

149 FERC ¶ 61,268
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Cheryl A. LaFleur, Chairman;
Philip D. Moeller, Tony Clark,
and Norman C. Bay.

ISO New England Inc. and New England Power Pool Docket No. ER14-2918-000
Participants Committee

ORDER ACCEPTING TARIFF REVISIONS

(Issued December 22, 2014)

1. On September 22, 2014, ISO New England Inc. (ISO-NE) and the New England Power Pool (NEPOOL) Participants Committee (together, Filing Parties) jointly filed, pursuant to section 205 of the Federal Power Act (FPA),¹ proposed revisions to ISO-NE's Transmission, Markets and Services Tariff (Tariff),² which modify ISO-NE's frequency regulation market design. As discussed below, we accept the proposed revisions effective March 31, 2015, as requested.

I. Background

2. In 2011, the Commission issued Order No. 755 to address market design issues involving compensation for frequency regulation service provided by participants in the organized wholesale electricity markets.³ ISO-NE submitted Tariff changes to implement the frequency regulation market design in accordance with Order No. 755, and

¹ 16 U.S.C. § 824d (2012).

² ISO New England Inc., ISO New England Inc. Transmission, Markets and Services Tariff, [III.13.7](#), [III.13.7 Performance, Payments and Charges in the FCM](#), [35.0.0](#) and [III.14 Regulation Market](#), [III.14 Regulation Market](#), [5.0.0](#). Capitalized terms have the meaning set forth in the Tariff.

³ *Frequency Regulation Compensation in the Organized Wholesale Power Markets*, FERC Stats. & Regs. ¶ 31,324 (2011) (Cross-Referenced at 137 FERC ¶ 61,064 (2011)) (Order No. 755), *reh'g denied*, 138 FERC ¶ 61,123 (2012) (Order No. 755-A).

the Commission accepted the changes to become effective on October 1, 2014, as requested.⁴

3. On March 20, 2014, in Docket No ER14-1537-000, the Filing Parties jointly proposed several modifications to the frequency regulation market rules that the Commission had previously accepted but which had not yet become effective. These changes included, among other things, a proposal to use a single dispatch method for all frequency regulation market resources, rather than use different dispatch methods for different technologies, i.e., one method for generation resources and another method for Alternative Technology Regulation Resources.⁵

4. By order issued May 20, 2014,⁶ the Commission rejected ISO-NE's proposed changes, finding that ISO-NE had not shown the proposed Tariff revisions to be just and reasonable, and not unduly discriminatory or preferential.⁷ The Commission explained that ISO-NE's proposed Tariff revisions would restrict the ability of limited-energy resources, such as storage devices, to participate in the frequency regulation market to the fullest extent possible while other resources would face no such restrictions. The Commission further explained that, in order to avoid penalties for potential non-performance due to "fading,"⁸ only limited-energy resources effectively would be required to limit the amount of capacity they offer. The Commission stated that Regional Transmission Organization (RTO) and Independent System Operator (ISO) market

⁴ *ISO New England Inc.*, 143 FERC ¶ 61,250 (2013), *ISO New England Inc.*, Notice of Extension of Time, Docket No. ER12-1643-002, issued July 29, 2013.

⁵ On August 5, 2008, the Filing Parties submitted Tariff revisions establishing the Alternative Technologies Regulation Pilot Program in order to permit Market Participants with resources incorporating new, alternative technologies to provide and be paid for frequency regulation services on a trial basis. *See ISO New England Inc. and New England Power Pool*, 129 FERC ¶ 61,213, at P 4 (2009).

⁶ *See ISO New England Inc.*, 147 FERC ¶ 61,135 (2014) (May 20, 2014 Order).

⁷ May 20, 2014 Order, 147 FERC ¶ 61,135 at P 26.

⁸ Fading, also called "drift," refers to when a storage resource either fills up or runs out of energy and is therefore unable to follow Automatic Generation Control (AGC) dispatch instruction until such time as the Area Control Error (ACE) reverses and the resource is dispatched in the opposite direction. *See ISO-NE Answer at n.27* (citing ISO-NE, Compliance Filing, Docket No. ER12-1643-000, at 11-13 (Lowell Testimony) (Apr. 30, 2012)).

experience shows that there are at least two ways to allow limited-energy resources to participate in a not unduly discriminatory manner: (i) active charge state management⁹ of storage resources that accounts for their availability; and (ii) separate AGC signals such as is used in PJM Interconnection, L.L.C. (PJM) and the appropriate coordination between AGC signals.

5. On August 1, 2014, ISO-NE submitted proposed tariff revisions to extend the effective date of its frequency regulation market rules and to make changes necessary to reflect the change in sequence in the implementation of the frequency regulation market rules and the energy market offer flexibility changes.¹⁰ On September 30, 2014, the Commission granted ISO-NE an extension of time to and including March 31, 2015, to implement the frequency regulation market rules, and accepted ISO-NE's Tariff revisions to become effective March 31, 2015, as requested.¹¹

II. Summary of the Filing

6. On September 22, 2014, the Filing Parties submitted proposed changes to the frequency regulation market design to address the Commission's concerns expressed in the May 20, 2014 Order. The Filing Parties state that the proposal provides for an energy-neutral dispatch option for non-generation resources. The Filing Parties state that this option is intended to eliminate the potential for limited-energy resources to fade under certain circumstances. Therefore, according to the Filing Parties, the proposed changes address the Commission's previously-stated concern that the lack of any capability for limited-energy resources to manage their state-of-charge creates a barrier to entry.¹²

⁹ Active charge state management (or just charge state management) occurs when the system operator specifically monitors the charge state of a storage resource and gives it dispatch instructions to maintain a certain charge level. *See, e.g.* California ISO, Business Practice Manual for Market Operations, Stored Energy Management for Non-Generator Resources in Real-Time, § 7.8.2.5.

¹⁰ The energy market offer flexibility changes refer to a set of market rule changes that will allow market participants to, among other things, submit hourly reoffers in the real-time market and submit offers that vary by hour. *See ISO New England Inc. & New England Power Pool*, 145 FERC ¶ 61,014 (2013), *order on compliance*, 147 FERC ¶ 61,073 (2014).

¹¹ *ISO New England Inc.*, 148 FERC ¶ 61,253 (2014).

¹² Lowell Testimony at 4.

7. The revised rules provide market participants with non-generation resources three dispatch options: (1) a new energy-neutral dispatch signal using the existing trinary dispatch method,¹³ (2) an energy-neutral version of the relative response rate dispatch method currently used by generating resources,¹⁴ or (3) the standard (i.e. not energy-neutral) AGC dispatch method in use today for generation resources.¹⁵ ISO-NE explains that the energy-neutral dispatch option works by sending dispatch instructions that result in dispatching an approximately equal amount of energy above and below the midpoint of a resource's regulating range over a relatively short period of time (i.e. 5 to 15 minutes).¹⁶ ISO-NE states that this is the same approach accepted by the Commission for use in the PJM region.

8. The Filing Parties state that the frequency regulation market rule changes also include additional revisions to clarify certain provisions, correct errors and conform the rules to the expected implementation of the energy market offer flexibility changes in December 2014. The Filing Parties state that all of the rule changes were unanimously supported by NEPOOL stakeholders, including most of those that are most affected by the implementation of the new frequency regulation market.¹⁷

II. Notice of Filing

9. Notice of the filing was published in the *Federal Register*, 79 Fed. Reg. 58,764 (2014), with interventions and protests due on or before October 14, 2014. On October 14, 2014, motions to intervene were timely-filed by Exelon Corporation, Northeast Utilities Service Company and Beacon Power, LLC. No comments or protests were filed.

¹³ The trinary dispatch method calculates AGC set points equal to either the resource's Regulation High Limit, Regulation Low Limit, or a midpoint between the Regulation High Limit and the Regulation Low Limit. ISO-NE Tariff section III.14.6.

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ ISO-NE Transmittal at 4-5.

¹⁷ ISO-NE Transmittal at 5.

III. Discussion

A. Procedural Matters

10. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2014), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

B. Commission Determination

11. We accept the proposed frequency regulation market provisions to become effective March 31, 2015, as requested.

12. As an initial matter, we accept the Tariff revisions clarifying certain provisions, correcting errors, and conforming the rules to be consistent with the expected implementation of the energy market offer flexibility changes, to occur in December 2014.

13. We also accept the revisions to the frequency regulation market providing for an energy-neutral dispatch option for non-generation resources (i.e. limited-energy resources). By ensuring that the amount of energy dispatched above and below a resource's regulation midpoint is approximately equal, the energy-neutral dispatch method reduces the likelihood that limited-energy resources will fade and therefore reduces the likelihood that these resources would need to limit the amount of capacity they offer in order to avoid penalties for potential non-performance. Thus, we find that the inclusion of an energy-neutral dispatch option addresses the Commission's concerns articulated in the May 20, 2014 Order by removing an unnecessary barrier to entry faced only by limited-energy resources. Accordingly, we accept the Tariff revisions to become effective March 31, 2015, as requested.

The Commission orders:

The proposed Tariff revisions are hereby accepted, effective March 31, 2015, as requested, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.