

Draft - for Discussion Purposes Only

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By Hand Delivery

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

***Re: New York Independent System Operator, Inc., Compliance with Order No. 719,
Docket No. ER09-xxx-000***

Dear Secretary Bose:

In compliance with Paragraph 97 of the Commission's final rule on *Wholesale Competition in Regions with Organized Electric Markets* ("Order No. 719"),¹ the New York Independent System Operator, Inc. ("NYISO") respectfully submits this compliance filing. This filing supplements the NYISO's May 15, 2009 submission in this docket, in which the NYISO stated that it would provide an additional report on (1) the feasibility of including small demand response resources in the ancillary services markets, and (2) its efforts to allow aggregators of such resources to bid directly into those markets.²

I. Documents Submitted

1. This filing letter;
2. Copies of NYISO staff materials presented at stakeholder meetings discussing aggregations of small demand response resources.

¹ Order No. 719, 73 Fed. Reg. 64,100 (Oct. 28, 2008), FERC Stats. & Regs. ¶ 31,281 (2008), 125 FERC ¶ 61,071 (2008).

² Cite May compliance filing.

II. Feasibility of Small Demand Response Aggregators Providing Ancillary Services

Order No. 719 requires ISOs/RTOs, “in cooperation with their customers and stakeholders . . . to perform an assessment, through pilot projects or other mechanisms, of the technical feasibility and value to the market of smaller demand response resources providing ancillary services, including whether, and how, smaller resources can reliably and economically provide operating reserves and report their findings to the Commission.”³

The NYISO has acquired significant experience with aggregating demand side resources. Under the NYISO’s current tariff, the NYISO permits demand response aggregators to offer load reductions on behalf of small resources into its Day-Ahead Energy Market through the Day-Ahead Demand Response Program (DADRP).⁴ Aggregators are also active participants in the NYISO’s ICAP market (representing “Special Case Resources”) and in its Emergency Demand Response Program (“EDRP”).⁵ In addition, as described in the May compliance filing, individual Demand Side Resources that meet a one megawatt threshold – including those represented by aggregators – may offer Operating Reserves or Regulation Service in the same manner as generators, *i.e.*, by submitting availability offers into either the Day-Ahead or real-time markets.

Following the NYISO’s May 15, 2009 compliance filing, the NYISO considered whether a pilot program or some other study was necessary to assess the feasibility of adding aggregators of small demand resources to the Operating Reserves and Regulation Services markets.⁶ Based on its recent experience integrating individual demand response resources into those markets through the Demand Side Ancillary Service Program (“DSASP”), and having reached the conclusion that the same reliability and communications issues would need to be resolved for either a pilot program or full-scale integration, the NYISO determined to proceed with the expansion of its programs without undertaking a pilot program. The NYISO considered several factors before making this determination:

³ Order No. 719 at P 581.

⁴ See Services Tariff section 2.38b.

⁵ Over 97% of all resources participating in the NYISO’s ICAP Special Case Resource program do so as part of an aggregation. *New York Independent System Operator, Inc.*, Compliance Filing - Attachment 1 at 4 and Table 1, Docket Nos. ER01-3001-022 and ER03-647-013 (filed January 15, 2009).

⁶ The Operating Reserves and Regulation Service Markets are the two bid-based ancillary services markets (collectively known as the NYISO’s “Demand Side Ancillary Services Program” or “DSASP”) to which the requirements of Order 719 apply. See NYISO May 15 compliance filing.

1. The NYISO would need clarification from regional reliability organizations in either case before it could allow aggregations of demand resources to provide operating reserves and regulation service.
2. Implementation of a pilot program without real-time operational visibility of the resources could jeopardize reliability.
3. A pilot program would therefore require an alternative means for testing the aggregated demand resources' capability to respond to operating reserve or regulation signals, which would not match the bidding, scheduling, dispatch, or communication requirements of real-time market participation.
4. Even if operational visibility were resolved through alternative communications, other market integration concerns still remained, such as market integration for economic dispatch, which would govern how the demand resources would be paid during the pilot program.

Thus, the NYISO concluded that undertaking a pilot would not serve the Commission's or market participants' interests in accomplishing the integration of small demand resources in the ancillary services markets. The NYISO is confident that the remaining technical and administrative barriers to these resources' participation can be resolved; these are discussed below.

III. Development of Market Rules and Systems

As the NYISO noted in its May filing, adequate real-time communications and telemetry requirements must be in place before aggregators of small demand response resources can enter the ancillary services markets. The NYISO also noted that measurement and verification rules for the aggregations, potential local reliability rule changes, and performance and payment requirements needed to be explored and developed. The NYISO has made progress on each of these issues, but acknowledges that further work remains to be done.

On the reliability issues, the NYISO has analyzed the potential for reliability rule changes that could be entailed by the aggregation of small demand resources, and presented the question to a regular meeting of the Northeast Power Coordinating Council's ("NPCC") Task Force on Coordination of Operations ("TFCO") in September. The TFCO determined that the requirements for incorporating aggregators would need to follow the existing NPCC A-06 Operating Reserve Criteria but would not require any rule changes. The NYISO has arranged to make a presentation on its plan to allow aggregators to participate in the ancillary services markets at the November 5th meeting of the New York State Reliability Council ("NYSRC") Reliability Rules Subcommittee ("RRS"). Subsequent presentations to the RRS may be

necessary when the proposed market rules are developed or if changes to any NYSRC reliability rules are required.

On the communications issues, the NYISO continues to work on mechanisms for controlling the dispatch and response of aggregations of small resources. The NYISO's current real-time communications and telemetry systems are sufficient for dispatch and control of individual demand resources providing ancillary services. Currently, real-time communications are sent through the Transmission Owner⁷ to the resource. For generators and individual demand resources, the timing of this communication path is consistent with reliability requirements. To implement a real-time communication path to dispatch small demand resources, the NYISO proposes to send the dispatch signal through the Transmission Owner to the Aggregator of Retail Customers ("ARC"), who will then relay the signal to its aggregations. While this approach may be adequate to allow ARCs to offer Operating Reserves, the second relay, from the aggregator to small demand resources, introduces a significant increase in the amount of time for a complete round trip of the dispatch signal. Response to operating reserve pickups is monitored over minutes rather than seconds, a time frame that is feasible within the communications capabilities of aggregated demand response providers of reserves. However, providers of regulation service must be capable of responding to six second basepoint signals. As a result of this timing problem, the NYISO has proposed to stakeholders that aggregations of small demand resources be limited to operating reserves until alternative secure communication protocols are developed. Such work is currently underway by the ISO/RTO Council ("IRC") as part of developing the technical requirements for plug-in electric hybrid vehicles.

As described in the May filing, the IRC has been engaged in an effort to define the rules and technical requirements that will apply to the aggregation of plug-in hybrid electric vehicles ("PHEV") with demand response programs across the Council members' markets. The PHEV project will identify the communication protocols that the ISOs and RTOs may use to communicate with small demand resources, including PHEVs. While market penetration of PHEVs is still very limited, there are similarities between the way the system operator will need to communicate with PHEVs and with other small demand resources. Both PHEVs and small demand resources need cost effective options for the equipment required to receive and respond to dispatch signals from the system operator because the costs for current telemetry requirements are a significant barrier to entry for smaller resources. For ancillary services, a direct communication path from the system operator to the resource or the ARC with protocols that allow secure communication is necessary to facilitate access to wholesale electricity markets. The NYISO anticipates that the IRC's efforts in the PHEV project, due at the end of this year, will be directly applicable to the integration of small demand response resources in the NYISO ancillary services markets.

⁷ Reference to the NYISO/TO backup agreement; see also NYISO Ancillary Services Manual, section 1.5.

In addition to identifying secure communication protocols, the IRC initiated a Smart Grid Standards Development project this summer to standardize the messages that are passed from the ISO/RTO to a resource, independent of the protocol that the ISO or RTO uses to send the message. This will allow ISOs/RTOs and aggregators to develop systems that can manage the same set of information regardless of which of the communication protocols is used for communicating with demand resources or other types of suppliers. Such Smart Grid standards provide flexibility for the ISO/RTO to specify which protocols it uses to send the message and provide the aggregator or other supplier with a standard set of information that it can expect for a certain type of message. In Phase I of this initiative, the highest priority will be given to the identification of common business process and standards requirements for the support of demand response and dynamic pricing at the wholesale level. The IRC expects to complete the Phase I part of this project by the end of the first quarter of 2010.

Since the May compliance filing, the NYISO has kept its stakeholders apprised of its efforts to address communications issues and reliability concerns through the Price Responsive Load Working Group (“PRLWG”). At the June 17 PRLWG meeting, the specific rules that would allow individual demand resources to provide ancillary services were reviewed along with the processes for proposing changes to those rules should any changes be necessary. The NYISO has also shared its preliminary views of the potential for changes to market rules relating to metering, measurement and verification, and settlement processes.⁸ Beginning with the next PRLWG meeting in November, the NYISO intends to initiate detailed discussions on the areas identified as having the potential for market rule changes so that any needed changes can be developed and impacts to NYISO administrative systems can be determined.⁹ Some areas where market rules and procedures may be impacted are summarized below:

Registration: The small demand response resources that comprise aggregations will need to be identified and tracked by the NYISO to prevent double-counting of registrations. The tools and processes required for this are distinct from those used to track SCR and EDRP participation. The NYISO will investigate any process changes necessary to handle small customer DSASP aggregations.

Metering: With the restriction that DSASP small customer aggregations cannot provide regulation service, it is likely that the current metering requirements for individual demand resource participation in DSASP could be applied to small customer aggregations for Operating Reserves. Rule changes may be necessary to allow small resources to participate in Regulation

⁸ Cite D. Pratt 10/1/09 presentation.

⁹ Should these discussions conclude that tariff amendments are necessary, the NYISO will propose such changes in a later filing. At that time, the NYISO will also propose any changes that are necessary to comply with the Commission’s directive in Order 719-A; see NYISO compliance filing (October 27, 2009).

Service, depending on the outcome of the communications standardization efforts underway at the IRC and the North American Electric Standards Board (“NAESB”), discussed below.

Measurement and Verification (“M&V”): The NYISO at this point does not see a need to obtain individual small customer meter information; rather, the NYISO expects that meter information will be based on aggregator response. The NYISO will need to monitor performance of DSASP small customer aggregations to determine whether the existing measurement and verification rules for individual DSASP resources are fully appropriate for aggregations. Should changes to any of the M&V requirements for aggregations of small demand resources into the NYISO's ancillary services market be necessary, the NYISO intends to adopt the standards and associated terms from the NAESB Phase I M&V standards for Wholesale Demand Response, which the Commission has recently proposed for approval.¹⁰

Settlement: As with metering and verification, the NYISO believes the settlement rules for individual DSASP resources can be applied to the settlement of DSASP small customer aggregations.

The NYISO proposes to provide FERC with semi-annual updates regarding its market rules development for aggregations of small demand resources providing ancillary services as part of the semi-annual demand response compliance filings submitted in January and June of each year, beginning with the January 2010 filing. In parallel with discussions with the NYSRC addressing any of their potential concerns, the NYISO will work with stakeholders to address the issues outlined in this section.

IV. Stakeholder Approval

The NYISO discussed its approach to this compliance filing with stakeholders at a regular meeting of the PRLWG on October 1, 2009 and received generally supportive comments. As a follow up, the NYISO shared a draft of this filing with the same group on October 20 and responded to comments and suggestions at a meeting held by conference call on October 23. Based on its discussions with the stakeholder group, the NYISO believes there is broad support for its ongoing work with the reliability councils and the IRC, and for its proposal to examine specific rule changes following publication of the IRC's technical recommendations.

V. Communications and Correspondence

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

Robert E. Fernandez, General Counsel

*Elizabeth A. Grisaru

¹⁰ FERC NOPR, "Standards for Business Practices and Communications Protocols for Public Utilities", Docket No. RM05-5-017, issued September 17, 2009.

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VI. Service

The NYISO will electronically send a link to this filing to the official representative of each of its customers, to each participant on its stakeholder committees, to the New York Public Service Commission, and to the electric utility regulatory agencies of New Jersey and Pennsylvania. In addition, the complete filing will be posted on the NYISO's website at www.nyiso.com. The NYISO will also make a paper copy available to any interested party that requests one. To the extent necessary, the NYISO requests waiver of the requirements of Section 35.2(d) of the Commission's Regulations (18 C.F.R. § 35.2(d) (2007)) to permit it to provide service in this manner.

VII. Conclusion

WHEREFORE, for the foregoing reasons, the NYISO respectfully requests that the Commission accept the demonstrations of compliance included herein, without any conditions or modifications.

Respectfully submitted,

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