146 FERC ¶ 61,208
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

New York Independent System Operator, Inc. Docket No. ER14-385-000

ORDER ON COMPLIANCE

(Issued March 20, 2014)

1. On November 12, 2013, New York Independent System Operator, Inc. (NYISO) submitted proposed revisions to the NYISO Market Administration and Control Area Services Tariff (Services Tariff) and Open Access Transmission Tariff (OATT) to comply with the requirements of Order No. 764.[1] In this order, we accept NYISO's proposed tariff revisions.

I. Background

2. On June 22, 2012, the Commission issued Order No. 764, which requires each public utility transmission provider to: (1) offer intra-hourly transmission scheduling at 15-minute intervals; and (2) incorporate provisions into the *pro forma* Large Generator Interconnection Agreement (LGIA) requiring interconnection customers whose generating facilities are variable energy resources (VER)[2] to provide meteorological and forced outage data to the public utility transmission provider for the purpose of power production forecasting. The Commission also provided guidance regarding the development and evaluation of proposals related to recovering the costs of regulation reserves associated with VER integration.[3]

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[1] *Integration of Variable Energy Resources*, Order No. 764, FERC Stats. & Regs. ¶ 31,331, *order on reh'g*, Order No. 764-A, 141 FERC ¶ 61,232 (2012), *order on reh'g,* Order No. 764-B, 144 FERC ¶ 61,222 (2013).

[2] Order No. 764 defined a VER as a device for the production of electricity that is characterized by an energy source that: (1) is renewable; (2) cannot be stored by the facility owner or operator; and (3) has variability that is beyond the control of the facility owner or operator. Order No. 764, FERC Stats. & Regs. ¶ 31,331 at P 210.

3. The reforms adopted in Order No. 764 were designed to remove barriers to the integration of VERs and to ensure that the rates, terms, and conditions for Commission-jurisdictional services provided by public utility transmission providers are just and reasonable and not unduly discriminatory or preferential.[4] Upon noting the increasing number of VERs being brought online, the Commission found that reforms were needed to ensure that transmission customers are not exposed to excessive or unduly discriminatory charges, and that public utility transmission providers have the information needed to efficiently manage reserve-related costs.

4. On December 20, 2012, the Commission issued Order No. 764-A, largely affirming the reforms adopted in Order No. 764. Among other things, Order No. 764-A extended the deadline for compliance with Order No. 764 to November 12, 2013.[5] On September 19, 2013 the Commission issued Order No. 764-B, which granted in part and denied in part the requests for clarification and denied the requests for rehearing of the Commission's determinations in Order No. 764-A.[6]

II. Notice of Filing and Responsive Pleadings

5. Notice of the filing was published in the *Federal Register*, 78 Fed. Reg. 70,031 (2013), with interventions, comments, and protests due on or before December 3, 2013. NYISO's Market Monitoring Unit (MMU), Potomac Economics, and New York Transmission Owners (NY Transmission Owners)[7] filed timely motions to intervene and comments. Exelon Corporation (Exelon), PJM Interconnection, L.L.C., (PJM) and NRG Companies (NRG) filed timely motions to intervene.

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[3] *Id*. P 4.

[4] *Id.* P 1.

[5] Order No. 764-A, 141 FERC ¶ 61,232 at P 8.

[6] Order No. 764-B, 144 FERC ¶ 61,222.

[7] The NY Transmission Owners collectively consist of: Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Long Island Power Authority, New York Power Authority, New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation d/b/a National Grid, Orange and Rockland Utilities, Inc., and Rochester Gas & Electric Corporation.

III. Discussion

A. Procedural Matters

6. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2013), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

B. Substantive Matters

1. Intra-Hour Scheduling

7. In Order No. 764, the Commission amended the *pro forma* Open Access Transmission Tariff (OATT) to provide all transmission customers the option of using more frequent transmission scheduling intervals within each operating hour, at 15-minute intervals.[8] The Commission found transmission customers' inability to adjust their transmission schedules within the hour to reflect changes in generation output can cause charges for Schedule 9 generator imbalance service to be unjust and unreasonable or unduly discriminatory. Thus, this reform was designed to allow transmission customers the flexibility to adjust their transmission schedules, in advance of real-time, to reflect the variability of output in generation, more accurate power production forecasts, and other changes in load profiles and system conditions.[9] It was also designed to allow public utility transmission providers, over time, to use fewer reserves to maintain overall system balance.[10] Finally, the Commission implemented this reform to ensure that charges for generator imbalance service under Schedule 9 of the *pro forma* OATT and for other ancillary services through which reserve-related costs are recovered are just and reasonable and are not unduly discriminatory.

8. In Order No. 764 in response to concerns regarding the cost of implementing intra-hour scheduling and possibly required changes in settlement procedures, the Commission stated that to the extent a public utility transmission provider believes that aligning the imbalance settlement with the intra-hour scheduling interval or implementing sub-hourly dispatch will result in more efficient operations, provide appropriate price signals to customers, or address other potential issues, it may seek any authorizations necessary from the Commission to do so under section 205 of the FPA. Such proposal could be submitted contemporaneously with the compliance filing in response to Order No. 764.[11]

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[8] Order No. 764, FERC Stats. & Regs. ¶ 31,331 at P 91.

[9] *Id.* P 92.

[10] *Id.* P 95.

In addition, in response to requests for regional variation in scheduling protocols the Commission acknowledged that future market enhancements in addition to existing 30-minute scheduling practices and other tools might yield equivalent or greater benefits to transmission customers and public utility transmission providers when reducing the scheduling interval from 30 to 15 minutes and thus could be consistent with or superior to Order No. 764's intra-hour scheduling requirements. Thus, the Commission affirmed the ability of a public utility transmission provider to submit alternative proposals that are consistent with or superior to the intra-hour scheduling requirements. Specifically, the Commission required that a public utility transmission provider demonstrate on compliance how its proposal provides equivalent or greater opportunities for transmission customers to mitigate Schedule 9 generator imbalance charges, and for the public utility transmission provider to lower its reserve-related costs, compared to market practices already in place within the region.[12]

a. Compliance Filing

9. NYISO asserts that the existing, Commission-approved deviations from the *pro forma* OATT in its tariff largely meet the requirements and policy goals of Order No. 764 and, therefore, are consistent with or superior to the requirements of Order No. 764. NYISO requests the Commission determine that its compliance proposal (including the proposed tariff revisions submitted in the related Coordinated Transaction Scheduling (CTS) filing with PJM)[13] provides scheduling flexibility to imports and exports that is

[11] *Id.* P 105.

[12] *Id.* PP 106-107.

[13] NYISO Filing, Docket No. ER14-552-000 (filed Dec. 6, 2013) (NYISO CTS Filing) (proposing revisions to the NYISO Services Tariff and OATT to add new real-time external transaction bidding and scheduling rules, CTS, for use at specifically designated proxy generator buses between NYISO and PJM); *see also N.Y. Indep. Sys. Operator, Inc*., 146 FERC ¶ 61,097, at P 1 (2014) (accepting, subject to condition, the revisions NYISO proposed in the NYISO CTS Filing). We note that intra-hour evaluation of CTS bids/offers is a new service that will provide additional options for market participants. NYISO and PJM will retain hourly evaluations of wheel-through service that has the potential for imbalances to be applied; however, NYISO explained such charges have not been applied because NYISO always schedules the same amount of energy for both the import and export portions of wheel-through transactions. NYISO Filing, Docket No. OA08-13-000, at 22-23 (filed Oct. 12, 2007). To the extent that a wheel-through transaction is entirely or partially curtailed, its export and import components will be reduced by the same amount. In addition, NYISO and PJM will retain intra-hour evaluations of Locational Based Marginal Price bids/offers.

equivalent to the scheduling flexibility that implementing the Order No. 764 changes to the *pro forma* OATT would provide.[14]

10. NYISO asserts that its existing OATT is consistent with or superior to Order No. 764's intra-hourly scheduling requirements because it preserves and protects the efficacy and benefits of the NYISO's co-optimized, multi-period, least cost market solution, significantly increases scheduling flexibility for external transactions without raising new market manipulation concerns, and provides equivalent or greater opportunities for transmission customers to mitigate "imbalance" charges, and for the NYISO to lower the cost it incurs to procure reserves.[15] NYISO asserts that its compliance proposal presents a tailored solution for the New York region that addresses the Commission's Order No. 764 goals while preserving the long-recognized market efficiency benefits of the NYISO's Real-Time Scheduling process. NYISO explains that it performs a unique ex ante, co-optimized, multi-period commitment, scheduling, and dispatch process that simultaneously evaluates bids and offers submitted by external transactions and internal resources to produce a least production cost solution.[16] NYISO states that, unlike markets that rely on "physical" (MW) reservations of ramp and transfer capability, it does not permit market participants to pre-reserve ramp or transfer capability. Instead, NYISO awards all necessary transmission service to economically committed resources, including external transactions.[17]

11. NYISO explains that it permits external transactions to be sourced from internal New York Control Area (NYCA) resources, which establishes a financial relationship between the internal and external resources but does not guarantee that NYISO will commit or dispatch the internal NYCA resource to serve the associated external transaction.[18] In other words, NYISO states, it utilizes a purely financial, and not physical, approach to scheduling transactions over its external interfaces. Instead of a market participant making a physical reservation for transmission service, the participant submits an external transaction offer into the real-time market, and, if the offer is

[14] NYISO's Transmittal at 10.

[15] NYISO's Transmittal at 12, 26 *et al*.

[16] NYISO explains that modifications to the relevant NYISO OATT provisions to accommodate its "financial" scheduling rules were accepted by the Commission as early as 1999. NYISO's Transmittal at 7 n.20 (citing *Cent. Hudson Gas & Elec. Co.*, 86 FERC ¶ 61,062, *order on reh'g*, 88 FERC ¶ 61,138 (1999), *order on reh'g*, 90 FERC ¶ 61,045 (2000)).

[17] NYISO's Transmittal at 12-13.

[18] NYISO's Transmittal at 13.

accepted, NYISO arranges transmission service in the amounts necessary to accommodate the transaction. In addition, external transactions are backed by ISO New England Inc.'s (ISO-NE) and NYISO's dispatch of pool-wide generation.[19]

12. Additionally, NYISO informs the Commission that it has implemented, or is in the process of implementing, 15 minute interchange scheduling with all of its neighbors that are able to support 15 minute interchange scheduling. NYISO explains that it's related CTS proposal with PJM proposed tariff revisions that are designed to permit import offers and export bids at all Variably Scheduled Proxy Generator Buses[20] to contain different MW quantities and different prices, for each quarter of an upcoming hour.[21] Further, NYISO will begin its economic evaluation of import offers and export bids 15 minutes closer to real-time operations. Today NYISO begins its evaluation 45 minutes prior to each quarter hour and establishes the binding schedules 30 minutes prior to real-time operations. NYISO states that, when the CTS improvements take effect, it proposes to begin its evaluation of import offers and export bids 30 minutes before each quarter-hour and to establish the binding schedules 15 minutes prior to the real-time operations, producing a 15-minute improvement that will improve the accuracy of scheduling decisions.[22]

13. NYISO explains that the enhanced scheduling flexibility it proposes to add will permit transmission customers to vary both the dollars and MW quantities included in their import offers and export bids to address "situations where the transmission customer knows or believes that generation output will change within the hour." The enhanced scheduling flexibility NYISO proposes in this filing will permit Import offers and Export bids that are associated with VERs to more accurately track a VER's forecast output on a

[19] *N.Y. Indep. Sys. Operator, Inc*., 139 FERC ¶ 61,048 (2012); *see also* NYISO Filing, Docket No. ER12-701-000, Attachment V White Paper, at I-4 (filed Dec. 28, 2011).

[20] "Variably Scheduled Proxy Generator Bus" is defined as: "A Proxy Generator Bus for which the ISO may schedule Transactions at 15-minute intervals in real time. Variably Scheduled Proxy Generator Buses are identified in Section 4.4.4 of the Services Tariff." NYISO Services Tariff, § 2.22; *see N.Y. Indep. Sys. Operator, Inc*., 146 FERC ¶ 61,097 at P 14 n.13.

[21] NYISO CTS Filing, at 15 (referring to Section 35.7.1.10 of the Joint Operating Agreement between NYISO and PJM); *see also N.Y. Indep. Sys. Operator, Inc*., 146 FERC ¶ 61,097 at PP 12, 33.

[22] NYISO's Transmittal at 6-7; *see N.Y. Indep. Sys. Operator, Inc*., 146 FERC ¶ 61,097 at P 12 n.11.

quarter-hourly basis over the course of each Real-Time Market hour. The NYISO's financial scheduling rules also permit VERs to include risks associated with VER forecast error in their economic offers. NYISO contends that its proposed improvements, in conjunction with its existing market design, will enable it to achieve the goals of Order No. 764.[23]

14. NYISO asserts that to enhance interchange scheduling flexibility in a manner that is consistent with the market rules in the New York region and maintains the economic efficiency of NYISO's real-time scheduling process, importers and exporters must continue to submit their import offers and export bids at least 75 minutes before each real-time market operating hour.[24] NYISO states that the same timing requirement applies to offers and bids submitted on behalf of NYCA resources.[25] NYISO explains that permitting importers and exporters to unilaterally modify the import or export schedule that NYISO's real-time scheduling process produces would decrease the efficiency of NYISO's real-time scheduling process solution to the detriment of NYCA loads and other scheduled imports and exports. Further, NYISO contends that permitting market-participant-directed import or export schedule changes would also present market manipulation concerns in NYISO's markets.[26]

15. NYISO states that the proposed effective dates for implementing the enhanced scheduling flexibility will be the fourth quarter of 2014 for all PJM Proxy Generator Buses, including scheduled lines, and for NYISO's Chateauguay interface with Hydro Quebec TransEnergie (HQ). NYISO further explains that NYISO and HQ are discussing a plan to implement the 190 MW Dennison Scheduled Line as a Variably Scheduled Proxy Generator Bus. NYISO and ISO-NE propose to implement CTS at their primary alternating current interface in the fourth quarter of 2015,[27] and following such implementation, will work with ISO-NE to implement 15-minute scheduling on the

[23] NYISO's Transmittal at 7.

[24] NYISO's Transmittal at 8. We note that ISO-NE stated, in its filing to adopt CTS with NYISO, that it is increasing the notification requirement from 60 minutes to 75 minutes to come into alignment with NYISO's market rules, which require 75-minute notification for external transaction offers. ISO-NE, Filing, Docket No. ER12-1155-000, at 15 (filed Feb. 24, 2012).

[25] NYISO's Transmittal at 8.

[26] NYISO's Transmittal at 8.

[27] NYISO's CTS Filing Docket No. ER14-552-000, Transmittal Letter at 2. S*ee also N.Y. Indep. Sys. Operator, Inc*., 146 FERC ¶ 61,097 (2014) (accepting, subject to condition, the revisions NYISO proposed in the NYISO CTS Filing).

Cross-Sound Cable Scheduled Line and the Northport-Norwalk Scheduled Line, NYISO states.[28] NYISO explains that the Ontario Independent Electricity System Operator (IESO) IESO indicated that it is not yet prepared to commit to implementation of 15-minute scheduling at the New York/Ontario border, or to a proposed implementation date for 15-minute scheduling.[29]

16. With respect to transmission customers' ability to mitigate "imbalance" charges, and reduce reserve related costs, NYISO maintains that "there is no such thing" as an imbalance charge or penalty in the context of scheduling between Balancing Authorities.[30] NYISO explains that if the owner of a VER schedules an export of 10 MW from the New York Control Area (NYCA) for a quarter-hour that is financially tied to its VER, but the VER only produces 8 MW, the NYISO provides the additional two MW from its available portfolio of on-line resources. NYSO further explains that it charges the VER's owner the locational based marginal price at the relevant proxy generator bus for the additional energy. NYISO states that there is no penalty imposed due to the VER's under-delivery of its export.[31] NYISO also explained how its compliance proposal will reduce the NYISO's reserve-related costs (and its energy and uplift costs), compared to the scheduling requirements of the final rule.[32]

b. Comments and Protests

17. Commenters support NYISO's proposal. The MMU contends that for NYISO's Real Time Commitment software to efficiently schedule external transactions and quick-start resources, the software must have reliable information regarding the available bids and offers over the short-term scheduling horizon. Otherwise, the MMU argues, the software might incur large costs to schedule imports and gas turbines only to find that some market participants simply change their bids and offers (or external schedules) after these costs are incurred.[33] As a result, the MMU states, this has led to the adoption of a 75-minute submission window for bids. The MMU argues that the danger of allowing schedule changes after this bid submission window closes is that it would undermine the

[28] NYISO's Transmittal at 9.

[29] NYISO's Transmittal at 9.

[30] NYISO's Transmittal at 26.

[31] NYISO's Transmittal at 26.

[32] NYISO's Transmittal at Section II.C, second example.

[33] MMU Comments at 4.

incentives of market participants to reveal their true cost of supply for imports, or demand exports, sufficiently far in advance for Real Time Commitment to efficiently coordinate scheduling of external transactions and internal resources.[34] The MMU further argues that if the Order No. 764 requirements were deemed to apply to the scheduling of imports and exports (rather than the scheduling of output from VER), some of the requirements of Order No. 764 may not be compatible with certain aspects of NYISO's real-time markets and modifying the markets to accommodate these requirements may harm the VERs in New York.[35]

18. Similarly, the NY Transmission Owners argue that permitting entities to submit, modify, or withdraw external transaction schedules with as little as 20- minutes notice without financial consequences for doing so would undercut existing market rules regarding market manipulation.[36]

c. Commission Determination

19. We find that NYISO's existing construct for transmission scheduling of intertie transactions that utilizes a purely financial, and not physical, approach to scheduling transactions over its external interfaces is consistent with or superior to the intra-hourly scheduling requirements of Order No. 764.[37] The purpose of Order No. 764's intra-hourly scheduling requirement is to provide transmission customers the ability to avoid unjust and unreasonable or unduly discriminatory imbalance charges and to allow public utility transmission providers to use fewer reserves to maintain overall system balance.[38] For Regional Transmission Organization and Independent System Operator regions, the Commission explained in Order No. 764 that "the implementation of 15-minute transmission scheduling will only apply to intertie transactions."[39]

20. NYISO's integrated financial approach to awarding transmission service to intertie transactions connects transmission service and intertie transactions in a manner that enhances economic efficiency and mitigates the financial risks associated with the use of ~~transmission service to facil~~itate intertie transactions in a manner that is superior to the

[34] MMU Comments at 4.

[35] MMU Comments at 2-3.

[36] NY Transmission Owners Comments at 2-4.

[37] Order No. 764, FERC Stats. & Regs. ¶ 31,331 at P 374.

[38] Order No. 764, FERC Stats. & Regs. ¶ 31,331 at PP 22, 374.

15-minute transmission scheduling requirement in Order No. 764. NYISO's approach to external transactions is not based on physical rights to use the transmission system, but rather assigns transmission capacity to the most economic transaction. This approach treats external transactions as pool-backed financial transactions and does not tie any transaction to the output of any single generator. For example, a market participant seeking to import power from New England to New York essentially engages in two concurrent transactions. First, it purchases system power in ISO-NE and sells system power in NYISO. Second, it sells generation from its own New England resource into the ISO-NE market. The first transaction constitutes the external transaction. Because this transaction is a purchase and a sale of system (or "pool") power, it is irrelevant whether the market participant's own generation (being sold as an internal transaction) matches the quantity sold in the external transaction. Under this purely financial approach to intertie transactions, VERs are not exposed to generator imbalance charges for such transactions. In addition, transmission service is awarded based solely on the bid to export and import.

21. Further, as NYISO asserts, its existing OATT is consistent with or superior to Order No. 764's intra-hourly scheduling requirements because "there is no such thing" as an imbalance charge or penalty in the context of scheduling between Balancing Authorities. NYISO explains that it performs a unique ex ante, co-optimized, multi-period commitment, scheduling, and dispatch process that simultaneously evaluates bids and offers submitted by external transactions and internal resources to produce a least production cost solution. Additionally NYISO's revisions to allow 15-minute scheduling will permit import offers and export bids at all Variably Scheduled Proxy Generator Buses to contain different MW quantities and different prices for each quarter of an upcoming hour. This will permit transmission customers, including VERs, to vary both the dollars and MW quantities included in their import offers and export bids to address "situations where the transmission customer knows or believes that generation output will change within the hour." This enhanced scheduling flexibility will thereby permit Import offers and Export bids that are associated with VERs to more accurately track a VER's forecast output on a quarter-hourly basis over the course of each Real-Time Market hour. We therefore accept this aspect of NYISO's compliance filing.

22. Consistent with our finding in ISO-NE,[40] we also find that the existing construct for transmission scheduling of intertie transactions over the Cross Sound Cable line is consistent with the intra-hourly scheduling requirements of Order No. 764. While a transmission customer must have an advance physical reservation under Schedule 18 or Attachment N[41] as a prerequisite to making an intertie transaction over the Cross Sound

[40] *ISO New England Inc. and New England Power Pool Participants Committee*, 146 FERC ¶ 61,190 (2014).

Cable, it is a purely financial transaction. As a result, transmission customers do not face generator imbalance charges as a result of their intertie transactions on the Cross Sound Cable. Accordingly, we accept NYISO's filing with respect to intra-hour scheduling over the Cross Sound Cable.

2. Data Reporting to Support Power Production Forecasting

23. In Order No. 764, the Commission amended the *pro forma* LGIA to require new interconnection customers, whose generating facilities are VERs, to provide meteorological and forced outage data to the public utility transmission provider with which the customer is interconnected.[42] Such data would only be required where it is necessary for that public utility transmission provider to develop and deploy power production forecasting. This reform was designed to facilitate public utility transmission providers' use of power production forecasts, which the Commission found can provide public utility transmission providers with advanced knowledge of system conditions needed to manage the variability of VER generation through the unit commitment and dispatch process, rather than through the deployment of more costly reserve service, such as regulation reserves. In requiring this change to the *pro forma* LGIA, the Commission specified that reporting requirements for meteorological and forced outage data would be set forth in Appendix C, Interconnection Details of an LGIA, as they may change from time to time.[43] The Commission declined to modify existing LGIAs or to require changes to the *pro forma* OATT,[44] upon finding that such changes would, in effect, impose the data reporting requirements on existing interconnection customers, including small generator interconnection customers, retroactively.[45]

24. In Order No. 764, the Commission stated that the flexibility of providing meteorological and forced outage data requirements in business practices or market rules is not a superior alternative in implementing the reforms of Order No. 764.[46] Rather, the Commission addressed public utility transmission providers' need for flexibility by requiring the reporting requirement to be set forth in Appendix C of the LGIA.

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[41] Attachment N of NYISO Services Tariff.

[42] Order No. 764, FERC Stats. & Regs. ¶ 31,331 at P 3.

[43] Order No. 764, FERC Stats. & Regs. ¶ 31,331 at P 193.

[44] *Id*. P 195.

[45] *Id.* P 196.

[46] *Id.* P 194.

Appreciating that public utility transmission providers in some regions have already implemented meteorological or forced outage data requirements in their business practices and market rules, the Commission allowed public utility transmission providers to demonstrate on compliance how continued use of such practices is consistent with or superior to the requirements of Order No. 764.[47]

a. Compliance Filing

25. NYISO proposes to add the requirement that wind generators provide maximum available megawatts to Section 5.8.1 of the NYISO Services Tariff.[48] NYISO states that Order No. 764 emphasizes that its intent is to require generating facilities that are VERs to provide data "where necessary for" and "commensurate with" the power production forecasting employed by the public utility transmission provider or ISO. NYISO explains that when it implemented its wind energy forecasting system in 2008,[49] it determined, in consultation with its wind forecasting consultant, the only *necessary* data elements from every wind generator were wind speed, wind direction and the technical capabilities (maximum available MWs) of each wind generator.[50] NYISO explains that its wind guide manual states that wind generators may provide, at their option, additional data

[47] *Id.*

[48] Section 5.8.1 of NYISO's Services Tariff states, in part:

> Pursuant to ISO Procedures, Intermittent Power Resources that depend on wind as their fuel shall maintain in good working order equipment to collect wind speed and wind direction data at their site and shall provide the ISO, or its agent, with wind speed, wind direction and maximum available megawatt data in the manner identified by the ISO, provided however this requirement shall not apply to any Intermittent Power Resource in commercial operation as of January 1, 2002 with nameplate capacity of 12 MWs or fewer. Maximum available megawatts shall be the sum of the individual nameplate capacities for all turbines that are online and currently capable of producing power (including those turbines that are not producing any power due to low wind speeds); this value should exclude those turbines that are not producing power due to a fault condition or a network communication failure condition or that are offline for service. Each Intermittent Power Resource that depends on wind as its fuel shall be responsible for the cost of installing and maintaining such equipment at its site and shall share in funding the ISO's cost of wind forecasting function pursuant to this Services Tariff.

[49] *N.Y. Indep. Sys. Operator, Inc*., 123 FERC ¶ 61,267 (2008).

[50] NYISO's Transmittal at 34.

elements for NYISO's use in its wind energy forecast. The optional data elements are: (1) ambient air temperature; (2) ambient air dewpoint; (3) ambient air relative humidity; and (4) barometric pressure. NYISO states it is not proposing to require submission of this additional data. NYISO believes that requiring only the data that it needs to produce its wind forecast satisfies Order No. 764 "provision of data" requirements for wind data, given the flexibility allowed for transmission providers to require meteorological data only "to the extent necessary for the Transmission Provider's development and deployment of power production forecasts."[51]

26. NYISO observes that Order No. 764 specifies that a VER having wind as the energy resource should provide, at a minimum, site-specific meteorological data including: temperature, wind speed, wind direction, and atmospheric pressure. However, NYISO states that its wind forecast relies on wind speed and wind direction data from wind generators. NYISO contends that it does not need to receive temperature and atmospheric pressure data from wind generators in order to produce its wind energy forecast. Therefore, NYISO argues that a requirement for production of such data to NYISO is not necessary in its *pro forma* LGIA or Tariffs. NYISO states that Order No. 764 provides that ISOs may seek to demonstrate how continued use of the existing business practices and market rules is adequate to satisfy the requirements of the Order using the "independent entity variation" standard.[52]

27. With regard to forced outage reporting requirements, NYISO explains that its Services Tariff requires all suppliers within the NYCA, not just wind generators or intermittent power resources, to submit data on generator status and output including forced outages or partial unit outages that resulted in a significant reduction in a generating unit's ability to produce energy in any hour, in accordance with the ISO Procedures.[53] NYISO also explains that section 3.5.2 of its Services Tariff requires customers to "inform the ISO, in accordance with the ISO Procedures, of the availability of generators within the NYCA subject to a customer's control by energy contract, ownership or otherwise." NYISO states that its Wind Energy Forecast specifically depends on the availability of wind generators; therefore, the Wind Guide provides, "it is critical that wind plant operators provide the NYISO with available capacity ratings for their plants in advance of reductions in plant output capacity."[54] NYISO states that the

[51] NYISO's Transmittal at 35.

[52] NYISO's Transmittal at 35-36.

[53] NYISO's Transmittal at 39.

[54] NYISO's Transmittal at 40 (citing NYISO, Guide 9: Wind Plant Operator Data Guide, § 4 (July 2013) (Wind Guide), *available at*

Wind Guide also specifies that unplanned outages should be reported as soon as practicable. They state the instructions specified by NYISO apply to any reduction in plant output capacity which is for 1 MW or more, and lasting for 1 hour or more.[55] NYISO also states that any reduction in plant output capacity which lasts less than 1 hour, does not need to be reported to the NYISO.

28. NYISO asserts that its existing Services Tariff is consistent with the Order No. 764 requirement that interconnection customers whose generating facility is a VER submit all forced outage data to a Transmission Provider or ISO. As a result, NYISO requests that the Commission accept its current Tariff forced outage reporting requirements for all suppliers, including wind generators and any other intermittent power resources as compliant with the forced outage reporting requirements specified in Order No. 764.

29. Additionally, NYISO explains that it will not be engaging in solar power production forecasting and, therefore, does not propose to include an obligation for solar generators to provide meteorological data to the NYISO in its Tariffs or its *pro forma* LGIA. However, NYISO explains that if solar energy forecasting becomes necessary in the future, it will present proposed tariff revisions to the Commission, to implement solar power production forecasting and to require provision of meteorological data from solar generators.[56]

30. With regard to the definition of VER, the NYISO proposes to modify its definition of Intermittent Power Resource in its Services Tariff section 2.9 and OATT section 1.9.

NYISO asserts that its revised definition of Intermittent Power Resource[57] incorporates the Variable Energy Resource definition from Order No. 764 and the existing elements of

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http://www.nyiso.com/public/webdocs/markets_operations/documents/Manuals_and_Guides/Guides/User_Guides/Wind_Plant_Operator_Forecast_Data_Guide.pdf).

[55] NYISO's Transmittal at 40.

[56] NYISO's Transmittal at 38-39.

[57] Under Section 2.9 of NYISO's Services Tariff, Intermittent Power Resource shall mean:

> A device for the production of electricity that is characterized by an energy source that: (1) is renewable; (2) cannot be stored by the facility owner or operator; and (3) has variability that is beyond the control of the facility owner or operator. In

NYISO's definition that are necessary to ensure continued consistency with other sections of NYISO's Tariffs and business practices.[58]

b. Commission Determination

31. We accept NYISO's proposal to comply with data reporting requirements of Order No. 764. We find that the data required under NYISO's tariff provisions to produce wind energy forecasts satisfies the requirements of Order No.764. Order No. 764 provides that ISOs may seek to demonstrate how continued use of the existing business practices and market rules is adequate to satisfy the requirements of the Order using the "independent entity variation" standard.[59] We also find that NYISO tariff provisions for forced outage data reporting requirements satisfies the requirements of Order No. 764.[60]

32. We accept NYISO's proposal to modify its existing definition of Intermittent Power Resource in its Tariffs because the use of NYISO's existing language and the incorporation of the Variable Energy Resource definition from Order No. 764 meet the independent entity variation standard. First, we find that the Services Tariff and OATT definition of Intermittent Power Resource is consistent with the definition of Variable Energy Resources in the *pro forma* OATT. Second, we find persuasive NYISO's assertion that its proposal is necessary to ensure continued consistency with other sections of NYISO's Tariffs and business practices.

The Commission orders:

NYISO's proposed Tariff revisions are hereby accepted, effective January 15, 2014, as requested.

By the Commission.

(S E A L)

New York, resources that depend upon wind, solar energy or landfill gas for their fuel have been classified as Intermittent Power Resources. Each Intermittent Power Resource that depends on wind as its fuel shall include all turbines metered at a single scheduling point identifier (PTID).

[58] NYISO's Transmittal at 41.

[59] Order No. 764, FERC Stats. & Regs. ¶ 31,331 at PP 194, 375.

[60] Order No. 764, FERC Stats. & Regs. ¶ 31,331 at P 192.

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