New York ISO
Independent System Operator

10 Krey Boulevard, Rensselaer, NY 12144
Ph: 518.356.6000 | Fax: 518.356.8899

January 29, 2021

By Electronic Delivery

Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: *New York Independent System Operator, Inc.*, Proposed Tariff Revisions to Implement Co-located Storage Resources; Docket No. ER21-____-000

Dear Ms. Bose:

Pursuant to Section 205 of the Federal Power Act ("FPA")[1] and the rules and regulations of the Federal Energy Regulatory Commission (the "Commission" or "FERC"),[2] the New York Independent System Operator, Inc. ("NYISO") submits, in electronic format, proposed revisions to its Open Access Transmission Tariff ("OATT") and to its Market Administration and Control Area Services Tariff ("Services Tariff") to implement enhancements that will enable an Energy Storage Resource ("ESR") and a wind or solar Intermittent Power Resource ("IPR") that share a common Point of Injection to participate in the ISO Administered Markets as Co-located Storage Resources ("CSR").[3]

In this filing the NYISO proposes revisions to its Energy and Ancillary Services market rules, its Interconnection Process, its metering rules, its Installed Capacity ("ICAP") market participation rules and its Market Mitigation Measures to accommodate the interconnection and participation of an ESR that is co-located with a wind or a solar IPR as a set of Co-located Storage Resources. The proposed rules will permit the two Generators[4] participating in a CSR to submit a single, shared interconnection request, or to consolidate two interconnection requests in the NYISO's interconnection queue. The proposed rules will require the resources in a CSR to share an injection limit, called a CSR injection Scheduling Limit, that can be less than the combined capability of the participating Generators.[5] The NYISO's Day-Ahead Security Constrained Unit Commitment ("SCUC"), Real-Time Commitment ("RTC") and Real-Time

[1] 16 U.S.C. § 824d.

[2] 18 C.F.R. Part 35.

[3] Capitalized terms that are not defined in this filing letter are defined in Section 1 of the OATT, Section 2 of the Services Tariff, or in the revisions to Section 1 of the OATT and Section 2 of the Services Tariff that are proposed in this filing.

[4] An ESR is a type of Generator. A wind or solar IPR is also a type of Generator.

[5] The CSR Scheduling Limits will be determined based on the associated interconnection and transmission facilities' physical capabilities. The CSR injection Scheduling Limit can be less than the capability of one or both of the Generators that participate in a CSR. For example, a 100 MW (maximum output) solar IPR and a 50 MW (maximum injection) ESR will be able to share interconnection facilities that allow a maximum of 80 MW of Energy to be simultaneously injected onto the New York State Transmission System.

Dispatch ("RTD") will economically schedule the Generators that participate in a CSR in a manner that respects both the CSR injection Scheduling Limit and the CSR withdrawal Scheduling Limit.

The Tariff revisions proposed in this filing were unanimously approved by the NYISO's stakeholders, with abstentions, at the November 11, 2020 Business Issues Committee meeting and the November 18, 2020 Management Committee meeting. On January 11, 2021 the NYISO's Board of Directors approved the proposed Tariff revisions for filing with the Commission.

The NYISO anticipates that this filing is the first of several filings that will enable blends of renewable and fossil generation, energy storage and demand response Resources to participate in the NYISO's markets as individual or aggregated Resources that share a common Point of Injection. The instant proposal is limited to the co-located operation of a wind or solar IPR and an ESR because (a) that resource combination was the most commonly requested by the NYISO's stakeholders, and (b) the NYISO expects it will be able to develop the necessary market improvements and implement the tariff revisions proposed in this filing in the fourth quarter of 2021. More complex proposals that include generation or demand response resources that must be committed or de-committed by the NYISO,[6] or that treat the set of resources behind the Point of Injection as an undifferentiated aggregation,[7] are expected to require additional time and effort to fully develop and implement. In 2021, the NYISO plans to work with its stakeholders to develop a participation model that will accommodate a different set of resource characteristics.

The NYISO respectfully requests that (1) the proposed new defined terms CSR and CSR Scheduling Limit, (2) the proposed revisions to the interconnection rules, and (3) the proposed revisions to the ICAP mitigation rules proposed in this filing be permitted to become effective on March 31**,** 2021, which is 61 days after the date of this filing. The requested effective date will enable developers of CSRs to submit, and the NYISO to evaluate, CSR interconnection requests before the CSR market participation rules are fully implemented. The NYISO proposes to make all of the other tariff revisions proposed in this filing effective on a flexible effective date between October 1, 2021 and December 31, 2021. The NYISO cannot propose a more precise effective date for its CSR market participation rules until the software changes necessary to implement CSR are finished and adequately tested. The NYISO proposes to submit a compliance filing at least two weeks prior to the proposed effective date that will specify the date on which the revisions will take effect. The compliance filing will provide adequate notice to the

[6] ESRs are dispatch-only resources that are not eligible to include commitment costs in their Bids. Wind and solar IPRs are not permitted to bid Start-up or minimum generation costs. Including unit commitment decisions would significantly increase the complexity of the solution.

[7] The NYISO expects it will take time to determine whether and how it can permit aggregations that contain several different resource types to provide Operating Reserves and Regulation Service consistent with applicable Reliability Rules. The Tariff revisions proposed in this filing will permit an ESR that participates in a CSR to provide both Operating Reserves and Regulation Service, and will permit both the ESR and the IPR to provide Voltage Support Service, as explained in greater detail below.

Commission and Market Participants of the implementation date for the CSR market participation rules proposed in this filing.

In a separate compliance filing in Docket No. ER19-2276-000, *et al*. the NYISO will propose an effective date of March 31, 2021 (the same effective date as the CSR revisions proposed herein), for revisions to Services Tariff Section 13.2 that the Commission has already accepted in that Docket.[8] The NYISO proposed these revisions to its metering rules in connection with its Distributed Energy Resource ("DER") participation model.[9] In the course of developing its proposed CSR tariff modifications, the NYISO determined that the accepted, but not yet effective, revisions to Services Tariff Section 13.2 are needed to complete the CSR proposal.[10] Therefore, the NYISO will submit a Notice of Effective Date for the applicable tariff revisions in Docket No. ER19-2276-000, *et al*., at least two weeks prior to the requested effective date, consistent with the April 21, 2020 Order in that docket.[11]

[8] *See New York Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,033 (Jan. 23, 2020) ("DER Order").

[9] The NYISO originally intended to make its DER participation model effective between October 1, 2021 and December 31, 2021, but now anticipates making it effective in 2022.

[10] To assist the Commission's review, Attachment I to this filing is a version of Services Tariff Section 13 that identifies the specific Tariff revisions the NYISO proposed and the Commission accepted in Docket No. ER19-2276-000, *et al*., that the NYISO will request permission to make effective on March 31, 2021.

[11] *New York Indep. Sys. Operator, Inc*. Docket No. ER19-2276-003, at 2 (Apr. 21, 2020) (unpublished letter order).

TABLE OF CONTENTS

I. BACKGROUND

The NYISO is engaged in an ambitious effort to integrate advanced energy technologies into the wholesale markets it administers. In addition to developing first-of-its-kind market rules for Distributed Energy Resources ("DERs"), the NYISO has implemented market rules to integrate ESRs into its markets. New York continues to see robust development of new renewable resources, including wind and solar Generators. The NYISO's extensive market design efforts complement the work being done by New York State through the Climate Leadership and Community Protection Act ("CLCPA"), which requires that seventy percent (70%) of New York's electric load be served by renewable resources by 2030, and also requires procurement of 6,000 MW of distributed solar resources by 2025, 3,000 MW of ESRs by 2030, and 9,000 MW of offshore wind resources by 2035. The CLCPA requires that one-hundred percent (100%) of New York's electric load be zero-emission by 2040.

Development of market rules for hybrid resources that combine renewable generators and energy storage are a natural, and integral next step in the NYISO's efforts. In this filing, the NYISO proposes market rules for CSR. Co-located Storage Resources are an IPR that uses wind or solar as its fuel paired with an ESR behind a common Point of Injection. The ESR and wind or solar IPR will each participate in the NYISO-administered Energy, Ancillary Service, and ICAP markets as distinct Generators, and will receive separate settlements.

The NYISO's market design process identified a number of motivating factors that support co-locating ESRs and renewable resources, including improving the performance and flexibility of renewable resources, reducing development costs by sharing interconnection facilities, and providing access to financial incentives that are available when storage assets use renewable energy to recharge or refill. Most importantly, the NYISO's hybrid storage resource participation models will help reduce barriers to entry for ESRs moving forward.

Within the last year the Commission has also identified hybrid storage resources as a natural extension of its work with ESRs. Speaking at the July 23, 2020 Technical Conference, Commissioner Chatterjee acknowledged the work the Commission has already done to integrate ESRs through Order Nos. 841 and 845, and that it is time to start planning for future opportunities for storage resources.[12] Then-Commissioner Glick seconded those thoughts and stressed the importance of identifying what, if anything, is holding back storage technologies.[13] The tariff revisions proposed in this filing will enhance the existing market opportunities for ESR participation in New York. It is part of a continuing effort to enable advanced energy technologies to participate in the NYISO-Administered Markets.

The NYISO intends to work with its stakeholders to develop a hybrid storage aggregation model that will allow an ESR and other Resources located at the same Point of Interconnection to participate in the markets as an aggregated resource. The NYISO expects to engage with stakeholders to complete a market design for a hybrid storage aggregation participation model in

[12] Hybrid Storage Resources Technical Conference, Docket No. AD20-9-000 (Jul. 23, 2020) Tr. 8:3-9 (Commissioner Chatterjee).

[13] *Id.* at Tr. 9:14-20 (Commissioner Glick).

2021. The market improvements that the NYISO is developing will improve opportunities for participation of new resource technologies and configurations that can achieve New York's forward-looking clean energy policy goals.

II. OVERVIEW OF PROPOSED TARIFF REVISIONS TO IMPLEMENT CO-LOCATED STORAGE RESOURCES

For most purposes the ESR and the wind or solar IPR that participate in a CSR will operate as two discrete Generators. Each Generator will be assigned its own point identifier ("PTID"), each will submit resource-specific Bids and each will receive a resource-specific schedule. The Generators that participate in a CSR will also be settled individually. With a few limited exceptions that are described below, an ESR that participates in a CSR will follow the same market participation rules as other New York Control Area ("NYCA") ESRs, and a wind or solar IPR that participates in a CSR will follow the same market participation rules as other NYCA wind or solar IPRs.

The two Generators that participate in a CSR will be required to have the same billing organization and the same bidding agent.[14] Their Energy injections, Operating Reserve schedules and Regulation Service schedules will be subject to a shared CSR injection Scheduling Limit and the same Locational Based Marginal Price ("LBMP") will apply to both participating Generators because they inject or withdraw Energy at the same electrical location. Net injection schedules at the Point of Injection will not be permitted to exceed the CSR injection Scheduling Limit.

The proposed changes to the Interconnection process will allow new multi–unit facilities like a CSR to submit a single Interconnection Request for several Generators behind the same Point of Interconnection that propose to participate as components of a CSR, or otherwise. Distinct solar or wind and energy storage Projects currently being evaluated in the NYISO interconnection process, with separate positions in the Interconnection Queue, will be able to combine and proceed under a single Interconnection Request as a CSR in accordance with a proposed transition rule discussed in more detail in Section III.C.viii of this filing letter. Generators participating in a CSR that the NYISO studies together as a single Project will have a single Interconnection Agreement; however, Energy Resource Interconnection Services ("ERIS") rights and Capacity Resource Interconnection Services ("CRIS") rights will be allocated to each Generator in the CSR separately. The ERIS and CRIS which Generators participating in a CSR may request will each be capped according to the physical limitation of the CSR. For example, ERIS rights awarded to the wind or solar IPR within a CSR may exceed the registered CSR injection Scheduling Limit in order to permit the IPR's Energy to be both injected onto the New York State Transmission System, and (simultaneously) used to charge the

[14] The billing organization and the bidding agent are not required to be the same entity.

co-located ESR, consistent with the NYISO's dispatch instructions.[15] The sum of the CRIS rights awarded to Generators in a CSR will be capped at the CSR injection Scheduling Limit.

Other important aspects of the NYISO's proposal to implement CSRs in its markets are summarized below.

A. Key Defined Terms

In order to help understand the NYISO's CSR proposal, NYISO provides an abbreviated glossary of important defined terms. Additional details about each defined term listed below are provided in the NYISO's section-by-section review of its proposed tariff revisions.

Co-located Storage Resources ("CSR"): A wind or solar Intermittent Power Resource and an Energy Storage Resource (two Generators) that: (a) are both located behind a single Point of Injection; (b) participate in the ISO Administered Markets as two distinct Generators; and (c) share a set of CSR Scheduling Limits.

CSR Scheduling Limits: The CSR injection Scheduling Limit sets the maximum, combined Regulation Capacity, Operating Reserve and Energy injection schedules for, and the maximum net injection by a CSR's Generators. The CSR withdrawal Scheduling Limit sets the maximum, combined Regulation Capacity and Energy withdrawal schedules for, and the maximum net withdrawal by a CSR's Generators.

Each CSR Generator must submit a CSR injection Scheduling Limit and a CSR withdrawal Scheduling Limit with its Day-Ahead and Real-Time Market Bids. The CSR Scheduling Limit values must reflect the physical capability to inject or withdraw Energy at the common Point of Injection/Point of Withdrawal.

Project: The proposed facility that is described in a single Interconnection Request, which may include all Generators participating in a proposed CSR.

B. Proposed Revisions to Energy and Ancillary Service Market Rules

The wind or solar IPR and the ESR that participate in a CSR together will be Bid into the NYISO's Energy market as two distinct resources. The ESR will be required to follow all of the Energy market rules that apply to a stand-alone ESRs. The wind or solar IPR will be required to follow all of the Energy market rules that apply to stand-alone IPRs of the same type.

The key change in the Energy, Operating Reserves and Regulation Service markets is the addition of a pair of CSR Scheduling Limits (an injection limit and a withdrawal limit) that will apply to the combined injections and withdrawals of the participating Generators. The CSR Scheduling Limits are expected to reflect the physical capabilities of the CSRs' interconnection facilities to inject or withdraw Energy at the CSR Generators' shared Point of Injection/Point of

[15] Both the ESR and the IPR that participate in a CSR are expected to follow the schedules and dispatch instructions that the NYISO issues. The NYISO's economic Bidding construct is flexible enough to permit the resources in a CSR to indicate when the IPR's Energy output should be used to charge the co-located ESR.

Withdrawal. The NYISO's Day-Ahead and real-time scheduling and dispatch software will develop Energy, Operating Reserve and Regulation Service schedules for the CSR Generators that respect the CSR Scheduling Limits.

To ensure that the NYISO has up-to-date information on the ability to support injections and withdrawals, each CSR Generator will be required to include MW values for the CSR injection Scheduling Limit and the CSR withdrawal Scheduling Limit with its Day-Ahead and real-time Bids. The CSR Scheduling Limit information submitted with the CSR Generator Bids is expected to accurately reflect the physical capabilities of the relevant facilities to accommodate the injection and withdrawal of Energy.[16] Submission of inaccurate CSR Scheduling Limits by CSR Generators could result in physical withholding of the CSR Generators' capabilities, or could put reliability at risk. The NYISO proposes enhancements to its Market Mitigation Measures to address possible physical withholding, and proposes to give its operators additional tools to address CSRs that do not operate consistent with their NYISO-issued schedules and dispatch.[17]

The Energy and Ancillary Services Market rules submitted in this filing were developed based on the premise that the *Proposed Tariff Amendments to Enhance Operational Control of Solar Resources and Amend Applicable Settlement Rules* that the NYISO filed for the Commission's consideration in Docket No. ER21-892-000 on January 15, 2021 (hereafter, "Solar on Dispatch"), and will be permitted to become effective before the NYISO implements CSRs in its Energy and Ancillary Services Markets.[18] The Solar on Dispatch revisions are necessary prerequisites because they align the rules and requirements that apply to wind and solar resources, so that the proposed CSR rules can apply agnostically to both types of IPRs.

A key proposed change to the operation of a wind or solar IPR that participates in a CSR is that when a pair of CSR Generators' combined Energy and Ancillary Services Schedules is within 10%[19] of the CSR injection Scheduling Limit, the NYISO will instruct the wind or solar

[16] Because the CSR injection and withdrawal Scheduling Limits submitted by each of the CSR Generators will address the capabilities of the same set of facilities, the NYISO intends to implement a Bid validation or similar measure to ensure that consistent values are submitted. Submission of inconsistent CSR Scheduling Limit values could prevent the NYISO's optimization from functioning appropriately, and could delay the issuance of schedules to Resources.

[17] Submitting a CSR Scheduling Limit that overstates a CSR's ability to inject or withdraw Energy could result in the NYISO issuing infeasible schedules to the CSR's Generators. The NYISO proposes to give its Operators the ability to modify CSR Scheduling Limits by issuing an Out-of-Merit instruction. Modifying the CSR Scheduling Limits is a tool that the NYISO's operators can use to address repeated failure to operate consistent with NYISO-issued real-time schedules and dispatch.

[18] If that premise proves inaccurate, then the Tariff rules proposed in this filing will work for wind IPRs but may need to be further modified in order to accommodate solar IPRs.

[19] The proposed definition of CSR Scheduling Limits states that the NYISO will have the ability to change the value that is ordinarily used (which will initially be set at > 90% of the CSR Scheduling Limit), based on its experience with actual CSR operation in its markets. The proposed Tariff language requires the NYISO to post the % value that is currently in-effect on its website, so CSRs will know when to expect that the NYISO will apply a Wind and Solar Output Limit to the IPR. If the NYISO determines that the % value it ordinarily uses should be changed, then the NYISO will post a new value on its website.

IPR not to exceed its NYISO-issued schedule. This instruction will be effectuated via the application of a Wind and Solar Output Limit. The purpose of this instruction is to provide a buffer to ensure the deliverability of scheduled Ancillary Services and Energy from the participating ESR given the potential for unexpected increases in output from the co-located IPR. When a Wind and Solar Output Limit applies, the IPR will not be paid for output in excess of its schedule plus a 3% of upper operating limit ("UOL") tolerance.[20] The IPR may also be subject to additional charges in accordance with Sections 15.3A.1.1 of the Services Tariff for overproducing Energy. By providing financial incentives to maintain the output of an IPR at or below its NYISO-issued schedule at times when the combined Energy and Ancillary Service schedules of a pair of CSR Generators approaches the CSR injection Scheduling Limit, the application of a Wind and Solar Output Limit will better enable the participating ESR to operate consistent with its NYISO-issued schedules and dispatch.

IPRs are not eligible to supply Operating Reserves or to provide Regulation Services. ESRs that participate in a CSR will remain eligible to provide these Ancillary Services in the same manner as other ESRs. As explained above, the CSR Scheduling Limits will account for a participating ESR's Operating Reserve and Regulation Service Schedules, and a Wind and Solar Output Limit may be assigned to a co-located IPR in order to permit the ESR to provide scheduled Operating Reserves and Regulation Service consistent with the NYISO's dispatch instructions.

The NYISO's proposed rules will permit both the ESR and the IPR that participate in a CSR to provide Voltage Support Service ("VSS"). The compensation paid to each VSS supplier in a CSR will be calculated from its Reactive Power capability or will be limited to the total Reactive Power capability at the CSR's Point of Injection if the total Reactive Power capability at the Point of Injection is less than the capability of the individual resource.

Each CSR Generator will be settled separately. The settlement rules for ESRs and wind or solar IPRs that participate in a CSR are the same rules that apply to stand-alone Generators of the same type with two exceptions. First, the NYISO does not propose to assess a Transmission Service Charge ("TSC") or a New York Power Authority Transmission Adjustment Charge ("NTAC") to an ESR for charging Energy the ESR receives from its co-located wind or solar IPR behind the CSR Generators' shared Point of Injection/Point of Withdrawal.[21] This proposal is appropriate because charging of an ESR by its co-located IPR that occurs behind the Point of Withdrawal is not expected to use New York Transmission Owner or New York Power Authority transmission facilities. Second, (and related) if a New York Load Serving Entity ("LSE") decides to apply retail charges to an ESR that participates in a CSR for its Energy withdrawals, then the NYISO will credit the ESR and charge the LSE the wholesale costs associated with all net withdrawals at the shared Point of Injection/Point of Withdrawal.[22]

[20] Section 4.5.2.1 of the Services Tariff identifies exceptions to this rule that apply when LBMPs are negative, or during reserve pickup reliability events.

[21] *See* proposed revisions to OATT Section 2.7.

[22] *See* proposed revisions to Services Tariff Section 7.2.

C. Proposed Revisions to Metering Rules

The NYISO proposes modifications to the metering provisions in Section 13 of its Services Tariff that will require CSRs to install physical metering infrastructure and meter data communication capability sufficient to facilitate delivery of real-time telemetry and after-the-fact revenue-quality meter data to the NYISO. The proposed modifications expand the existing metering requirements that apply to other Resources.

The NYISO has identified metering configurations that will enable the measurement and delivery of the necessary data. The CSR Generators will share a common revenue-quality meter at the Point of Injection/Point of Withdrawal that will measure the CSR's net injections and withdrawals. Data from the revenue quality meter at the Point of Injection/Point of Withdrawal will be used in wholesale market settlements. In addition, each CSR Generator will be required to provide its real-time telemetered output to the NYISO on a six-second basis. The six-second telemetry data will be used to (i) maintain real-time situational awareness of Generator injections or withdrawals, and (ii) allocate the net injections (measured at the Point of Injection/Point of Withdrawal) between/among the two CSR Generators. The required metering will combine to provide the NYISO with the data it needs to reliably dispatch the CSR Generators, and to accurately settle each of the CSR Generators based on their performance.

D. Proposed Revisions to Interconnection Rules

In order to accommodate Generators seeking to participate in NYISO markets as participants in a CSR, the NYISO proposes modification to the interconnection rules in Attachments S, X and Z to the OATT. Most notably, multiple Generators behind a single Point of Interconnection will now be permitted to submit a single Interconnection Request to the extent such Interconnection Request complies with specific requirements described in Sections III.C.ii and iii of this filing letter. For Projects currently in the NYISO Interconnection Queue with separate queue positions that seek to combine to become a proposed CSR, transition rules are proposed to permit such Projects to combine and proceed under a single Interconnection Request as a single CSR (*i.e.*, as a single Project).

To streamline and provide clarity to the Generators that propose to participate together as a CSR, the NYISO proposes a new defined term "Project" to facilitate references to a multi-unit Generator interconnection. The new term Project allows a collection of units/facilities/Generators behind the same Point of Interconnection to be included in a single Interconnection Request.

The NYISO also proposes rules to clarify how its interconnection procedures will evaluate and assign ERIS and CRIS rights. ERIS is basic interconnection service that allows a Developer to interconnect its generating facility (*i.e.*, "Project") to the New York State Transmission System or Distribution System in accordance with the NYISO Minimum Interconnection Standard to enable the New York State Transmission System or Distribution System to receive electric energy from the facility. If a Developer wants its proposed Project to qualify as an Installed Capacity Supplier and to participate in the NYISO-administered Installed Capacity market, the Developer must also obtain CRIS. CRIS is interconnection service that

allows a Developer to interconnect its Project to the New York State Transmission System or Distribution System in accordance with the NYISO Deliverability Interconnection Standard, which allows participation in the NYISO's ICAP market to the extent of the Project's deliverable capacity.

Traditionally, a Project proceeding through the NYISO's interconnection process has proposed a single ERIS and CRIS value – the MW of ERIS and CRIS the Developer requests for the Project as a whole. That collective value is subject to a cap on the permissible MW that can be requested such that a Project cannot obtain more ERIS or CRIS than it is capable of providing. For multi-unit Projects like CSRs that may also have limitations on the total output of the combined Generators (represented by the CSR Scheduling Limits), the NYISO proposes modifications to the Interconnection Request and data forms in the interconnection procedures to provide for the requested allocation of a Project's requested ERIS and CRIS among the individual Generators within the Project. Modifications are also proposed to the rules that address how the NYISO caps the permissible ERIS and CRIS that may be requested by the Generators in a Project.

ERIS for the IPR cannot exceed the CSR injection Scheduling Limit plus the full withdrawal capability of the ESR. The proposed limit is consistent with the expectation that the IPR in a CSR will only be scheduled to inject MWh that exceed the CSR Scheduling Limit when the co-located ESR is scheduled to withdraw Energy. The sum of the CRIS allocated to both of the Generators in a CSR may not exceed the CSR injection Scheduling Limit.

For Projects that complete the Interconnection study process and propose to move forward, the NYISO proposes rules to allow multi-unit Projects such as CSRs to execute a single Interconnection Agreement.

E. Proposed Revisions to Capacity Market Rules

The capacity market participation rules that apply to a stand-alone wind or solar IPR, or to a stand-alone ESR will apply to the Generators that participate in a CSR. The NYISO proposes several modifications that will account for the impact of the CSR injection Scheduling Limit and CSR withdrawal Scheduling Limit on the availability and capability of the CSR Generators. Specifically, the NYISO proposes to modify the Operating Data Reporting Requirements, Availability Requirements, and Unforced Capacity Calculation to incorporate the effects of the CSR Scheduling Limits on the CSR Generators. Unforced Capacity calculations for a participating ESR will incorporate both an availability factor for the shared interconnection facilities and any limitations on the ability to provide Capacity that are imposed by the CSR injection Scheduling Limits. Unforced Capacity calculations for a participating IPR will incorporate the potential impact of the CSR Scheduling Limits on the IPR's Production Factor.

In addition to the traditional Bid/Schedule/Notify requirement that applies to the ESR in a CSR,[23] each Installed Capacity Supplier in a CSR must, on a daily basis and for each hour of the Day-Ahead Market Day: (i) provide a CSR injection Scheduling Limit; and (ii) notify the ISO of

[23] *See* Services Tariff Section 5.12.7.

any derate or outage to the interconnection facilities comprising the Point of Interconnection.[24] The values submitted by the Generators that participate in a CSR are expected to be identical because they address the same set of interconnection facilities.[25]

Finally, the NYISO proposes to require the CSR Generators to each, individually, acquire CRIS. The total amount of CRIS allocated to each CSR Generator cannot be greater than the amount of capacity found to be deliverable at the CSR's Point of Injection.

F. Proposed Revisions to Energy and Capacity Market Mitigation Rules

1. Proposed Tariff Revisions to Address Physical Withholding of CSR Generators in the Energy and Ancillary Services Markets

The NYISO proposes changes to the Energy and Ancillary Services market physical withholding rules in Sections 23.2 and 23.3 of its Market Mitigation Measures[26] to address the potential to physically withhold either or both of the Generators that participate in a CSR by artificially reducing a CSR Scheduling Limit to reduce or prevent the CSR Generators' participation. In particular, artificially reducing the CSR injection Scheduling Limit below the actual physical capability of the relevant interconnection facilities could prevent either or both of the CSR Generators from injecting Energy at a time when it would be economic for them to do so. Artificial withholding of the CSR Generators' output could cause inflated LBMPs, or increase Guarantee Payments to other, less economic, Generators.

The proposed revisions will also permit the NYISO to address the possibility that a Market Participant could artificially reduce the CSR withdrawal Scheduling Limit that applies to Energy withdrawals by an ESR that participates in a CSR. Exercising market power in this manner could prevent the participating ESR from obtaining the economic Energy it needs to charge-up during times when LBMPs are low. Limiting the amount of Energy that an ESR is able to economically withdraw in order to charge will also effectively limit the Energy that the same ESR can economically inject when LBMPs are high. The ultimate impact of this strategy would be to prevent the ESR that participates in a CSR from injecting Energy at a time when it would be economic for the ESR to do so. Artificial withholding of the ESR's output could cause inflated LBMPs, or increase Guarantee Payments to other, less economic, Generators.

2. Proposed Revisions to Buyer-Side Mitigation and Other Capacity Market Mitigation Rules

The NYISO is not proposing any substantive changes to Buyer-Side Mitigation ("BSM") or to any other Capacity Market Mitigation rules as part of its CSR tariff revisions. The NYISO

[24] *See* Proposed Services Tariff Section 5.12.7.1.

[25] The NYISO plans to implement a new Bid validation requirement or other similar measure to ensure that both of the Generators in a CSR submit consistent CSR injection and withdrawal Scheduling Limits. The submission of inconsistent CSR Scheduling Limits could cause CSR Generators to receive infeasible Energy and/or Ancillary Services schedules, and could delay the NYISO's issuance of schedules to all Resources.

[26] The Market Mitigation Measures are set forth in Section 23 of the Services Tariff.

is proposing clarifying tariff edits to describe relevant processes pertaining to Additional CRIS MW requests, and to permit the NYISO to consider any shared costs and their allocation between the participating Generators as part of its evaluation.

The wind or solar IPR and the ESR within a CSR will each be a separate Examined Facility for purposes of the BSM Measures. Renewable Generators within CSRs will be eligible to seek a BSM Renewable exemption.

III. SECTION-BY-SECTION REVIEW OF PROPOSED TARIFF REVISIONS

A. Proposed Revisions to Defined Terms in Services Tariff and OATT

i. *Services Tariff Section 2 and OATT Section 1*

The NYISO proposes a number of new defined terms, and proposes to modify several existing defined terms. The proposed changes to the Services Tariff definitions and the OATT definitions are not always identical but they result in a consistent set of defined terms,[27] so the NYISO describes all of the proposed revisions to defined terms that appear in Section 2 of the Services Tariff and in Section 1 of the OATT here. Definitions specific to the NYISO's interconnection procedures in OATT Sections 25, 30 and 32 are described in Section III.C.ii of this filing letter.

The NYISO proposes a conforming change and a clarification to the definition of **Actual Energy Withdrawals**. First, the NYISO proposes to conform the definition in the Services Tariff with the definition that appears in the OATT by adding the sentence "For purposes of the allocation of the ISO annual budgeted costs and the annual FERC fee pursuant to Rate Schedule 1 of the ISO OATT, withdrawals shall also include the absolute value of negative withdrawals by Load for behind the meter generation."[28] Second, the NYISO proposes to clarify that "For purposes of assessing TSC and NTAC, Actual Energy Withdrawals shall include the absolute value of negative injections by Energy Storage Resources in accordance with Section 2.7 of the OATT." The proposed clarification is consistent with the Commission's requirement that ESRs pay a Transmission Service Charge ("TSC") and the NYPA Transmission Adjustment Charge ("NTAC") for their withdrawals from the grid at times when the ESR is not providing a service.[29]

The NYISO proposes to revise the definition of **Availability** to explicitly include interconnection facilities so it clearly applies to the facilities used to determine CSR Scheduling Limits. The NYISO also proposes to simplify the definition by removing words that its stakeholders found duplicative or confusing.

---

[27] In some cases the definition included in the Services Tariff is a cross-reference to the definition in the OATT, or vice-versa.

[28] Add a cite to the order in which this language was accepted by FERC.

[29] *See New York Indep. Sys. Operator, Inc.*, Docket No. ER19-467-006, at 1 (Oct. 23, 2020) (unpublished letter order).

The NYISO proposes to add a new term **Co-located Storage Resources ("CSR")**. A CSR is a wind or solar Intermittent Power Resource and an Energy Storage Resource that: (a) are both located behind a single Point of Injection (as defined in Section 1.16 of the OATT); (b) participate in the ISO Administered Markets as two distinct Generators; and (c) share a set of CSR Scheduling Limits. Resources that serve a Host Load may not participate in the ISO-Administered Markets as components of a CSR.

The NYISO proposes to add a new term **CSR Scheduling Limits**. The CSR injection Scheduling Limit sets the maximum, combined Regulation Capacity, Operating Reserve and Energy injection schedules for, and the maximum net injection by a CSR's Generators. The CSR withdrawal Scheduling Limit sets the maximum, combined Regulation Capacity and Energy withdrawal schedules for, and the maximum net withdrawal by a CSR's Generators.

A Market Participant must submit a CSR injection Scheduling Limit and a CSR withdrawal Scheduling Limit with the hourly Day-Ahead and Real-Time Market Bids it submits for each of the CSR Generators. The values that the Market Participant submits must reflect the physical capability to inject or withdraw Energy at the CSR's Point of Injection/Point of Withdrawal.

Finally, the definition of CSR Scheduling Limits explains that, when an ESR that participates in a CSR has a non-zero Regulation and/or Operating Reserves schedule or is dispatched to inject Energy, and the sum of the participating ESR's and IPR's Energy, Regulation Service and Operating Reserves Schedules is greater than or equal to a specified percentage of the CSR injection Scheduling Limit,[30] then the ISO will issue a Wind and Solar Output Limit to the Intermittent Power Resource to not exceed its Base Point Signal.

The NYISO proposes to revise the definition of an **Intermittent Power Resource ("IPR")** to permit "an energy source that: (1) is renewable; (2) cannot be stored by the ~~facility owner or operator~~producing device; and (3) has variability that is beyond the control of the facility owner or operator" to qualify as an IPR. The proposed change is appropriate because the NYISO will treat the ESR and the IPR that participate in a CSR as two distinct resources that each submit Bids to the NYISO and receive schedules from the NYISO. When resources that might otherwise qualify as IPRs participate in the ISO-Administered Markets as components of an aggregation that includes a variety of different resources types, then it is likely that a different set of rules will need to be applied. The Commission has already accepted the NYISO's DER rules, which address participation by intermittent resources in a DER Aggregation.[31]

[30] The proposed definition of CSR Scheduling Limits states that the NYISO will have the ability to change the value that is ordinarily used (which will initially be set at > 90% of the CSR Scheduling Limit), based on its experience with actual CSR operation in its markets. The proposed tariff language requires the NYISO to post the % value that is currently in-effect on its website, so CSRs will know when to expect that the NYISO will apply a Wind and Solar Output Limit to the IPR. If the NYISO determines that the % value it ordinarily uses should be changed, then the NYISO will post a new value on its website.

[31] *New York Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,033 at P 34 (2020) ("NYISO's filing facilitates the participation of DERs and other Aggregations of resources in its wholesale markets by enabling heterogeneous

Out-of-Merit actions involve the ISO's commitment or dispatch of Resources to meet Load and/or reliability requirements that differ from or supplement the ISO's security constrained economic commitment and/or dispatch. The NYISO proposes to add language explaining that it may also use Out-of-Merit actions to reduce a CSR injection Scheduling Limit and/or a CSR withdrawal Scheduling Limit to protect NYCA or local reliability. When the ISO sets a CSR Scheduling Limit Out-of-Merit for NYCA or local reliability, the Out-of-Merit for NYCA or local reliability designation will also apply to each of the CSR Generators that are subject to the affected CSR Scheduling Limit. Setting a Generator Out-of-Merit for NYCA or local reliability has favorable settlement consequences in some circumstances.[32]

B. Proposed Revisions to the Market Services Tariff

i. *Section 4.1.6, Customer Responsibilities*

In order to accommodate the operation of paired Generators that share a CSR Scheduling Limit, and to better address the impacts of non-dollar operating parameters that affect the ability of Generators to follow their NYISO-issued schedules, the NYISO proposes to clarify the range of real-time operating issues that Suppliers are required to inform the NYISO about.

> A Supplier with a Generator or Demand Side Resource with a real time physical operating problem that makes it impossible for ~~it~~the Generator or Demand Side Resource (a) to operate in the bidding mode in which it was scheduled, or (b) to provide all of the Energy or Ancillary Services offered in its Bids, or (c) to achieve or comply with applicable operating parameters or other requirements, shall notify the ISO.

The term "Demand Side Resource" in the above paragraph will be replaced with "Aggregation" when the NYISO implements its DER rules in 2022. The proposed revisions clarify the obligation of Generators that participate in a CSR to report limitations affecting their interconnection facilities that could prevent one or both of the CSR Generators from operating consistent with its Bids. The proposed revisions will also (for example) more clearly require ESRs to report significant reductions in their ability to withdraw, store, or inject Energy to the NYISO.

ii. *Section 4.2, Day-Ahead Market Requirements*

To make clear that Generators that participate in a CSR can (and should) offer all of their capability into the Day-Ahead Market because the NYISO will account for the CSR injection and withdrawal Scheduling Limits in assigning Day-Ahead schedules to the Generators, the NYISO proposes to add a statement that "[t]he ISO will account for the CSR Scheduling Limits in the schedules it issues to CSR Generators" to Section 4.2.1.3.1 of the Services Tariff.

---

groups of technologies to aggregate and be compensated for services that they are collectively capable of providing.").

[32] *See e.g.*, Services Tariff Sections 4.5.2.1, 18.4.1.1.3, 18.4.1.2.1 (are there any OATT Sections we should cite?).

Section 4.2.1.3.2 of the Services Tariff addresses Day-Ahead bid parameters. The NYISO proposes to add two new requirements that will apply to Generators that participate in a CSR. First, Co-located Storage Resources must each submit a CSR injection Scheduling Limit and a CSR withdrawal Scheduling Limit for each hour of the Day-Ahead Market to indicate the expected capability of the relevant interconnection facilities. Second, an ESR that participates in a CSR is not permitted to submit a Day-Ahead Market Bid that would Self-Commit the ESR to inject or to withdraw a quantity of Energy that exceeds an applicable CSR Scheduling Limit.[33] This requirement is necessary to prevent an ESR that participates in a CSR from receiving an infeasible schedule that could have adverse reliability consequences, or delay the NYISO's posting of the Day-Ahead Market.

In Section 4.2.1.7 the NYISO proposes to clarify that even though ESRs can withdraw Energy to charge they are Generators and, like other Generators, ESRs are not eligible to be the Point of Withdrawal for a Bilateral Transaction.

iii. *Section 4.4, Real-Time Market Requirements*

To make clear that Generators that participate in a CSR can (and should) offer all of their capability into the Real-Time Market because the NYISO will account for the CSR injection and withdrawal Scheduling Limits in assigning real-time schedules and issuing dispatch instructions to the Generators, the NYISO explains that both its Real-Time Commitment and its Real-Time Dispatch will "account for the CSR Scheduling Limits in the schedules it issues to CSR Generators" in Sections 4.4.1.2 and 4.4.2.1 of the Services Tariff.

Section 4.4.1.2.1 of the Services Tariff addresses real-time bid parameters. The NYISO proposes to add two new requirements that will apply to Generators that participate in a CSR. First, Co-located Storage Resources must each submit a CSR injection Scheduling Limit and a CSR withdrawal Scheduling Limit for each hour of the Real-Time Market to indicate the expected capability of the relevant interconnection facilities. Second, an ESR that participates in a CSR is not permitted to submit a Real-Time Market Bid that would Self-Commit the ESR to inject or to withdraw a quantity of Energy that exceeds an applicable CSR Scheduling Limit.[34] This requirement is necessary to prevent an ESR that participates in a CSR from receiving an infeasible schedule that could have adverse reliability consequences, or delay the NYISO's issuance of real-time schedules and dispatch instructions to Resources.

The NYISO also proposes revisions to Section 4.4.1.2.1 of the Services Tariff to clarify the circumstances under which a Generator that is experiencing real-time operating problems is required to notify the NYISO. The proposed revision is largely consistent with current practice.

[33] Wind IPRs are not eligible to submit Self-Committed or fixed Bids. *See* Services Tariff Section 4.2.1.3.2. In its Solar on Dispatch filing the NYISO proposes to apply the same rules to solar IPRs. *See* revisions to Services Tariff Section 4.2.1.3.2 included in the NYISO's *Proposed Tariff Amendments to Enhance Operational Control of Solar Resources and Amend Applicable Settlement Rules*, Docket No. ER21-892-000, filed on January 15, 2021.

[34] Wind IPRs are not eligible to submit Self-Committed or fixed Bids. *See* Services Tariff Section 4.2.1.3.2. In its Solar on Dispatch filing the NYISO proposes to apply the same rules to solar IPRs. *See* revisions to Services Tariff Section 4.2.1.3.2 included in the NYISO's *Proposed Tariff Amendments to Enhance Operational Control of Solar Resources and Amend Applicable Settlement Rules*, Docket No. ER21-892-000, filed on January 15, 2021.

The proposed revisions make clear the circumstances under which a real-time derate or outage of a CSR's interconnection facilities (that is not already reflected in the information that the CSR Generators submit with their real-time Bids) need to be promptly reported to the NYISO.

iv. *Section 5.12, Capacity Market Requirements*

The NYISO proposes several modifications to Services Tariff Section 5.12 that will tailor its existing Installed Capacity market rules to integrate CSRs. As a general rule, each CSR Generator will be subject to the Installed Capacity market rules applicable to its Resource type.[35] Additional Installed Capacity market rules are necessary because the CSR Generators will be located behind a shared Point of Injection that may not be able to simultaneously accommodate the full output of both CSR Generators, and a derate or outage of the interconnection facilities affects the CSR Generators' ability to provide Unforced Capacity. The tariff modifications described in this section will allow the NYISO to accurately reflect the capacity a CSR Generator is capable of supplying, and help maintain the reliability of the New York State Transmission System.

Allocation of Capacity Resource Interconnection Service

The NYISO proposes to require each Generator that participates as a CSR to independently obtain CRIS in order to qualify as an Installed Capacity Supplier.[36] As described in Sections III.C.ii and iii of this filing letter, the Generators in a CSR will proceed through the NYISO's interconnection processes as a single Project and have a single Interconnection Agreement. However, for a CSR that requests and obtains CRIS, the NYISO will allocate the total amount of CRIS between the two CSR Generators. This is necessary in order to accurately calculate the amount of Unforced Capacity each CSR Generator is permitted to sell in the wholesale markets. The CSR Developer may request that its CRIS be allocated to individual CSR Generators as it sees fit, subject to the caps in the NYISO's interconnection procedures. However, the total amount of CRIS allocated to the Generators may not exceed the CSR injection Scheduling Limit for the entire facility. This rule provides developers with flexibility to determine how CRIS will be allocated to each Generator, while ensuring that the total amount of CRIS does not exceed the total allocation.

Incorporating CSR Injection and Withdrawal Scheduling Limits

There are a variety of provisions in Services Tariff Section 5.12 that address (i) the amount of capacity that an ICAP Supplier is qualified to provide, and (ii) the availability of that capacity to the wholesale markets. The existing rules for stand-alone Generators do not differentiate outages occurring at the generating plant from those affecting the Generator's interconnection facilities. CSR Generators are different because the derate or outage of a CSR's interconnection facilities affects both CSR Generators. In addition, in certain CSR

[35] An ESR that participates in a CSR will be subject to all of the rules that apply to other ESRs, and the wind or solar IPR that participates in an ESR will be subject to the same rules as other IPRs that use wind or solar energy as their fuel. *See* Proposed Revision to Services Tariff Section 5.12.1.

[36] *See* Proposed Revision to Services Tariff Section 5.12.1.

configurations the sum of the capacity that CSR Generators are able to simultaneously supply is expected to exceed the amount of Energy that the interconnection facilities are capable of transferring. The NYISO developed the CSR Scheduling Limits to address possible differences between the amount of Energy the CSR Generators can produce and the maximum amount of Energy the interconnection facilities can transfer. Therefore, the NYISO proposes certain tariff modifications that incorporate the CSR injection and withdrawal Scheduling Limits into existing Tariff rules that address the Unforced Capacity that a CSR Generator may qualify to provide, Operating Data reporting requirements, and Day-Ahead Market bidding obligations. The proposed Tariff modifications will allow the CSR Generators' schedules to accurately reflect the capability of the CSR as a whole, and help the NYISO maintain reliability.

Proposed Modifications to the ICAP Supplier Availability Requirements and Applicable Sanctions

CSR Generators that are ICAP Suppliers will be required to meet certain Day-Ahead Market bidding requirements on a daily basis. As a general rule, ICAP Suppliers are required, on a daily basis, to (i) schedule a Bilateral Transaction, or (ii) Bid Energy in each hour of the Day-Ahead Market in accordance with the applicable provisions of Section 5.12.1 of the Services Tariff, or (iii) notify the ISO of any full or partial derates.[37] This rule is commonly referred to as the "Bid/Schedule/Notify Rule."[38] ESRs that are ICAP Suppliers have slightly different Day-Ahead Market bidding obligations that are tailored to their characteristics and capabilities. An ESR that has an Energy Duration Limitation[39] will be subject to the Bid/Schedule/Notify Rule (a) for the injection portion of its operating range during the NYISO-identified Peak Load Window, and (b) for the withdrawal portion of its operating range for each hour outside of the NYISO-identified Peak Load Window. The application of the Bid/Schedule/Notify Rule to an ESR with an Energy Duration Limitation is tailored to capture the grid reliability benefit of the ESR's capacity during peak load hours, since the ESR is not capable of injecting Energy for an entire Day-Ahead Market day. Wind and solar IPRs that are ICAP Suppliers are not required to Bid in the Day-Ahead Market. The NYISO uses wind and solar forecasts instead of Bids to establish the Day-Ahead Market expectations for wind and solar IPRs. Wind and solar IPRs use past period performance history in a like capability period to determine how much UCAP they are permitted to sell.

At times, the interconnection facilities utilized by the CSR Generators will be affected by an outage or derate for maintenance, or as the result of an equipment malfunction. The NYISO therefore proposes new Services Tariff Sections 5.12.1.6.1 and 5.12.7.1 that will require each CSR Generator to account for the effect of changes to its CSR injection and withdrawal Scheduling Limit on the individual Generator's availability. Section 5.12.1.6.1 proposes to

[37] The total amount of Energy that must be Bid, scheduled as a Bilateral Transaction, and/or derated by an ICAP Supplier must equal the Installed Capacity Equivalent of the Unforced Capacity it supplies. *See* Services Tariff Section 5.12.7.

[38] *Id.*

[39] A Resource with Energy Duration Limitation is a Resource that is not capable of supplying its ICAP equivalent of UCAP sold in each hour of the day due to a run-time limitation, such as an Energy storage limitation or permit restriction. *See* Services Tariff Section 2.5.

require each CSR Generator to submit the CSR injection and withdrawal Scheduling Limit for each hour of the Day-Ahead Market day, consistent with the requirements of Section 5.12.7.1.

Section 5.12.7.1, in turn, requires each CSR Generator to, for each hour of the Day-Ahead Market Day: (i) provide a CSR injection Scheduling Limit with its Day-Ahead Market Bid and notify the ISO of any full or partial outage of the CSR's interconnection facilities, and (ii) provide a CSR withdrawal Scheduling Limit with its Day-Ahead Market Bid and notify the ISO of any full or partial outage of the CSR's interconnection facilities. The sum of the CSR injection Scheduling Limit and any derate must equal or exceed the sum of the Installed Capacity Equivalent of the Unforced Capacity supplied by the IPR and the applicable Bid/Schedule/Notify Rule obligation of the ESR.[40] The sum of the CSR withdrawal Scheduling Limit and any derate must equal the applicable ESR withdrawal Bid/Schedule/Notify Rule obligation. Market Participant compliance with these rules should provide the NYISO with an accurate understanding of the expected injection and withdrawal capability of the CSR as a whole, and for each CSR Generator.

ICAP Suppliers are subject to financial sanction when they fail to comply with the Services Tariff Section 5.12.7 Bid/Schedule/Notify Rules. The NYISO proposes a new financial sanction that will apply to a CSR Generator that fails to comply with the requirements of Section 5.12.7.1 that relate to including CSR Scheduling Limits in Day-Ahead Market Bids and notifying the NYISO of interconnection facility outages. The proposed financial sanction will be calculated as the product of the deficiency charge (described above) and the difference between the Installed Capacity Equivalent of the Unforced Capacity Sold from the Generator and the relevant CSR Scheduling Limit.[41] If a CSR Generator is subject to financial sanctions for its failure to comply with both Section 5.12.7 and Section 5.12.7.1, the NYISO proposes only to apply the larger of the two sanctions. The proposed sanction is similar to existing sanctions that apply when an ICAP Supplier fails to meet its availability reporting obligations, and is necessary to incent compliance with proposed Services Tariff Section 5.12.7.1 and to help maintain reliability.

CSR Operating Data Reporting Requirements

Installed Capacity Suppliers are obligated to submit plant operating data to the NYISO.[42] This information is typically in the form of Generator Availability Data System ("GADS") information or GADS-equivalent data. In addition to the data required to be supplied based on its Resource type, the NYISO proposes to require each CSR Generator outage or other operational information that will allow the NYISO to validate and verify the CSR Scheduling Limits associated with the CSR Generator.[43] Accurate reporting of CSR Scheduling Limit availability information is an essential component to ensure compliance with the CSR-specific

[40] In other words the sum of the CSR injection Scheduling Limit and any derate must equal or exceed the combined Bid/Schedule/Notify obligations of the IPR and the ESR.

[41] *See* proposed revisions to Services Tariff Section 5.12.12.2.

[42] Services Tariff Section 5.12.5.1.

[43] *See* Proposed Services Tariff Section 5.12.5.5.

Bid/Schedule/Notify Rule, and to calculate the Unforced Capacity each CSR Generator is qualified to provide.

Unforced Capacity Calculations for CSR Generators

The NYISO calculates the amount of Unforced Capacity each Installed Capacity Supplier is qualified to provide, accounting for the Resource's derating factor. The Unforced Capacity calculation for an ESR that is a CSR Generator will be similar to the calculation that applies to ESRs that do not participate in a CSR, with an adjustment for the availability of the shared interconnection facilities.[44] The proposed Tariff modification will ensure that the derating factor accounts for both the availability of the ESR and the availability of the CSR interconnection facilities. The Unforced Capacity that a wind or solar IPR that is participating as part of a CSR is authorized to supply will similarly account for the unavailability of the CSR interconnection facilities.[45]

v. *Section 5.18, Generator Outage States*

The NYISO's proposed revisions to Services Tariff Sections 5.18.2.1 and 5.18.3.1 clarify that if one of the Generators participating in a CSR enters an ICAP Ineligible Forced Outage ("IIFO") or a Mothball Outage, the remaining CSR Generator can continue to participate in the NYISO's markets as part of a CSR unless or until the CSR Generator that is in the IIFO or Mothball Outage becomes Retired. The proposed revisions are appropriate because it requires a significant administrative effort by the affected Market Participant and the NYISO to change the participation model that applies to a Generator, and the NYISO has not identified any inappropriate benefits that the remaining CSR Generator would receive because it is permitted to continue to participate as part of a CSR. These rules are mirrored in Section 38.3 of the OATT.

vi. *Section 7.2, Billing and Payment*

Order No. 841 requires Independent System Operators ("ISOs") and Regional Transmission Organizations ("RTOs") to prevent electric storage resources from paying twice—a wholesale rate and a retail rate—for the same Energy withdrawals, and directed the RTOs/ISOs to develop rules under which ESRs will not be charged at wholesale when the ESR's distribution utility is unwilling or unable to net out the costs of Energy withdrawn for wholesale market participation from the retail charges it assesses.[46] The NYISO submitted market rules complying

[44] Proposed revision to Services Tariff Section 5.12.6.2.

[45] *Id*.

[46] *Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order No. 841, 162 FERC ¶ 61,127 P 326 (Feb. 15, 2018), 83 Fed. Reg. 9580 (Mar. 6, 2018), Errata Notice (Feb. 28, 2018) ("Order No. 841"), *order on reh'g*, Order No. 841-A, 167 FERC ¶ 61,154 (2019). Citations to Order No. 841 are to the revised order included with the February 28, 2018, errata notice.

with the Commission's directives on February 18, 2020,[47] and the Commission accepted its compliance filing on August 3, 2020.[48]

Services Tariff Section 7.2.8 states that when the applicable Load Serving Entity ("LSE") requires an ESR to pay a retail rate for its charging withdrawals, the NYISO will (i) issue a credit to the Customer for the associated Actual Energy Withdrawals, and (ii) assess a charge to the LSE for those same Actual Energy Withdrawals. ESRs that participate as a CSR will be subject to this market rule. Unlike stand-alone ESRs, an ESR that participates in a CSR may receive charging Energy from its co-located wind or solar IPR behind the CSR's Point of Injection/Point of Withdrawal. Charging Energy that a wind or solar IPR provides to its co-located ESR behind the shared Point of Injection/Point of Withdrawal is not provided by the LSE and does not use the LSE's transmission or distribution facilities. The NYISO therefore proposes to exempt charging Energy received from the co-located Intermittent Power Resource from the charging and crediting described in Section 7.2.8 of the Services Tariff:

> When an Energy Storage Resource participates as a Co-located Storage Resource, the credit issued to an affected Customer and the corresponding charge assessed to the Load Serving Entity will not include the Energy Storage Resource's charging Energy received from the co-located Intermittent Power Resource behind the Co-located Storage Resource's shared Point of Injection/Point of Withdrawal.[49]

The proposed tariff modification will produce accurate settlements for both the ESR that participates in a CSR, and the relevant LSE.

vii. *Section 8.2, Additional Requirements Applicable to Suppliers*

In order to ensure that the Bids for a pair of CSR Generators (including the required submission of CSR Scheduling Limit information) are submitted in a consistent, coordinated manner that makes efficient use of the Generators and accounts for the CSR Scheduling Limits, the NYISO proposes to require the Generators that participate in a CSR together to share the same bidding entity. In order to avoid the possibility that the NYISO might be caught in the middle of a dispute about compensation between the owners of two Generators that participate in a CSR, the NYISO proposes to require Generators that participate in the ISO Administered Markets together as a CSR to share the same billing organization.

To simplify administration of CSRs, the NYISO proposes to require Market Participants and owners of Co-located Storage Resources to provide the ISO at least 60 days advance written notice in order to change the bidding entity or the billing organization for a set of Co-located Storage Resources. As is the case for all Generators, the NYISO will only effectuate a change of billing organization on the first day of a month.

---

[47] *New York Indep. Sys. Operator, Inc*., Compliance Filing, Docket No. ER19-467-004 (Feb. 18, 2020).

[48] *New York Indep. Sys. Operator, Inc*., 172 FERC ¶ 61,119 at P 25 (Aug. 3, 2020).

[49] Proposed revision to Services Tariff Section 7.2.8.

viii. *Services Tariff Section 13, Metering*

The NYISO proposes modifications to Services Tariff Section 13.1 to require a CSR to install and maintain metering that is adequate to ensure the reliable operation of the NYS Power System. This will require CSRs to install physical metering infrastructure and meter data communication capability sufficient to facilitate delivery of real-time telemetry data to the NYISO.[50] The proposed modifications expand the existing metering requirements that apply to other Resources.

The NYISO has identified metering configurations that will enable the measurement and delivery of the necessary data. The CSR Generators will share a common revenue-quality meter at the Point of Injection/Point of Withdrawal that will measure the CSR's net injections and withdrawals. Data from the revenue quality meter at the Point of Injection/Point of Withdrawal will be used in wholesale market settlements. In addition, each CSR Generator will be required to provide its real-time telemetered output to the NYISO on a six-second basis. The six-second telemetry data will be used to (i) maintain real-time situational awareness of Generator injections or withdrawals, (ii) identify simultaneous injections and withdrawals by the ESR and the IPR that are not captured by the hourly revenue-quality meter, and (iii) determine the hourly injections and withdrawals (MWh) for allocation to ESR and to the wind or solar IPR. The required metering will combine to provide the NYISO with the data it needs to reliably dispatch the CSR Generators, and to accurately settle each of the CSR Generators based on their performance.

ix. *Section 15.2, Voltage Support Service*

The NYISO proposes revisions to Services Tariff Section 15.2 to describe the automatic voltage controlling equipment that Generators are required to possess in order to qualify for payments for supplying VSS, and how those payments will be calculated for qualifying Generators that participate in a CSR. Throughout Section 15.2, the NYISO proposes to replace "Automatic Voltage Regulator" or "AVR" with a more general reference to "automatic voltage controlling equipment." Automatic voltage controlling equipment is described in the proposed revisions as including, but not being limited to: (a) an Automatic Voltage Regulator ("AVR") for more traditional, non-inverter-based Generators, or (b) inverters capable of automatic voltage control for inverter-based Generators, which include most batteries (ESRs) and DC-coupled wind and solar IPRs. The proposed revisions describe the equipment that both inverter-based Generators and non-inverter-based Generators rely on to automatically control voltage levels.

The proposed revisions specify that a qualifying VSS Supplier that is part of a CSR will be eligible for compensation limited to the lesser of the individual resource's Reactive Power capability, demonstrated in accordance with ISO procedures, or the total Reactive Power capability at the CSR's Point of Injection/Point of Withdrawal. In other words, if the total Reactive Power capability at the CSR's Point of Injection/Point of Withdrawal is less than the

[50] *See* Proposed Revisions to Services Tariff Section 13.2 ("Customers shall provide real-time telemetry for Generators and Co-located Storage Resources, nominally every six (6) seconds, in accordance with the specifications set forth in the ISO Procedures.").

Reactive Power capability of an individual resource, the resource's VSS compensation will be calculated from the Reactive Power capability at the CSR's Point of Injection/Point of Withdrawal. This proposal was developed to provide more appropriate compensation in circumstances where the CSR Scheduling Limits are less than the capabilities of the participating Generators.

x. *Section 15.4, Operating Reserves*

Section 15.4 of the Services Tariff addresses the provision of Operating Reserves. ESRs, including ESRs that participate in a CSR, are eligible to provide Operating Reserves. IPRs are not currently eligible to provide Operating Reserves in New York.

The NYISO proposes revisions to Section 15.4.2.1 that explain how the CSR injection Scheduling Limit and the CSR withdrawal Scheduling Limit will apply to combined Energy and Ancillary Service Schedules. For net injection schedules (measured at the Point of Injection/Point of Withdrawal) the sum of the amount of Energy each Generator is scheduled to provide,[51] the amount of Regulation Service the ESR is scheduled to provide, and the amount of each Operating Reserves product the ESR is scheduled to provide, shall not exceed the CSR injection Scheduling Limit. For net withdrawal schedules (again, measured at the Point of Injection/Point of Withdrawal) the net amount of Energy that the CSR Generators are scheduled to withdraw,[52] plus the amount of Regulation Service the ESR is scheduled to provide, shall not exceed the CSR withdrawal Scheduling Limit.

As explained in Section II.B of this filing letter, at times when the combined Energy and Ancillary Services Schedules of the CSR Generators exceed 90% of the CSR injection Scheduling Limit, the NYISO will assign a Wind and Solar Output Limit to the IPR Generator that participates in the CSR in order to permit both the ESR and the IPR to achieve their NYISO-issued real-time schedules and to comply with the NYISO's dispatch instructions.

xi. *Section 17.1, LBMP Calculation*

The NYISO proposes revisions to Services Tariff Sections 17.1.2.1.2.1.1 and 17.1.2.1.2.2.1 that will apply to all ESRs, including an ESR that participates in a CSR. The proposed changes clarify that an ESR's operating characteristics including its metered energy level, Lower Operating Limit, and Upper and Lower Storage Limits, will be considered in determining the ESR's upper and lower dispatch limits in the NYISO's Real-Time Dispatch ("RTD"). The proposed clarifications will more accurately reflects how RTD incorporates ESRs additional operating characteristics into its determination of Resource schedules.

[51] The amount of Energy the ESR is scheduled to provide can be a negative value if the ESR is scheduled to withdraw Energy.

[52] Only the ESR can be scheduled to withdraw Energy, but injections by the IPR affect the calculation.

xii. *Section 23.2, Mitigation Measures*

The NYISO proposes a variety of changes to Section 23.2 of its Market Mitigation Measures.

The NYISO proposes to add the proposed new defined term "Project" to its Market Mitigation Measures via a cross-reference to Section 30.1 of the OATT, where the proposed new term is defined. In two places in Section 23.2, the NYISO proposes to replace an existing term or existing terms with the proposed new, defined term "Project." The proposed changes will allow the NYISO to apply its mitigation rules to a Project that is comprised of a single Resource, or to a Project that includes several Resources that will each participate in the ISO-Administered Markets as distinct Resources. For example, the Generators in a CSR may be part of the same "Project" for interconnection purposes, but they will participate in the Energy, Ancillary Services and Capacity Markets as two distinct resources after they enter service.

The NYISO proposes to revise the definition of a **Renewable Exemption Applicant** to make clear that an IPR that participates in a CSR is permitted to be a Renewable Exemption Applicant and Qualified Renewable Exemption Applicant.

Finally, the NYISO proposes to replace the word "Generator" with the word "Electric Facility" (which includes both Generators and transmission facilities) in Section 23.2.4.1.1. The proposed revision will more clearly permit the NYISO to hold a Market Party responsible for Energy market physical withholding if a CSR Scheduling Limit is reduced in order to physically withhold one or both of the Generators that participate in the CSR.

xiii. *Section 23.3, Energy Market Physical Withholding Revisions*

Under the Mitigation Measures set forth in Section 23 of the Services Tariff the NYISO applies prospective mitigation or assesses an after-the-fact financial penalty when: (a) a Bid or action that violates a Tariff-specified **conduct** threshold occurs, ***and*** (b) the NYISO determines that the conduct violation caused an **impact** that exceeds one of the Tariff-specified impact thresholds.[53]

The NYISO proposes to revise the Energy market physical withholding conduct thresholds set forth in Sections 23.3.1.1.1 and 23.3.1.1.1.1 of the Mitigation Measures to address the possibility that a Market Party could reduce the CSR injection Scheduling Limit or the CSR withdrawal Scheduling Limit[54] it submits with its Bids in order to physically withhold one or both of the CSR Generators from providing Energy or Ancillary Services. The NYISO proposes to apply the same conduct thresholds to physical withholding that relies on reduced CSR Scheduling Limits as it applies to other types of physical withholding. In particular, withholding that exceeds 10% or 100 MW of a CSR Scheduling Limit outside the New York City

[53] Most (but not all) of the impact thresholds are set forth in Section 23.3.2.1 of the Mitigation Measures.

[54] If a Market Party reduces the CSR withdrawal Scheduling Limit to prevent its ESR from withdrawing Energy at times when LBMPs are low and it would be economic for the ESR to do so, then the ESR will not have as much Energy (or Operating Reserves) to sell at times when LBMPs are high.

Constrained Area, or withholding that exceeds 10% or 50 MW of a CSR Scheduling Limit in the New York City Constrained Area while a constraint is active, would violate the proposed conduct thresholds.

The NYISO also proposes a slight revision to Section 23.3.3.3.2.1.6 of the Mitigation Measures in order to recognize that an ESR may incur costs that it is eligible to recover from the NYISO (once demonstrated to the NYISO's satisfaction) when the ESR is required to purchase Energy at a higher price than it would otherwise be expected to pay in order to respond to a NYISO Supplemental Reliability Evaluation or Out-of-Merit instruction to protect system or local reliability.

xiv. *Sections 23.4.5.7, Buyer-Side Market Power Mitigation*

Services Tariff Section 23.4.5.7 of the NYISO's Mitigation Measures introduces the Buyer-Side Market Power Mitigation provisions that apply to some ICAP. Changes to this introductory section are limited to a pair of wording improvements that more clearly specify which entity or entities the Tariff language applies to.

Section 23.4.5.7.2 of the Mitigation Measures addresses the exemption of Examined Facilities located in Mitigated Capacity Zones from being assigned an Offer Floor. An Examined Facility is a facility that is requesting CRIS and subject to review for possible Buyer-Side Market Power Mitigation. In addition to updating terminology to use the new defined term "Project," and to replace the term "Installed Capacity Supplier" with the term "Examined Facility," the NYISO proposes two types of revisions to this Section. First, the NYISO proposes revisions that recognize that a single interconnection Project (such as a CSR) may now include or contain several Examined Facilities (Generators). Second, the NYISO proposes revisions that address the possibility that it may need to determine how to allocate Project costs between/among the several Examined Facilities that, together, comprise the Project. The revision is appropriate because Market Parties may have regulatory or economic incentives to over-assign costs to one of the two Examined Facilities in a Project. Appropriate cost allocation is necessary for the NYISO to apply Buyer-Side Market Power Mitigation appropriately.

Most of the NYISO's proposed revisions to Section 23.4.5.7.3 replace existing terminology with the new defined term "Project." The NYISO proposes to add language to Section 23.4.5.7.3.4 that requires both of the Examined Facilities (Generators) that together comprise a CSR Project to timely satisfy all of the information submission requirements. If the information submission requirements are not satisfied for both of a CSR's Generators, then the entire Project will be subject to an Offer Floor if the Project is located in a Mitigated Capacity Zone.

The NYISO proposes minor clarifications throughout Section 23.4.5.7.6. The most common change is the addition of the words "Examined Facility." The NYISO proposes two additions at the very end of this Section. Proposed new Section 23.4.5.7.6.9 explains that for Additional CRIS MW requested by an Examined Facility, the ISO may consider any shared costs when determining the methodology for calculating the Unit Net CONE for Additional CRIS MW. Again, this change is appropriate because Market Parties may have regulatory or economic

incentives to over-assign costs to one of the two Examined Facilities in a Project. Proposed new Section 23.4.5.7.6.10 explains that when two Examined Facilities are joined into the same CSR Project, the NYISO will evaluate the combined Project using the rules specified in Section 23.4.5.7.2 of the Mitigation Measures.

The proposed revision to Section 23.4.5.7.10 is a ministerial change to incorporate the new defined term "Project."

The NYISO proposes two substantive revisions to Section 23.4.5.7.13, which addresses the Renewable Exemption from Buyer-Side Market Power Mitigation. In Section 23.4.5.7.13.1.1 the NYISO proposes to permit a wind or solar IPR that participates in a CSR to request a Renewable Exemption at the same time the co-located ESR is pursuing a Competitive Entry Exemption from Buyer-Side Market Power Mitigation. The proposed treatment is appropriate because each of the CSR Generators will be evaluated in the Class Year Study for the possible application of Buyer-Side Market Power Mitigation as distinct facilities, and the ESR and IPR will each participate in the NYISO's Capacity, Energy and Ancillary Services Markets independently.[55]

For similar reasons, the NYISO proposes to revise Section 23.4.5.7.13.3.1 to state that a Generator that received a Renewable Exemption, and that subsequently participates in the NYISO's markets as part of a CSR, will not lose its Renewable Exemption because it is participating in the NYISO's markets as part of a CSR.

Finally, Section 23.4.5.7.14 addresses the Self Supply Exemption from Buyer-Side Market Power Mitigation. In Section 23.4.5.7.14.1.1(a) the NYISO proposes to clarify that a Developer of a pair of CSR Generators may request a Self Supply Exemption for one of its Examined Facilities (Generators) and at the same time request a Competitive Entry Exemption for its other Examined Facility (Generator). Again, the proposed treatment is appropriate because each of the CSR Generators will be evaluated in the Class Year Study for the possible application of Buyer-Side Market Power Mitigation as distinct facilities, and each Generator will participate in the NYISO's Capacity, Energy and Ancillary Services Markets independently.

C. Proposed Revisions to the OATT

i. *Section 2.7, Billing and Payment*

The settlement rules for Generators that participate in a CSR will be same as those applicable to stand-alone ESRs and IPRs, with one exception. The NYISO proposes to revise

[55] Prohibiting a wind or solar IPR from requesting a Renewable Exemption because it has elected to participate in the NYISO's markets as part of a CSR, or prohibiting an ESR from requesting a Competitive Entry Exemption because it has elected to participate in the NYISO's markets as part of a CSR, would result in disparate treatment of similarly situated facilities. The revisions the NYISO proposes are appropriate because they do not require a Developer to choose between the economic and procedural efficiencies provided by the CSR participation model, and the Buyer-Side Market Power Mitigation Exemptions its Generators are qualified to receive. While it is appropriate to permit Generators that participate in a CSR to request the applicable Exemptions, the NYISO intends to evaluate any contractual or other relationships between the Generators to determine if they cause a CSR Generator to be ineligible for an Exemption.

Section 2.7.2.1.5 of the Services Tariff to state that an ESR Generator that participates in a CSR will not pay a Transmission Service Charge and or a NYPA Transmission Adjustment Charge when it receives charging energy from its co-located IPR behind the shared Point of Injection/Point of Withdrawal. The ESR will still be required to pay TSC and NTAC for the net energy withdrawals from the grid by the combined CSR Generators at the Point of Injection/Point of Withdrawal if the ESR is not providing a FERC-approved "service." The proposed change is appropriate because the ESR is not expected to use New York Transmission Owner or New York Power Authority transmission facilities to receive Energy from its co-located IPR behind the CSR Generators' shared Point of Injection/Point of Withdrawal.

ii. *Sections 25.1, 30.1, 30.14 and 32.5 – Interconnection-related Definitions*

As described above, the NYISO proposes to add a new term "**Project**" for purposes of clarifying the units/facilities/Generators to which a particular Interconnection Queue position refers. The NYISO's current interconnection procedures, in part due to legacy terms from Order Nos. 2003 and 2006, include references to "units" (*e.g.*, multiple turbines within a single Generator), "facilities" (*e.g.*, Small Generating Facility and Large Generating Facility) and "projects" (*e.g.*, a proposed entrant into a Class Year Study or the facility described in a single Interconnection Request). In light of the multi-unit characteristic of CSRs,[56] the proposed term "Project" will facilitate references to (a) a CSR that is comprised of two distinct Generators, and/or (b) a multi-unit Generator. The new term "Project" can be applied to any collection of units/facilities/Generators behind the same Point of Interconnection that are included in a single Interconnection Request, to the extent such request is permitted by the then-effective interconnection rules.

The new term "Project" is proposed to be defined as: The proposed facility as described in a single Interconnection Request, to the extent permitted by Attachment X or Attachment Z to the ISO OATT, as applicable. For facilities not subject to the ISO's Large Facility Interconnection Procedures in Attachment X to the ISO OATT or Small Generator Interconnection Procedures in Attachment Z to the ISO OATT, the Project refers to the facility as described in a single Class Year Study Agreement or Expedited Deliverability Studies Agreement, to the extent permitted by Attachment S to the ISO OATT. The NYISO proposes to add this new definition to each of the existing definition sections/glossaries in the interconnection procedures in OATT Sections 25.1, 30.1, 30.14 and 32.5. The NYISO also proposes confirming edits using the new defined term "Project" throughout Attachments S, X and Z.[57]

With the proposed new term "Project" pointing to the facility as described in the Interconnection Request, the NYISO also proposes corresponding revisions to the definition of Interconnection Request in OATT Sections 30.1 and 32.5 to provide that, for purposes of an Interconnection Request, a Large Generating Facility or Small Generating Facility comprised of multiple Generators behind the same Point of Interconnection with a single/shared Point of

[56] A CSR is comprised of two Generators, an ESR and a wind or solar IPR.

[57] Conforming revisions to accommodate the new defined term "Project" are proposed to Sections 25.1, 25.3, 25.5, 25.6, 25.7, 25.8, 30.1, 30.3, 30.4, 30.14, 32.1, 32.4 and 32.5, and subsections thereof.

Injection will be considered a single Project (*i.e.*, a single Large Generating Facility if the total output is greater than 20 MW or a single Small Generating Facility if the total output is 20 MW or less) for purposes of the interconnection process, provided the Interconnection Request identifies a single Developer. This revision aligns the new defined term "Project" with the definition of Interconnection Request, which is necessary in light of the term Project's reference to the "project" as set forth in the Interconnection Request. The requirement that the Interconnection Request be submitted by a single Developer is necessary for administrative purposes in order to, for example, have only one entity that may enter into the requirement agreements and make cost allocation decisions.

NYISO also proposes revisions to the definitions of "Large Generating Facility" in OATT Section 30.1 and "Small Generating Facility" in OATT Section 32.5. Part of the proposed revisions to "Large Generating Facility" make the definition consistent with that used in the definition of Small Generating Facility in Attachment Z, with the exception of the MW level. In addition to these revisions for consistency, the NYISO proposes to add to each of these definitions language providing that a facility comprised of multiple Generators will be treated as a single Large or Small Generating Facility if the facility proposed in the Interconnection Request is comprised of multiple Generators behind a single Point of Interconnection, even if such Generators are of different technology types. The proposed revisions mirror the provisions in the new term "Project," and are needed to achieve consistency with the revised definition of "Interconnection Request."

iii. *Sections 30.3.1 and 32.4.11.2: Interconnection Request*

In addition to the revisions discussed above, with regard to the definition of an Interconnection Request, the NYISO proposes revisions to specify the requirements for a multi-Generator Project that seeks to submit a single Interconnection Request.

Section 30.3.1 of the OATT sets forth the circumstances that trigger the requirement to submit an Interconnection Request. One of these is a material increase in capacity as measured against a Project's "baseline ERIS." Section 30.3.1 defines baseline ERIS as the greater of (i) the existing Large Facility's CRIS level (for facilities pre-dating Class Year 2007) calculated pursuant to OATT Section 25.9.3.1, if applicable; or (ii) the final maximum summer megawatt electrical output studied for the facility, or if neither (i) nor (ii) are applicable, the baseline ERIS level is the value reflected in the Large Facility's interconnection agreement or other applicable documentation governing the Large Facility's interconnection. The NYISO proposes to add a parenthetical to clarify that for purposes of calculating the "final maximum summer megawatt electrical output studied for the facility," such megawatt level includes all Generators in a facility comprised of multiple Generators. This revision extends the current practice for multi-unit Large Facilities that comprise only one Generator to multi-unit facilities like a CSR, and is necessary to clarify the application of this rule to multi-Generator Projects. Section 30.3.1 of the OATT also specifies the circumstances in which separate Interconnection Requests are required. The NYISO proposes to revise this language to allow a Developer of a proposed Large Facility comprised of multiple Generators behind a single Point of Injection to submit either separate Interconnection Requests or a single Interconnection Request; provided however, the following requirements must be satisfied to submit a single Interconnection Request:

i. the Large Facility is proposed by a single Developer;

ii. the individual Generators comprising the Large Facility are co-located behind the same Point of Interconnection; and

iii. units in the Large Facility propose to interconnect at the same voltage levels (unless, as it proposes to interconnect, the Large Facility includes either (a) a 3-winding transformer with the potential to connect to two different voltage level lines simultaneously; or a combined cycle with a generator turbine and steam turbine connected at two different voltage levels).

The proposed revisions will permit a single Interconnection Request where doing so is practical under the interconnection procedures. A single Interconnection Request needs to be limited to a single Developer in order to ensure a single entity is taking on the Developer obligations set forth in Attachment X to the OATT and to avoid the possibility that multiple different participating entities might propose project changes, execute agreements, accept or reject Project Cost Allocations, or otherwise bind the Project (possibly in an inconsistent or contrary manner). The co-location requirement is necessary to ensure that the Project being evaluated is injecting its MW into a single Point of Interconnection. The interconnection studies evaluate the impact of a Project based on what it injects into the system at the Point of Interconnection. Finally, the voltage level requirement retains the current rule requiring separate Interconnection Requests for Projects interconnecting at different voltages unless the voltage difference is attributed to a 3-winding transfer or a combined cycle with a generator turbine and a steam turbine at different voltage levels.

To clarify the manner in which the MW level is determined for a Small Generating Facility comprised of multiple Generators, the NYISO proposes to add language to the Interconnection Request provisions in Section 32.4.11.2 of the OATT to provide that an Interconnection Request for a Small Generating Facility comprised of multiple Generators behind the same Point of Interconnection shall be evaluated on the basis of the aggregate capacity of the multiple Generators. These revisions further provide that, for a CSR, the aggregate capacity of the multiple Generators is the aggregate of the maximum injection capability of each individual Generator.

iv. *Sections 25.6, 30.3.2.2 and 32.4.11.2: Permissible Levels and Allocation of ERIS under the Interconnection Procedures*

Section 25.6 of the OATT addresses the ERIS allocation process for Projects comprised of multiple Generators, such as a CSR. To clarify the manner in which such provisions will apply to multi-Generator Project, the NYISO proposes revisions that require the Developer to request ERIS for the entire Project and, as required by Section 30.3.2.2, to specify the desired allocation of ERIS between/among the Generators in its Interconnection Request. Similar provisions are proposed in Section 32.4.11.2, which addresses Small Generating Facilities.

The NYISO further proposes to revise OATT Section 30.3.2.2 to provide that ERIS requested for the IPR in a CSR cannot exceed the CSR injection Scheduling Limit plus the full withdrawal capability of the co-located ESR. Permitting the IPR in a CSR to request ERIS that

exceeds the CSR injection Scheduling Limit is appropriate because the co-located IPR's Energy may be dispatched by the NYISO to both: (a) be injected onto the New York State Transmission System and, at the same time (b) be used to charge the co-located ESR.[58] Similar provisions are proposed in Section 32.4.11.2, which addresses Small Generating Facilities.

To document the requested ERIS allocation, the NYISO proposes changes to the forms on which Developer provide their requested ERIS MW levels, including:

- Appendix 1 to the Large Facility Interconnection Request form in Section 30.14;
- Appendix 2 to the Large Facility Interconnection Facilities Study Agreement in Section 30.14; and
- Attachment A to the Small Generator Facilities Study Agreement in Appendix 6 of Section 32.5.

v. *Sections 25.7, 25.8.1 and 30.3.2.4: Permissible Levels and Allocation of CRIS under the Interconnection Procedures*

To describe how CRIS will be evaluated, awarded and allocated among multi-unit Generators like CSRs, the NYISO proposes revisions to several sections of Attachment S, X and Z.

Section 25.7.6: CRIS Values

The NYISO proposes revisions to OATT Section 25.7.6 to clarify that for Projects comprised of multiple Generators (*e.g.*, CSR), a Project's CRIS shall be allocated among the Generators, as requested by the Developer. This methodology will facilitate consistency between the interconnection process and how the Generators participate in the ISO-Administered Markets based on the Developer's preference for CRIS allocation, subject to the limits set forth in Section 25.8.1.

To document the requested CRIS allocation, the NYISO proposes changes to the forms on which Developers provide their requested CRIS MW levels, including:

- Attachment B of the Expedited Deliverability Study Agreement in Appendix 2 of Section 25.11 (with corresponding revisions in Section 25.5.9.2.2 instructing Developer to indicate on that form the MW level of requested CRIS, up to the levels permitted by Section 25.8.1);

[58] It is possible for the maximum output of an IPR that participates in a CSR to exceed the CSR injection Scheduling Limit. Both the ESR and the IPR that participate in a CSR are expected to follow the schedules and dispatch instructions that the NYISO issues. The NYISO's economic Bidding construct is flexible enough to permit the resources in a CSR to indicate when the IPR's Energy output should be used to charge the co-located ESR.

- Appendix 1 to the Large Facility Interconnection Request form in Section 30.14;

- Appendix 2 to the Large Facility Interconnection Facilities Study Agreement in Section 30.14; and

- Attachment A to the Small Generator Facilities Study Agreement in Appendix 6 of Section 32.5.

The proposed revisions will allow the Developers to specify: (a) the amount of CRIS a Project is requesting, and (b) the allocation of available CRIS between or among the Generators in the Project, where applicable.

Sections 25.8.1 and 30.3.2.4: Maximum Requested CRIS

Existing rules in OATT Sections 25.8.1 and 30.3.2.4 set forth the maximum CRIS that may be requested and ultimately awarded to a Project. The NYISO proposes to consolidate these provisions under Section 25.8.1, with a cross reference in Section 30.3.2.4 pointing to Section 25.8.1.

The NYISO proposes revisions to OATT Section 25.8.1 to clarify how the maximum CRIS rules will apply to multi-Generator Projects like CSRs. Proposed revisions to Section 25.8.1 explain that for Projects comprised of multiple Generators (*e.g.*, CSRs), the MW level of CRIS will be requested and evaluated at the Project level, and allocated among the several Generators, as requested by the Developer. The ultimate allocation will be documented in the deliverability study report for the applicable deliverability study – either the Class Year Study or Expedited Deliverability Study.

Section 25.8.1 currently limits the MW value of CRIS that may be requested. This provision already provides for the possibility of a multi-unit project. It states that for such a Project, "the requested MW level of CRIS must be requested at the facility level." The NYISO proposes to add a parenthetical to clarify that "at the facility level" means corresponding to the Project as described in the Interconnection Request or revised Interconnection Request, as applicable. The NYISO proposes to add further specificity to this section by adding that the MW level of CRIS for a Project comprised of multiple Generators (*e.g.*, a CSR) will be determined at the facility *(i.e.*, Project) level and shall be allocated among the multiple Generators, as requested by Developer (to the extent permissible under Section 25.8.1 of Attachment S to the OATT). Finally, the NYISO proposes to add language stating that the Project's CRIS and allocation of CRIS among its units, as applicable, will be specified by the NYISO in the Class Year Deliverability Study report.

Section 25.8.1 specifically caps the MW level of CRIS a Developer may request, limiting it to the minimum of the following: (a) the expected maximum injection capability in MW; (b) the nameplate capacity of the Project (*i.e.*, the collective injection capability of all units within the proposed Project expressed in MW); or (c) the sum of facility's requested and existing ERIS, as applicable. To clarify what "expected maximum injection capability" means for a

multi-Generator Project, the NYISO clarifies that it refers to the expected maximum injection capability in MW for the Project as described in the Interconnection Request, as revised if applicable, including all co-located Generators sharing the same injection limit (*e.g*., both of the Generators in a CSR).

Proposed revisions to Section 25.8.1 also clarify that for existing facilities proposing a modification to add a Generator at the same Point of Interconnection for which the Developer requests CRIS, the collective CRIS of the resources in the modified facility (*e.g.*, a CSR that results from adding an ESR to an existing wind or solar IPR) cannot exceed the CSR injection Scheduling Limit. In addition the proposed rules provide that the amount of CRIS a multi-unit project (such as a CSR) receives cannot be increased by first requesting CRIS for each of the Generators that will participate in the Project, then seeking to joint them together. The proposed rule will treat a modified facility the same way it would have been treated had the Developer initially proposed the Project as a CSR. This prevents a Developer from being able to submit separate Interconnection Requests and later combine them in a way that would allow its Generators to obtain more CRIS than they would have received if the Developer had proposed a single, unified, CSR Project from the outset.

vi. *Sections 25.3, 30.3.2.6 and 32.4.11.1: 2 MW Additional CRIS*

Under existing rules, Generators that have CRIS may obtain up to 2 MW of additional CRIS without having such additional CRIS be subject to a deliverability evaluation. For Projects comprised of multiple Generators (*e.g*., a pair of CSR Generators) the NYISO proposes to clarify in Sections 25.3 and 30.3.2.6 that the CRIS increase of up to 2 MW is only available at the Project level, not for each of the Generators that, together, comprise the CSR. For a multi-Generator Project, this would allow an increase of up to 2 MW of CRIS for the entire Project without requiring a deliverability evaluation.

The NYISO's proposed approach is consistent with its existing practice of awarding up to 2 MW of additional CRIS based on the facility that is the subject of the Interconnection Agreement. A Large Generating Facility with 10 different turbines is evaluated a single Project with a single CRIS value today. Upon registration in the NYISO Capacity Market, the available CRIS is allocated among the 10 turbines that, together, comprise the facility. If that Large Generating Facility requests additional CRIS, but is not prepared to undergo a deliverability evaluation, it can request up to 2 MW of additional CRIS for the entire Large Generating Facility. A 2 MW increase is not permitted for each of the ten turbines within the Large Generating Facility. This rule is appropriate because the 2 MW increase is only *de minimis* if it applies to the Large Generating Facility as a whole. To allow each of ten individual units/turbines to obtain a 2 MW increase could permit a significant MW level of increased CRIS to be obtained (20 MW) without being subject to the deliverability requirements in Attachment S to the OATT. The proposed clarification to this rule is necessary to limit the incremental MW of CRIS carved out from the deliverability evaluation to only 2 MW per Project, consistent with the NYISO's current treatment of multi-unit Generators, and the intended *de minimis* nature of the 2 MW exception. Parallel revisions that apply to Small Generating Facilities are proposed in Section 32.4.11.1 of the OATT.

vii. *Section 25.9.4: Same Location CRIS Transfers*

Existing CRIS transfer provisions allow a transfer of CRIS between facilities without such CRIS transfer being subject to a deliverability evaluation if (1) the facilities are at the same electrical location, (2) the transferor facility is deactivating, and (3) the transferee facility is operational before the CRIS rights expire – within 3 years after the transferor facility become CRIS-inactive. This tariff section essentially allows one Generator to step into another's CRIS rights.

The NYISO proposes revisions to OATT Section 25.9.4 to clarify that for a CRIS transfer from a Project comprised of multiple Generators (such as a CSR), the CRIS may only transfer at the "Project" level, not the individual Generator level, thereby requiring the entire Project to deactivate in order for its CRIS to be freed up to transfer to a new facility/Project. This proposed approach is necessary to align the transfer of CRIS with the manner in which the NYISO initially evaluates the CRIS. For instance, CRIS for a multi-Generator Project is evaluated at the Project level. The collective CRIS amount for the multi-Generator Project is subject to System Deliverability Upgrades ("SDU") and a single SDU Project Cost Allocation. While the CRIS is allocated among the Generators within the Project in the manner requested by the Developer, allowing each individual Generator within a Project to transfer its CRIS would treat multi-Generator Projects differently than how a "single Generator" Project that includes several turbines is treated.

viii. *Sections 30.3.2.2, 30.4.4 and 32.1.4.1: Project Modifications and Transition Rule Applicable to Multi-Generator Projects*

A modification to an existing Interconnection Request is evaluated to determine whether it constitutes a Material Modification that cannot be accommodated as part of the existing Interconnection Request, but instead requires a separate Interconnection Request. The interconnection procedures applicable to Project modifications are set forth primarily in Section 30.4.4 of the OATT, however Section 30.3.2.2 also includes certain modification provisions. The NYISO proposes revisions to both sections.

Section 30.3.2.2 of the OATT addresses modifications to the interconnection service evaluation election (*i.e.*, changes to the MW level of requested ERIS and/or CRIS). Specifically, this section allows a Developer to modify its interconnection service evaluation election when it executes a Class Year Study Agreement. The NYISO proposes to supplement this language to explain that the rules apply regardless of whether the Large Facility requests ERIS, or ERIS together with CRIS. Section 30.3.2.2 explicitly permits an increase in requested CRIS prior to execution of a Class Year Study Agreement. To improve the internal consistency of this Tariff section and avoid causing confusion, the NYISO proposes to delete language later in Section 30.3.2.2 which states that *any* increase in MW initially requested to be evaluated for CRIS shall constitute a Material Modification. The statement the NYISO proposes to delete is not entirely accurate because some increases are permitted – those requested prior to execution of the Class Year Study Agreement. Deleting the identified language from Section 30.3.2.2 eliminates an apparent inconsistency. The NYISO's proposed revisions cross reference Section 30.4 of the

OATT, which requires that the modification to the service election not include a modification that is a Material Modification.

Section 30.4 of the OATT identifies certain modifications that are *per se* not Material Modifications. Among such modifications are those expressly provided for in Section 30.4.4.2, all of which must be requested prior to return of the executed Interconnection Facility Study Agreement. The NYISO proposes to explicitly reference in Section 30.4.4.2 the ability to combine Projects under the proposed transition rule, subject to the following requirements:

- projects must already be in the Interconnection Queue prior to the effective date of these rules;
- the modification must be requested prior to the return of the executed Interconnection Facility Study Agreement;
- projects must be co-located behind the same Point of Interconnection;
- Developer must submit a revised Interconnection Request reflecting the modification to become a Project comprised of multiple Generators, and identifying the Developer of record for purposes of the interconnection process; and
- Developer must demonstrate that the Developer of record has Site Control for the combined Project.

The NYISO's proposed revision to Section 30.4.4.2 further provide that upon NYISO approval of such modification, the combined Project shall proceed as a single Project for purposes of the next interconnection study required for the Project that has advanced the farthest in the interconnection study process (*i.e.*, a Project with a completed SRIS may combine with a Project without a completed SRIS; provided however, the combined Project will be evaluated as a single Project in the Class Year Study). As long as the Projects are combined prior to undergoing the Class Year Study, the reliability impacts of the interconnection will be assessed even though one of the Projects may not have completed a SRIS. An overview of this transition rule is also included in Section 30.4.3. Parallel revisions applicable to Small Generating Facilities are proposed to Section 32.1.4.1 of the OATT.

Consistent with the proposed transition rule and existing rules regarding modifications permitted under Section 30.4.4, the NYISO proposes to add language to 30.4.4.3 to make clear that any modification to a Class Year Project during a Class Year Study for which it is a member shall constitute a Material Modification requiring the Developer to withdraw the proposed modification or proceed with a new Interconnection Request for the modification.

ix. *Sections 25.6.2.3.1 and 25.8.2: Treatment of multi-Generator Projects in a Class Year Study*

Attachment S to the OATT provides for the rules for processing Projects in the its Class Year Interconnection Facilities Study ("Class Year Study"). The Class Year Study evaluates the cumulative impact of a group of projects—a "Class Year" of projects. All Large Facilities studied under Attachment X (output of which is larger than 20 MW) are required to participate in the Class Year Study. Certain Small Generating Facilities studied under Attachment Z (output of which is 20 MW or less) are also required to participate in the Class Year Study,[59] and Small Generating Facilities requesting CRIS of greater than 2 MW must participate in the deliverability elements of the Class Year Study to obtain CRIS.[60] The NYISO proposes certain revisions to the Class Year Study rules in Attachment S to clarify how such rules will apply to multi-Generator Projects, including CSR.

In order to enter a Class Year Study, one of the requirements for a Large Generating Facility is satisfaction of a regulatory milestone requirement by one of the following methods:

- Satisfaction of an applicable regulatory milestone set forth in Section 25.6.2.3.1 of the OATT;

- Payment of a two-part deposit consisting of $100,000 plus $3,000/MW for the requested ERIS; or

- Demonstration that the Developer has obtained for the Project a New York State Energy Research and Development Authority ("NYSERDA") Renewable Portfolio Standard agreement, (b) a NYSERDA Renewable Energy Certificate agreement (c) a NYSERDA Market Acceleration Incentive agreement, or (d) a power purchase agreement for the full output of the Large Facility.[61]

The NYISO proposes revisions to Section 25.6.2.3.1.1 to clarify that, with respect to the regulatory milestone requirement, the applicable milestone must be achieved for all the Generators in a multi-unit Large Generating Facility.

In anticipation of the possibility that a multi-Generator Project like a CSR may have satisfied the regulatory milestone requirement for one Generator but not the other, the NYISO

[59] As described in Section 32.3.5.3 of Attachment Z, if any Interconnection Study determines that a Small Generating Facility requires a non-Local SUF to interconnect, then that Small Generating Facility is required to enter in the next Class Year Study, and cost responsibility is allocated to the Small Generating Facility in accordance with the procedures and methodologies in Attachment S. *See also* NYISO Transmission Interconnection and Expansion Manual (Issued: August 2, 2019) at Section 3.4.4.

[60] A Developer of a generating facility that is requesting 2 MW or less of CRIS may obtain this amount without being evaluated for deliverability under the NYISO Deliverability Interconnection Standard. *See* OATT, Sections 25.3.1, 32.1.1.7. If a Developer requests greater than 2 MW of CRIS, its proposed generating facility must be evaluated for deliverability as part of a Class Year Study for a Class Year of projects. *See* OATT Sections 25.3.1, 32.1.1.7.

[61] OATT Section 25.6.2.3.1.

proposes revisions to Section 25.6.2.3.1 to provide that, in such scenario, the Generator for which the Project has not satisfied an applicable regulatory milestone or obtained a NYSERDA or power purchase contract, the Developer may enter the Class Year Study by submitting the two-part deposit corresponding to the MW level of ERIS for that Generator. This allows a multi-unit Generator to enter a Class Year Study without having to submit a deposit for the portion of its Project for which it has already satisfied the regulatory milestone or obtained a NYSERDA or power purchase contract.

Additional revisions are proposed to the Class Year Study decision and settlement process at the conclusion of the study. Consistent with the defined term "Project," and the rules regarding what may be included in a single Interconnection Request, a Project entering a Class Year Study, if comprised of multiple Generators, is deemed one Project with one Developer in the Class Year Study process. As a result, a Project Cost Allocation will be provided to the entire Project, the cost allocation will not be broken down to address the different Generator components of the Project. The NYISO proposes to add language to OATT Section 25.8.2 to provide that a Developer for a Class Year Project that is a multi-Generator Project must submit a single notice (acceptance or non-acceptance) in the Class Year decision process. A Developer proposing a CSR may not submit an Acceptance Notice for one of the CSR Generators and a Non-Acceptance notice for the co-located Generator. This aligns with the NYISO's current process, which treats a Class Year Project as one entity for purposes of Project Cost Allocation and acceptance or non-acceptance thereof.

x. *Other Revisions to the Interconnection Procedures*

The NYISO's proposed revisions to OATT Attachments S, X and Z also include a number of minor revisions intended to clarify and clean up existing language. In addition to ministerial edits, the NYISO proposes to make the revisions specified and explained in the table below:

Tariff Section	**Description and Rationale of Proposed Modification**
OATT Section 25.1.1 ("Purpose of the Rules")	Replace the term "[t]hese rules" with "rules in this Attachment S to the ISO OATT" to be more specific regarding the referenced rules.
OATT Section 25.1.2 (Definition of "Contribution Percentage")	Replace the term "projects" with "Projects in the same Class Year" to make clear which projects this definition refers to.
OATT Section 25.1.2 (Definition of "Developer")	Replace the reference to "owners of facilities" with "developers of existing facilities (*i.e.*, facilities that have completed the applicable interconnection studies and have an effective interconnection agreement)" to clarify what facilities are considered "existing."
OATT Section 25.1.2 (Definition of "System Upgrade Facilities")	Replace reference to "proposed interconnection projects" with "proposed interconnections" to avoid confusion between "projects" and the new defined term "Project."
OATT Section 25.3.1 ("Scope and Purpose of [Deliverability Interconnection] Standard")	To clarify existing language using the term "facility" that cannot be revised to use the new term "Project," add the following sentence, "For purposes of this Section 25.3.1, a facility comprised of multiple Generators is a

Tariff Section	Description and Rationale of Proposed Modification
	single 'facility.'"
OATT Section 25.3.1 ("Scope and Purpose of [Deliverability Interconnection] Standard")	Rather than duplicating the permissible levels of CRIS that may be requested, provide a cross reference to Section 25.8.1.
OATT Section 25.5.9.2.1 ("Expedited Deliverability Study Process")	Replace placeholder "effective date" with the effective date of the applicable tariff revisions to which that applied – February 18, 2020.
OATT Section 25.7.8.2.1.3 ("Class Year Study") and 25.7.8.2.2.2 ("Expedited Deliverability Study")	In language regarding how multi-Generator Projects will be derated in the deliverability evaluation, replace the term "units" with "Generators" for clarity and consistency with other provisions in Attachment S.
OATT Section 25.7.8.2.2.3 ("Expedited Deliverability Study")	Replace the term "facility Developer" with "Developer" to omit unnecessary and potentially confusing terminology.
OATT Section 25.8.1 ("Project Cost Allocation Figures")	Revise section heading to "Maximum Requested CRIS and Project Cost Allocation Figures" to reflect the entirety of topics covered by Section 25.8.1 and its subsections.
OATT Section 25.8.1 ("Project Cost Allocation Figures")	To provide increased clarify and readability, (i) add additional detail to the introductory section to explain which Projects must specify their Interconnection Service elections and by when, and (ii) clarify that a project may, but does not have to, request CRIS.
OATT Section 25.8.1 ("Project Cost Allocation Figures")	Eliminate an unnecessary parenthetical for readability
OATT Section 25.9.3.1 ("Retaining CRIS Status")	Add a clarifying phrase that refers to CRIS as allocated among the individual units (*i.e.*, individual Generators that comprise the Project), as applicable
OATT Sections 25.5.9.3.1.1.1 and 25.9.3.1.1.2 ("Retaining CRIS Status")	Replace placeholder "effective date" with the effective date of the applicable tariff revisions to which that applied – February 29, 2020.
OATT Section 25.9.3.4 ("CRIS for Facilities Not Subject to ISO Interconnection Procedures")	Replace placeholder "effective date" with the effective date of the applicable tariff revisions to which that applied – February 29, 2020.
OATT Section 25.9.4 ("Transfer of Deliverability Rights – Same Location")	Replace the term "unit" with "Large Facility" for clarity
OATT Section 30.3.1 ("Interconnection Requests – General")	For completeness and for consistency with other interconnection tariff provisions, the NYISO proposes to supplement existing language regarding the requirement to submit a new Interconnection Request, to include material modifications and increases in capacity of Small Generating Facilities that result in total output in excess of 20 MW.
OATT Section 30.3.1 ("Interconnection Requests – General")	Addition of a cross reference to Attachment P to the OATT to clarify the specific section of Attachment P referenced in this section.
OATT Section 30.3.2.3 ("ERIS Elections")	Replace language referencing the Class Year as the mechanism for evaluating CRIS increases to reference both the Class Year Study and the Expedited Deliverability Study.
OATT Section 30.3.2.4 ("CRIS Elections")	Clarify that in determining whether SDUs are required, the Project is evaluated to determine whether it is deliverable *at its requested CRIS MW level*. This

Tariff Section	Description and Rationale of Proposed Modification
	clarification is helpful to distinguish between the Project's total capability vs. the MW it requests to be evaluated for CRIS.
OATT Section 30.4.3 ("Transferability of Queue Position")	Requires Developer that request to transfer its queue position to another entity to demonstrate that new entity has Site Control for the Project. This is necessary to prevent projects from being transferred to an entity that does not have the site control necessary to move forward with the project.
OATT Section 30.14, Appendix 1 ("Large Facility Interconnection Request"), Appendix 1-A ("External CRIS Rights Request"), Appendix 2 ("Interconnection Facilities Study Agreement"),	Streamline and reorganize form and eliminate the request for information not needed for the evaluation of projects in the interconnection studies.
OATT Section 32.1.1.7 ("Applicability [of Small Generator Interconnection Procedures]")	Add a parenthetical to clarify that the MW size of a Small Generating Facility is inclusive of all Generators in the Small Generating Facility.
OATT Sections 32.1.2.4.4 and 32.1.2.2.5 ("Pre-Application")	Following revisions for clarity and consistency with new defined terms: - Replace "assets behind the single facility meter" with "Generators behind the single Point of Injection" - Replace the term "facility" with "Small Generating Facility" - Replace the term "units" with "Generators" - Replace the term "facility meter" with "Point of Injection"
OATT Section 32.5, Appendix 1 and Appendix 7 (Definition of "Commercial Operation Date")	Replace "unit" with "Small Generating Facility" for clarity
OATT Section 32.5, Appendix 1 and Appendix 7 (Definition of "NYISO Deliverability Interconnection Standard")	Restructured first sentence for readability
OATT Section 32.5, Appendix 1 and Appendix 7 (Definition of "NYISO Minimum Interconnection Standard")	Revise definition to mirror the same definition in Attachment X.
OATT Section 32.5, Appendix 2 ("Small Generator Interconnection Request")	Streamline and reorganize form and eliminate the request for information not needed for the evaluation of projects in the interconnection studies
OATT Section 32.5, Appendix 6, Attachment A ("Facilities Study Agreement")	Revise statement on data form attached to Facilities Study Agreement explaining that CRIS request greater than 2 MW must be evaluated in a Class Year Study *or Expedited Deliverability Study* and that such evaluations are subject to the eligibility and entry requirements specified in Attachment S
OATT Section 32.5, Appendix 7, Attachment 1 (Definition of "Small Generating Facility")	Replace the term "facility meter" with "Point of Interconnection" consistent with revisions to Attachments S and X definitions

xi. *Section 38.3, Short-Term Reliability Process*

The NYISO's proposed revisions to OATT Sections 38.3.1.6 and 38.3.2 clarify that if one of the Generators participating in a CSR enters an IIFO or a Mothball Outage, the remaining CSR Generator can continue to participate in the NYISO's markets as part of a CSR unless or

until the CSR Generator that is in the IIFO or Mothball Outage becomes Retired. The proposed revisions are appropriate because it requires a significant administrative effort by the affected Market Participant and the NYISO to change the participation model that applies to a Generator, and the NYISO has not identified any inappropriate benefits that the remaining CSR Generator would receive because it is permitted to continue to participate as part of a CSR. These rules are mirrored in Section 5.18 of the Services Tariff.

D. Miscellaneous and Ministerial Changes

The NYISO's proposed revisions to the OATT and Services Tariff include a number of minor revisions intended to conform, clarify or clean-up existing language. The NYISO proposes to make the following types of revisions in a number of places in the Tariffs.

- correct capitalization;
- revise or correct internal tariff cross-references;
- correct spacing and formatting;
- insert or delete periods and commas; and
- update the headings and section numbering to address new, revised, and delated tariff provisions.

IV. EFFECTIVE DATES

The NYISO respectfully requests that the revisions to the interconnection rules and the ICAP mitigation rules proposed in this filing, along with the defined terms Co-located Storage Resources and CSR Scheduling Limit, be permitted to become effective on March 31, 2021, which is 61 days after the date of this filing. The requested effective date will enable developers of CSRs to submit, and the NYISO to evaluate, CSR interconnection requests before the NYISO is able to implement its CSR market participation rules.

The NYISO requests a flexible effective date between October 1, 2021 and December 31, 2021 for all of the other Tariff revisions proposed herein. On this second effective date (and not before) the NYISO will become able to permit CSR to participate in its Energy, Capacity and Ancillary Services market. The NYISO cannot propose a more precise effective date before the software changes necessary to implement CSR in its Energy, Ancillary Services and Capacity Markets are finished and adequately tested. The NYISO proposes to submit a compliance filing at least two weeks prior to the proposed effective date that will specify the date on which the revisions will take effect. Consistent with Commission precedent, the NYISO's compliance filing will provide adequate notice to the Commission and Market Participants of the implementation date for the CSR market participation rules proposed in this filing.[62]

[62] *See, e.g., New York Indep. Sys. Operator, Inc.*, 106 FERC ¶ 61,111 at P 10 (2004); Docket No. ER 11-2544-000, *New York Indep. Sys. Operator, Inc.*, Letter Order at 1 (February 10, 2011); Docket No. ER15-485-000, *New York*

V. STAKEHOLDER APPROVAL

The tariff revisions proposed in this filing were discussed with stakeholders at the NYISO's November 11, 2020 BIC meeting and its November 18, 2020 MC meeting. The proposed revisions were unanimously approved by both the BIC and the MC, with abstentions. On January 11, 2021 the NYISO Board of Directors approved the proposed Tariff revisions for filing with the Commission, pursuant to Section 205 of the Federal Power Act.

VI. COMMUNICATIONS

Communications and correspondence regarding this filing should be directed to:

Robert E. Fernandez, Executive Vice President &
General Counsel
Raymond Stalter, Director of Regulatory Affairs
*Alex M. Schnell, Assistant General Counsel,
Registered Corporate Counsel
*Sara B. Keegan, Senior Attorney
David Allen, Senior Attorney
James H. Sweeney, Senior Attorney
*Gregory J. Campbell, Senior Attorney
New York Independent System Operator, Inc.
10 Krey Boulevard
Rensselaer, NY 12144
Tel: (518) 356-6000
Fax: (518) 356-8825
rfernandez@nyiso.com
rstalter@nyiso.com
aschnell@nyiso.com
dallen@nyiso.com
jsweeney@nyiso.com
gcampbell@nyiso.com

*Persons designated to receive service[63]

VII. LIST OF DOCUMENT SUBMITTED

The NYISO respectfully submits the following documents with this filing letter:

1. An illustrative version of Services Tariff Section 13 that identifies the specific Tariff revisions that the NYISO proposed and the Commission accepted in Docket No.

Indep. Sys. Operator, Inc., Letter Order at 2 (January 15, 2015); *New York Indep. Sys. Operator, Inc.*, 151 FERC ¶ 61,057 at P 20 (2015).

[63] Waiver of the Commission's regulations (18 C.F.R. § 385.203(b)(3)) is requested to the extent necessary to permit service to three NYISO counsel.

ER19-2276-000, *et al*., including the revisions that the NYISO will request permission to make effective on March 31, 2021 (Attachment I);

2. A clean version of the proposed revisions to the OATT, effective March 31, 2021 (Attachment II);

3. A blacklined version of the proposed revisions to the OATT, effective March 31, 2021 (Attachment III);

4. A clean version of the proposed revisions to the Services Tariff, effective March 31, 2021 (Attachment IV);

5. A blacklined version of the proposed revisions to the Services Tariff, effective March 31, 2021 (Attachment V);

6. A clean version of the proposed revisions to the OATT, with an effective date to be determined (Attachment VI);

7. A blacklined version of the proposed revisions to the OATT, with an effective date to be determined (Attachment VII);

8. A clean version of the proposed revisions to the Services Tariff, with an effective date to be determined (Attachment VIII); and

9. A blacklined version of the proposed revisions to the Services Tariff, with an effective date to be determined (Attachment IX).

VIII. SERVICE

The NYISO will send an electronic copy of this filing to the official representative of each of its customers, to each participant on its stakeholder committees, to the New York Public Service Commission and the New Jersey Board of Public Utilities. In addition, the complete public version of this filing will be posted on the NYISO's website at www.nyiso.com.

IX. CONCLUSION

WHEREFORE, for the foregoing reasons the New York Independent System Operator, Inc. respectfully requests that the Commission accept this filing without requiring any modifications, on the effective dates specified in Section IV of this filing letter.

Respectfully submitted,

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

By: */s/ Alex M. Schnell*
Alex M. Schnell
Assistant General Counsel,
Registered Corporate Counsel
Sara B. Keegan
Senior Attorney
Gregory Campbell
Senior Attorney

cc: Jignasa Gadani
Jette Gebhart
Leanne Khammal
Kurt Longo
John C. Miller
David Morenoff
Larry Parkinson
Douglas Roe
Frank Swigonski
Eric Vandenberg
Gary Will