

140 FERC ¶ 61,205  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinohoff, Chairman;  
Philip D. Moeller, John R. Norris,  
Cheryl A. LaFleur, and Tony T. Clark.

New York Independent System Operator, Inc.

Docket No. ER12-718-001

ORDER ON COMPLIANCE FILING

(Issued September 20, 2012)

1. On May 1, 2012, New York Independent System Operator, Inc. (NYISO) and PJM Interconnection, L.L.C. (PJM) (collectively, Applicants) submitted a joint compliance filing in response to an order issued March 15, 2012 in which the Commission addressed Applicants' initial compliance proposal to implement a Market-to-Market Coordination Process.<sup>1</sup> Applicants request a flexible effective date for the filing that would require implementation no later than January 15, 2013. For the reasons discussed below, we accept Applicants' compliance filing, to become effective January 15, 2013, subject to the submission of an additional compliance filing within 30 days of the date of this order.

**I. Background**

2. The instant proceeding originated from a proceeding instituted by NYISO to address certain unscheduled energy flows around Lake Erie that were associated with transactions scheduled by a small number of market participants, beginning in 2008, for the purpose of exporting power from NYISO to PJM (Lake Erie Loop Flows). The scheduled paths exited NYISO in a counter-clockwise direction around Lake Erie, crossed through the service territory of the Ontario Independent Electricity System Operator (IESO), entered Michigan in the service territory of the Midwest Independent Transmission System Operator, Inc.

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<sup>1</sup> *New York Indep. Sys. Operator, Inc.*, 138 FERC ¶ 61,192 (2012) (March 2012 Order). *See also New York Indep. Sys. Operator, Inc.*, 133 FERC ¶ 61,276 (2010) (December 2010 Order) (requiring the NYISO to submit a market-to-market coordination mechanism by the second quarter of 2011), *order on reh'g*, 136 FERC ¶ 61,011 (2011) (July 2011 Order) (extending NYISO's compliance deadline to the end of the fourth quarter 2011).

(MISO), and ended in PJM. However, the actual power flows went clockwise through the NYISO system and flowed directly into PJM.

3. To address market distortions resulting from these unscheduled power flows, NYISO proposed certain short-term solutions that the Commission accepted subject to the requirement that NYISO work with its neighboring regional entities to develop a comprehensive, long-term solution.<sup>2</sup> In response, *inter alia*, NYISO, in collaboration with PJM, MISO and the IESO, proposed to develop and implement a Market-to-Market Coordination mechanism to reduce the cost of transmission congestion between NYISO and PJM.<sup>3</sup> Applicants submitted their proposed Market-to-Market Coordination Process on December 30, 2011, consisting of revisions to the Joint Operating Agreement Among and Between NYISO and PJM (JOA).<sup>4</sup>

4. In their December 30, 2011 filing, Applicants noted that the Market-to-Market Coordination 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, New York phase angle regulators (PAR),<sup>5</sup> to be jointly managed by NYISO and

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<sup>2</sup> See *New York Indep. Sys. Operator, Inc.*, 124 FERC ¶ 61,174 (2008); *New York Indep. Sys. Operator, Inc.*, 125 FERC ¶ 61,184, at P 20 (2008). In a subsequent order, the Commission established a deadline for NYISO to develop and file an implementation plan addressing its proposed long-term solutions. *New York Indep. Sys. Operator, Inc.*, 128 FERC ¶ 61,049 (2009).

<sup>3</sup> See *New York Independent System Operator, Inc.'s Report on Broader Regional Markets; Long-Term Solutions to Lake Erie Loop Flow*, submitted January 12, 2010, in Docket No. ER08-1281-004. On rehearing, at the request of NYISO, the Commission granted an extension of the filing deadline through the end of the fourth quarter 2011 and specified that the Market-to-Market Coordination initiatives be implemented by the end of 2012. See July 2011 Order, 136 FERC ¶ 61,011 at PP 13,15.

<sup>4</sup> See *Joint Operating Agreement Among and Between NYISO and PJM (JOA)*, NYISO Open Access Transmission Tariff (NYISO OATT), § 35, Attachment CC, Schedule D.

<sup>5</sup> PARs are electrical devices used to help control power flows. The Ramapo PARs refer to two of the eight PARs that regulate the power flow across the eastern alternating current (A/C) ties between NYISO and PJM. Located at Ramapo, Rockland County, New York, the Ramapo PARs are primarily used to facilitate the delivery of power between PJM and NYISO across the Branchburg-Ramapo 500 kV interconnection (5018 interconnection), a line that connects the Consolidated Edison (Con Ed) Ramapo Substation to the PSEG Branchburg Substation.

PJM through the use of their respective real-time, security-constrained, economic dispatch models. Pursuant to this process, NYISO and PJM will jointly monitor specific flowgates.<sup>6</sup> When their respective systems are constrained and their counterpart entity (NYISO or PJM) is able to more efficiently redispatch generation, they will be authorized to request that the counterpart entity do so. Monetary settlements resulting from such redispatch will be based on the Market-to-Market Entitlements that NYISO and PJM will each have over the specific flowgate compared to the benefits that each receives based on scheduled flows. The Market-to-Market Coordination Process also provides rules that permit the Ramapo PARs to deviate from their expected schedule in order to provide further congestion relief.<sup>7</sup>

5. In the December 30, 2011 filing, Applicants also noted that several outstanding issues would be addressed in subsequent filings. Specifically, they stated that both the method of determining Market-to-Market Entitlements and the initial allocation of Market-to-Market Entitlements would need to be agreed to and submitted.<sup>8</sup> In addition, they stated that they may propose revisions addressing: (i) the modeling of external resources for purposes of developing Market-to-Market Entitlements; (ii) the appropriate criteria to determine how the Ontario/Michigan PARs will be reflected in the Market-to-Market Entitlement calculations;<sup>9</sup> (iii) whether and when it is appropriate to limit Market-to-Market obligations and settlements based on the physical capabilities (e.g., thermal rating) of the 5018 interconnection; and (iv) how to reflect PJM's service to its Rockland Electric Company (Rockland) load (as this load uses the flowgates in question).<sup>10</sup>

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<sup>6</sup> A flowgate represents a point, or coordinated multiple points, of physical connection within a system that represent both a monitoring point and a point of potential congestion. Market-to-Market flowgates are those flowgates where constraints will be jointly monitored and coordinated by NYISO and PJM. *See* JOA, § 35.2.1; *see also* JOA, schedule D § 2.

<sup>7</sup> JOA, schedule D § 8.

<sup>8</sup> *See* JOA, schedule D, § 6. *See also* March 2012 Order, 138 FERC ¶ 61,192 at n.13. Market-to-Market Entitlements are predetermined rights to use each other's (i.e., NYISO or PJM) Market-to-Market flowgates. *See* JOA at § 35.2.1.

<sup>9</sup> The Ontario/Michigan PARs are owned and operated by International Transmission Company. They were installed, effective April 5, 2012, as one of the long-term solutions to loop flow in the Lake Erie region.

<sup>10</sup> March 2012 Order, 138 FERC ¶ 61,192 at P 22. *See also* *Rockland Electric Company and PJM Interconnection, L.L.C.*, 97 FERC ¶ 61,357 (2001) (transferring Rockland's transmission facilities in the Eastern Division of Rockland's service area located in Bergen County, New Jersey). These facilities, which are directly interconnected with

6. The March 2012 Order conditionally accepted Applicants' proposal subject to the submission of all remaining tariff revisions required to implement the Market-to-Market Coordination Process by May 1, 2012, with implementation in its entirety by the end of the fourth quarter of 2012. The March 2012 Order left issues regarding the effective date applicable to the Market-to-Market Coordination Process to be addressed by the Commission's future order addressing Applicants' additional compliance filing.<sup>11</sup>

## **II. Compliance Proposal**

7. Applicants propose to revise the JOA and NYISO proposes to revise Schedule 1 of the NYISO OATT, to address the unresolved issues from the December 30, 2011 filing as directed by the March 2012 Order.<sup>12</sup> First, Applicants propose revisions that further define the methods that they will use to calculate Market-to-Market Entitlements and ensure that the Market-to-Market Coordination Process will produce equitable results.<sup>13</sup> The revisions address modeling of external capacity resources, transmission system expansion, use of an updated system model, and redispatch.<sup>14</sup> Applicants state that Market-to-Market Entitlements will serve as a baseline to which the actual levels of each others' market flows are compared in order to determine compensation under the program.

8. Further, Applicants propose rules that outline when the redispatch process must be initiated, and when it may be terminated. For example, the redispatch process is to be initiated only when an appreciable quantity of redispatch relief is expected to be available from the Non-monitoring RTO.<sup>15</sup> They state that this ensures that Market-to-Market redispatch settlements are limited to circumstances when the Non-monitoring RTO is redispatching to provide relief, or the Non-monitoring RTO's market flow exceeds its Market-to-Market Entitlement.<sup>16</sup> Under these conditions, they state, the Monitoring RTO

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facilities controlled by PJM, include 8.3 miles of 138 kV, 35.9 miles of 69 kV, and 12.4 miles of 35 kV transmission lines and eleven substations. *Id.* n.2

<sup>11</sup> March 2012 Order, 138 FERC ¶ 61,192 at P 27.

<sup>12</sup> *Id.*

<sup>13</sup> See JOA, schedule D, §§ 6.1, 6.3, 6.4, 7.1.2(b), and 7.1.6.

<sup>14</sup> *E.g.*, circumstances under which significant relief is expected or the non-monitoring entity (PJM or NYISO) has a market flow in excess of its entitlement.

<sup>15</sup> The Non-monitoring RTO refers to the party that does not have operational control of a particular Market-to-Market Flowgate. See JOA, Schedule D, § 7.1.2(b).

<sup>16</sup> See JOA, schedule D, §§ 7.1.2(b) and 7.1.6.

will engage the Market-to-Market Coordination Process for the constrained Market-to-Market Flowgate.

9. Applicants also propose to account for the impact of the Ontario/Michigan PARs when the Ontario/Michigan PARs are “in-service.”<sup>17</sup> Proposed section 7.1.2 provides for a determination of the impact of the Ontario/Michigan PARs on Market-to-Market Flows. A comparison is then made to Market-to-Market Entitlements on the constrained Market-to-Market Flowgate, thereby enabling the Monitoring RTO to determine whether the Non-monitoring RTO is able to provide dispatch relief. Applicants assert that this process is appropriate because the impact of the Ontario/Michigan PARs will not be permitted to cause the Monitoring RTO or Non-monitoring RTO that would otherwise receive a Market-to-Market payment to instead incur a Market-to-Market settlement obligation, an appropriate outcome, they claim, given that neither PJM nor NYISO control the operation of these PARs. Applicants note that they have agreed to reconsider this issue at such time as sufficient operational data has been collected.

10. Applicants state that the proposed Market-to-Market rules will address the operation of the Ramapo PARs to ensure that Market-to-Market implementation occurs in a manner consistent with the implementation of existing arrangements—the *Unscheduled Transmission Service Agreement*<sup>18</sup> and the *ConEd Wheel Agreement*.<sup>19</sup> Applicants propose to incorporate terms of the *Unscheduled Transmission Service Agreement* and the *ConEd Wheeling Agreement* into the JOA, to ensure that the implementation of the Market to Market Coordination process occurs in manner that is consistent with preexisting regulatory obligations. Applicants state that this will allow for the realization of the full scheduling and physical capability of the PJM and NYISO interface.

11. Applicants also propose to terminate the *Unscheduled Transmission Service Agreement*. Applicants state that their proposed revisions also represent a compromise on

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<sup>17</sup> The term “in-service” is not defined.

<sup>18</sup> See PJM Rate Schedule 30.

<sup>19</sup> See JOA, Schedule C. See also *Consolidated Edison Co. of New York, Inc.*, 132 FERC ¶ 61,221 (2010) (requiring ConEd to deliver to PSEG, in northern New Jersey, 1000 MW of power and for PSEG to redeliver the same amount of power to ConEd in New York City). The *ConEd Wheel Agreement*, incorporated into the JOA as schedule C, effective May 1, 2012, details the operating protocol to implement the *ConEd/PSEG Wheel Agreements* (e.g., Long-term Firm Point-to-Point Transmission Service Agreements referred to in the JOA as “600/400 MW transactions”). Applicants state that Schedule C to the JOA replaces, Attachment M-1 to the NYISO Market Administration and Control Area Services Tariff effective May 1, 2012.

treatment of PJM's service to its Rockland load in the Market-to-Market Entitlement and market flow calculations. Specifically, Applicants propose that 20 percent of the PJM service to Rockland load will be included in the Market-to-Market Entitlement and market flow calculation as PJM load, while 80 percent will be excluded and reflected instead as a PJM obligation over the Ramapo PARs, as set forth in the JOA, at schedule D, sections 6.2.

12. Finally, Applicants request a 15-day extension of time to implement their proposal effective January 15, 2013, given what they assert is the scope and complexity of required software enhancements.<sup>20</sup>

### **III. Notice of Filing and Responsive Pleadings**

13. Notice of Applicants' May 1, 2012 compliance filing was published in the *Federal Register*, 77 Fed. Reg. 27,220 (2012), with interventions and protests due on or before May 22, 2012. On May 3, 2012, Duke Energy Corporation (Duke Energy) filed a motion to intervene. On May 21, 2012, the Indicated New York Transmission Owners (Indicated Transmission Owners) filed comments.<sup>21</sup> On May 29, 2012, Old Dominion Electric Cooperative (ODEC) filed a motion to intervene out-of-time.

14. Indicated Transmission Owners state that they fully support the Applicants' filing. However, Indicated Transmission Owners state that, while implementation of the Market-to-Market Coordination Process will reduce the cost of managing transmission congestion on constraints that are significantly affected by the dispatches conducted both by NYISO and PJM, it will not affect the level of interchange between NYISO and PJM. Therefore, Indicated New York Transmission Owners encourage NYISO and PJM to develop and implement a mechanism similar to the Coordinated Transaction Scheduling mechanism that was developed between NYISO and ISO New England, Inc. (ISO-NE).<sup>22</sup> Indicated Transmission Owners state that implementation of Coordinated Transaction Scheduling has

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<sup>20</sup> Applicants state that they are also resubmitting several sections of the JOA solely to add the proposed January 15, 2013 effective date requested in this filing. *See* proposed NYISO OATT §§ 35.1, 35.3, 35.5 - 35.9, 35.11, and 35.13 - 35.21.

<sup>21</sup> Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Long Island Power Authority, New York Power Authority, Niagara Mohawk Power Corporation, and Orange and Rockland Utilities, Inc.

<sup>22</sup> Indicated Transmission Owners comments at 4 (citing *New York Indep. Sys. Operator, Inc.*, 139 FERC ¶ 61,048 (2012)).

resulted in the scheduling of more efficient levels of interchange between participating control areas.<sup>23</sup>

15. Noting that the JOA, at Schedule D, section 7.1.2 uses the term “in-service” when referring to the Ontario/Michigan PARs in calculating the amount of dispatch relief and market flows, Indicated Transmission Owners argue that the JOA should specify that all five of the Ontario/Michigan PARs must be “in-service” before taking them into consideration. Indicated Transmission Owners assert that the ability of these PARs to control Lake Erie circulation depends on all of the PARs being in-service on both sides of the Canadian and Michigan interface.

16. On June 5, 2012, Applicants filed an answer, noting their agreement that the term “in-service” should be clarified to mean that the Michigan-Ontario PARs should be considered in-service under the JOA when the PAR tap changers are in-service at all four of the major transmission lines that interconnect Michigan and Ontario. Applicants state that they are prepared to submit a compliance filing revising the JOA to provide the requested clarification.

#### **IV. Procedural Matters**

17. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2012), the timely, unopposed motion to intervene serves to make Duke Energy a party to this proceeding. We grant ODEC’s unopposed, late-filed motion to intervene, given its interests in the issues presented, the early stage of this compliance proceeding, and the absence of any undue prejudice or delay.

18. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2012), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept Applicants’ answer because it has provided information that assisted us in our decision-making process.

#### **V. Discussion**

19. For the reasons discussed below, we accept Applicants’ compliance filing, subject to an additional compliance filing, to become effective January 15, 2013. Except as otherwise noted below, we find that Applicants’ proposal appropriately resolves the outstanding matters that needed resolution in order for implementation of the Market-to-Market Coordination Process to proceed and that the Commission required to be addressed in the March 2012 Order.

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<sup>23</sup> Applicants’ June 5, 2012 answer does not address this recommendation.

20. There are currently five PARs at the Ontario/Michigan interface (two are in series) resulting in four PARs paths. With respect to these PARs, Applicants' compliance proposal requires that NYISO consider the impact of the Ontario/Michigan PARs on the Market-to-Market Coordination Process in periods when the PARs are "in-service."<sup>24</sup> While the term "in-service" is not defined in Applicants' compliance filing, Applicants clarify, in their June 5, 2012 answer, that the Michigan/Ontario PARs will be considered "in service" when all four PARs paths are in-service.<sup>25</sup>

21. Applicants, however, have not justified why the consideration of the impact of Ontario/Michigan PARs on the Market-to-Market Coordination Process should be limited to the circumstances at play when all four PARs paths are in-service. In fact, there is no record evidence supporting or otherwise justifying Applicants' proposal. The formula contained in section 7.1.2.a. has the potential to consider a number of different PAR configurations, i.e., a process for calculating the impact of the Ontario/Michigan PARs on Market-to-Market flows that accounts for each PAR path separately when any number of PARs are operating. We find it appropriate to take into account the impact of the Ontario/Michigan PARs whenever any of the PARs have an effect on the Market-to-Market Coordination Process and that such calculations should not be qualified to occur only when all of the PARs are in service. Accordingly, we direct Applicants to modify section 7.1.2 of the JOA to provide that the provisions thereof that apply when the Michigan/Ontario PARs are "in-service" apply when any of the PARs are in service, and to file a revised JOA with these changes within 30 days from the date of this order.

22. Finally, we will not address here Indicated Transmission Owners' proposal that NYISO and PJM develop a Coordinated Transaction Scheduling process similar to that recently adopted by NYISO and ISO-NE. Such proposal is beyond the scope of this proceeding, as the Market-to-Market Coordination Process was developed specifically in response to problems associated with Lake Erie loop flows. While we will not address the issue in this proceeding, we encourage NYISO and PJM to explore the need for a mechanism to achieve more efficient levels of interchange between the RTOs (such as a Coordinated Transaction Scheduling mechanism) through their stakeholder processes.

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<sup>24</sup> JOA, Schedule D, § 7.1.2.

<sup>25</sup> Applicants' June 5, 2012 Answer at 2 ("The RTOs agree that the Michigan-Ontario PARs should be considered in-service under the JOA when the PAR tap changers are in-service at all four of the major transmission lines that interconnect Michigan and Ontario.").

The Commission orders:

Applicants' proposed tariff revisions are hereby accepted, effective January 15, 2013, subject to the submittal of an additional compliance filing within 30 days from the date of this order, as discussed in the body of this order.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.