# FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, DC 20426

#### OFFICE OF ENERGY MARKET REGULATION

In Reply Refer To: ISO New England Inc. Docket No. ER22-983-000

Issued: 5/18/2022

ISO New England Inc. Attn: Graham Jesmer Regulatory Counsel One Sullivan Road Holyoke, MA 01040-2841

Reference: Compliance Filing for Order No. 2222

Dear Mr. Jesmer:

On February 2, 2022, ISO New England Inc. (ISO-NE), joined by the New England Power Pool (NEPOOL) Participants Committee and the Participating Transmission Owners (PTO) Administrative Committee (PTO AC), on behalf of the New England PTOs (together, Filing Parties), <sup>1</sup> filed Tariff revisions <sup>2</sup> to comply with Commission Order No. 2222. <sup>3</sup> Please be advised that additional information is necessary

<sup>&</sup>lt;sup>1</sup> Transmittal at 1 n.3. ISO-NE submitted revisions to Market Rule 1, which are sections II and III of its Transmission, Markets, and Services Tariff (Tariff). The Participating Transmission Owners Administrative Committee also joins certain parts of the filing.

<sup>&</sup>lt;sup>2</sup> Unless otherwise noted, capitalized terms not defined herein have the meanings set forth in ISO-NE's Transmission, Markets and Services Tariff or in the Second Restated NEPOOL Agreement, the Participants Agreement, or the Transmission Operating Agreement (TOA).

<sup>&</sup>lt;sup>3</sup> Participation of Distributed Energy Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System Operators, Order No. 2222, 172 FERC ¶ 61,247 (2020) (Order No. 2222), order on reh'g, Order No. 2222-A, 174 FERC ¶ 61,197 (Order No. 2222-A), order on reh'g, Order No. 2222-B, 175 FERC ¶

to process the filing. Please provide complete responses to the following and include citations to any relevant existing or proposed Tariff provisions:<sup>4</sup>

#### I. Small Utility Opt-In

In Order No. 2222, the Commission added section 35.28(g)(12)(iv) to the Commission's regulations to provide that RTOs/ISOs may not accept bids from distributed energy resource aggregators that aggregate customers of small utilities unless the relevant electric retail regulatory authority (RERRA) allows such customers of small utilities to participate in distributed energy resource aggregations (i.e., to opt in).<sup>5</sup> Specifically, the Commission directed each RTO/ISO to amend its market rules as necessary to (1) accept bids from a distributed energy resource aggregator if its aggregation includes distributed energy resources that are customers of utilities that distributed more than 4 million MWh in the previous fiscal year, and (2) not accept bids from distributed energy resource aggregators if the aggregation includes distributed energy resources that are customers of utilities that distributed 4 million MWh or less in the previous fiscal year, unless the RERRA permits such customers to be bid into RTO/ISO markets by a distributed energy resource aggregator (small utility opt-in).<sup>6</sup> The Commission also required each RTO/ISO to explain how it will implement this small utility opt-in, noting that an RTO/ISO may choose to implement this requirement in a similar manner as it currently implements the small utility opt-in provision under Order No. 719-A.<sup>7</sup>

1. ISO-NE proposes to revise Tariff section III.6.1(f) to require that DER Aggregations (DERAs) "not be located in the metering domain of a Host Utility that distributed 4 million MWh or less in the previous fiscal year, unless the [RERRA] permits such Host Utility to host Distributed Energy Resource Aggregations." ISO-NE explains that it intends to implement this opt-in provision in the same manner as the small utility opt-in for Demand Response

<sup>61,227 (2021) (</sup>Order No. 2222-B).

<sup>&</sup>lt;sup>4</sup> ISO-NE may file revised Tariff records where appropriate.

<sup>&</sup>lt;sup>5</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 56.

 $<sup>^6</sup>$  *Id.* P 65; see Order No. 2222-A, 174 FERC ¶ 61,197 at PP 34-35 (dismissing arguments on rehearing about the small utility opt-in).

<sup>&</sup>lt;sup>7</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 66.

<sup>&</sup>lt;sup>8</sup> Transmittal at 40-41.

Resources, which, ISO-NE explains, has been effective in determining where Demand Response Resources are eligible to be hosted in New England. ISO-NE additionally revises Tariff section III.6.7(c)(ii) to require that "the Host Utility (or its agent) shall confirm that the Host Utility has opted to allow Distributed Energy Resource Aggregations [connecting to a Host Utility that served less than or equal to 4 million MWh of load in the previous fiscal year] to participate in wholesale markets."

- a. Please explain why ISO-NE proposes that DERAs shall "not be located in the *metering domain* of a [small] Host Utility," (emphasis added) when Order No. 2222 requires that RTOs/ISOs not accept bids from a distributed energy resource aggregator if its aggregation includes distributed energy resources that are customers of small utilities.<sup>9</sup>
- b. Under ISO-NE's proposed Tariff section III.6.7(c)(ii), why must the *Host Utility* opt in, when the Commission explained that the *RERRA* must opt in to allow RTOs/ISOs to accept bids from DER Aggregators that include distributed energy resources that are customers of small utilities? Under ISO-NE's proposed Tariff section III.6.1(f), why does ISO-NE propose to restrict DER aggregation participation "unless the [RERRA] *permits such Host Utility to host Distributed Energy Resource Aggregations*" (emphasis added) when Order No. 2222 states that RTOs/ISOs may not accept bids from aggregators if its aggregation includes distributed energy resources that are customers of small utilities unless the RERRA *permits such customers* to be bid into RTO/ISO markets by a distributed energy resource aggregator. <sup>10</sup>
- c. Please explain what type of Host Utility confirmation about opting in must be made to allow DER Aggregations to participate in wholesale markets.

<sup>&</sup>lt;sup>9</sup> Compare Order No. 2222, 172 FERC ¶ 61,247 at P 65, with Transmittal at 40-41.

<sup>&</sup>lt;sup>10</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 8.

d. Please explain how the Host Utility's role in making such a confirmation complies with the Commission's decision to allow such customers to participate if the RERRA so permits.

## II. <u>Interconnection</u>

In Order No. 2222, the Commission declined to exercise its jurisdiction over the interconnections of distributed energy resources to distribution facilities for the purpose of participating in RTO/ISO markets exclusively as part of a distributed energy resource aggregation and directed each RTO/ISO to make any necessary tariff changes to reflect this guidance in its compliance filing.<sup>11</sup> In Order No. 2222-A, the Commission clarified that the Commission declined to exercise jurisdiction over the interconnections of distributed energy resources, including the interconnections of Qualifying Facilities (QFs), to distribution facilities for the purpose of participating in RTO/ISO markets exclusively as part of a distributed energy resource aggregation.<sup>12</sup>

- 1. ISO-NE proposes to modify section 1.1.1 of the Small Generator Interconnection Procedure (SGIP) in Schedule 23 of section II of the Tariff to add an additional category of interconnection that is not subject to the SGIP: "a Distributed Energy Resource that will be participating in the wholesale market exclusively through a [DERA]." <sup>13</sup>
  - a. Please explain whether ISO-NE's proposed modification would exempt from the SGIP all interconnections of resources participating in the ISO-NE markets exclusively through an aggregation, even those interconnected to ISO-NE's Administered Transmission System. If so, please explain how this is consistent with the Commission's guidance.
- 2. Please provide an overview of how ISO-NE will evaluate new service requests for DERs and/or DER Aggregations and whether that process is the same as for other resources.
- 3. Please explain if ISO-NE will evaluate each DER and/or DER Aggregation seeking to provide capacity. If so, please explain the

<sup>&</sup>lt;sup>11</sup> *Id.* PP 90, 104.

<sup>&</sup>lt;sup>12</sup> Order No. 2222-A, 174 FERC ¶ 61,197 at P 43.

<sup>&</sup>lt;sup>13</sup> Transmittal at 41.

evaluation process and studies performed and how does that evaluation compare to the evaluation process for other resources? Please provide an overview of how ISO-NE will evaluate DER and DER Aggregation for deliverability and whether that process is the same as for other resources.

- 4. ISO-NE proposes a pathway for DERs to participate in the New England energy and ancillary services markets through a singleresource DERA prior to the effective date of the full slate of DERA rules. 14 ISO-NE explains that, to accomplish this, section 1.1.1 of the SGIP would exempt the DERs that make up a single-resource DERA from the SGIP when they "secure a [Capacity Supply Obligation] as part of a [Distributed Energy Capacity Resource] in a Capacity Commitment Period prior to the effective date of the Compliance Proposal's energy market rules, but are located on a distribution feeder that would otherwise be subject to the SGIP as part of the Administered Transmission System." The proposed Tariff language associated with this proposal states: "Distributed Energy Resource reviewed as part of a Distributed Energy Capacity Resource that qualifies in any Forward Capacity Auction that takes place prior to the effective date of Section III.6 (Distributed Energy Resource Aggregations), shall not be subject to the SGIP, provided that: i) the Distributed Energy Resource meets the requirements of, and is included in the Distributed Energy Capacity Resource as a single-resource Distributed Energy Resource Aggregation, ii) the Distributed Energy Capacity Resource was qualified as a resource composed of one or more Distributed Energy Resource Aggregations that are each single-resource aggregations; iii) each underlying Distributed Energy Resource has a valid state interconnection agreement, and iv) each of the underlying Distributed Energy Resources has received approval from the ISO for a Proposed Plan Application pursuant to Section I.3.9 of the Tariff, if applicable."15
  - a. Please explain how it is consistent with Order No. 2222 to allow DERs to make use of this provision while not being

<sup>&</sup>lt;sup>14</sup> *Id*. at 41.

<sup>&</sup>lt;sup>15</sup> Proposed Tariff, § 1.1.1.

- subject to the full set of DERA rules, which will become effective in 2026.
- b. Please identify the language in proposed section 1.1.1 of the SGIP that "would exempt the DERs that make up a single-resource DERA from the SGIP when they: secure a [Capacity Supply Obligation] as part of a [Distributed Energy Capacity Resource] in a Capacity Commitment Period prior to the effective date of the Compliance Proposal's energy market rules." 16

# III. <u>Definitions of Distributed Energy Resource and Distributed Energy Resource Aggregator</u>

In Order No. 2222, the Commission amended section 35.28(b) of the Commission's regulations to define a distributed energy resource as "any resource located on the distribution system, any subsystem thereof or behind a customer meter." The Commission explained that its adopted definition of distributed energy resource is technology-neutral, thereby ensuring that any resource that is technically capable of providing wholesale services through aggregation is eligible to do so, which enhances competition in the RTO/ISO markets and, in turn, helps to ensure that these markets produce just and reasonable rates.

- 1. ISO-NE proposes to modify the Commission's definition of a "Distributed Energy Resource Aggregator" to leverage current ISO-NE Tariff terms such as "Market Participant" and "Lead Market Participant" to describe the role of a Distributed Energy Resource Aggregator in relation to ISO-NE and the New England Markets. 18 Thus, ISO-NE defines Distributed Energy Resource Aggregator as "a Market Participant that aggregates one or more Distributed Energy Resource Aggregation and serves as the Lead Market Participant for a Distributed Energy Resource Aggregation."
  - a. Please identify where in the Tariff ISO-NE defines
    Distributed Energy Capacity Resource. To the extent ISO-

<sup>&</sup>lt;sup>16</sup> Transmittal at 41.

<sup>&</sup>lt;sup>17</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 114.

<sup>&</sup>lt;sup>18</sup> Transmittal at 9.

NE does not define this term in its Tariff, as it does in the Transmittal, <sup>19</sup> please explain why this is appropriate.

### IV. Eligibility to Participate

#### A. Participation Model

In Order No. 2222, the Commission added section 35.28(g)(12)(i) to the Commission's regulations to require each RTO/ISO to establish distributed energy resource aggregators as a type of market participant and to allow distributed energy resource aggregations under one or more participation models in the RTO's/ISO's tariff that accommodate the physical and operational characteristics of the distributed energy resource aggregation. The Commission stated that it would evaluate each proposal submitted on compliance to determine whether it meets the goals of Order No. 2222 to allow distributed energy resources to provide all services that they are technically capable of providing through aggregation.

1. In order to allow Distributed Energy Resource Aggregations to provide energy and ancillary services, ISO-NE proposes to allow DERAs to use five existing participation models (some with minor modifications) and two new DERA-specific participation models: the Demand Response Distributed Energy Resource Aggregation (DRDERA) and Settlement Only Distributed Energy Resource Aggregation (SODERA) models.<sup>21</sup> The existing participation models include the Generator Asset model and the Demand Response Resource (DRR) participation model for homogeneous aggregations of demand response resources. ISO-NE explains that DERAs that only inject energy can use the Generator Asset model; DERAs that inject and/or withdraw energy and provide demand response can use the DRDERA model; and DERAs that inject and/or

<sup>&</sup>lt;sup>19</sup> *Id.* at 20-21 (explaining that a DECR is an aggregation of DERAs in a single DRR Aggregation Zone).

<sup>&</sup>lt;sup>20</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 130.

<sup>&</sup>lt;sup>21</sup> Transmittal at 10-24.

withdraw energy but are not dispatchable by ISO-NE can use the SODERA model.<sup>22</sup>

a. Must homogeneous aggregations of demand response resources participate under the DRR model, or may they alternatively participate under the DRDERA model? Please explain.

#### B. Types of Technologies

To implement section 35.28(g)(12)(ii)(a) of the Commission's regulations, the Commission required in Order No. 2222 that each RTO's/ISO's rules not prohibit any particular type of distributed energy resource technology from participating in distributed energy resource aggregations.<sup>23</sup> Order No. 2222 also stated that the RTO/ISO must incorporate the requirements of Order No. 745 in rules for demand response resources participating in heterogeneous aggregations.<sup>24</sup>

1. Regarding the proposed DRDERA participation model, ISO-NE states that a DRDERA is required to submit a single offer, rather than separate offers for demand response DERs and non-demand response DERs because the aggregation is treated as a single market resource. ISO-NE explains that is not possible to distinguish which part of the offer represents the demand response DERs component of the aggregation, and which part of the offer represents the non-demand response component. In addition, ISO-NE states that any energy injection (or energy withdrawal) is priced at the locational marginal price (LMP) and is compensated, even if the DRDERA is not dispatched by ISO-NE. ISO-NE also explains that offer prices submitted by DRDERAs are subject to the Demand Reduction Threshold Price calculated pursuant to Tariff section

<sup>&</sup>lt;sup>22</sup> ISO-NE Answer at 24-25.

<sup>&</sup>lt;sup>23</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 141.

<sup>&</sup>lt;sup>24</sup> *Id*.

<sup>&</sup>lt;sup>25</sup> Transmittal at 17 (citing Proposed Tariff, § III.1.10.1A(l)).

<sup>&</sup>lt;sup>26</sup> ISO-NE explains that, under the existing rules, energy injections by DRRs that are not dispatched by ISO-NE are not paid as energy supply. *Id.* at 17 n.48.

III.1.10.1A(f) to ensure energy payments for demand reductions satisfy the net benefits test described in Order No. 745. ISO-NE states that the application of the net benefits test only requires a DRDERA to provide demand reduction service at or above the Demand Reduction Threshold Price and imposes no restriction on when a DRDERA can provide energy injection service or energy withdrawal service.<sup>27</sup>

- a. Because a DRDERA is required to submit a single offer that is subject to the Demand Reduction Threshold Price, please explain how this requirement imposes no restriction on when a DRDERA can provide energy injection service or energy withdrawal service. For example, could there be a scenario where a DRDERA is unable to economically clear the market and be dispatched to provide energy injection service (e.g., if the DRDERA offers below the Demand Reduction Threshold Price)? Please explain why this approach would not present a barrier to the participation of DRDERAs.
- b. Given that ISO-NE cannot distinguish which part of the offer represents the demand response DERs component of the aggregation, and which part of the offer represents the non-demand-response component, how will ISO-NE accurately settle and compensate a DRDERA that provides energy injection service and demand reduction service consistent with requirements of Order No. 745?
- 2. ISO-NE explains that, for a DRDERA, ISO-NE establishes a baseline for each DER in the aggregation in the same manner as prescribed for a demand response asset in section III.8.2 of the Tariff. ISO-NE states that the DER Aggregator is required to submit a Baseline Deviation Offer pursuant to proposed section III.1.10.1A(l) for unit commitment and economic dispatch purposes.
  - a. Please clarify whether ISO-NE proposes to establish baselines for both demand response DERs and non-demand-response DERs.
  - b. If ISO-NE proposes to establish baselines for non-demandresponse DERs, please explain the process by which ISO-NE establishes a baseline for such DERs, noting any similarities

<sup>&</sup>lt;sup>27</sup> *Id.* at 17 n.49.

with and/or differences from the existing process for doing so for demand response assets.

# C. <u>Double Counting of Services</u>

To implement section 35.28(g)(12)(ii)(a) of the Commission's regulations, the Commission in Order No. 2222 allowed RTOs/ISOs to limit the participation of resources in RTO/ISO markets through a distributed energy resource aggregator that are receiving compensation for the same services as part of another program.<sup>28</sup>

- 1. ISO-NE states that it proposes to prevent double counting in two ways. First, ISO-NE proposes that a facility with non-energy-efficiency measures that are part of an On-Peak Demand Resource or a Seasonal Peak Demand Resource may not be part of a Distributed Energy Capacity Resource (DECR), to avoid double counting the same demand-reducing or energy-injecting capacity in two different resources. Second, ISO-NE proposes metering requirements to prevent double counting of services. Specifically, it proposes that a DER's meter data must be reported to demonstrate that the DER's output or load does not modify the load reported for the Retail Delivery Point, to ensure that the services paid for in wholesale markets provide a service beyond the Point of Interconnection or Retail Delivery Point of the facility as applicable. 30
  - a. Please clarify how ISO-NE's proposal protects against a DER being counted twice for providing the same service, once in the wholesale markets and a second time in a retail market/program? Please describe how ISO-NE will account for the different wholesale and retail services that DERs provide. Please explain how such restrictions are appropriate and narrowly designed.

<sup>&</sup>lt;sup>28</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 159.

<sup>&</sup>lt;sup>29</sup> Transmittal at 22; see proposed Tariff, § III.13.1.4A.

<sup>&</sup>lt;sup>30</sup> Transmittal at 34; see proposed Tariff, § III.6.4(e).

#### D. Single Resource Aggregation

In Order No. 2222, the Commission required RTOs/ISOs to implement a minimum size requirement not to exceed 100 kW for all distributed energy resource aggregations.

To implement section 35.28(g)(12)(ii)(a) of the Commission's regulations, the Commission in Order No. 2222 did not establish a minimum or maximum capacity requirement for individual distributed energy resources to participate in RTO/ISO markets through a distributed energy resource aggregation.<sup>31</sup> Although the Commission declined to establish a specific maximum capacity requirement for individual distributed energy resources in an aggregation, the Commission directed each RTO/ISO to propose a maximum capacity requirement for individual distributed energy resources participating in its markets through a distributed energy resource aggregation or, alternatively, explain why such a requirement is not necessary.<sup>32</sup>

To implement § 35.28(g)(12)(ii)(a) of the Commission's regulations, the Commission required each RTO/ISO to revise its tariff to allow a single qualifying distributed energy resource to avail itself of the proposed distributed energy resource aggregation rules by serving as its own distributed energy resource aggregator.<sup>33</sup>

1. ISO-NE proposes to incorporate the 100 kW minimum size requirement for all proposed DERA participation models. ISO-NE states that under the proposal, a DER with an energy injection capability of 5 MW or greater will be restricted from aggregating with other DERs and must participate as a single-resource aggregation.<sup>34</sup> In addition, ISO-NE explains that if a group of DERs can inject 5 MW or greater at a single bus-level transmission node, that group is restricted from aggregating with facilities at other nodes. ISO-NE explains that the "proposed participation models recognize that each DERA, comprised of one or more DERs, could have one or more capabilities."<sup>35</sup> Proposed Tariff section III.6.1(a) states that a "Distributed Energy Resource Aggregation shall: (a)

<sup>&</sup>lt;sup>31</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 179.

<sup>&</sup>lt;sup>32</sup> *Id*.

<sup>&</sup>lt;sup>33</sup> *Id.* P 185.

<sup>&</sup>lt;sup>34</sup> Transmittal at 24-25.

<sup>&</sup>lt;sup>35</sup> *Id.* at 11.

comprise one or multiple facilities at one or more points of interconnection or Retail Delivery Points; ..."

a. Can DERs smaller than 5 MW participate as a single-resource aggregation? Please explain.

#### V. Locational Requirements

In Order No. 2222, the Commission added section 35.28(g)(12)(ii)(b) to the Commission's regulations to require each RTO/ISO to revise its tariff to establish locational requirements for distributed energy resources to participate in a distributed energy resource aggregation that are as geographically broad as technically feasible.<sup>36</sup>

- 1. ISO-NE proposes to establish locational requirements specific to each participation model based on existing single Demand Response Resource (DRR) aggregation zones (for DERAs using the DRR or Alternative Technology Regulation Resource participation models), or a DRR aggregation zone and a metering domain (for DERAs using the Generator Asset, SODERA, DRDERA, Continuous Storage Facility and Battery Storage Facility models).<sup>37</sup> ISO-NE explains that using the metering domain construct will ensure that supply and demand reported by the Host Participant Meter Readers to ISO-NE for Energy Market settlement is accurate.
  - a. Please explain why the overlap between DRR aggregation zones and metering domains ensures that the locational requirements are as geographically broad as technically feasible. To the extent that the boundaries of metering domains change, how does ISO-NE's proposal ensure that the zones remain as geographically broad as technically feasible?
  - b. Please explain whether the DRR aggregation zones and metering domains can change independent of the utility metering domains.

# VI. <u>Distribution Factors and Bidding Parameters</u>

In Order No. 2222, the Commission added section 35.28(g)(12)(ii)(c) to the Commission's regulations to require each RTO/ISO to establish market rules that address

<sup>&</sup>lt;sup>36</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 204.

<sup>&</sup>lt;sup>37</sup> Transmittal at 25-27; see Proposed Tariff, § III.6.2.

distribution factors and bidding parameters for distributed energy resource aggregations.<sup>38</sup> Specifically, the Commission required each RTO/ISO that allows multinode aggregations to revise its tariff to (1) require that distributed energy resource aggregators give to the RTO/ISO the total distributed energy resource aggregation response that would be provided from each pricing node, where applicable, when they initially register their aggregation, and to update these distribution factors if they change; and (2) incorporate appropriate bidding parameters into its participation models as necessary to account for the physical and operational characteristics of distributed energy resource aggregations.

The Commission stated that, in meeting the requirement to account for distribution factors and bidding parameters, each RTO/ISO may revise its tariff to manage the locational attributes of distributed energy resource aggregations in a manner that reflects the RTO's/ISO's unique network configuration, infrastructure, and existing operational processes.<sup>39</sup> The Commission stated that it would evaluate each RTO's/ISO's proposal to ensure that it will provide the RTO/ISO with sufficient information from resources in a multi-node distributed energy resource aggregation that is necessary to reliably operate its systems without imposing undue burden on individual distributed energy resources or utility distribution companies. The Commission stated that RTOs/ISOs that allow multi-node aggregations must, at a minimum, propose clear protocols explaining how a distributed energy resource aggregation can provide the required information and update that information when needed.

# VII. <u>Information and Data Requirements</u>

In Order No. 2222, the Commission added section 35.28(g)(12)(ii)(d) to the Commission's regulations to require each RTO/ISO to establish market rules that address information requirements and data requirements for distributed energy resource aggregations. <sup>40</sup> As discussed in more detail below, the Commission required each RTO/ISO to revise its tariff to (1) include any requirements for distributed energy resource aggregators that establish the information and data that a distributed energy resource aggregator must provide about the physical and operational characteristics of its aggregation; (2) require distributed energy resource aggregators to provide a list of the individual resources in their aggregations; and (3) establish any necessary information that must be submitted for the individual distributed energy resources. The Commission also required each RTO/ISO to revise its tariff to require distributed energy resource aggregators to provide aggregate settlement data for the distributed energy resource

<sup>&</sup>lt;sup>38</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 225.

<sup>&</sup>lt;sup>39</sup> *Id.* P 229.

<sup>&</sup>lt;sup>40</sup> *Id.* P 236.

aggregation and to retain performance data for individual distributed energy resources in a distributed energy resource aggregation for auditing purposes.

- 1. In its proposal, ISO-NE states that the responsibility for metering resources and loads that settle through the energy market rests with the PTOs. ISO-NE also states that the TOA requires that the PTOs "provide the ISO with revenue metering data or cause the ISO to be provided with such revenue metering data."
  - a. Please explain how the proposal is consistent with the requirement of Order No. 2222 that the RTO/ISO must require each distributed energy resource aggregator to maintain and submit aggregate settlement data for the distributed energy resource aggregation so that the RTO/ISO can regularly settle with the distributed energy resource aggregator for its market participation, and to provide, upon request from the RTO/ISO, performance data for individual resources in a distributed energy resource aggregation for auditing purposes. 43

#### **VIII. Metering and Telemetry System Requirements**

In Order No. 2222, the Commission added section 35.28(g)(12)(ii)(f) to the Commission's regulations to require each RTO/ISO to revise its tariff to establish market rules that address metering and telemetry hardware and software requirements necessary for distributed energy resource aggregations to participate in RTO/ISO markets. <sup>44</sup> The Commission stated that it would not prescribe the specific metering and telemetry requirements that each RTO/ISO must adopt; rather, the Commission provided the RTOs/ISOs with flexibility to establish the necessary metering and telemetry requirements for distributed energy resource aggregations, and required each RTO/ISO to explain in its compliance filing why such requirements are just and reasonable and do not

<sup>&</sup>lt;sup>41</sup> Transmittal at 32.

<sup>&</sup>lt;sup>42</sup> *Id*.

<sup>&</sup>lt;sup>43</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 240.

<sup>&</sup>lt;sup>44</sup> *Id.* P 262.

pose an unnecessary and undue barrier to individual distributed energy resources joining a distributed energy resource aggregation.<sup>45</sup>

The Commission stated that each RTO's/ISO's proposed metering requirements should rely on meter data obtained through compliance with distribution utility or local regulatory authority metering system requirements whenever possible for settlement and auditing purposes. <sup>46</sup> To the extent that the RTO/ISO proposes that such information comes from or flows through distribution utilities, the Commission required that RTOs/ISOs coordinate with distribution utilities and RERRAs to establish protocols for sharing metering and telemetry data, and that such protocols minimize costs and other burdens and address concerns raised with respect to privacy and cybersecurity. <sup>47</sup>

1. In its proposal, ISO-NE states that, within ISO-NE, metering responsibility is governed by the Transmission Operating Agreement (TOA) and the Tariff, and the responsibility for metering resources and loads that settle through the energy market rests with the Participating Transmission Owners. 48 ISO-NE states that its proposal incorporates in proposed Tariff section III.6.4 metering and telemetry requirements that are consistent with the requirements for other resources using the same participation models, or draw from those models, including the new DRDERA and SODERA models.<sup>49</sup> ISO-NE states that the proposed rules allow, but do not require, submetering individual DERs or parallel metering.<sup>50</sup> ISO-NE states that generally a DER's meter must be located at the Point of Interconnection or Retail Delivery Point, but to the extent that the pertinent Host Participant Assigned Meter Reader can accommodate such a configuration, a DER's interconnection point can be located

<sup>&</sup>lt;sup>45</sup> *Id.* P 263.

<sup>&</sup>lt;sup>46</sup> *Id.* P 269.

<sup>&</sup>lt;sup>47</sup> *Id.* P 270.

<sup>&</sup>lt;sup>48</sup> Transmittal at 32 (citing ISO-NE, Transmission Operating Agreement § 3.06(a)(vii) (TOA); TOA § 3.06(a)(x)).

<sup>&</sup>lt;sup>49</sup> *Id.* at 33.

<sup>&</sup>lt;sup>50</sup> *Id.* at 35. ISO-NE indicates that "sub-metering" occurs when a DER's point of interconnection is located behind a Retail Delivery Point (i.e., metering located at a Behind-the-Meter DER). ISO-NE Answer at 7.

behind a Retail Delivery Point.<sup>51</sup> ISO-NE states that, in such a case, the DER's meter data must be reported such that the DER's output or load does not affect the load reported for the Retail Delivery Point, as this will ensure that retail metering is relied on to the extent practical and that the services paid for in wholesale markets are in fact making it past the Point of Interconnection or Retail Delivery Point of the facility as applicable.<sup>52</sup> ISO-NE states that most retail metering in New England is located at the Retail Delivery Point, not at a submeter location.<sup>53</sup> According to ISO-NE, many states prohibit submetering unless explicitly authorized by the retail regulator and that mandating submetering would be at odds with state regulatory constructs and could potentially lead to increased costs for retail customers. 54 ISO-NE states that The Host Participant or Host Utility, or its Assigned Meter Reader, are responsible for: (1) reporting of interval energy quantities; (2) reporting of meter reconciliation data; and (3) prompt reporting of any discovered metering, calculating, or reporting errors.<sup>55</sup>?

- a. Is there a difference between use of the term submetering in retail markets versus the term submetering in ISO-NE's wholesale markets? Please explain.
- b. Please explain what responsibility the distributed energy resource aggregator or another entity bears for providing any required metering and telemetry information to ISO-NE.
- c. Please explain what criteria will be used to determine whether the pertinent Host Participant Assigned Meter Reader can

<sup>52</sup> For example, ISO-NE explains that if the production of a behind-the-meter generator were directly submetered, the same production would also reduce the load as measured at the Retail Delivery Point meter. ISO-NE explains that paying the behind-the-meter generator based on its directly submetered production while also billing the customer based on its lower Retail Delivery Point meter reading would result in the double counting of services. *Id*.

<sup>&</sup>lt;sup>51</sup> *Id.* at 34.

<sup>&</sup>lt;sup>53</sup> *Id.* at 35.

<sup>&</sup>lt;sup>54</sup> *Id.* at 35 n.87.

<sup>&</sup>lt;sup>55</sup> *Id.* at 33.

- accommodate a DER's point of interconnection behind a Retail Delivery Point. Please also explain if this varies between TOs.
- d. Please clarify whether ISO-NE's proposed telemetry requirements allow the use of existing telemetry infrastructure whenever possible.
- e. Please clarify whether ISO-NE proposes that metering and telemetry data come from or flow through distribution utilities. If yes, please explain whether ISO-NE coordinated with distribution utilities and RERRAs to establish protocols for sharing metering and telemetry data. Please describe these protocols and identify their location in ISO-NE's Tariff or manuals.
- 2. In its answer, ISO-NE states that "[i]intervenors have failed to explain how data validation would be accomplished under their proposal, a critical, and [ISO-NE] believes, fatal, flaw to their argument that the Compliance Proposal should permit third parties to provide submetering data services." ISO-NE further explains that third parties providing submetering would be infeasible for potentially large numbers of DERs comprising a DERA. Specifically, ISO-NE explains the main complication is that submetered data is not directly comparable to Retail Delivery Point (RDP) data.
  - a. Please explain the difference between what the RDP data measures and what submetering data measures. Has ISO-NE considered metering approaches that would allow for the comparison of these different forms of data? If so, explain whether any such approaches are possible in ISO-NE.

# IX. Coordination between the RTO/ISO, Aggregator, and Distribution Utility

#### A. Role of Distribution Utilities

To implement § 35.28(g)(12)(ii)(g) of the Commission's regulations, Order No. 2222 required each RTO/ISO to develop a distribution utility review process that includes criteria by which distribution utilities would determine whether (1) each proposed distributed energy resource is capable of participation in a distributed energy resource aggregation; and (2) the participation of each proposed distributed energy resource in a distributed energy resource aggregation will not pose significant risks to the reliable and

safe operation of the distribution system.<sup>56</sup> The Commission also stated that the distribution utility should have the opportunity to request that the RTO/ISO place operational limitations on an aggregation or the removal of a distributed energy resource from an aggregation based on specific significant reliability or safety concerns that it clearly demonstrates to the RTO/ISO and distributed energy resource aggregator on a case-by-case basis.<sup>57</sup>

In Order No. 2222-A, the Commission clarified that, although it is providing each RTO/ISO with the flexibility to develop review procedures and criteria appropriate for its region, the Commission expects that the criteria proposed on compliance will require that an RTO/ISO decision to deny wholesale market access to a distributed energy resource for reliability reasons be supported by a showing that the distributed energy resource presents significant risks to the reliable and safe operation of the distribution system.<sup>58</sup>

In Order No. 2222-A, the Commission clarified that RTO's/ISO must permit sharing any necessary information and data collected about the individual distributed energy resources participating in a distributed energy resource aggregation with distribution utilities and the distributed energy resource aggregator. Such information could include whether a resource affects the safety and reliability of the distribution system or is capable of participating in an aggregation. <sup>59</sup>

In Order No. 2222-A, the Commission required that the review criterion on impacts on distribution system reliability must include "any incremental impacts from a resource's participation in a distributed energy resource aggregation that were not previously considered by the distribution utility during the interconnection study process for that resource." <sup>60</sup>

1. ISO-NE's Compliance Proposal includes a process for Host Utility review of the eligibility of DERs participating in a DERA that is

<sup>&</sup>lt;sup>56</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 292.

<sup>&</sup>lt;sup>57</sup> *Id.* P 297.

<sup>&</sup>lt;sup>58</sup> Order No. 2222-A, 174 FERC ¶ 61,197 at P 76 (citing Order No. 2222, 172 FERC ¶ 61,247 at P 292) (referencing the criteria by which the distribution utilities will determine whether a proposed distributed energy resource will pose "significant risks to the reliable and safe operation of the distribution system").

<sup>&</sup>lt;sup>59</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 75

<sup>&</sup>lt;sup>60</sup> Order No. 2222-A, 174 FERC ¶ 61,197 at P 79 (citing Order No. 2222, 172 FERC ¶ 61,247 at P 297).

triggered by the DER Aggregator's initial notification. In section III.6.7 of the proposed tariff, ISO-NE proposes a registration process that was developed with stakeholders to address all concerns and that meets the Commission's 60-day review period deadline. The Host Utility review includes an examination of whether each DER is capable of wholesale market participation (e.g., the DER is not also participating in a retail program that prohibits wholesale market participation, has valid operating agreements, etc.), and whether the DER would pose risks to the reliable and safe operation of the distribution system. ISO-NE states that it plans to specify additional operational coordination details, including the process for identification of a Designated Entity or Demand Designated Energy will specified in the ISO-NE Operating Procedures. ISO-NE states that, in order to complete the registration and activation of a DERA, the DER Aggregator shall Provide the information required by applicable ISO-NE Manuals. Proposed section III.6.7 of the Tariff provides the stages that are required to register a DER aggregation. The four stages are: (1) Initial Notification of Intent to Register a Distributed Energy Resource Aggregation; (2) Eligibility Confirmation; (3) Registration and Activation; (4) Updates to an Existing Distributed Energy Resource Aggregation Registration.

- a. Please describe the process, if any, that a Distributed Energy Resource Aggregator will need to follow to obtain necessary information (such as billing account and location) in order to submit an initial notification to ISO-NE. Will there be any limits on the time required to obtain this information?
- b. Will a complete and accurate initial notification be required before the Eligibility Confirmation stage commences? What will occur if an initial notification is incomplete and how will ISO-NE notify the Distributed Energy Resource Aggregator?
- c. Please identify which sections of the (proposed) Tariff or Manuals identify the information required to be submitted in the initial notification.
- d. Please identify which sections of the (proposed) Tariff or Manuals will specify the protocols or communication methods that will be used to transfer information and results of the Eligibility Confirmation.

- e. Please describe the acceptable types and/or forms of evidence of violation of eligibility criteria that the Host Utility (or its agent) may use to demonstrate in its written notice that a distributed energy resource aggregation is ineligible in full or in part.
- f. Please explain how any necessary information and data collected about the individual distributed energy resources participating in a distributed energy resource aggregation by ISO-NE will be shared with Host Utilities and the distributed energy resource aggregator.
- g. Please explain how the distribution utility review process will examine any incremental impacts from a resource's participation in a distributed energy resource aggregation that were not previously considered by the distribution utility during the interconnection study process for that resource.

In Order No. 2222, the Commission required each RTO/ISO to revise its tariff to incorporate dispute resolution provisions as part of its proposed distribution utility review process. <sup>61</sup> The Commission stated that each RTO/ISO should describe how existing dispute resolution procedures are sufficient or, alternatively, propose amendments to its procedures or new dispute resolution procedures specific to this subject.

In Order No. 2222-A, the Commission stated that disputes regarding the distribution utility review process—including those between non-host distribution utilities and a host distribution utility or the RTO/ISO—may be resolved through the RTO's/ISO's dispute resolution process, the Commission's Dispute Resolution Service, or complaints filed pursuant to section 206 of the Federal Power Act at any time. 62

2. Proposed section III.6.7(c)(v) states that in the event the Host Utility (or its agent) confirms that a Distributed Energy Resource Aggregation has not fulfilled the requirements of this subsection to be activated for participation in the New England Markets, and the Distributed Energy Resource Aggregator disputes this confirmation, the Distributed Energy Resource Aggregation may seek dispute

<sup>&</sup>lt;sup>61</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 299.

 $<sup>^{62}</sup>$  Order No. 2222-A, 174 FERC ¶ 61,197 at P 70 (citing Order No. 2222, 172 FERC ¶ 61,247 at P 299).

resolution in a process established by the RERRA, if available, or if not available, in accordance with section I.6 of the Tariff.

a. Please identify circumstances in which a dispute resolution process established by a RERRA would not be available.

#### B. Role of Relevant Electric Retail Regulatory Authorities

To implement section 35.28(g)(12)(ii)(g) of the Commission's regulations, in Order No. 2222 the Commission required each RTO/ISO to specify in its tariff, as part of the market rules on coordination between the RTO/ISO, the distributed energy resource aggregator, and the distribution utility, how each RTO/ISO will accommodate and incorporate voluntary RERRA involvement in coordinating the participation of aggregated distributed energy resources in RTO/ISO markets.<sup>63</sup>

- 1. ISO-NE states that its proposed Tariff language allows for RERRAs to play an active role in the participation of DERAs if they choose to, but does not mandate such participation for all RERRAs. ISO-NE specifically identifies a role for RERRAs in setting interconnection rules and metering standards, resolving disputes, and section III.6.7(b) requires that eligibility confirmations be provided to appropriate RERRAs upon request.<sup>64</sup>
  - a. Please describe the "active" role that a RERRA can play in the participation of DERAs. In particular, what further role in coordination can a RERRA play when it receives an eligibility confirmation? Will RERRAs also receive information on initial notifications that were deemed incomplete?
  - b. Please also explain how the metering standards for RERRAS differ from those in the TOA and which standards the DERA must adhere to in different circumstances.

#### X. Modifications to List of Resources

In Order No. 2222, the Commission required each RTO/ISO to revise its tariff to specify that distributed energy resource aggregators must update their lists of distributed

<sup>&</sup>lt;sup>63</sup> Order No. 2222, 172 FERC  $\P$  61,247 at P 322.

<sup>&</sup>lt;sup>64</sup> Transmittal at 38-39.

energy resources in each aggregation (i.e., reflect additions and subtractions from the list) and any associated information and data.  $^{65}$ 

In Order No. 2222-A, the Commission encouraged the RTOs/ISOs to propose abbreviated distribution utility review processes for modifications to existing aggregations.<sup>66</sup> The Commission also limited the length of the distribution utility review period to no more than 60 days.<sup>67</sup>

- 1. Section III.6.7(e)(1) of the proposed tariff states that, when a DER is added to or removed from an existing aggregation, the aggregator shall update the aggregation's registration information, including information required by applicable ISO-NE Manuals, sufficient to confirm that any newly added DERs are eligible for participation.
  - a. Please explain in more detail what information must be provided and explain whether the information required for such updates satisfies the requirement in Order No. 2222 that aggregators must provide any associated information and data when updating their list of DERs.
- 2. Proposed Tariff section III.6.7(e) gives Host Utilities 60 days to review changes to a DERA under the same criteria used for initial registration. ISO-NE explains that during review, there is no pause in a DERA's participation in ISO-NE markets. ISO-NE states that the 60 days will allow Host Utilities to restudy an entire DERA to determine whether such changes produce reliability impacts across the entire DERA footprint, i.e., whether the changes introduce interactions between DERs that were not present for the original DERA composition. ISO-NE states that as modifications are made to the underlying DERAs that make up a DECR, the DECR does not need to maintain the technology mix that was initially qualified and became commercial, consistent with the rules in proposed Tariff section III.13.3.8(d).<sup>68</sup> Further, ISO-NE explains that the rules allow for an Existing Generating Capacity Resource or Existing Demand

 $<sup>^{65}</sup>$  Order No. 2222, 172 FERC  $\P$  61,247 at P 336 (citing information and data requirements of Order No. 2222).

<sup>&</sup>lt;sup>66</sup> Order No. 2222-A, 174 FERC ¶ 61,197 at P 71.

<sup>&</sup>lt;sup>67</sup> *Id.* P 72.

<sup>&</sup>lt;sup>68</sup> Transmittal at 39; Proposed Tariff, § III.13.3.8(d).

Capacity Resource, which meet the Commission-accepted definitions and requirements associated with DECRs, to convert to an Existing DECR. Proposed Tariff section III.6.7(e)(iii) Changes to the Distributed Energy Resources participating in a Distributed Energy Resource Aggregation shall become effective in the manner stated in Manual M-RPA.

- a. Please explain the process and corresponding sections in Manual M-RPA that describe how changes to a DER participating in a DERA will become effective and when the aggregator can include the DERs in its offers.
- b. Please explain how modifications to a list of resources in an aggregation will affect a DECR with a Capacity Supply Obligation. Please explain how frequently an aggregator may make modifications to a list of resources in the DECR and the review period required to evaluate such modifications, and how this affects their Capacity Supply Obligation during the review period. Please also explain which tariff provisions govern modifications to a list of resources in a DECR.

# XI. Effective Date

In Order No. 2222, the Commission required each RTO/ISO to propose a reasonable implementation date, together with adequate support explaining how the proposal is appropriately tailored for its region and implements Order No. 2222 in a timely manner.<sup>69</sup> The Commission stated that it will establish on compliance the effective date for each RTO's/ISO's compliance filing.

1. ISO-NE requests "that the Commission accept the complete Compliance Proposal, without amendment or condition on or before November 1, 2022, to allow for [ISO-NE] to implement FCM specific rules in time to allow for DECR participation in [Forward Capacity Auction 18 (FCA 18)]." ISO-NE states that, "[a]pproval of the complete Compliance Proposal will provide Project Sponsors with a reasonable understanding of their rights and obligations in the energy and ancillary service markets when taking on a Capacity Supply Obligation in FCA 18 with DECRs comprised of DERAs." ISO-NE requests that the rules for DECR participation in the FCM,

<sup>&</sup>lt;sup>69</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 361.

<sup>&</sup>lt;sup>70</sup> Transmittal at 43.

the SGIP amendments, and certain definition changes become effective November 1, 2022, and that the remainder of Tariff sections included in the Compliance Proposal be made effective on November 1, 2026. In support of the request for a November 1, 2026 effective date, ISO-NE states that this date is reasonable in light of the implementation needs of ISO-NE, Transmission Owners, and Host Utilities.

- a. After the Commission issues an order on ISO-NE's compliance with the Order No. 2222 requirements, what implementation steps must ISO-NE complete to allow for DECR participation in FCA 18, currently scheduled for February 2024?<sup>71</sup> How far ahead of FCA 18 must those steps be complete, and how much time does ISO-NE expect it will need to complete the steps? Please include a list of relevant milestones and timeline.
- b. If a DECR wishes to participate in FCA 18, what are the relevant milestones and associated deadlines for those milestones that it needs to meet? Does the distribution utility review period occur prior to those milestones? If so, please include in the list of relevant milestones and timeline.
- c. Please explain whether any double compensation may occur as a result of the staggered implementation dates for the DECRs and remaining provisions that include protections against double compensation. Specifically, is there any concern that a DER that participates in a retail program may offer into the capacity market as part of a DECR during the intervening period between November 1, 2022 and November 1, 2026 and potentially receive double compensation in both the wholesale markets and retail programs for the same product during that intervening period?
- d. With respect to ISO-NE's request for a November 1, 2026 effective date for the tariff revisions related to the energy and ancillary markets, please clarify and provide detail regarding

<sup>&</sup>lt;sup>71</sup> ISO-NE, Forward Capacity Auction 18 Schedule (Feb. 10, 2021), <a href="https://www.iso-ne.com/static-assets/documents/2021/02/fca-18-market-timeline-02-10-2021.pdf">https://www.iso-ne.com/static-assets/documents/2021/02/fca-18-market-timeline-02-10-2021.pdf</a>

important milestones and timetables of the implementation needs of ISO-NE, Transmission Owners, and Host Utilities.

This letter is issued pursuant to 18 C.F.R. § 375.307 (2021) and is interlocutory. This letter is not subject to rehearing under 18 C.F.R. § 385.713.

A response to this letter must be filed within 30 days of the date of this letter in accordance with the Commission's electronic tariff requirements using Type of Filing Code 80 – Compliance.

Failure to respond to this letter order within the time period specified may result in a further order rejecting your filing.

Issued by: Kurt Longo, Director, Division of Electric Power Regulation – East