

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

<b>Mandatory Reliability Standards for the Bulk Power System</b>	) ) )	<b>Docket Nos. RM06-16-010 RM06-16-011</b>
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**COMMENTS OF  
THE NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.**

The New York Independent System Operator, Inc. (“NYISO”) respectfully submits these comments to the Commission’s Notice Allowing Post Technical Conference Comments, issued on September 24, 2010 following the Technical Conference held on September 23, 2010 concerning Frequency Response in the Wholesale Electric Grid.

The NYISO appreciates the opportunity to submit comments on this issue and agrees with the Commission and industry participants at the technical conference that proper interconnection frequency response is critical for the recovery of interconnected frequency to acceptable levels. The NYISO supports the NERC Resources Subcommittee’s (“RS”) current efforts on this matter. The RS is the correct forum to analyze this issue and continue its ongoing evaluation. Given the importance of this issue to bulk power system reliability, FERC, as well as industry, needs the intelligence from this evaluation, already underway, to provide valuable input into the standards development process. The results of this evaluation will inform the NERC standards drafting team as to appropriate frequency response levels to maintain systematic reliability. While the NYISO appreciates the Commission’s concern that over three years have passed since the issuance of Order 693<sup>1</sup>, FERC should allow the NERC RS to complete its evaluation before NERC drafts a revised standard. Participants in the Commission’s technical

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<sup>1</sup> *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, FERC Stats. & Regs., ¶ 31,242 (2007)(“Order 693”).

conference correctly identified the NERC RS as the best resource for developing a standard on frequency response. NERC needs the opportunity to thoroughly examine and set appropriate target frequency response levels, and the schedule established by FERC should allow this to be completed. NERC will then be able to develop the most accurate and workable standards focused on system reliability.

As to a final standard, NYISO offers comments on what it believes to be the proper structure of the new standard and how the compliance obligations should be defined. Opportunities also exist to leverage new technologies to solve the challenges associated with frequency response, and any new or revised standard should be designed to accommodate such technology.

In addition to these comments, the NYISO is a signatory to, and supports, the *Comments of the ISO/RTO Council*, which were also submitted today.

## **I. BACKGROUND**

In Order 693, issued in March 2007, FERC approved 83 of the 107 of the Reliability Standards proposed by NERC, including the Resource and Demand Balancing Reliability Standards<sup>2</sup>. Included in the approved standards was BAL-003-0, which is designed to ensure that a Balancing Authority's ("BA") frequency bias setting is accurately calculated to match its actual frequency response. However, with regard to BAL-003, FERC directed NERC "to determine the optimal periodicity of frequency response surveys necessary," and further to define the "minimum frequency response needed for Reliable Operation" and identify "methods of obtaining the frequency response."<sup>3</sup> On March 18, 2010, the Commission issued an order setting a deadline for compliance directing NERC to submit a modification to Reliability

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<sup>2</sup> *Id.*

<sup>3</sup> *Id.* at ¶¶ 369-372.

Standard BAL-003 to comply with the Order 693 directives within six months.<sup>4</sup> Following extensive industry comment, an order granting rehearing for further consideration and scheduling a technical conference was issued May 13, 2010.<sup>5</sup> In that order, FERC recognized the complex technical and procedural issues raised and deferred the six-month deadline, instead ordering NERC to propose a schedule 30 days following the technical conference that included a firm compliance deadline for submission of a modified BAL-003 standard that complies with the Order 693 directives.<sup>6</sup>

As noted by the Commission<sup>7</sup>, the current approved BAL-003 standard provides an enforceable and mandatory reliability standard setting forth a consistent method for calculating the frequency bias component of Area Control Error (“ACE”). BAL-003 requires each BA to review its frequency bias<sup>8</sup> settings by January 1 of each year and recalculate its setting to reflect any changes in the frequency response<sup>9</sup> of the BA. BAL-003 specifically requires each BA to establish and maintain a frequency bias setting that is equal to or greater than that BA’s actual frequency response, but no less than 1% of its estimated peak load per .1 Hertz change. BAL-003 requires each BA to operate its Automatic Generation Control (“AGC”) on tie line frequency bias, unless such operation is adverse to system or interconnection reliability. The NYISO’s current approach to frequency response parallels these requirements as outlined in the BAL-003 NERC standard.

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<sup>4</sup> *Order Setting Deadline for Compliance*, Docket No. RM06-16-010, 130 F.E.R.C ¶ 61,218 (March 18, 2010) (“March 18 Order”).

<sup>5</sup> *Order Granting Rehearing for Further Consideration and Scheduling a Technical Conference*, Docket No. RM06-16-011, (May 13, 2010).

<sup>6</sup> *Id.* at ¶ 15.

<sup>7</sup> *See* March 18 Order

<sup>8</sup> *See*, Frequency Response and Bias, NERC standard BAL 003-0.1b (May 13, 2009), *available at* [http://www.nerc.com/files/BAL-003-0\\_1b.pdf](http://www.nerc.com/files/BAL-003-0_1b.pdf).

<sup>9</sup> *Id.*

## **II. COMMENTS**

### **A. The NERC Resources Subcommittee is the Correct Industry Group to Address Frequency Response.**

The NYISO supports the NERC RS group as the appropriate forum to complete Frequency Response Initiative (“FRI”) analysis and issue a white paper making recommendations on how to revise BAL-003. This group has been closely associated with the issue from the beginning and has initiated the Standard Authorization Request (“SAR”) to evaluate the adequacy of frequency response and identify any underlying issues. As correctly stated by NERC in its comments to the March 18 order, this is a complex issue that cannot be addressed in a hurried manner. There needs to be ample time for NERC, with input from industry to evaluate the historical frequency response targets for reliability purposes. The NERC RS process should be completed prior to NERC drafting a standard. Questions inherent in that analysis include: (i) an examination of how fast the interconnection needs to return to 60 hertz to minimize the risk of activation of under-frequency load shedding or accidental generation tripping, (ii) what combination and interaction of frequency response and AGC response are needed, and (iii) what are appropriate levels of both frequency response and AGC service to safely enable restoration of 60 hertz. These points are more thoroughly discussed in the *Comments of the ISO/RTO Council*, submitted today. Answers to these technical questions from the NERC RS group are vital prior to determining what should be included in the final standard.

## **B. Comments Regarding Drafting the Final Standard.**

With regard to the structure of the final standard, Balancing Authorities (“BAs”), Generator Owners/Operators, and other potential frequency response service providers (such as Limited Energy Storage Resources [“LESRs”] and new smart grid technologies) should all have a role to play in the revised standard. While generators provide the vast majority of existing governor response and AGC services, reliability concerns require coordination with BAs and the total system interconnection. The new or revised standard will require coordination between the BA, Generator Owners/Operators, and new technologies capable of providing this service.

Any final standard should consider to which entities the frequency response standard will be directed and further which components of the standard should apply to which entities. The most efficient solution may not be a standard mandating frequency response from all generating units. Specifically, consideration should be given as to which entities the governor response component and AGC component of the frequency standard should apply. While both could be made applicable to generators exclusively, the NYISO does not believe this is the best solution. For example, governor response could be a service provided by LESRs, such as fly-wheels or batteries, or even new smart grid technologies in the form of local monitoring and frequency response to bus-bar frequency measurements. The AGC component can currently be offered by LESRs under existing NYISO market designs and tariffs. A better approach could be to develop a frequency response standard administered by the BA on an interconnection-wide basis, as opposed to a standard focused on generators and other service providers. This could not be accomplished in a short amount of time as BAs do not currently have jurisdiction over generator governor controls. A change of that magnitude would require substantial tariff changes, must be

coordinated across BAs, and would need a prudent schedule for development to avoid unexpected consequences.

### **III. COMMUNICATIONS**

Correspondence and communications with respect to this filing should be sent to:

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### **IV. CONCLUSION**

For the reasons set forth above, the NYISO respectfully requests that any final rule issued in these proceedings adopt the recommendations made in these comments as well as those submitted by the ISO/RTO Council.

Respectfully Submitted,

/s/ Kristin A. Bluvas

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October 14, 2010

## **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 14th day of October, 2010

/s/ Joy A. Zimmerlin

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