NEW YORK INDEPENDENT SYSTEM OPERATOR
10 Krey Boulevard ♦ Rensselaer, NY 12144

March 21, 2016

By Electronic Delivery

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

Re: ***New York Independent System Operator, Inc.*, Docket ER08-1281-000; Third Broader Regional Markets Informational Report**

Dear Ms. Bose:

In accordance with paragraph 33 and ordering paragraph "D" of the Federal Energy Regulatory Commission's ("Commission's" or "FERC's") December 30, 2010 *Order on Rehearing and Compliance* in Docket No. ER08-1281 ("December 2010 Order") and the Commission's June 2, 2014 order[1] modifying the reporting requirement from a semiannual to an annual obligation, the New York Independent System Operator, Inc. ("NYISO") hereby submits this third *Broader Regional Markets Informational Report* ("Report"). Ordering paragraph "D" of the December 2010 Order states that the "RTO/ISO parties are hereby directed to submit informational reports, as discussed in the body of this order." **In footnote 35 of its December 2010 Order the Commission stated that it does not intend to issue a public notice or an order on this informational Report.**

Paragraph 33 of the December 2010 Order instructs the NYISO:

> "in collaboration with its neighboring RTO/ISOs, NERC and other market participants, to submit a report, as an information filing, addressing (i) the effects of the reforms on reducing congestion that results from loop flows and the costs associated with mitigating congestion; (ii) the effects of the implementation of the enhanced interregional transaction coordination initiative; and (iii) recommendations and analyses as to whether the buy-through congestion proposal is required, and if so, when it should be implemented.[35]"

[1] *New York Independent System Operator, Inc.*, 133 FERC ¶ 61,276 (2010) and *New York Independent System Operator, Inc.*, 147 FERC ¶ 61,175 (2014).

[35] These reports will be for informational purposes only. They will not be noticed and the Commission does not intend to act on them.

While the NYISO is responsible for submitting this informational Report to the Commission, the contents of the Report were developed through collaboration between and among PJM Interconnection, LLC ("PJM"), the Midcontinent Independent System Operator, Inc. ("MISO"), the Ontario Independent Electricity System Operator ("IESO") and the NYISO (collectively the "Lake Erie ISOs and RTOs"), with input from the North American Electric Reliability Corporation ("NERC").

I. Market Design and Physical Improvements

A. Market Design Improvements the ISOs/RTOs Have Completed or Are Presently Developing

The Lake Erie ISOs and RTOs present the following summary of the market design features that have been, or will be, implemented to improve coordination between markets and reduce Lake Erie loop flow.

1. PJM/NYISO Market-to-Market Implementation

The Commission authorized the NYISO and PJM to begin coordinated congestion management/market-to-market coordination ("M2M") in January 2013.[2] The M2M coordinated congestion management process allows transmission constraints that are significantly impacted by generation dispatch changes in both the NYISO and PJM markets, or by the operation of the Ramapo PARs, to be jointly managed in the real-time security-constrained economic dispatch models of both RTOs.[3] This joint real-time management of transmission constraints near the market borders provides a more efficient and lower cost transmission congestion management solution, and facilitates price convergence at the market boundaries. Real-time coordination results in a more efficient economic dispatch solution to manage the real-time transmission constraints that impact both markets.

The M2M coordination process has provided NYISO and PJM a set of very effective tools to assist their management of congestion caused by unscheduled power flows including Lake Erie loop flow. During 2015, the NYISO estimated that the value to New York of M2M

[2] *New York Independent System Operator, Inc.*, 138 FERC ¶ 61,192 (2012).

[3] NYISO/PJM M2M includes two types of coordination: (1) re-dispatch coordination; and (2) Ramapo PAR coordination. For re-dispatch coordination, the non-monitoring RTO re-dispatches its generation to help manage congestion in the monitoring RTO, when economic, if one of the pre-defined flowgates becomes congested in the monitoring RTO. For Ramapo PAR coordination, the Ramapo PARs are operated to reduce overall congestion if certain pre-defined flowgates become congested in one or both RTOs.

coordination was $17.9M.[4] The estimate represents the value New York realizes from Ramapo PAR coordination. This includes (1) the estimated savings to NYISO for additional deliveries into New York, and (2) PJM compensation to NYISO for additional deliveries into PJM (as compared to the Ramapo Target Value,[5] excluding service to RECO load). The identified value is net of any settlements to PJM when PJM's transmission system is congested.

2. Implementation of More Frequent Scheduling

Enhanced Interregional Transaction Coordination ("EITC") permits the scheduling of inter-Balancing Authority transactions on a more frequent basis than hourly schedules.[6] The NYISO continues to work with Hydro-Quebec ("HQ") and IESO to develop more frequent scheduling options. The NYISO continues to evaluate the feasibility of 5-minute scheduling with Hydro-Quebec and 15-minute scheduling with IESO.

The NYISO and ISO-New England ("ISO-NE") implemented Coordinated Transaction Scheduling ("CTS") on December 15, 2015, including the scheduling of CTS Interface Bids on a quarter-hour basis.

3. PJM/NYISO Coordinated Transaction Scheduling

The NYISO and PJM implemented CTS on November 4, 2014 at all four of the Proxy Generator Buses that represent the interconnections between their two areas where interchange can be scheduled. CTS enables market participants to access the least-cost source of power within the two regions and helps lower the combined energy production cost of the two systems. CTS enables PJM and the NYISO to more efficiently use the transmission lines connecting the two regions. The new scheduling system also minimizes counterintuitive power flows by explicitly incorporating projected price differences between the two markets into interregional scheduling decisions. During 2015, Market Participants utilized CTS at all four of the Proxy Generator Buses representing the border between NYISO and PJM.

4. PJM/MISO Coordinated Transaction Scheduling

As part of the MISO-PJM Joint and Common Market ("JCM") effort, PJM and MISO have developed a CTS design for the RTOs to achieve more optimal coordination of interchange in real time across the MISO-PJM interface. On December 15, 2015, PJM and MISO submitted a filing to revise the Joint Operating Agreement between MISO and PJM and their respective

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[4] http://www.nyiso.com/public/webdocs/markets_operations/committees/mc/meeting_materials/2016-01-27/Agenda%2003_Operations_Report.pdf.

[5] The Ramapo Target Value is defined in the NYISO/PJM Joint Operating Agreement, Schedule D, Section 7.2.1. The Ramapo Target Value is based on the net interchange schedule between the NYISO and PJM plus the deviation of actual flows and desired flows across the ABC and JK interfaces.

[6] *New York Independent System Operator, Inc.*, 134 FERC ¶ 61,186 (2011).

governing tariffs to implement CTS.[7] The RTOs requested an effective date of March 1, 2017 with an order accepting the proposed revisions to be issued by the Commission no later than April 15, 2016.

B. Ontario-Michigan (ONT-MI) Interface PARs

As of April 5, 2012, all four circuits comprising the Michigan/Ontario interconnection had in-service PARs. Starting on that date, the MISO and IESO began actively operating the PARs to better conform actual power flows to scheduled power flows. The expectation was that such operations, in conjunction with controls already operational elsewhere on the system, would help reduce the unscheduled flows which cause Lake Erie Circulation ("LEC").

In January 2014, MISO, PJM and IESO completed an evaluation of the PARs on the Ontario-Michigan interface and their ability to maintain actual flow within a 200 MW bandwidth of scheduled flow and produced an Evaluation Report.[8] The Evaluation Report follows from the Regional Power Control Device Coordination ("RPCDC") Study report published in 2011 as a joint effort among IESO, MISO, NYISO, and PJM.

Although the RPCDC Study recommended a follow-up study (Second Study) be performed after the Ontario-Michigan PARs enter service and operational data had been collected for a year, the Evaluation Report should not be considered as meeting that recommendation. A Second Study is still planned for the future and is anticipated to include the involvement of all four RTOs/ISOs around Lake Erie.

II. The Lake Erie ISOs and RTOs Agree That Implementing Buy-Through is Not Necessary at This Time

The objective of the proposed Buy-Through of Congestion Broader Regional Market solution is to (a) identify the sources of loop flow caused by interregional transaction scheduling, (b) determine the costs incurred in supporting the loop flows by each impacted region, and (c) allocate the costs incurred by the off-contract path Balancing Authorities to the scheduling entity, or remove the associated schedules if the scheduling entity is not willing to pay the full cost of flowing its transaction(s). Buy-Through of Congestion would result in a more complete identification, and accurate assignment, of the costs to move power between regions, and will provide an economic alternative to the administrative/physical curtailment processes. If a scheduling party indicates it is not willing to pay congestion charges, its transaction would be removed if the off-contract path flow impacts add to congestion costs in an off-contract path ISO or RTO.

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[7] *See PJM Interconnection, L.L.C.*, Docket No. ER16-535-000, *et al.* (December 15, 2015); *see also Midcontinent Independent System Operator, Inc.*, Docket No. ER16-533-000, *et al.* (December 15, 2015) ("MISO CTS Filing").

[8] The Ontario-Michigan PAR Performance Evaluation Report ("Evaluation Report") is posted at http://www.miso-pjm.com/documents.aspx.

The Lake Erie ISOs and RTOs have decided not to pursue the Buy-Through of Congestion Broader Regional Market solution at this time. The collective set of market solutions discussed herein, and in the two prior reports submitted in this docket, has generally resulted in decreased loop flows around Lake Erie. In addition, the cost of generating electricity (which is relevant to the value of alleviating incremental transmission congestion) is low and may remain that way for some time. NYISO, PJM, MISO and IESO all agree that the operational experience gained since the other market solutions have been implemented, along with low electricity costs, render the Buy-Through of Congestion Broader Regional Market solution unnecessary for the foreseeable future. The Lake Erie ISOs and RTOs concluded that the Buy-Through of Congestion Broader Regional Market solution will not provide sufficient additional benefit to merit its development and implementation. If the Lake Erie ISOs and RTOs determine that the Buy-Through of Congestion Broader Regional Market solution becomes necessary in the future, a new proceeding will be initiated to present a proposal for the Commission's consideration.

III. Communications and Correspondence

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

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IV. Service

The NYISO will send an electronic link to this filing to the official representative of each party to this proceeding, 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 New Jersey Board of Public Utilities. In addition, the complete filing will be posted on the NYISO's website at www.nyiso.com.

V. Conclusion

The NYISO respectfully requests that the Commission accept this Report as satisfying the requirements set forth in the Commission's December 2010 Order, as modified in the June 2014 Order.

Respectfully submitted,

/s/ Alex M. Schnell
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