

185 FERC ¶ 61,044  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Willie L. Phillips, Acting Chairman;  
James P. Danly, Allison Clements,  
and Mark C. Christie.

ISO New England Inc.

Docket Nos. ER23-739-000  
ER23-739-001  
ER23-743-000  
ER23-743-001

ORDER ACCEPTING TARIFF REVISIONS

(Issued October 19, 2023)

1. On December 29, 2022, pursuant to section 205 of the Federal Power Act (FPA)<sup>1</sup> and section 35.13 of the Commission’s regulations,<sup>2</sup> ISO New England Inc. (ISO-NE), joined by the Participating Transmission Owners Administrative Commission on behalf of the New England Participating Transmission Owners (PTO) and the New England Power Pool (NEPOOL) Participants Committee (together, Filing Parties) filed proposed revisions to ISO-NE’s Transmission, Markets and Services Tariff (Tariff) and Transmission Operating Agreement (TOA) to enable electric storage facilities to be planned and operated as transmission-only assets (i.e., Storage as Transmission-Only Asset or SATOA) to address system needs identified in the regional system planning process set forth in the Tariff.<sup>3</sup> In this order, we accept Filing Parties’ proposal and direct them to notify the Commission of the actual effective date of the Tariff revisions no less than 30 days prior to the date the proposed Tariff revisions are implemented, as discussed below.

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<sup>1</sup> 16 U.S.C. § 824d.

<sup>2</sup> 18 C.F.R. § 35.13 (2022).

<sup>3</sup> The proposed revisions to the Tariff and TOA are referred to collectively as the SATOA Revisions. ISO-NE states that it submitted the Tariff revisions in Docket No. ER23-739 and the TOA revisions separately in Docket No. ER23-743 due to technical limitations associated with the Commission’s eTariff system. ISO-NE asks that the Commission treat the two submissions as a single filing. ISO-NE submitted both sets of revisions with “12/31/9998” effective dates.

## I. Background

2. In *Nevada Hydro I*, the Commission denied a request that a pumped storage project (Lake Elsinore Advanced Pumped Storage project, or LEAPS) be treated as a transmission facility under the operational control of California Independent System Operator Corporation (CAISO) and that the cost of the project be included in CAISO's rolled-in transmission access charge.<sup>4</sup> The Commission stated that the purpose of CAISO's transmission access charge is to recover the costs of transmission facilities under the control of CAISO, not to recover the costs of bundled services.<sup>5</sup> The Commission found that it would not be appropriate for CAISO to assume operational control over the pumped-storage facility.<sup>6</sup> The Commission stated that, for these reasons, LEAPS' costs were not properly recovered through the transmission access charge. The Commission added that, absent information that justified treating LEAPS differently from the existing pumped hydro facilities in CAISO's footprint, allowing LEAPS to receive a guaranteed revenue stream through CAISO's transmission access charge would create an undue preference for LEAPS compared to these other similarly situated pumped hydro generators.<sup>7</sup>

3. Subsequently, in *Western Grid*, the Commission granted a petition for declaratory order from Western Grid, requesting that the Commission classify its electric storage resources as transmission for cost-based recovery purposes, finding (among other things) that when operated at CAISO's direction to provide voltage support and thermal overload protection for relevant transmission facilities, the electric storage resource would function as wholesale transmission facilities.<sup>8</sup>

4. In 2017, the Commission issued a policy statement providing guidance and clarification on, among other things, the ability of electric storage resources to receive cost-based rate recovery for certain services, such as transmission or grid support

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<sup>4</sup> *The Nev. Hydro Co.*, 122 FERC ¶ 61,272, at PP 82-83 (2008) (*Nevada Hydro I*).

<sup>5</sup> *Id.* P 83.

<sup>6</sup> *Id.* P 82.

<sup>7</sup> *Id.* P 83.

<sup>8</sup> *W. Grid Dev., LLC*, 130 FERC ¶ 61,056, at PP 45, 46, *order on reh'g*, 133 FERC ¶ 61,029 (2010) (*Western Grid*).

services, while also receiving market-based revenues for providing separate market-based rate services.<sup>9</sup>

5. In 2018, the Commission dismissed a petition requesting that the Commission find that the LEAPS project is a transmission facility consistent with *Western Grid* and the 2017 Policy Statement and that the project was entitled to cost-based recovery.<sup>10</sup> The petition was dismissed as premature as the project had not yet been studied in CAISO's regional transmission planning process, and the Commission concluded that it could not make a reasoned decision as to whether the project was a transmission project and thus eligible for cost recovery under CAISO's rolled-in transmission access charge.<sup>11</sup>

6. In 2020, the Commission accepted a proposal by Midcontinent Independent System Operator, Inc. (MISO) to revise its Open Access Transmission, Energy, and Operating Reserve Markets Tariff to allow electric storage resources that serve a transmission function to be approved as the preferred solutions to transmission issues identified in the MISO Transmission Expansion Plan and to have their costs recovered through cost-based transmission rates.<sup>12</sup>

7. In 2023, the Commission accepted a proposal by Southwest Power Pool, Inc. (SPP), under which an electric storage resource may be considered a transmission asset.<sup>13</sup> The Commission found that the framework will result in the selection of SATOAs only when those resources perform a transmission function.<sup>14</sup>

## II. Filing

8. Filing Parties state that the SATOA Revisions add a definition of SATOA<sup>15</sup> and include facilitating Tariff language to address the cost allocation and recovery,

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<sup>9</sup> *Utilization of Elec. Storage Res. for Multiple Servs. When Receiving Cost-Based Rate Recovery*, 158 FERC ¶ 61,051, at P 9 (2017) (2017 Policy Statement).

<sup>10</sup> *Nev. Hydro Co.*, 164 FERC ¶ 61,197 (2018) (*Nevada Hydro II*).

<sup>11</sup> *Id.* P 22.

<sup>12</sup> *Midcontinent Indep. Sys. Operator, Inc.*, 172 FERC ¶ 61,132, *reh'g denied*, 173 FERC ¶ 62,022 (2020) (MISO Order).

<sup>13</sup> *Sw. Power Pool, Inc.*, 183 FERC ¶ 61,153 (2023) (SPP Order).

<sup>14</sup> *Id.* P 29.

<sup>15</sup> Filing Parties propose to define SATOA as “electric storage equipment that: (1) is connected to or to be connected to Pool Transmission Facilities in the New England

transmission planning, operation, interconnection, and market participation issues related to SATOAs.

9. Filing Parties state that the SATOA Revisions provide for the consideration of electric storage facilities as a regulated transmission solution in the Solutions Study<sup>16</sup> and the competitive solution processes to address transmission system needs identified in Needs Assessments and Public Policy Transmission Studies performed pursuant to Attachment K of the Tariff.<sup>17</sup> Filing Parties explain that if a SATOA is selected as the preferred regulated transmission solution via these processes for inclusion in the Regional System Plan, the SATOA will be categorized as a Pool Transmission Facility subject to ISO-NE's operating authority.<sup>18</sup>

10. Filing Parties state that ISO-NE will use its operating authority to manually dispatch the SATOA for the limited purposes of addressing the transmission system needs for which it was planned, avoiding or mitigating load shedding after all available dispatchable resources that can effectively provide relief to avoid or mitigate the load shedding have been dispatched, or providing support during system restoration.<sup>19</sup>

11. Filing Parties state that the proposed revisions prohibit SATOAs from participating in ISO-NE's markets other than for the limited purposes specified in the

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Transmission System at a voltage level of 115 kV or higher; (2) the ISO approved to be included in the Regional System Plan and RSP Project List as a regulated transmission solution and Pool Transmission Facility pursuant to the regional system planning processes in Attachment K of the [Tariff]; and (3) is capable of receiving energy only from the Pool Transmission Facilities and storing the energy for later injection to the Pool Transmission Facilities.” Proposed Tariff, I.2 (148.1.0), § I.2.2.

<sup>16</sup> Unless indicated otherwise, all capitalized terms not defined herein shall have the same meaning given to them in the Tariff.

<sup>17</sup> Transmittal at 7-8 (citing Tariff, attach. K, (28.1.1) §§ 4.2, 4.3, 4A). Filing Parties explain that the Solutions Study process is used to develop transmission solutions to system reliability needs that are time sensitive, whereas the competitive solutions process is used to develop transmission solutions to market efficiency needs, public policy needs, and reliability needs that are not time sensitive. Time-sensitive reliability needs are those that are needed within three years or less from the completion of a Needs Assessment. *See* Tariff, attach K, § 4.1(i).

<sup>18</sup> Transmittal at 8 (citing Transmittal, § IV(C) (discussing Proposed Tariff, § II.51 (1.0.0)); *see also id.*, attach. (Brent K. Oberlin Testimony) at 11-12).

<sup>19</sup> Transmittal at 8.

rules.<sup>20</sup> Filing Parties note that these limitations on market activity help minimize market impacts and ensure a SATOA does not receive dual recovery of its costs via both cost-of-service rates and market-based rates.<sup>21</sup> Filing Parties explain that SATOAs will be considered Pool Transmission Facilities, and therefore a SATOA owner will be eligible for compensation through the Annual Transmission Revenue Requirements set forth in Attachment F of the Tariff. They further explain that any net costs and revenues a SATOA receives from the New England Markets for charging and discharging will be charged or credited, as applicable, to transmission ratepayers via the Annual Transmission Revenue Requirements in Attachment F of the Tariff.<sup>22</sup>

12. According to Filing Parties, the revisions include, among other rules: (1) an evaluation process that allows a SATOA to be included in the Regional System Plan as the preferred regulated transmission solution for a system need and ensures that SATOAs are reviewed with the same rigor as traditional wires-based transmission solutions;<sup>23</sup> (2) limitations on a SATOA's operations;<sup>24</sup> (3) restrictions on the market activities and, therefore, market impacts of a SATOA;<sup>25</sup> (4) a mechanism under which a SATOA owner recovers costs and returns incidental payments from consuming and injecting energy;<sup>26</sup> and (5) other conforming revisions necessary to recognize the SATOA as transmission and avoid confusion, including restrictions that exclude SATOAs from the

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<sup>20</sup> Transmittal at 9.

<sup>21</sup> *Id.*

<sup>22</sup> *Id.* (citing Proposed Tariff, § II.51).

<sup>23</sup> *Id.* (citing Proposed Tariff, § II.51.1; *see also* MISO Order, 172 FERC ¶ 61,132 at P 52 (finding that “MISO’s proposed evaluation criteria establish a just and reasonable and not unduly discriminatory or preferential framework for SATOAs to be evaluated in the MTEP using the same qualification requirements that the Commission has already approved for existing transmission project types, plus appropriate additional criteria specific to the SATOA”)).

<sup>24</sup> *Id.* (citing Proposed Tariff, § II.51.2).

<sup>25</sup> *Id.* (citing Proposed Tariff, § III.1 (68.1.0), § III.1.7.21; *id.* § III.3 (28.1.0), §§ III.3.2.1(b)(iv), III.3.2.1(b)(vi), III.3.2.2). Section III of the ISO-NE Tariff is referred to herein as Market Rule 1.

<sup>26</sup> *Id.* (citing Proposed Tariff, § II.51; *id.*, attach. F- app. E; *see also* 2017 Policy Statement, 158 FERC ¶ 61,051 at PP 16-17 (stating that crediting any market revenues back to the cost-based ratepayers is one possible solution to avoid double recovery of costs by electric storage facilities being compensated through cost-based rates)).

Interconnection Procedures applicable to market resources and elective transmission expansion.<sup>27</sup>

13. Filing Parties also assert that the instant filing is consistent with Commission precedent addressing SATOAs, because: (1) the SATOA will be operated in a manner that preserves ISO-NE's independence because the SATOA owner is responsible for maintaining the necessary state of charge to serve the transmission function;<sup>28</sup> (2) ISO-NE will exercise operating authority (i.e., functional control) of the SATOA for transmission purposes only<sup>29</sup> and will not be responsible for buying power to charge the SATOA; (3) any payments or charges received by a SATOA owner for charging and discharging to meet its transmission obligations are properly credited against the Annual Transmission Revenue Requirements; and (4) the project must be identified in ISO-NE's regional system planning process as the preferred solution to meet a system need.

14. Filing Parties further state that the proposed revisions clarify that, as a price taker in the Real Time Energy Market, a SATOA will pay or be paid the Locational Marginal Price for energy at the time of consumption or injection at its solely-assigned node<sup>30</sup> and will be unable to make bids or offers into the energy market; therefore a SATOA will be unable to set the market price.<sup>31</sup>

15. Filing Parties state that, during transmission solution development under the regional system planning process, ISO-NE will test the SATOA under Tariff section I.3.9

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<sup>27</sup> *Id.* at 9-10 (citing Proposed Tariff, Schedules 22, 23, 25; *see also generally* TOA and Non-Incumbent Transmission Developer Operating Agreement).

<sup>28</sup> *Id.* at 10 (citing 2017 Policy Statement, 158 FERC ¶ 61,051 at PP 25, 27; *see also* MISO Order, 172 FERC ¶ 61,132 at P 108).

<sup>29</sup> *Id.* (citing TOA, Schedule 1.01 (defining Operating Authority); *see also id.* §§ 3.02, 3.05 (describing the functions ISO-NE will perform with respect to each PTO's Transmission Facilities)).

<sup>30</sup> Filing Parties propose new section III.1.7.21 to Market Rule 1, providing that a node will be established for each SATOA.

<sup>31</sup> Filing Parties clarify that the SATOA Revisions do not contain revisions that explicitly prohibit a SATOA from submitting bids and offers in the New England Markets because the currently effective Tariff provisions already preclude a SATOA from doing so. Filing Parties explain that the currently effective Tariff provides which resources are permitted to submit bids and offers in the New England Markets and that the language enabling resources to submit bids and offers only applies market-based resources. Transmittal at 23 n.95.

to ensure that the SATOA does not have an adverse impact on the system or on any resources proposed under interconnection processes. If such impacts are discovered, Filing Parties state that the cost of impact mitigation will be in the SATOA project costs and will be considered part of the overall SATOA project. Filing Parties conclude that these requirements, collectively, foreclose any need to study the SATOA in the queue.<sup>32</sup>

16. Filing Parties request that the Commission accept the SATOA Revisions as filed, without modifications or conditions, with an effective date of “12/31/9998” to allow ISO-NE’s staff sufficient time to develop, test, and implement the software system modifications necessary to implement the SATOA Revisions and to develop the processes necessary to implement the revisions. Filing Parties state that ISO-NE will submit a filing with the Commission specifying a precise effective date prior to implementation. Filing Parties further request that the Commission issue an order accepting the SATOA Revisions no later than March 29, 2023, to provide the regulatory certainty required for ISO-NE to begin committing resources to implement the SATOA software and processes to support a targeted July 1, 2024, effective date.<sup>33</sup> Filing Parties request waiver of the Commission’s notice requirements to allow these Tariff revisions to be effective more than 120 days after the date of filing.

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

17. Notice of Filing Parties’ proposed SATOA Revisions was published in the *Federal Register*, 88 Fed. Reg. 1214 (Jan. 9, 2023), with interventions and protests due on or before January 19, 2023. A notice of intervention was filed in Docket Nos. ER23-739-000 and ER23-743-000 by Massachusetts Department of Public Utilities. Timely motions to intervene were filed under Docket Nos. ER23-739-000 and ER23-743-000 by: Avangrid Networks, Inc.; Electric Power Supply Association; Eversource Energy Service Company; LSP Transmission Holdings II, LLC; and RENEW Northeast, Inc. Timely motions to intervene were filed under Docket No. ER23-739-000 only by: American Clean Power Association; Narragansett Electric Company; and Vistra Energy Corp. and Dynegy Marketing and Trade, LLC, jointly.

18. Timely motions to intervene and comments or protests were filed under Docket Nos. ER23-739-000 and ER23-743-000 by: Advanced Energy United; FirstLight Power, Inc.; New England Power Generators Association Inc. (NEPGA); New England States Committee on Electricity (NESCOE); the Union of Concerned Scientists; and Vermont Electric Power Company, Inc. and Vermont Transco (collectively, VELCO). Timely motions to intervene and comments or protests were filed under Docket No. ER23-739-000 only by National Grid USA (National Grid). ISO-NE, NEPOOL, and

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<sup>32</sup> *Id.* at 20-21.

<sup>33</sup> *Id.* at 21.

NEPGA filed answers under Docket Nos. ER23-739-000 and ER23-743-000. National Grid filed an answer under Docket No. ER23-739-000 only. On March 3, 2023, ISO-NE filed a second answer.

19. On May 15, 2023, Commission staff issued a deficiency letter requesting additional information about Filing Parties' filing (Deficiency Letter). On June 14, 2023, ISO-NE filed a response to the Deficiency Letter (Deficiency Response). Notice of the Deficiency Response was published in the *Federal Register*, 88 Fed. Reg. 40,254 (June 21, 2023), with interventions and protests due on or before July 5, 2023.

20. On July 5, 2023, Elevate Renewables F7, LLC (Elevate Renewables) filed a timely motion to intervene and comments.

21. On July 12, 2023, National Grid filed a motion to reject Elevate Renewables comments.

22. On July 27, 2023, Elevate Renewables filed a timely answer to National Grid's motion.

#### **IV. Commission Determination**

##### **A. Procedural Issues**

23. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2022), the notice of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

24. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2022), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We accept ISO-NE's, National Grid's, NEPGA's, and NEPOOL's answers because they have provided information that assisted us in our decision-making process. We also accept National Grid's timely submitted motion to reject for filing.

25. Pursuant to Rule 213(a)(3) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(3), answers to motions are permitted; therefore, we accept Elevate Renewables' answer to National Grid's motion to reject.

##### **B. Substantive Issues**

26. As discussed below, we find that the proposed SATOA Revisions to establish a framework under which an electric storage resource may be considered a transmission asset are just and reasonable and not unduly discriminatory or preferential, and therefore we accept them. We direct Filing Parties to make a filing notifying the Commission of



the actual effective date of the proposed SATOA Revisions no less than 30 days prior to the date ISO-NE implements the proposed Tariff revisions.<sup>34</sup>

## 1. Evaluation and Selection of SATOA

### a. Filing

27. Filing Parties explain that proposed section II.51.1 of the Tariff contains the rules for evaluating and selecting a SATOA under ISO-NE's regional system planning process. According to Filing Parties, section II.51.1 provides for a SATOA to be evaluated as a regulated transmission solution and identified as the preferred solution in accordance with the criteria, factors, and requirements in Attachment K of the Tariff, as well as those specific to SATOAs incorporated in sections II.51.1(a) through (h).<sup>35</sup> Filing Parties posit that if a SATOA offers the best combination of electrical performance, cost, future system expandability, and feasibility to comprehensively address a system need based on the proposed evaluation criteria (i.e., the traditional and SATOA-specific criteria), it will be selected as the preferred solution to address the system need.<sup>36</sup>

28. Filing Parties explain that SATOA-specific criteria incorporated in sections II.51.1(a) to (h) are as follows: section II.51.1(a) requires ISO-NE to consider the ability of a proposed SATOA to address the applicable system need in all hours that the need is determined to exist; section II.51.1(b) requires ISO-NE to evaluate the ability of a SATOA to provide or absorb reactive power regardless of whether the SATOA is injecting or consuming real power;<sup>37</sup> section II.51.1(c) limits the aggregate amount of SATOAs as regulated transmission solutions to 300 megawatts (MW) of charging capability and 300 MW of discharging capability; section II.51.1(d) limits the total

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<sup>34</sup> Filing Parties should use the following eTariff Type of Filing Code: "150 Data Response/Supplement the Record." We grant Filing Parties' request for waiver of the Commission's 120-day advance notice requirement for good cause shown. *See* 18 C.F.R. § 35.3(a)(1) (2022).

<sup>35</sup> Transmittal at 14 (citing Tariff, attach. K, §§ 4.2(d), 4.3(h), 4A.8 (listing evaluation factors used to identify the preferred solution to address system needs)).

<sup>36</sup> *Id.* at 15 (citing Tariff, attach. K, §§ 4.2(a), 4.3(h), 4.3(j), 4A.9(a)); *see also id.*, Oberlin Test. at 6.

<sup>37</sup> Filing Parties note that SATOAs are often capable of producing reactive power much like a dynamic reactive transmission device; an electric storage facility that can provide reactive power continuously—24 hours a day, seven days a week—will be looked at more favorably than an electric storage facility that cannot. Transmittal at 14-15.

amount of SATOAs at a substation to 30 MW of charging capability and 30 MW of discharging capability;<sup>38</sup> section II.51.1(d) prohibits the evaluation or selection of a SATOA as the preferred solution to address violations of an Interconnection Reliability Operating Limit (IROL) or system needs related to an IROL;<sup>39</sup> section II.51.1(f) precludes the selection of multiple SATOAs to address a single system need or multiple needs in the same area due to contingencies involving the same or similarly situated elements; section II.51.1(g) requires that a SATOA only be evaluated or identified as the preferred solution to resolve a system need that is the result of a second contingency (N-1-1): a proposed SATOA shall not be evaluated or identified as the preferred solution to resolve an N-0 (all-lines-in) or N-1 (first contingency) system need;<sup>40</sup> and section II.51.1(h) allows ISO-NE to evaluate any additional considerations unique to SATOAs that may support comparative evaluation to other solutions to the system need.<sup>41</sup> ISO-NE states that, because these proposed revisions are technology neutral, this allows flexibility for the SATOA to propose innovative solutions and ISO-NE to account for them in considering the SATOA's ability to meet the system need.<sup>42</sup>

29. Filing Parties also propose to revise the Interconnection Procedures to clarify that they do not apply to SATOAs, since SATOAs are being developed as regulated transmission solutions pursuant to the regional system planning process in Attachment K. Specifically, Filing Parties propose to revise the definition of Generating Facility in Schedules 22 and 23 of the Tariff to state that a Generating Facility shall not include a

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<sup>38</sup> Filing Parties explain these limits are necessary to minimize the likelihood of sudden impacts on Area Control Error and generation dispatch and will reduce the burden on system operators manually dispatching SATOAs outside of the ISO-NE market systems. Transmittal at 15.

<sup>39</sup> Filing Parties state that precluding the use of a SATOA for addressing violations of an IROL or system needs related to an IROL avoids additional risk should the SATOA fail to enter into service when needed. Transmittal at 15-16.

<sup>40</sup> Filing Parties assert that limiting the selection of a SATOA to address lower probability, more infrequent contingencies (i.e., N-1-1 contingencies) decreases the likelihood of a SATOA frequently injecting real power, which could occur if a SATOA was needed to address an all lines in condition (N-0) or first contingency (N-1) if the failed element was one that takes significant time to repair, and minimizes frequent operation of SATOAs for real power injection. Transmittal at 16.

<sup>41</sup> *Id.* at 14-17.

<sup>42</sup> Deficiency Response at 11.

SATOAs. Additionally, Filings Parties propose to revise Schedule 25 of the Tariff to state that an Elective Transmission Upgrade (ETU) shall not include a SATOA.<sup>43</sup>

**b. Comments/Protests**

30. National Grid believes it is important for any Commission order accepting these revisions to clarify that the changes to the Tariff do not prevent proposed storage projects that do not meet the narrow requirements of a SATOA from being considered and studied as participant-funded transmission projects or merchant transmission projects under relevant ISO-NE Tariff provisions including the ETU interconnection provisions of the Tariff.<sup>44</sup> To the extent the SATOA Revisions could be interpreted to preclude the consideration of non-SATOAs storage projects as ETUs under the Tariff, National Grid protests such a limitation.<sup>45</sup> National Grid is concerned that, absent clarification from the Commission, the proposed SATOA Revisions could be misinterpreted as being the exclusive vehicle through which storage facilities in New England may qualify as transmission for any purpose under the ISO-NE Tariff.<sup>46</sup>

31. National Grid maintains that under the ISO-NE Tariff, ETUs can include participant-funded transmission facilities and merchant transmission facilities, while noting that, in the SATOA Revisions, ISO-NE proposes to revise Schedule 25 to “explicitly state that an [ETU] shall not include a SATOA” and to “preclude the application of the [Schedule 25] procedures to SATOA.”<sup>47</sup> National Grid argues that interpreting the SATOA Revisions to preclude the development of storage projects as participant-funded transmission or merchant transmission facilities would improperly discriminate against the development of such projects.<sup>48</sup> National Grid states that if ISO-NE intended to prevent non-SATOAs storage projects from being ETUs, ISO-NE has not justified such a limitation.<sup>49</sup>

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<sup>43</sup> Transmittal at 19-20.

<sup>44</sup> National Grid Comments and Limited Protest at 2.

<sup>45</sup> *Id.*

<sup>46</sup> *Id.* at 7.

<sup>47</sup> *Id.* at 9-10.

<sup>48</sup> *Id.* at 12.

<sup>49</sup> *Id.* at 13.

c. Answers

32. In their answers, ISO-NE and NEPGA contend that National Grid's request to amend the Tariff rules related to non-SATOA storage projects is outside the scope of the SATOA Revisions and must be rejected.<sup>50</sup> ISO-NE asserts that National Grid asks the Commission to go well beyond the scope of the instant proceeding to modify Schedule 25 in order to extend its application to storage, which presently falls under the Interconnection Procedures for Generating Facilities set forth in Schedules 22 and 23 of the Tariff in accordance with the Commission's Order Nos. 792 and 845.<sup>51</sup> ISO-NE argues that National Grid's suggested clarification or, alternatively, proposed modification to Schedule 25 of the Tariff is prohibited under the standard of review for FPA section 205 because the SATOA Revisions were filed pursuant to FPA section 205, which "gives a utility the right to file rates and terms for services rendered with its assets."<sup>52</sup> ISO-NE states that whether an intervenor suggests or even prefers an alternative proposal, the Commission must accept the SATOA Revisions if it finds them just and reasonable.<sup>53</sup> NEPGA states that the question before the Commission is whether it is lawful to allow a battery storage resource to qualify to meet transmission reliability needs as a Pool Transmission Facility according to the quantity and operational conditions filed by ISO-NE, not, as National Grid suggests, whether it might be lawful for a market asset (e.g., a battery storage resource offered as an ETU) to also qualify as a SATOA and Pool Transmission Facility.<sup>54</sup>

33. ISO-NE explains that, to the extent National Grid wishes to explore Tariff revisions that allow for the treatment of "non-SATOA storage projects" as ETUs, those changes should proceed through the stakeholder process, as required under the Commission-accepted Participant Agreement.<sup>55</sup>

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<sup>50</sup> ISO-NE First Answer at 3-5; NEPGA Answer at 1.

<sup>51</sup> ISO-NE First Answer at 4 (citing *Small Generator Interconnection Agreements & Procs.*, Order No. 792, 145 FERC ¶ 61,159 (2013), *order on clarification*, Order No. 792-A, 144 FERC ¶ 61,214 (2014); *Reform of Generator Interconnection Procs. & Agreements*, Order No. 845, 163 FERC ¶ 61,043 (2018), *order on reh'g*, Order No. 845-A, 166 FERC ¶ 61,137 (2019)).

<sup>52</sup> *Id.* (citing *Atl. City Elec. Co. v. FERC*, 295 F.3d 1, 9 (D.C. Cir 2002)).

<sup>53</sup> *Id.* at 5 (citing *S. Cal. Edison Co.*, 73 FERC ¶ 61,219, at 61,608 n.73 (1995)).

<sup>54</sup> NEPGA Answer at 2-5.

<sup>55</sup> ISO-NE First Answer at 5.

34. In its reply to ISO-NE and NEPGA, National Grid states that it simply requests that the Commission confirm that its precedent and policy allowing storage to be treated as transmission on a case-by-case basis will continue to apply if the changes proposed by ISO-NE in this proceeding are accepted.<sup>56</sup> National Grid asserts that its requested clarification is appropriate to reflect long-standing Commission precedent finding “electricity storage devices . . . do not readily fit into only one of the traditional asset functions of generation, transmission or distribution,” and “[f]or this reason, the Commission has addressed the classification of energy storage devices on a case-by-case basis.”<sup>57</sup>

35. National Grid asserts that its comments are within the scope of the current proceeding, and do not implicate the generator interconnection provisions under Schedules 22 and 23.<sup>58</sup> National Grid is concerned that the proposed changes to Schedule 25 may have broader implications, including barring storage-based ETUs from consideration as non-SATOA participant-funded transmission or merchant transmission solutions.<sup>59</sup>

36. In reply to NEPGA, National Grid claims that NEPGA’s arguments falsely portray National Grid’s intended aim of preserving opportunities, consistent with Commission precedent and policy, for storage facilities to be classified as transmission on a case-by-case basis in order to meet needs in New England.<sup>60</sup> National Grid clarifies that its comments do not suggest that storage projects proposed as ETUs would be market assets, nor does National Grid request that any storage project considered as an ETU also qualify as a SATOA or be treated as a Pool Transmission Facility.

37. In its Second Answer, ISO-NE reiterates its view that National Grid’s requests are outside the scope of this proceeding and National Grid is attempting to have the Commission opine on a question that is irrelevant to this proceeding; namely, whether Schedule 25 and other relevant provisions of the Tariff allow non-SATOA electric

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<sup>56</sup> National Grid Answer at 1-3 (citing National Grid Comments at 10 (citing *Transmission Plan. & Cost Allocation by Transmission Owning & Operating Pub. Utils.*, Order No. 1000, 136 FERC ¶ 61,051, at PP 724-726 (2011) (permitting “a transmission developer, a group of transmission developers, or one or more individual transmission customers to voluntarily assume the costs of a new transmission facility”)).

<sup>57</sup> *Id.* at 3-4 (citing *Western Grid*, 130 FERC ¶ 61,056 at P 44).

<sup>58</sup> *Id.* at 4.

<sup>59</sup> *Id.* at 5.

<sup>60</sup> *Id.* at 7-8.

storage facilities to be considered and studied as participant-funded transmission projects or merchant transmission projects under relevant ISO-NE Tariff provisions.<sup>61</sup> ISO-NE further maintains, however, the proposed revisions to Schedule 25 do not affect or determine whether non-SATOA electric storage facilities may be considered as participant-funded transmission projects or merchant transmission projects under Schedule 25 of the Tariff or other relevant Tariff provisions. Therefore, ISO-NE posits, National Grid's requests are not within the scope of this proceeding and should be rejected by the Commission.<sup>62</sup>

**d. Deficiency Response**

38. In the Deficiency Letter, Commission staff asked Filing Parties to explain how the SATOA Revisions, in conjunction with ISO-NE's existing regional planning process, ensure that a SATOA performs a transmission function. In response, ISO-NE states that the revisions are consistent with *AEP* because a SATOA will only be selected if it is studied and selected to address a specific transmission system need by providing a transmission function.<sup>63</sup> ISO-NE states that once selected, a SATOA will only perform transmission functions, i.e., the reliability functions provided by transmission assets over which ISO-NE has Operating Authority.<sup>64</sup>

39. In the Deficiency Letter, Commission staff asked Filing Parties to identify any specific information an electric storage resource must provide to be considered in the regional planning process and how that information bears on evaluation and selection of a SATOA. In reply, ISO-NE states that while the Tariff does not specify information provided for each type of transmission asset, examples of SATOA-specific information would include maximum charge rate, maximum discharge rate, MW capability, capability to provide or absorb reactive power, and replacement schedules for the electric energy storage.<sup>65</sup> ISO-NE further states that this SATOA-specific information would be used to determine whether a proposed SATOA is capable of addressing a N-1-1 contingency, and that ISO-NE would use an electric storage resource's reactive

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<sup>61</sup> ISO-NE Second Answer at 2-3.

<sup>62</sup> *Id.* at 5.

<sup>63</sup> Deficiency Response at 4 (citing *Am. Elec. Power Serv. Corp.*, 173 FERC ¶ 61,264 (2020), *order on reh'g*, 175 FERC ¶ 61,094 (2021) (*AEP*)).

<sup>64</sup> *Id.* at 4-5.

<sup>65</sup> *Id.* at 10.

capability information to evaluate the ability of a SATOA to provide or absorb reactive power regardless of whether the SATOA is injecting or consuming real power.<sup>66</sup>

**e. Comments on Deficiency Response**

40. Elevate Renewables supports ISO-NE's SATOA proposal and urges the Commission to accept it without condition or modification. With respect to National Grid's protest, Elevate Renewables states that ISO-NE has satisfied its FPA obligations, and, in any case, National Grid's request is beyond the scope of ISO-NE's proposal and would upset stakeholder consensus.<sup>67</sup>

**i. Motion to Reject Elevate Renewables Comments**

41. National Grid requests that the Commission reject Elevate Renewables' comments. National Grid states that, although styled as comments in support of ISO-NE's initial filing and subsequent Deficiency Response, Elevate Renewable's pleading is an impermissible and untimely answer to National Grid's January 19, 2023 protest submitted without requesting leave from the Commission to do so and far beyond the deadline for such answers.<sup>68</sup> National Grid avers that Elevate Renewable's comments raise matters beyond the scope of the questions posed in the Deficiency Letter or the information provided in the Deficiency Response.<sup>69</sup>

**ii. Answer to National Grid's Motion**

42. Elevate Renewables responds that National Grid's motion should be rejected because it is overly broad, as it seeks to have the Commission reject even the portion to which National Grid raises no objection.<sup>70</sup> Elevate Renewables states that there is nothing novel or inappropriate in Elevate Renewables' comments referencing pleadings that have been submitted to date on the ISO-NE proposal.<sup>71</sup>

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<sup>66</sup> *Id.*

<sup>67</sup> Elevate Comments on Deficiency Response at 5-8.

<sup>68</sup> National Grid Motion to Reject at 3, 4.

<sup>69</sup> *Id.* at 4-5.

<sup>70</sup> Elevate Renewables Answer at 6.

<sup>71</sup> *Id.* at 5.

**f. Commission Determination**

43. We find that Filing Parties' SATOA Revisions for electric storage resources to be considered transmission-only assets is just and reasonable and not unduly discriminatory or preferential. We deny National Grid's motion to reject, as discussed below.

44. Filing Parties' SATOA Revisions will result in the selection of SATOAs only when those resources perform a transmission function, consistent with Commission precedent.<sup>72</sup> Filing Parties' SATOA Revisions ensure that a SATOA will serve a transmission function because: (1) the SATOA definition requires that a SATOA be connected to the transmission system as a transmission facility and be capable of receiving energy only from Pool Transmission Facilities and storing the energy for later injection to Pool Transmission Facilities; (2) a proposed SATOA must be identified or selected in ISO-NE's transmission planning processes as the preferred solution to resolve a transmission issue; (3) there must be a need to resolve the transmission issue through the storage facility's function as a SATOA, as the transmission issue cannot be addressed by a market solution; (4) a SATOA will operate only as necessary to address the applicable system needs or concerns for which the SATOA was identified to address through a Needs Assessment, a Solutions Study, a Public Policy Transmission Study, the competitive solutions process in Attachment K of the Tariff, or a combination of these;<sup>73</sup> and (5) the SATOA will be under ISO-NE's operational control. We find that, in these circumstances, SATOAs are properly characterized as transmission assets, and the costs of a SATOA are appropriately recoverable through transmission rates.<sup>74</sup>

45. We agree with ISO-NE that National Grid's request for clarification regarding the applicability of Schedule 25 of the Tariff to *non*-SATOAs is outside the scope of this proceeding. As ISO-NE explains, the proposed revisions to Schedule 25 do not affect or determine whether non-SATOA electric storage facilities may be considered as participant-funded transmission projects or merchant transmission projects under

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<sup>72</sup> See SPP Order, 183 FERC ¶ 61,153 at PP 28-29; MISO Order, 172 FERC ¶ 61,132 at P 131; *Western Grid*, 130 FERC ¶ 61,056 at P 43; see also *AEP*, 173 FERC ¶ 61,264 at P 35 (finding that the storage facility at issue failed to perform a transmission function and therefore was not a transmission asset eligible to receive cost-of-service transmission rate recovery).

<sup>73</sup> Proposed Tariff section II.51.2 provides that SATOAs may also operate to absorb or provide reactive power, maintain its required state-of-charge, support the transmission system during restoration, or avoid or mitigate Load Shedding after all available Dispatchable Resources that can effectively provide relief to avoid or mitigate the Load Shedding have been dispatched.

<sup>74</sup> See SPP Order, 183 FERC ¶ 61,153 at PP 28-29.



Schedule 25 of the Tariff or other relevant Tariff provisions. The Commission's review under FPA section 205 is limited to determining whether the proposal as submitted is just and reasonable and not unduly discriminatory or preferential. Given that the SATOA Revisions have no bearing on treatment of non-SATOA storage facilities under the ISO-NE Tariff or TOA, we need not address such matters in this proceeding.

46. In response to National Grid's motion to reject Elevate Renewables' comments, we find that Elevate Renewables' response to ISO-NE's Deficiency Response appropriately addressed issues presented in that Deficiency Letter and Response. Elevate Renewables timely intervened and submitted comments germane to the subjects addressed in the Deficiency Letter and the Deficiency Response, which included the selection and evaluation of SATOAs. Accordingly, we deny National Grid's motion to reject Elevate Renewables' comments on the Deficiency Response.

## **2. SATOAs for Non-Thermal Issues**

### **a. Filing**

47. Filing Parties explain that in system planning, the real power (i.e., MW) from a SATOA will only be evaluated and selected to resolve post-second contingency (post N-1-1) thermal issues. If, however, once selected for inclusion in the Regional System Plan, the SATOA also has the capability to provide dynamic reactive power (i.e., megavolt amps reactive (MVAR)) while it is neither charging nor discharging (i.e., MW output equals zero), ISO-NE may use the SATOA's dynamic reactive capability to address stability and voltage concerns during N-0, N-1, and N-1-1 conditions.<sup>75</sup> According to Filing Parties, a SATOA will not be injecting real power onto the New England Transmission System if the SATOA is being used to address stability and voltage concerns during N-0 and N-1 contingency events. Filing Parties posit that when operating in this mode the SATOA would be operating identically to other transmission system equipment—e.g., STATCOM, static VAR compensator, or synchronous condenser.<sup>76</sup>

### **b. Comments/Protests**

48. VELCO agrees that a SATOA should be allowed to be used as real power to resolve thermal violations identified as a need, which would also allow it to provide dynamic reactive power to address voltage violations.<sup>77</sup> VELCO asks, however, for a

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<sup>75</sup> Proposed Tariff, § II.51.2(a).

<sup>76</sup> Transmittal at 16 (citing Transmittal, Oberlin Test. at 10-11).

<sup>77</sup> VELCO Comments at 3.

“minor modification” to allow for the evaluation and selection of the SATOA as the preferred inverter-based solution for identified voltage needs, in addition to thermal needs.<sup>78</sup> In VELCO’s view, the proposed Tariff revisions should be slightly modified to make it clear that a SATOA is allowed for dynamic reactive capability to address voltage violations when a voltage need is identified, even if a thermal need is not.<sup>79</sup> VELCO contends that, while other inverter-based solutions can provide dynamic voltage support, a SATOA is a superior solution in some cases as it offers multiple benefits. VELCO notes that, for example, unlike a static VAR compensator or static compensator, a SATOA can be used for voltage stability and to mitigate load shedding. VELCO explains that it believes “the use of SATOA for voltage support is a segment of the main use case (thermal violations) detailed by [ISO-NE] in its filing, and should be allowed to stand equally as a preferred solution.”<sup>80</sup>

49. VELCO notes that the Vermont Needs Assessment conducted by ISO-NE will be completed in early 2024 and requests that a SATOA be an eligible solution to address needs identified by ISO-NE for Vermont.<sup>81</sup>

**c. Answers**

50. ISO-NE and NEPGA argue that VELCO’s request for an alternative rate design must be rejected as a matter of law because the SATOA Revisions were filed pursuant to FPA section 205.<sup>82</sup> ISO-NE states that, whether an intervenor suggests or even prefers an alternative proposal, the Commission must accept the SATOA Revisions if it finds them just and reasonable, and ISO-NE contends that the SATOA Revisions are just and reasonable for all the reasons described in the filing.

51. NEPGA states that VELCO’s request should be rejected on the basis that it is either beyond the scope of the proceeding or that the relief VELCO requests is impermissible, as it asks the Commission to both accept and direct significant changes to ISO-NE’s FPA section 205 filing that go “in the opposite direction” of ISO-NE’s proposal by “expand[ing] the scope” of battery storage resources eligible to serve as

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<sup>78</sup> *Id.* at 1-2.

<sup>79</sup> *Id.* at 4.

<sup>80</sup> *Id.*

<sup>81</sup> *Id.* at 5.

<sup>82</sup> ISO-NE First Answer at 8; NEPGA Answer at 5.

transmission assets, which is a “completely different strategy” than Filing Parties propose.<sup>83</sup>

52. ISO-NE further states that VELCO’s proposal is a significant deviation from the SATOA Revisions proposed in the filing that would increase costs for customers and reduce the ability to use SATOAs for their intended operation.<sup>84</sup> ISO-NE avers that under VELCO’s proposed modification, SATOAs would be used where there is no defined need for the capability to inject real power and, therefore, the additional equipment (i.e., electric storage facility) to allow for energy to be stored for later use would impose an unnecessary cost on the region without any defined benefit. ISO-NE also states that implementing the SATOA Revisions prior to July 1, 2024, is not possible given the time needed for ISO-NE staff to develop, test, and implement the software system modifications necessary to implement the SATOA Revisions and to develop the processes necessary to implement the revisions.<sup>85</sup>

53. NEPOOL reiterates that the instant filing is just and reasonable, and argues that Tariff modifications, such as those proposed by VELCO, should be vetted through NEPOOL Participant Processes before being filed with the Commission. NEPOOL maintains that, while it takes no position on the merits of VELCO’s proposed modifications, the Commission should reject VELCO’s request without prejudice and remind interested parties to use New England’s stakeholder process when seeking Tariff modifications. NEPOOL concludes that the Commission should accept the SATOA Revisions without modification or condition.<sup>86</sup>

#### **d. Commission Determination**

54. We find that Filing Parties’ proposal to evaluate and select real power (i.e., MW) from a SATOA only to resolve post-second contingency (post N-1-1) thermal issues is just and reasonable because, as ISO-NE explains, it allows ISO-NE to use a SATOA to

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<sup>83</sup> NEPGA Answer at 4-5 (citing *NRG Power Mktg., LLC v. FERC*, 862 F.3d 108, 115- 16 (D.C. Cir. 2017) (“FERC’s modifications expanded the [Minimum Offer Price Rule] exemptions” and “expanded the scope of the exemption not just beyond PJM’s original filing, but beyond the scope of the exemptions as they had stood before PJM’s filing.”)).

<sup>84</sup> ISO-NE First Answer at 6-7.

<sup>85</sup> *Id.* at 8.

<sup>86</sup> NEPOOL Answer at 3-5 (citing, e.g., *ISO New England Inc.*, 147 FERC ¶ 61,173, at P 35 (2014) (“To the extent parties seek additional changes, we encourage them to do so through the stakeholder process.”)).

resolve thermal system needs by injecting stored real power into the system, while also accounting for ISO-NE's concern that it may not be cost-effective to use SATOAs when there is no defined need for the capability to inject real power.<sup>87</sup> VELCO's suggestion to modify the proposal to allow for the evaluation and selection of a SATOA as the preferred inverter-based solution for identified voltage needs (e.g., a non-thermal issue) constitutes an alternative rate design that is outside the scope of this proceeding.<sup>88</sup>

### **3. 300 MW Aggregate and 30 MW Substation Limitation**

#### **a. Filing**

55. Filing Parties propose Tariff language to limit the aggregate amount of SATOAs as regulated transmission solutions to 300 MW each of charging and discharging capability. Filing Parties also propose to limit the total amount of SATOAs at one substation to 30 MW each of charging and discharging capability.<sup>89</sup> Filing Parties assert that these limits are necessary to minimize the likelihood of sudden impacts on area control error and generation dispatch and will reduce the burden on system operators manually dispatching SATOAs outside of the ISO-NE market systems.

#### **b. Comments**

56. FirstLight and NEPGA support the proposal to limit the application of the proposed SATOA implementation to no more than 300 MW total and with each no greater than 30 MW at one substation. FirstLight avers that this allows the results of SATOA implementation to be observed in practice to determine how effective they are at avoiding interference with wholesale market price formation.<sup>90</sup> Advanced Energy United

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<sup>87</sup> See ISO-NE First Answer at 6-7.

<sup>88</sup> Under FPA section 205, the Commission limits its inquiry “into whether the rates proposed by a utility are reasonable—and [this inquiry does not] extend to determining whether a proposed rate schedule is more or less reasonable than alternative rate designs.” See *ISO New England Inc.*, 114 FERC ¶ 61,315, at P 33 & n.35 (2005) (citing *Pub. Serv. Co. of N.M. v. FERC*, 832 F.2d 1201, 1211 (10th Cir. 1987); *Cities of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984), *cert. denied*, 469 U.S. 917 (1984)).

<sup>89</sup> Transmittal at 15; Proposed Tariff, § II.51.1(c).

<sup>90</sup> FirstLight Comments at 5.

suggests that the 300 MW aggregate limit on SATOA capacity and the 30 MW limit on SATOA charging and discharging should be revisited after gaining experience.<sup>91</sup>

**c. Deficiency Response**

57. In response to questions in the Deficiency Letter about the 30 MW SATOA limit at a substation and the aggregate 300 MW limit, ISO-NE explains the following:

When a SATOA is placed into service, the result is that there is excess generation on the system. Until such time that adjustments are made to the dispatch, likely through automatic generation control, New England will be in an oversupply situation, causing Area Control Error. The larger the SATOA, either individually or total, the greater this error is. Fluctuations in Area Control Error from natural variation in load and variable generation output are frequently about 30 MW. Therefore, the addition of a 30 MW change from a SATOA would be consistent with the normal operation of the system and be manageable in the current automatic generation control construct. Moreover, if there is an issue with the dispatch or operation of a SATOA in trying to address a reliability concern, the impact would be limited to 30 MW and would be localized.<sup>92</sup>

58. ISO-NE further explains that each SATOA will be dispatched manually by ISO-NE operators outside of all internal systems and that the 300 MW aggregate limit, in conjunction with the 30 MW limit at a single substation, was selected to reduce the aggregate number of SATOAs on the system that the ISO's operators would need to dispatch at any given time. ISO-NE states that limiting the number of SATOAs prevents overburdening ISO-NE's operators during events that may have many transmission contingencies, such as major storms. ISO-NE explains that if too many N-1-1 operating concerns are addressed using SATOAs, operators will be dispatching many SATOAs manually during a complex event, which could lead to a high burden on operators during unusual operating conditions (i.e., many SATOAs simultaneously discharging).<sup>93</sup>

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<sup>91</sup> Advanced Energy United Comments at 5.

<sup>92</sup> Deficiency Response at 13.

<sup>93</sup> *Id.*

**d. Commission Determination**

59. We find that Filing Parties have justified their proposal based on their experience with the ISO-NE system and that the 300 MW aggregate and 30 MW substation limitations for SATOAs are just and reasonable. As ISO-NE explains in the Deficiency Response, the addition of a 30 MW change from a SATOA would be consistent with the normal operation of the ISO-NE system and manageable in the current automatic generation control construct.<sup>94</sup> We find persuasive ISO-NE's explanation that the 300 MW aggregate limitation is reasonable when considering the possible need to manually dispatch multiple SATOAs during a severe weather event when the system operator must be focused on transmission system reliability, and not on resolving large Area Control Errors caused by simultaneous deployment of SATOAs. In response to Advanced Energy United, we note that the Commission will address any future proposals to modify these limits when, or if, the Commission receives such a filing.

**4. Other Comments**

60. NEPGA asks that, in its order, the Commission recognize the risks ISO-NE seeks to mitigate and request that ISO-NE's Internal and External Market Monitors evaluate and report on the effectiveness of the SATOA limits and conditions and on the competitiveness of ISO-NE's solicitation of SATOAs in their annual reports filed with the Commission.<sup>95</sup> NEPGA further requests that the market monitors report other observations about the integration of SATOAs as solutions to regional transmission needs, including whether and how often SATOAs are selected through a competitive process.<sup>96</sup>

61. Specifically, NEPGA suggests that the market monitors report on how often SATOAs are included in the regional transmission plan through ISO-NE's Order No. 1000-compliant competitive process versus assigned to an incumbent transmission owner through the exception from competition for "immediate" reliability needs and how often SATOAs are considered as market-based alternatives to immediate need reliability projects.<sup>97</sup>

62. Advanced Energy United supports the filing and states that the SATOA proposal is a measured approach to allow energy storage to be considered as a transmission asset

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<sup>94</sup> *Id.*

<sup>95</sup> NEPGA Comments at 3.

<sup>96</sup> *Id.* at 8.

<sup>97</sup> *Id.*

to address system needs identified through regional planning processes.<sup>98</sup> Advanced Energy United states that the proposal addresses a current barrier to participation by energy storage in ISO-NE by allowing storage resources to serve as transmission assets when identified as the best-fit solution.

63. Notwithstanding its support for the SATOA Revisions, Advanced Energy United urges ISO-NE to view this proposal as a first step and encourages efforts to evaluate its efficacy moving forward. Advanced Energy United states that certain specific limitations will constrain utility of the SATOA and should be evaluated over time. As noted above, Advanced Energy United states that the 300 MW and 30 MW limits should be revisited once ISO-NE has gained experience with SATOA implementation.<sup>99</sup>

64. Advanced Energy United also contends that “dual use of storage to meet transmission and market needs would ensure optimal value in return for investment in storage while maximizing beneficial deployment of storage resources.”<sup>100</sup> Advanced Energy United notes that enabling storage to eventually participate as both transmission and market resources in ISO-NE would offer useful capacity and support to mitigate shortfalls or constraints of various types. Advanced Energy United states that it welcomes future efforts to allow dual use of storage as transmission and a market resource and urges the Commission to provide encouragement and guidance to transmission providers towards this end.<sup>101</sup>

65. Advanced Energy United avers that without improvements to regional planning, storage as transmission solutions could be restricted to development by incumbent transmission owners even though such storage facilities are not subject to the same development timing constraints.<sup>102</sup> Advanced Energy United also encourages a Commission inquiry into whether storage as transmission solutions will be considered as non-transmission alternatives to meet identified needs, the step before a need is declared immediate and assigned to an incumbent transmission owner.<sup>103</sup>

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<sup>98</sup> Advanced Energy United Comments at 3.

<sup>99</sup> *Id.* at 2.

<sup>100</sup> *Id.* at 6.

<sup>101</sup> *Id.* at 6-7.

<sup>102</sup> *Id.* at 7.

<sup>103</sup> *Id.* at 7-8.

66. Union of Concerned Scientists supports ISO-NE's effort to address the issues identified in this filing.<sup>104</sup> However, Union of Concerned Scientists believes this is only a first step and that the New England region and the United States should make additional provisions for expanding the capabilities of the transmission system using storage.<sup>105</sup> Union of Concerned Scientists notes that the Large Generator Interconnection Process (LGIP) is the de facto means by which investors seeking to add new generation must expand the electric power system and that the generation sector is regularly required to make investments in transmission upgrades without cost-recovery assurances through the LGIP, but there is no provision for using storage to meet those transmission needs.<sup>106</sup> Union of Concerned Scientists urges the Commission to advance reforms to enable this type of storage deployment.<sup>107</sup>

67. NESCOE maintains that the eligibility of electric storage facilities as transmission-only assets should enhance the competitiveness of future solicitation processes, resulting in cost-effective transmission and customer benefits.<sup>108</sup>

68. FirstLight supports the filing, noting that it appropriately limits the operation of SATOAs and appears to minimize the risk of market harm. FirstLight would strongly oppose any efforts to expand SATOA operation to impact competitive market operation.<sup>109</sup>

69. NEPGA supports ISO-NE's proposed limitations on the pricing and dispatch of SATOAs as critical to this proposal.<sup>110</sup> NEPGA states ISO-NE's limit of dispatch to

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<sup>104</sup> Union of Concerned Scientists Comments at 1.

<sup>105</sup> *Id.* at 2.

<sup>106</sup> *Id.* at 2-3.

<sup>107</sup> *Id.* at 3.

<sup>108</sup> NESCOE Comments at 2-3.

<sup>109</sup> FirstLight Comments at 6.

<sup>110</sup> NEPGA Comments at 2.



dealing with specific transmission contingencies and load shed, and limitation to the real time market are consistent with Commission precedent.<sup>111</sup>

**a. Answers**

70. ISO-NE requests that the Commission reject NEPGA’s request for a reporting requirement. ISO-NE states that the Internal Market Monitor and External Market Monitor currently have the authority to evaluate and report on any potential price-suppression and risks to economic wholesale market outcomes that are the consequence of the pricing and operation of SATOAs.<sup>112</sup> ISO-NE contends that no additional directive is needed from the Commission to address NEPGA’s concerns, as that authority and discretion to exercise that authority is already provided for under the Internal Market Monitor’s and External Market Monitor’s responsibilities under the Tariff.

**b. Commission Determination**

71. We do not direct ISO-NE to adopt any additional reporting requirements related to operation of SATOAs. ISO-NE has sufficiently demonstrated that the proposal as filed is just and reasonable within the context of ISO-NE’s overall Tariff, including oversight by its Internal and External Market Monitors. Moreover, we acknowledge ISO-NE’s representation that its market monitors already have the authority to evaluate and report on wholesale market outcomes that are the consequence of the pricing and operation of SATOAs.

72. We find that Advanced Energy United’s comments pertaining to dual use of storage as a transmission asset and market resource and pertaining to changes to the regional transmission planning process are beyond the scope of this proceeding. Likewise, Union of Concerned Scientists’ suggestion that the Commission consider reforms to allow generators to use storage to meet transmission upgrades required pursuant to the interconnection process is outside the scope of this proceeding. Consequently, we decline to address these issues here.

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<sup>111</sup> *Id.* at 5 (citing *ISO New England Inc., Revisions to Enable the Treatment of Storage as Transmission-Only Assets*, Docket Nos. ER23-739-000 and ER23-743-000 (filed Dec. 29, 2022); Transmittal at 15-16, 18; *id.*, Oberlin Test. at 15-16, 21).

<sup>112</sup> ISO-NE First Answer at 9 (citing, e.g. Proposed Tariff, Market Rule 1 (47.0.), § III.A.2.1(b) (“The Internal Market Monitor and External Market Monitor will perform the following core functions: . . . (b) Review and report on the performance of the New England Markets to the ISO, the Commission, Market Participants, the public utility commissioners of the six New England states, and to other interested entities.”)).

The Commission orders:

(A) The proposed SATOA Revisions are hereby accepted, as discussed in the body of this order.

(B) Filing Parties are hereby ordered to submit a filing, providing the actual effective date of the SATOA Revisions no less than 30 days prior to the date the proposed Tariff revisions are implemented, as discussed in the body of this order.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.