UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION


COMMENTS AND PROTEST OF ADVANCED ENERGY ECONOMY AND THE SUSTAINABLE FERC PROJECT


I. INTRODUCTION AND EXECUTIVE SUMMARY

AEE, NRDC, and SFP strongly support the Commission’s objective in Order No. 2222 to remove barriers to wholesale market participation by aggregated distributed energy resources

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1 18 C.F.R. §§ 385.210 and 385.211.

2 Advanced Energy Economy ("AEE") is a national association of businesses that are making the energy we use secure, clean, and affordable. AEE is the only industry association in the United States that represents the full range of advanced energy technologies and services, both grid-scale and distributed. Advanced energy includes energy efficiency, demand response, energy storage, wind, solar, hydro, nuclear, electric vehicles, and more.

3 Natural Resources Defense Council ("NRDC") is a 501(c)(3) nonprofit organization headquartered in New York, New York, that advocates for policies that support and protect the environment. On behalf of our over 3 million members, NRDC works to promote initiatives at the local, state, national and global levels.

4 The Sustainable FERC Project ("SFP") is a partnership of state, regional and national environmental and other public interest organizations working to expand the deployment of clean energy resources into America’s electricity transmission grid and to reduce and eventually eliminate carbon pollution from the U.S. power sector.

(“DERs”). We also recognize that NYISO has been a leader in developing a participation model for aggregated DERs to participate in its markets, filing a proposal with the Commission before Order No. 2222 was issued.6 However, many DERs still lack participation options in NYISO, and unfortunately, the proposal put forward by NYISO falls short of complying with Order No. 2222 for several reasons. Some of the flaws in NYISO’s DER Aggregation (“DERA”) participation model reflect failures on NYISO’s part to remedy barriers to participation that already existed in its Commission-approved DERA model in light of the requirement in Order No. 2222 that RTOs/ISOs must “accommodate the physical and operational characteristics of each distributed energy resource aggregation” and “allow distributed energy resources to provide all services that they are technically capable of providing through aggregation.”7 Other barriers have been newly introduced, purportedly in service of meeting the specific requirements of Order No. 2222. Whether existing or new, these flaws in NYISO’s DERA participation model render it not in compliance with Order No. 2222.

As explained in more detail below, AEE, NRDC, and SFP believe that the following aspects of NYISO’s proposal (including both its pre-existing DERA model and the revisions filed in this docket) fail to comply with Order No. 2222:

- The participation of heterogeneous aggregations is limited by the “least capable” resource within the aggregation, preventing heterogeneous aggregations from offering all the services they are technically capable of providing;
- Energy efficiency and passive demand resources lack a viable participation model in NYISO, and NYISO’s filing fails to remedy this barrier;

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7 Order No. 2222 at PP 6, 130.
• NYISO’s metering and telemetry requirements are overly burdensome, do not effectively balance the needs of NYISO for information from DERs in an aggregation against the burdens imposed on DERs, and will pose an undue barrier to participation, especially for smaller resources;

• The proposed distribution utility ("DU") review process is unsupported by evidence, is not compliant with Order No. 2222, and creates opportunity for anticompetitive discrimination and a new barrier to participation;

• NYISO’s proposal to prohibit double counting of services is redundant, unacceptably vague, and is likely to pose undue barriers to participation;

• The proposed provisions for coordination with DUs and Relevant Electric Retail Regulatory Authorities ("RERRAs") are poorly defined and may create risk of undue delays and barriers to participation;

• The opt-out / opt-in provisions are unclear and could be interpreted to apply to competitive Load Serving Entities, and include an unjust and unreasonable requirement that DER Aggregators track and have knowledge of the opt-in decisions of small utilities, rather than having NYISO track and post those decisions;

• The requirement for all DERs to obtain Capacity Resource Interconnection Service ("CRIS") award is unnecessary and burdensome;

• The data requirements for participation are not currently defined in the Tariff, and NYISO provides no justification for those requirements in its filing;

• Locational requirements based on mapping distribution feeder lines to a Transmission Node may be appropriate to balance geographic flexibility in constructing DERAs and reliability constraints, but the mapping process has not begun and it is unclear whether it
will ultimately ensure that DERAs can be assembled over the largest possible geographic area; in addition, the timeframe for updating Transmission Nodes should be revisited to avoid undue delays; and

- Applying Buyer-Side Mitigation Measures to (net) injecting DERs is an undue barrier to DER participation in the market.

In addition, we note that NYISO’s proposal gives DERAs important flexibility by allowing third-party metering, which will allow DERs to utilize a range of configurations to participate in a DERA. This proposal appropriately recognizes the unique physical and operational characteristics of DERAs, as Order No. 2222 requires, and will ensure that common uses cases for aggregated DERs will be able to provide all of the services they are capable of providing. The Commission should accept this proposal, and in so doing, signal to other RTOs/ISOs that allowing third-party metering is necessary to comply with Order No. 2222’s requirement to accommodate the physical and operational characteristics of DER aggregations.

For all of these reasons, AEE, NRDC, and SFP respectfully request that the Commission accept NYISO’s compliance in part, reject it in part, and direct NYISO to submit a further compliance filing to address the deficiencies identified above and described in more detail in our comments below.

AEE, NRDC, and SFP also point out that NYISO’s filing is not the result of a robust stakeholder process. While we recognize and appreciate that NYISO developed its existing FERC-approved DERA participation model\(^8\) with stakeholder input, that stakeholder process took place before the Commission issued Order No. 2222, which set specific parameters and

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establishes requirements for aggregations of DERs to be fully accommodated in RTO/ISO markets. As explained in detail in our comments, some existing features of NYISO’s DERA model are not compliant with Order No. 2222, and NYISO has failed to propose changes to the DERA model or other participation model(s) that fully accommodate the physical and operational characteristics of all aggregated DERs and that enable all aggregations of DERs to offer all the services they are technically capable of providing.

Over the course of evaluating the requirements of Order No. 2222, identifying deficiencies in its current Tariff, and developing Tariff revisions to come into compliance with Order No. 2222, NYISO conducted very limited stakeholder outreach. NYISO says that it “presented its proposed compliance revisions to its stakeholders in advance of submitting this filing,” but that presentation was made just one business day prior to the filing of the proposed Tariff revisions, at which point the window for stakeholders to provide meaningful input had clearly passed. The resulting filing fails to address some of the existing barriers to the participation of DERAs, introduces some new barriers to participation by DERs in aggregations, and lacks clarity in many areas. Without a robust stakeholder process, there was no opportunity for prospective DER Aggregators to identify some of the deficiencies in the current DERA model, point out new barriers to entry erroneously introduced in purported service of meeting the

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10 NYISO Transmittal Letter at 12. NYISO held a stakeholder meeting on July 16, 2021, just one business day prior to NYISO’s filing. Presentation materials were posted three days prior to that meeting, and draft Tariff language was made available less than 24 hours in advance.
directives of Order No. 2222, or gain clarity with respect to some of the vague or ill-defined elements of NYISO’s filing. The deficiencies in NYISO’s filing result at least in part from this failure to solicit stakeholder input.

II. COMMENTS

A. NYISO’S proposal fails to address FERC’s directive to “accommodate the physical and operational characteristics of each distributed energy resource aggregation” and to enable aggregated DERs to “provide all services they are technically capable of providing through aggregation.”

In Order No. 2222, the Commission unequivocally stated its overall objective to remove barriers to participation by aggregated DERs, including heterogeneous aggregations. The order requires that RTOs/ISOs “accommodate the physical and operational characteristics of each distributed energy resource aggregation” and “allow distributed energy resources to provide all services that they are technically capable of providing through aggregation.”11 As explained below, NYISO’s proposal fails to meet this objective for all DERs, and particularly falls short of enabling full participation by heterogeneous aggregations and by energy efficiency and other passive demand resources (which is explained more fully in a separate filing in this docket).12

i. NYISO’s proposed model for participation of a heterogeneous aggregation is limited by the characteristics of the “least capable resource” within the aggregation, failing to account for the characteristics of the entire heterogeneous aggregation and preventing it from providing all the services it is technically capable of providing.

The Commission concluded in Order No. 2222 that “[r]equiring that RTOs/ISOs allow heterogeneous aggregations will further enhance competition in RTO/ISO markets by ensuring that complementary resources, including those with different physical and operational

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11 Order No. 2222 at PP 6, 130.
characteristics, can meet qualification and performance requirements such as minimum run times, which will help ensure that these markets produce just and reasonable rates.” 13 NYISO’s DERA model, as modified here, does not fully accommodate heterogeneous aggregations of DERs. NYISO explains only that an “Aggregation participates in the wholesale markets as a “Resource,”” before noting the Commission’s requirement that it accommodate both homogeneous and heterogeneous aggregations. But this does not explain how its DERA participation model considers the capabilities of a Resource as a whole, particularly one that is heterogeneous. 14

Instead of looking at the Resource in its entirety to determine the services the DERA is capable of providing, under NYISO’s DERA model “the type and quantity of each service will be defined by the technical capability of the individual resources that comprise the Aggregation.” 15 Most to the point, NYISO states that “an Aggregation may only qualify to offer the Ancillary Services that all individual facilities in the Aggregation are qualified to provide.” 16 NYISO also requires each DERA to operate “using a fully dispatchable, continuous Bid curve across their entire operating range.” 17

This approach will preclude many heterogeneous aggregations from participating in the DERA model, or if they do participate, from providing all the products and services that they are technically capable of providing. For example, aggregations comprised of behind-the-meter solar and behind-the-meter storage will not be able to provide all of the services they are technically

13 Order No. 2222 at P 142
14 NYISO Transmittal Letter at 15.
15 NYISO Transmittal Letter at 17.
16 NYISO Transmittal Letter at 16.
17 NYISO Transmittal Letter at 17.
capable of providing given these restrictions in NYISO’s DERA model. This is an existing and fast-growing DERA use case that the Commission references in Order No. 2222 when introducing and justifying the requirement that RTOs/ISOs must facilitate heterogeneous DERs. Specifically, the Commission explained that “aggregating electric storage resources with distributed generation could allow the aggregation to achieve performance requirements (such as minimum run times) that an electric storage resource could not meet on its own and provide services (such as regulation) that distributed generation may not be able to provide on its own.”18

NYISO’s requirement that all individual facilities within an Aggregation must be qualified to provide an Ancillary Service for the Aggregation to be eligible to provide that service directly prevents NYISO’s model from accommodating this very use case described by the Commission. For example, under NYISO’s model, adding any amount of solar PV to an aggregation of energy storage resources would render the entire aggregation ineligible to provide regulation service or operating reserves because the solar cannot individually provide these services, despite the fact that a portion of the aggregation is technically capable of doing so. To be compliant with Order No. 2222, the NYISO model must allow the aggregation in this example to provide ancillary services up to the amount that the storage can provide.

To take the opposite example, adding any amount of energy storage to an aggregation of solar PV would impose stringent scheduling and dispatch requirements that are applied to energy storage resources alone to the entire aggregation, a result at odds with the “physical and operational characteristics” of that aggregation given that it includes solar resources. A DERA containing only solar resources will be permitted to operate pursuant to scheduling and dispatch rules in place for Intermittent Power Resources (e.g., it will be exempted from binding day-ahead

18 Order No. 2222 at P 142.
market schedules and not required to follow economic dispatch with the exception of congestion-related curtailment). However, the addition of just a small energy storage resource to that DERA would impose a requirement for the entire DERA to commit to a binding day-ahead schedule and to follow economic base points in real-time, since those rules are applied to energy storage resources. Here again, the NYISO DERA model fails to accommodate the “physical and operational characteristics” of the Aggregation.

NYISO could resolve this barrier by creating one or more participation models that allow an Aggregation of solar and storage resources to operate like an intermittent power resource during solar performance hours; the Aggregation would also be eligible to provide regulation and other ancillary services either during all hours or during non-solar performance hours. PJM Interconnection, Inc. (“PJM”) has proposed to take a similar approach for solar-battery hybrids. Specifically, PJM proposes to allow solar-battery hybrids to participate in two different modes, a “hybrid mode” in which the resource is subject to following dispatch signals similar to any other dispatchable resource, and a “solar-only mode” in which the resource is viewed by PJM as an intermittent resource and is expected to produce energy consistent with the availability of the solar resource rather than following economic dispatch signals. This kind of flexible model for DERAs would be compliant with FERC’s directive to accommodate the physical and operational characteristics of heterogeneous DERAs; without such solutions, NYISO’s model is not compliant with the requirement that all RTOs/ISOs must accommodate heterogeneous DERAs.

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20 PJM’s proposal to comply with Order No. 2222 is still under development, and as a result, AEE and SFP are not asserting here that it will be in compliance.
ii. Energy efficiency and passive demand resources lack a viable participation model in NYISO, and NYISO’s filing fails to remedy this barrier.

As defined in Order No. 2222, DERs include but are not limited to “electric storage resources, intermittent generation, distributed generation, demand response, energy efficiency, thermal storage, and electric vehicles and their supply equipment.”

Despite being defined as DERs, energy efficiency and passive demand resources (such as behind-the-meter solar PV acting as a load reducer) lack a viable participation model under NYISO’s current Tariff, and NYISO’s compliance filing does not propose a new or revised participation model that would allow these resources to participate. AEE, NRDC and SFP have joined a separate protest outlining the barriers to entry faced by energy efficiency and passive demand resources in NYISO and explaining how NYISO’s compliance filing falls short of meeting FERC’s directive to accommodate all DERs.

B. NYISO’s metering and telemetry requirements are overly burdensome and are not adequately tailored to the services provided.

In Order No. 2222, the Commission requires RTOs/ISOs to take a measured approach when establishing metering and telemetry requirements for DERAs. Specifically, the Order states, “[we] understand the need to balance, on one hand, the RTO’s/ISO’s need for metering and telemetry data for settlement and operational purposes, and, on the other hand, not imposing unnecessary burdens on distributed energy resource aggregators.” To achieve this balance, the Order requires “that each RTO/ISO explain in its compliance filing why such requirements are just and reasonable and do not pose an unnecessary and undue barrier to individual distributed

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21 Order No. 2222 at P 114.


23 Order No. 2222 at P 263.
energy resources joining a distributed energy resource aggregation.” The metering and telemetry requirements in NYISO’s proposal fail to achieve the balance the Commission requires, and NYISO fails to provide adequate justification for these requirements.

NYISO’s DERA model requires six-second telemetry for all DERAs, regardless of the services provided by the DERA. NYISO explains, “[c]onsistent with the rules for Generators, Aggregations will be required to send telemetry signals 24 hours a day, seven days a week, nominally on a six (6) second basis.” This blanket requirement for 6-second telemetry is not tailored to the wholesale services provided by the DERA, and NYISO fails to explain why it is necessary for all services. For example, six second telemetry may be appropriate for DERAs providing certain ancillary services such as regulation, which requires a fast and accurate response, but is not necessary for capacity and energy market participation. Six-second telemetry data will not benefit NYISO if the DERA is not providing a service that necessitates such real-time awareness, and will be burdensome and costly for many DERAs to comply with, presenting an undue barrier to participation. Specifically, this requirement will likely preclude residential-scale DERs—such as residential demand response, behind-the-meter solar PV and/or storage, and light-duty electric vehicles—from participating under NYISO’s DERA model, or, at the very least, limit the products and services that an aggregation of such resources would be able to provide.

The limited flexibility afforded to DERAs in meeting the six-second telemetry requirement does nothing to alleviate the barrier this requirement presents. The fact that telemetry is only required to be communicated from the Aggregation, and not from individual

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24 Ibid.
25 NYISO Transmittal Letter at 34.
DERs within the aggregation, does slightly lessen the administrative burden of providing this
data to NYISO, but does nothing to resolve the cost and logistical barriers of being able to collect
and aggregate such data from DERs that comprise an Aggregation.26 Furthermore, the option to
rely on “either directly measured or calculated values, or a combination thereof,” offers no
relief.27 Such estimated values must be based on 5-minute data, a level of granularity generally
not available via Advanced Metering Infrastructure (“AMI”) for residential customers. Even if
available, the latency of such data prevents it from being useful in delivering estimated telemetry
data.

NYISO’s only explanation for this requirement is that six-second telemetry “is the same
as the requirement for Generators” and “is crucial for the NYISO to maintain the reliability of
the New York Bulk Power System.”28 NYISO fails to explain how or why this is the case for all
DERs regardless of their size or the services they are providing, despite the directive in Order
No. 2222 that all RTOs/ISOs provide such an explanation. NYISO’s claim that six-second
telemetry is necessary for reliability is difficult to reconcile with the large quantity of DERs
already operating in New York. New York has a robust retail net metering program,29 with
several hundred MW of DERs currently injecting into NYISO’s system without any telemetry
whatsoever. In terms of system impact, these net metered resources are similarly situated to
wholesale DERs selling energy; they differ only in market participation, which can be supported
by less expensive metering solutions. By failing to explain how the proposed telemetry
requirement is necessary for some resources but not for other similar situated ones, NYISO fails

26 NYISO Transmittal Letter at 34.
27 NYISO Transmittal Letter at 35.
28 NYISO Transmittal Letter at 34.
29 See, e.g., Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and
Related Matters, (March 9, 2017) Order in NY PSC Cases 15-E-0751 and 15-E-0082, Appendix B.
to meet its Order 2222 requirement to explain why its rules are just and reasonable and do not create an undue barrier.

A six-second telemetry requirement for all DERAs fails to achieve the balance between needs and burdens discussed in Order No. 2222. We urge the Commission to direct NYISO to fine-tune telemetry requirements for DERAs such that the requirements are tailored to the services provided and backed up by a clear justification of need.

With respect to metering, NYISO’s DERA model requires that settlement data be submitted the following operating day, presenting an additional barrier to participation.\(^\text{30}\) This requirement will almost certainly result in a need for duplicative metering, because Aggregators will not have access to utility meter data in time to meet this deadline. Given the cost of installing, maintaining, and managing the separate metering equipment that would be required, this will preclude many DERs, especially smaller resources, from participating.

\section*{C. The proposed DU review process is unsupported by evidence, is not compliant with Order No. 2222, and creates opportunity for anticompetitive discrimination and a new barrier to participation.}

NYISO proposes to allow DUs 60 days to review DERA registrations\(^\text{31}\) and to extend from 30 to 90 days the required notice period for a DER to switch Aggregations.\(^\text{32}\) Although this 60 day period is based on Order No. 2222,\(^\text{33}\) NYISO’s proposal otherwise fails to comply with the mandate in Order No. 2222 that the review process be transparent and provide specific review criteria,\(^\text{34}\) and fails to follow FERC’s guidance that state interconnection processes are the

\begin{itemize}
\item \(^{30}\) See NYISO Manual 14, Accounting and Billing Manual, Section 1.1., Settlement Processing.
\item \(^{31}\) NYISO Transmittal Letter at 43-44.
\item \(^{32}\) NYISO Transmittal Letter at 35-36.
\item \(^{33}\) See Order 2222 at 295.
\item \(^{34}\) Id. at 293
\end{itemize}
appropriate platform to address distribution system impacts.\textsuperscript{35} The result is a process which creates opportunity for undue discrimination and anti-competitive behavior.

Mindful of the potential for poorly defined review processes to create barriers to participation, FERC directed RTO/ISOs to develop specific criteria to determine if proposed DERA participation would pose significant risks to the distribution system.\textsuperscript{36} NYISO has not done so. Rather, NYISO’s proposed Tariff merely echoes the language of Order No. 2222.\textsuperscript{37} However, Order No. 2222 is clear that the Commission’s articulation of the high level purpose of the utility review does not set the criteria RTOs/ISOs must adopt.\textsuperscript{38} NYISO’s proposed Tariff provides no criteria for evaluating DER impacts on the distribution systems, sets few boundaries on the scope of DU review, and limits transparency to a review of results after the DU has completed its work. These procedures do not meet the requirements of Order No. 2222 and should be rejected.

FERC has declined to exercise jurisdiction over interconnection of individual DERs, expecting instead that state and local procedures will govern interconnection and provide the primary means of identifying distribution system issues.\textsuperscript{39} NYISO fails to explain how its proposed DU review procedures interact with the requirements of the applicable state interconnection process, why any additional requirements are necessary, and why they will not be redundant to the review that already takes place in the state interconnection process. Redundant review in itself creates costs and delay that can serve as a barrier to participation and

\textsuperscript{35} Id., at 294.
\textsuperscript{36} Id. at 292.
\textsuperscript{37} Proposed Services Tariff Section 4.1.10.7.1
\textsuperscript{38} Order 2222 at 296.
\textsuperscript{39} Id. at 294.
opens the door to interconnection standards that discriminate on the basis of market participation rather than engineering matters.

NYISO is a single state ISO, and New York State has standardized DER interconnection rules. This simplifies review of the relevant RERRA rules to identify what issues would have been considered prior to registration to participate in an RTO/ISO Aggregation. Several features of the NY Interconnection Rules appear to address the same issues a DU might consider in reviewing RTO/ISO Aggregations. NYISO does not address these issues in its filing.

The NY Interconnection Rules consistently direct utilities to evaluate the “aggregate interconnected and proposed DER” on local circuits, rather than considering individual DERs in isolation. This is important because distribution utilities frequency cite as a concern justifying additional review the potential for aggregation to cause multiple DERs to act in concert. In New York, at least, these concerns appear to be well addressed in the state jurisdictional DER interconnection process. The NY Interconnection Rules direct review of whether total aggregate DER capacity on a circuit is less than 15% of minimum load on the network and less than 50% of minimum load on local transformers, and require that utilities use power flow models or other means to evaluate whether local Line Sections can accept the total aggregate DER capacity. Additionally, perhaps anticipating how DERAs might provide reserves and regulation, the NY

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41 NY Interconnection Rules, Appendix G, Screen 3

42 Id., Screens 3(a), 3(b) and 3(g).
Interconnection Rules direct detailed review of whether the aggregate DERs on a circuit could
create flicker, voltage excursions, or exceed the rating of voltage regulating devices.43

The NY Interconnection Rules thus appear to already address many, if not most, of the
issues that might arise on the distribution system from DERA participation. This underscores the
need for the DU review of RTO/ISO Aggregations to be strictly limited to articulated criteria. As
part of meeting the Order No. 2222 requirement to develop specific criteria for DU review,
NYISO should also be required in a further compliance filing to revise its Tariff to identify
criteria for review and to demonstrate that each criterion is not redundant to those already
contained in the NY Interconnection Rules.

NYISO also proposes another full 60-day review period when an individual DER
switches aggregations. In support of this requirement, NYISO cites language in Order No. 2222
allowing that DUs be given up to 60 days to evaluate DER participation in an aggregation in
wholesale markets.44 NYISO does not otherwise provide any explanation as to why this
additional time is necessary; given that 30 days was deemed adequate previously, it appears that
the language of Order No. 2222 is the only or primary reason for this change. However, Order
No. 2222 does not require that Distribution Utilities be given 60 days to evaluate modifications
to a DERA. This extended time period for review of facilities seeking to switch Aggregations is
unnecessarily restrictive and burdensome for DERs.

With respect to modifications to the list of resources in a DERA, the Commission in
Order No. 2222 states:

“[w]hile any modification of a distributed energy resource aggregation will trigger
distribution utility review, we clarify that it may be appropriate for each RTO/ISO to
abbreviate the distribution utility’s review of modifications to the distributed energy
resou...
resource aggregations. We find that the incremental impacts on RTO/ISO markets and operations that would result from the addition or removal of individual distributed energy resources from a distributed energy resource aggregation, after the initial registration, are likely to be minimal and thus individual distributed energy resources should generally be able to enter and exit distributed energy resource aggregations participating in RTO/ISO markets without impairing safety and reliability. Because the impacts of modifications may often be minimal, an abbreviated review process should be sufficient for the distribution utility to identify the cases where an addition to the list of resources might pose a safety or reliability concern.”

NYISO has ignored the Commission’s conclusion that an abbreviated review is generally more appropriate for the review of modifications to a DERA and has failed to justify why the current 30-day review period is no longer sufficient. Moreover, the proposed new 90-day review period exceeds the up to 60 days the Commission deemed reasonable for reviewing the initial inclusion of a DER in an aggregation that NYISO cites for support.

We ask that the Commission reject this aspect of NYISO’s compliance filing and direct NYISO to revert back to the original 30-day notice period. We also note that the longer 90-day review period creates additional challenges in light of the proposed timeline for NYISO to publish changes to Transmission Nodes; this concern is explained in more detail in Section I, below.

Finally, NYISO’s proposed Tariff contains what may be an oversight in when the review window starts. Order No. 2222 directs the review process be triggered by initial registration. NYISO’s proposed Tariff states the 60-day review “shall begin on the date the ISO transmits… information to the Distribution Utility.” This creates opportunity for additional, unspecified

45 Order No. 2222 at P 337 (emphasis added).
46 Order No. 2222 at 292.
47 Proposed Services Tariff Section 4.1.10.7.1.
delay from internal ISO processes, contradicting the finding in Order No. 2222 that timely registration is needed to eliminate barriers.

D. NYISO’s proposal to prohibit double counting of services is redundant, unacceptably vague, and likely to pose a barrier to participation.

Many DERs are technically capable of providing both retail and wholesale services, and allowing DERs to participate in both wholesale markets and retail programs or markets is critical to make best use of these resources. Access to both retail and wholesale revenue streams will also facilitate optimal deployment of these resources. Recognizing these benefits, the Commission in Order No. 2222 expressly requires RTOs to allow such dual participation, and states that it is “appropriate for RTOs/ISOs to place narrowly designed restrictions on the RTO/ISO market participation of distributed energy resources through aggregations, if necessary to prevent double counting of services.”

In response to the Commission’s allowance for narrowly crafted restrictions if necessary to avoid double counting of services, NYISO proposes to revise its DER participation model “to prohibit a DER that provides services (e.g., Energy, Operating Reserves, and capacity) to a utility from providing the same, or a functionally similar service, in the NYISO-administered markets.” However, what constitutes “the same, or a functionally similar service” is not defined, and therefore fails to meet the Commission’s directive that such restrictions be “narrowly designed.” Any prohibition on double counting of services should be clearly and narrowly defined, and should be designed to preclude the same DER from receiving compensation for an identical service.

48 Order No. 2222 at P 161.
49 NYISO Transmittal Letter at 41.
NYISO further states that an Aggregator will be prohibited from even *enrolling* a new DER in an Aggregation “if the Aggregation is qualified to provide a service in the NYISO-administered markets that the new DER provides in a retail market or program.” This broad prohibition would apply regardless of whether that same DER would be providing the same service at the same time in the wholesale markets and through a utility or retail program, and without consideration for whether the DER is being compensated twice for doing so. This blanket prohibition also fails to meet the Commission’s directive that restrictions on dual participation be “narrowly designed.”

NYISO’s overly broad and vague interpretation of FERC’s directive to prevent double counting of services will preclude the dual participation by many DERs that the Commission expressly encouraged and promoted in Order No. 2222.

Moreover, the revision proposed by NYISO in purported compliance with Order No. 2222 is unnecessary and redundant given protections against double counting and double compensation of services already enacted by NYISO and by the New York Public Service Commission (“NYPSC”). Specifically, NYISO already prevents the same DER from serving as load reduction and supply. The New York Public Service Commission (“NYPSC”) has also put in place multiple restrictions to avoid double compensation, including (1) precluding DERs participating in the Value of DER Tariff from also participating in the NYISO markets, since that program compensates DERs for the value of avoided capacity; and (2) precluding DERs

50 Ibid.

51 See NYISO Load Forecasting Manual M-6, Section 2.3.1, Reconciliation of Transmission District Load at Time of NYCA Peak. “The ISO will also add back to the Transmission District loads the following data for Demand Side Resources participating in the NYISO’s EDRP and SCR program… and Load reductions of EDRP resources and SCRs resulting from activation of Transmission Owner administered retail demand response programs occurring during the Transmission District and NYCA peaks.” Available at https://www.nyiso.com/documents/20142/2924447/load_fcst_mnl.pdf.
participating in the Commercial System Relief Program and Distribution Load Relief Program that receive the wholesale locational marginal price (“LMP”) when dispatched by NYISO from also receiving LMP compensation through utility programs during those same hours.52

Order No. 2222-A expressly allows RTOs/ISOs to rely on existing mechanisms to meet the requirement that double counting of services be avoided, stating that, “to the extent an RTO/ISO already has restrictions in place to avoid double counting of services, it is not required to propose new restrictions but rather must explain on compliance how these existing restrictions prevent double counting.”53 We ask the Commission to direct NYISO to provide an explanation of why existing restrictions already in place at NYISO and the NYPSC are not sufficient to avoid double counting of services. If additional restrictions are deemed necessary, we ask the Commission to direct NYISO to work with stakeholders to develop clear and specific requirements in compliance with the directive that such restrictions be “narrowly designed.”

E. The proposed provisions for coordination with DUs and RERRAs are poorly defined and may pose delays and barriers.

As required by Order No. 2222, NYISO’s compliance proposal includes provisions for coordination with DUs and RERRAs; the addition of these provisions was one of the most

52 See, e.g., Con Edison Rider T Tariff at Section 24.D.7 (Leaf 274), “participants enrolled in a NYISO market-based program offered by the Company, NYPA or other entity, such as the Day-ahead Demand Response Program or the Demand-Side Ancillary Services Program, must provide the Company with their NYISO generator identification number, under a confidentiality agreement, and give the Company the ability to view their market participation activity. This information will be used to verify the times of participation in these other programs to prevent double-payment during concurrent events.” Id. at Section J (Leaf 281.1), ““Performance Payments will not be made under CSRP or DLRP if the Direct Participant or Aggregator (on behalf of its customer) receives payment for energy under Rider P, V, or W or any other demand response program (e.g., NYISO’s Day-ahead Demand Reduction Program or NYISO’s Special Case Resources Program) in which the customer is enrolled through the Company during concurrent Load Relief hours in the same Network(s); provided, however, that Performance Payments will be made under CSRP or DLRP for Load Relief provided in excess of accepted demand reduction bids under Rider W, expressed in kWh.” See also, Case No. 14-E-0423, Order Adopting Dynamic Load Management Filings With Modifications, at 13. “[t]he utility shall include in those revisions provisions mirroring those currently in place under Con Edison’s CSRP for performance payments it will make to customers who enroll in both programs and respond to simultaneous CSRP and NYISO SCR program events.”

53 Order No. 2222-A at P 64.
significant new additions to NYISO’s DERA participation model. As described above, however, stakeholders had no opportunity to weigh in on these provisions as they were developed, and very limited opportunity to gain an understanding or ask questions about the requirements prior to NYISO’s filing. These new provisions lack detail and specificity, and for the reasons discussed below, may pose barriers that delay or prevent DER participation in the DERA model.

First, with respect to DU coordination, NYISO’s filing introduces a risk of penalty for failure to follow dispatch that DERAs have no control over or means to manage. Specifically, with respect to real-time operation, DERAs would face charges and penalties for failure to follow NYISO dispatch even if that failure is the result of a DU notification that occurs within the 75-minute window prior to the operating hour, at which point it is too late for the Resource to update its bid. Specifically, NYISO’s revised Tariff states that “Aggregations that are unable to operate to achieve the ISO’s dispatch due to the direction of the Distribution Utility will remain subject to any charges or penalties that may apply.” This requirement does not include any recognition that the DERA may be unable to incorporate a DU notification into its real-time bid. While it is reasonable to require Aggregators to update Day-Ahead or Real-Time bids in response to DU notifications, it is not reasonable to subject DERAs to risk of charges or penalties for circumstances beyond their control. The Commission should require NYISO to submit a further compliance filing that ensures that DERAs are not subject to unreasonable risk of penalties.

Second, NYISO also provides limited information about the proposed role for the RERRA, and offers only a vague definition, describing a RERRA as “[t]he entity that establishes

54 By comparison, PJM and MISO have both held several stakeholder meetings focused on DU coordination, and ISO-NE has included discussion of DU coordination at several Transmission Committee meetings.

55 NYISO Filing, Attachment II, MST Marked, Sec. 4.1.10.7.2.
the retail electric prices and competition policies for retail electric customers.”

This could encompass not only the NYPSC, but also additional entities such as Long Island Power Authority, New York Power Authority, and municipalities and cooperative utilities. NYISO states that it will share the same information with the RERRA that it shares with the DU to “allow the RERRA to evaluate the facility if it so desires.” NYISO also states that “if the RERRA identifies any concerns, the NYISO will consider those concerns in its evaluation of the DER.”

The nature of RERRA review, the potential scope of concerns a RERRA may identify, and how such concerns will be considered by NYISO are not defined in NYISO’s filing, however. Moreover, NYISO does not explain why additional RERRA review provisions are necessary above and beyond the distribution interconnection standards put in place by New York state regulators, which will apply to all DERs seeking to join a DERA and already address safety issues and the system impacts of all DERs on a circuit. NYISO also does not explain how the RERRA review provisions interact with these distribution interconnection standards. While NYISO may intend to flesh out these details in business practice manuals, such details are likely to significantly affect rates, terms, and conditions of service, and could result in barriers to participation for DERs that run contrary to Order No. 2222’s requirements. For these reasons, the Commission should direct NYISO to provide further details regarding the scope of RERRA review in its Tariff.

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56 NYISO Transmittal Letter at 37.
57 NYISO Transmittal Letter at 46.
59 See, e.g., Constellation Mystic Power, LLC v. ISO New England, Inc., 172 FERC ¶ 61,144 at P 29 (2020) (Explaining that “provisions that significantly affect rates, terms, and conditions’ of service, are readily susceptible
F. The opt-out / opt-in provisions should be clarified to apply to DUs rather than all Load Serving Entities, and small utilities and their opt-in decisions should be tracked by NYISO.

Order No. 2222 prohibits DERs that are customers of DUs serving load less than or equal to four million MWh from participating in a DERA unless expressly permitted by a RERRA. However, NYISO’s filing could be interpreted to apply this opt-out to all Load Serving Entities—including competitive retail providers—and not just DUs. Specifically, the Tariff revisions state, “[an] individual Resource that is a customer of a Load Serving Entity that distributed less than or equal to four million MWh in the ISO’s immediately prior and completed fiscal year (which runs January 1 through December 31) shall not be enrolled in an Aggregation, unless the Relevant Electric Retail Regulatory Authority affirmatively authorizes customers of that Load Serving Entity to participate in the ISO-administered markets in an Aggregation.” “Load Serving Entity” is defined in NYISO’s Tariff as “[a]n entity, including a municipal electric system and an electric cooperative, authorized or required by law, regulatory authorization or requirement, agreement, or contractual obligation to supply Energy, Capacity and/or Ancillary Services to retail customers located within the NYCA [New York Control Area], including an entity that takes service directly from the ISO to supply its own load in the NYCA.” This includes not just DUs but also competitive retail suppliers. In contrast, Order No. 2222 specifically ties the opt-out to utilities that “distribute 4 million MWh or less” The Commission based this decision on the potential burden to the utility system, making clear that

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60 Order No. 2222 at P 64.
61 NYISO Filing Attachment II, MST Marked, Sec. 4.1.10.
63 Id., emphasis added.
the reference to the DU rather than the load serving entity is intentional. NYISO’s proposal could be read to tie the opt-out to the size of the Load Serving Entity, which is inconsistent with the plain language of the Order. Additionally, as retail choice Load Serving Entities have no role in distribution system operations, allowing these entities to qualify for the opt-out would not be consistent with the Commission’s concern for the burden placed on smaller utilities. To avoid confusion and ensure compliance with Order No. 2222, the Commission should direct NYISO to revise its Tariff to make explicitly clear in the that it will apply the op-out based only on the load served by DUs without reference to Load Serving Entities.

Also problematic is NYISO’s proposal to burden DER Aggregators with the responsibility of tracking which DUs are below four million MWh threshold, and, of those, which have opted in to allow DERAs within their service territory. Specifically, NYISO’s proposed Tariff revisions state:

“An Aggregator shall, upon enrollment of each individual Resource and annually thereafter, (i) determine whether each Resource is a customer of a Load Serving Entity meeting the annual MWh threshold identified above, and (ii) for each Resource that is a customer of a Load Serving Entity that meets such threshold, accurately attest that the Relevant Electric Retail Regulatory Authority has authorized the Load Serving Entity’s customers to participate in an Aggregation.”

Even if the ambiguity above regarding applicability of the opt-out to Load Serving Entities is resolved by NYISO, this requirement creates additional uncertainty and adds an administrative burden for Aggregators. Individual DER Aggregators are not in the best position to track utility load thresholds and utility opt-in determinations, nor is it efficient for each prospective Aggregator to perform this task itself. NYISO is better suited to track and post this information for the benefit of all market participants. The Commission should require NYISO to make an

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64 NYISO Filing, Attachment II, MST Marked, Sec. 4.1.10.
additional compliance filing to revise it Tariff to include provisions requiring it to track and post small utility opt-in determinations.

**G. The requirement for DERs to obtain a Capacity Resource Interconnection Service (CRIS) award is unnecessary and burdensome**

Undergoing CRIS review is a time-consuming and administratively burdensome process for DERs and raises a barrier to entry for smaller DERs. We recommend that the Commission direct NYISO to not require CRIS review for any individual DER or DERA less than 5 MW.

**H. Data requirements for participation are not currently defined in the Tariff, and justification for those requirements is not included in NYISO’s filing.**

NYISO’s compliance filing states that NYISO needs to take additional steps “to finalize the list of attributes necessary to register an Aggregation and enroll individual DER,” and that NYISO will provide that information to stakeholders and develop a new business practice manual after acceptance of the filing.\(^\text{65}\) However, this ignores the requirement of Order No. 2222 that each RTO/ISO must “identify and explain in its compliance filing what additional specific information about the individual distributed energy resources within an aggregation that the RTO/ISO needs.”\(^\text{66}\) NYISO references the ICAP Manual and DRIS User Guide\(^\text{67}\) for enrollment procedures as well as information and data requirements for Special Case Resource aggregations and individual Special Case Resources. As that information currently lies outside of NYISO’s Tariff, the Commission should require NYISO to add the key requirements to the Tariff in an

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\(^{65}\) NYISO Transmittal Letter at 30.

\(^{66}\) Order No. 2222 at P 184.

\(^{67}\) NYISO Transmittal Letter at 30-31.
additional compliance filing to ensure that they fully comply with Order No. 2222, and to ensure that the implementation details included in the manual and user guide will also be in compliance.

The Commission should also require NYISO to undergo a robust stakeholder process to vet these requirements and ensure they are necessary. The Commission agreed with commenters “that sharing detailed information about the individual distributed energy resources may be an unnecessary and unduly burdensome requirement.” Absent a robust stakeholder process, at a minimum NYISO needs to define the data and information requirements in its further compliance filing as well as provide a description detailing why these requirements are necessary for participation.

I. NYISO’s proposal to base locational requirements on mapping distribution feeder lines to a Transmission Node should theoretically appropriately balance geographic flexibility and reliability constraints, but the mapping process has not begun and it is unclear whether it will ultimately ensure that DERAs can be assembled over the largest possible geographic area.

Allowing flexibility for DERs to aggregate across the largest possible geographic area and providing clarity as to how these geographic areas are delineated will enhance market opportunities and improve the competitiveness of DERAs. AEE, NRDC and SFP therefore support any efforts to maximize the geographic scope transparency of DERA locational requirements. We also recognize that this goal must be balanced against the need to maintain reliability and sufficient visibility on the bulk power system. Order No. 2222 seeks to achieve such a balance by allowing RTOs/ISOS to set locational requirements but requiring them to demonstrate that such requirements “are as geographically broad as technically feasible.”

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68 Order No. 2222 at P 184.
69 Order No. 2222 at P 204.
NYISO’s proposal to map distribution feeder lines to a Transmission Node to which individual facilities may aggregate, which is intended to maximize geographic footprint while accounting for efficiency and reliability of the markets and system, appears to appropriately strike this balance. We support NYISO’s effort to maximize the geographic scope of Aggregations and to provide much-needed transparency into how distribution feeder lines will be mapped to Transmission Nodes. However, we also note that this mapping process has not yet been conducted, so it is impossible at this time to evaluate whether the outcome will indeed be consistent with ensuring that aggregation footprints are as “geographically broad as technically feasible.” We request that the Commission require NYISO to follow up with an informational filing once Transmission Nodes for DERAs have been established, to allow the Commission and stakeholders to assess whether they achieve the balance sought in Order No. 2222.

Furthermore, we note that the timeline to update Transmission Nodes does not align with the timeline for DU review, creating potential delays in market participation for DERAs. Specifically, NYISO proposes to post changes to Transmission Nodes “at least ninety (90) days prior to the beginning of the Capability Year.” Under NYISO’s proposal, DERAs face a 60-day DU review period and 90-day review period for changes to existing Aggregations. Additionally, dispatchable resources must undergo the Network Modeling process, which is conducted every two months. The limited 90-day advanced notice of changes to Transmission Nodes may therefore preclude Aggregators from registering DERAs far enough in advance to allow for timely market participation, resulting in a lag of a month or more. We reiterate our request above that the DU review period for modifications to an existing DERA be shortened from 90 days to

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71 NYISO Filing, Attachment II, MST Marked at 4.1.10.2.
30 days, and also ask that FERC direct NYISO to adjust the timing of Transmission Node updates to avoid any delays in DERA market participation.

**J. Applying Buyer-Side Mitigation Measures to (net) injecting DERs is a barrier to DER participation in the market.**

The Buyer-Side Mitigation ("BSM") rules as they currently exist should not be applied to DERs with the capability to inject Energy. Order No. 2222 is intended to remove barriers to DERA participating in the RTO/ISO markets because such barriers reduce competition and fail to ensure just and reasonable rates. NYISO’s rules inappropriately “apply buyer-side market power mitigation to entities that are not buyers or that lack market power,” thereby over-mitigating the entry of new resources into the market. NYISO Tariffs would subject all individual DERs that have the capability to inject Energy onto the grid to BSM review.

This aspect of NYISO’s DER participation model risks artificially stifling competition and the development of cost-effective and competitive DERs. It is not clear how NYISO will screen such a large number of resources in a timely and efficient manner. The transaction costs associated with applying such analysis to small resources could be very large in relation to their anticipated revenue streams, raising the possibility that mitigation screening will act as a barrier to entry for economic resources. Further, because NYISO’s mitigation screening procedures are linked with the Class Year process, a cumbersome screening process applied to potentially hundreds of DERs risks creating delays in interconnection and market entry for non-DER resources.

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72 Order No. 2222 at PP 1, 3.
74 NYISO Market Services Tariff, attachment H.
NYISO does not explain in its filing why applying BSM rules to DERs is just and reasonable or complies with Order No. 2222. The Commission should direct NYISO to submit a further compliance filing with Tariff revisions to ensure that BSM is not applied to DERs participating in aggregations or an explanation of why it is just and reasonable to apply BSM to these resources.

**K. Some elements of NYISO’s proposal add appropriate flexibility for DERAs to recognize their unique physical and operational characteristics and should be approved.**

i. **Provisions allowing third-party metering offer important flexibility that allows DERs to utilize a range of configurations to participate in a DERA.**

Order No. 2222 is intended to ensure that wholesale market rules recognize the unique physical and operational characteristics of DERAs, including those that encompass a range of technologies, sizes, and configurations, and allow them to participate in wholesale markets. To achieve this objective, RTOs/ISOs should not apply a “one size fits all” approach to metering; there is no single solution that will work for all DERAs.

In particular, metering configurations will necessarily differ between front-of-the-meter and behind-the-meter DERs, and between behind-the-meter DERs at residential facilities and behind-the-meter DERs at commercial and industrial facilities. NYISO’s DERA model provides much-needed flexibility with respect to metering by allowing DERAs to rely on third-party metering entities. Meter Service Entities (MSEs), of which there were six approved as of July 2021, are third-party entities that meet the requirements set forth in NYISO’s Tariff to “provide

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75 NYISO Filing, Attachment II, MST Marked at 4.1.10.4. “Aggregators may choose to have an ISO-authorized Meter Services Entity or the applicable Member System provide Aggregation metering services for wholesale market participation.”

metering and/or meter data services, as applicable, to a Demand Reduction Provider, DSASP Provider, Responsible Interface Party, or Curtailment Service Provider.”

Allowing third-party metering will especially facilitate participation by sub-metered behind-the-meter DERs that do not conform to traditional metering configurations.

In this respect, at least, NYISO has provided a good example of compliance with Order No. 2222 that should be considered in other regions. Our organizations, working with prospective DER Aggregators, have identified metering challenges as among the most pervasive barriers to many innovative DER use cases, and the ability to use third-party metering solutions would be a significant contributor to lowering those barriers.

III. CONCLUSION

WHEREFORE, for the foregoing reasons, AEE, NRDC, and SFP respectfully request that the Commission accept NYISO’s compliance filing in part, reject it in part, and require NYISO to make a further compliance filing to correct the deficiencies described herein.

Respectfully submitted,

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77 NYISO MST at 13.3.2.

78 A recent AEE report cites the ability to directly measure or “submeter” behind-the-meter DERs as key to enabling several near-term DER aggregation use cases, including frequently dispatched DERs such as electric busses and fleets, frequently dispatched residential demand response resources such as smart thermostats and water heaters, and residential behind-the-meter storage and solar-plus-storage. See Advanced Energy Economy, FERC Order No. 2222 and the Use Cases it Can Unlock (June 2021), available at https://info.aee.net/ferc-order-no.-2222-and-the-use-cases-it-can-unlock.
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August 23, 2021
CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in these proceedings. Dated this 23rd day of August, 2021.

/s/ Caitlin Marquis