

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

New York Independent System Operator, Inc.)))	Docket No. ER21-1001-000
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**REQUEST FOR LEAVE TO ANSWER AND ANSWER OF
NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.**

Pursuant to Rules 212 and 213 of the Rules of Practice and Procedure promulgated by the Federal Energy Regulatory Commission (“Commission”),¹ the New York Independent System Operator, Inc. (“NYISO”) hereby submits this Request for Leave to Answer and Answer in response to the Limited Protest (“Limited Protest”) that was filed by the U.S. Energy Storage Association (“ESA”), American Clean Power Association (“ACPA”), Alliance for Clean Energy – New York (“ACE-NY”), and New York Battery and Energy Storage Technology Consortium (“NY-BEST”) on February 19, 2021, in response to the NYISO’s submission of its Proposed Tariff Revisions to Implement Co-located Storage Resources (the “CSR Filing”).²

The CSR Filing proposes revisions to the NYISO’s Energy and Ancillary Services³ market rules, its interconnection process, its metering rules, its Installed Capacity (“ICAP”) market participation rules and its Mitigation Measures to accommodate the interconnection and participation of an Energy Storage Resource (“ESR”) that is co-located with a wind or a solar Intermittent Power Resource (“IPR”) as a set of Co-located Storage Resources (“CSR”). The ESR and wind or solar IPR will each participate in the NYISO-administered Energy, Ancillary

¹ 18 C.F.R. §§ 385.212 and 385.213.

² Docket No. ER21-1001-000, *New York Independent System Operator, Inc.*, Proposed Tariff Revisions to Implement Co-located Storage Resources (January 29, 2021).

³ Capitalized terms that are not defined herein have the meaning specified in the NYISO’s Open Access Transmission Tariff or in its Market Administration and Control Area Services Tariff.

Service, and ICAP markets as distinct Generators,⁴ and will receive separate settlements. The proposed rules require the two Generators to share an injection limit, called a CSR injection Scheduling Limit, that can (but need not) be less than their combined output capability.⁵ The NYISO's Day-Ahead Security Constrained Unit Commitment ("SCUC"), Real-Time Commitment ("RTC") and Real-Time Dispatch ("RTD") will economically schedule each of the Generators that participate in a CSR in a manner that respects both the CSR injection Scheduling Limit and the CSR withdrawal Scheduling Limit.⁶

The CSR Filing is just, reasonable, and not unduly discriminatory. The Limited Protest raises just "one concern"⁷ with the CSR Filing, and does not question the justness and reasonableness of the proposal as a whole. Specifically, the Limited Protest argues that the NYISO should not assess ISO Annual Budget Charges ("ISO Charges") or FERC Annual Charges ("FERC Charges") to Generators that participate as a CSR for Energy that is produced by a wind or solar IPR and withdrawn by the ESR in order to charge behind the CSR Generators' shared Point of Injection/Point of Withdrawal ("POI") to the transmission system.

As explained below, the NYISO worked collaboratively with its stakeholders to develop the CSR market rules and proposed Tariff revisions. The concern that is identified in the Limited Protest was discussed in the NYISO's shared governance process, but did not gain broad acceptance by participating stakeholders or the NYISO because: (a) it is not consistent with the

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.

⁶ See CSR Filing at 8-10.

⁷ Limited Protest at 2.

decision to treat each of the CSR Generators as a distinct Market Participant to the greatest extent possible; (b) the NYISO's proposal will provide the same scheduling and dispatch services to CSR Generators as the service it provides to comparable stand-alone Generators; and (c) the NYISO's cost to provide scheduling and dispatch services to CSR Generators will equal or exceed the cost the NYISO incurs to provide scheduling and dispatch services to comparable stand-alone Generators.

Making the change to the assessment of ISO and FERC Charges that is proposed in the Limited Protest would give ESRs and wind or solar IPRs that participate in the NYISO's markets as a CSR an unjustified advantage over stand-alone ESRs and IPRs. The NYISO's proposed approach treats CSR Generators and equivalent stand-alone Generators comparably. The Commission should reject the arguments in the Limited Protest for the reasons explained below. The CSR Filing should be accepted without modification or condition.

I. REQUEST FOR LEAVE TO ANSWER

The Commission has discretion to accept answers to protests⁸ and has routinely done so when an answer: (1) will lead to a more complete and accurate record; (2) helps the Commission better understand the issues; (3) clarifies matters in dispute or errors; and/or (4) provides information that will assist the Commission in rendering a decision.⁹ This answer clarifies

⁸ 18 C.F.R. § 385.213(a)(2).

⁹ See, e.g., *New York Independent System Operator, Inc.*, 158 FERC ¶ 61,028 (2017) (accepting answers to protests that provided information that assisted the Commission's decision making process); *New York Independent System Operator, Inc.*, 134 FERC ¶ 61,058 (2011) (accepting answers to protests because they provided information that aided the Commission in better understanding the matters at issue in the proceeding); *New York Independent System Operator, Inc.*, 99 FERC ¶ 61, 246 (2002) (accepting answers to protests that help clarify issues and did not disrupt the proceeding); *New York Independent System Operator, Inc.*, 91 FERC ¶ 61,218 (2000) (accepting an answer deemed useful in addressing issues arising in the proceeding at issue); and *Morgan Stanley Capital Group, Inc. v. New York Independent System Operator, Inc.*, 93 FERC ¶ 61,017 (2000) (accepting an answer that was helpful in the development of the record).

matters in dispute, corrects certain erroneous assertions and assumptions, provides information that will assist the Commission, and assists in the development of a complete record in this proceeding.¹⁰ Accordingly, the Commission should accept and consider this Answer.

II. ANSWER

A. The Proposal to Treat the ESR and the Wind or Solar IPR that Participate in a CSR as Two Distinct Resources Recognizes the Resources' Operating Characteristics and Enhances Market Participation Opportunities

Permitting each of the CSR Generators to participate in the ISO-Administered Markets as distinct resources enables the NYISO to apply existing market rules that are tailored to the operating characteristics of each Generator. The proposed market design provides a number of benefits to Developers of these resources.

First, it will enable the NYISO to make a participation model for an ESR plus wind or solar IPR combination¹¹ available to Developers in the near-term.

Second, an ESR that participates in a CSR benefits because it will be eligible to provide Operating Reserves and Regulation Service, so it can earn revenues for providing these services. Wind and solar IPRs are not currently eligible to provide Operating Reserves or Regulation Service in New York because the variability of their output is “beyond the control of the facility owner or operator.”¹² More work needs to be done to determine whether and the extent to which aggregations that include wind and solar IPRs can reliably provide Operating Reserves or

¹⁰ This Answer does not respond to all assertions made in the Protest. The Commission should not construe the NYISO's silence as to any particular assertion or argument as agreement or acquiescence.

¹¹ The NYISO developed the wind or solar IPR plus ESR combination because many stakeholders told the NYISO they wanted the ability to develop and operate this combination of resource types.

¹² Services Tariff Section 2.9, definition of Intermittent Power Resource.

Regulation Service. The CSR proposal will permit a co-located ESR to sell Operating Reserves and Regulation Service, and the rules can be in place by the end of 2021.

Finally, a wind or solar IPR that participates in a CSR also benefits from NYISO's decision to treat each CSR Generator as a distinct Resource. Due to the inherent variability of their Energy output, wind and solar IPRs are not subject to the same financial penalties as other Resources when their output does not follow NYISO-issued schedules or dispatch.¹³ Except at times when the CSR Generators' combined schedule is very close to the CSR injection Scheduling Limit,¹⁴ or when an IPR's operation could jeopardize reliability, a wind or solar IPR that participates in a CSR will be paid the LBMP at the CSR's location for *all* of its Energy output, just like a stand-alone wind or solar IPR. The NYISO is able to accord a wind or solar IPR that participates in a CSR the same type of output flexibility as stand-alone wind or solar IPRs *because* it is treated as a stand-alone resource.¹⁵

B. The NYISO Does Not Propose to Assess Transmission Service Fees to CSR Generators when the ESR Withdraws Energy that the Co-located IPR Produces

The Limited Protest discusses charges for transmission service and wheeling service.¹⁶ It argues that because the facilities used to transmit power from the wind or solar IPR to the co-located ESR will belong to the CSR (the interconnection customer), not to a New York

¹³ Services Tariff Sections 15.3A.1 and 15.3A.2 require most Resources to operate consistent with the NYISO's dispatch, but permit wind and solar IPRs to be paid for the Energy they produce.

¹⁴ See CSR Filing at 9-10.

¹⁵ It would not be appropriate for the NYISO to accord the same degree of flexibility to a resource like an ESR that can follow NYISO's dispatch signals and operate to a schedule. In the not-so-distant future, when the NYCA is more heavily reliant on Energy produced by IPRs, the NYISO will need to use all of the supply and demand-side controllable resources it has available to match Energy output and Load consumption.

¹⁶ See, e.g., Limited Protest at 2 ("When the IPR provides energy that is simultaneously absorbed by the ESR, NYISO will provide no wheeling services, as zero megawatt-hours will be injected into, or withdrawn from, the NYISO grid."), Limited Protest at 6 ("The allocation of NYISO administrative fees under circumstances where the NYISO provides no wheeling services can be viewed...").

Transmission Owner, it is not appropriate for the NYISO to assess ISO or FERC Charges to the CSR Generators.¹⁷ This argument inappropriately conflates charges for services that the NYISO will provide to Generators that participate in a CSR (including but not limited to the scheduling and dispatch of the CSR Generators) with charges for transmission service over the CSR's own facilities. The NYISO agrees that it would not be appropriate to assess transmission charges, like the 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 POI, and the NYISO is not proposing to assess these charges.

In the CSR Filing the NYISO proposes to excuse the CSR Generators from paying TSC and NTAC charges when the output of the IPR is used to charge the co-located ESR behind the CSR Generators' shared POI. Page 10 of the CSR Filing explains:

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.¹⁸ 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....

Other significant transmission service costs are losses and transmission congestion, which are components of the LBMP. The LBMP for a pair of CSR Generators is the same because the Generators inject and withdraw Energy at the same electrical location. This means the LBMP

¹⁷ Limited Protest at 6 ("None of this energy is injected into the NYISO grid, as the battery receives the energy produced by the IPR using only facilities classified as interconnection customer interconnection facilities.")

¹⁸ See proposed revisions to OATT Section 2.7.

that is charged to the ESR for its wholesale withdrawal will equal the LBMP that is paid to the wind or solar IPR for the Energy it produces at times when the IPR is producing Energy and the ESR is scheduled by the ISO to withdraw Energy. The LBMP payment and the LBMP charge effectively net to zero.

C. It is Appropriate for NYISO to Recover its Cost of Providing Scheduling and Dispatch Services from All Resources that Require Those Services on an Equivalent Basis

The Commission's cost causation principles allow an ISO to allocate costs to entities that "cause" the ISO to incur those costs.¹⁹ Consistent with these principles, the Tariffs authorize the NYISO to recover its costs for providing a broad variety of services²⁰ from Eligible Customers that execute a Services Agreement.²¹ The NYISO's application of its Tariffs to recover ISO and FERC Charges from CSR Generators is fully consistent with the Commission's cost causation principles.

The NYISO incurs costs to provide scheduling and dispatch services to Generators.²² The NYISO will provide scheduling and dispatch services to CSR Generators that are more complex and resource intensive than the scheduling services that NYISO provides to other

¹⁹ See *Western Area Power Administration v. FERC*, 525 F.3d 40, 58 (D.C. Cir. 2008) (upholding FERC rule allowing allocation of California Independent System Operator Corporation administrative charges to behind-the-meter generators that caused CAISO to incur administrative costs).

²⁰ See OATT Sections 6.1.2 and 6.1.2.1, and Services Tariff Section 5.1 which elaborates on the Control Area Services that the NYISO provides.

²¹ An Eligible Customer is "An entity that is engaged, or proposes to engage, in the wholesale or retail electric power business including any electric utility, power marketer, Federal power marketing agency, or any person generating Energy for sale for resale..." See OATT Sections 1.5 (definition of Eligible Customer). An Eligible Customer that execute a Services Agreement with the NYISO is a Transmission Customer. See OATT Sections 1.5 (definition of Eligible Customer) and 1.20 (definition of Transmission Customer). See also, Section 15.1 of the Services Tariff.

²² The costs that the NYISO incurs to provide scheduling and dispatch service include but are not limited to, the development, operation and maintenance of the NYISO's Day-Ahead SCUC, its RTC and its RTD. NYISO Staff are tasked with ensuring that the NYISO timely issues reliable and economically appropriate schedules and dispatch to Generators and other Resources, and maintains the necessary technology.

NYCA Generators. The NYISO will dispatch an ESR that participates in a CSR to withdraw or inject Energy consistent with the Bids submitted for that ESR (or with its mitigated Bids). The NYISO will schedule and dispatch both of the CSR Generators in a manner that incorporates the CSR injection and withdrawal Scheduling Limits. The schedules and dispatch instructions that the NYISO issues must account for the possibility that the wind or solar IPR's output could change unexpectedly.

Consistent with its Tariffs, the NYISO assesses ISO and FERC Charges to a stand-alone ESR *each time* the ESR withdraws or injects Energy. The NYISO schedules and dispatches its system to accommodate the variable output of wind and solar IPRs, and assesses ISO and FERC Charges to stand-alone wind or solar IPRs for *all* of the Energy they produce.

The Limited Protest argues that "...NYISO intends to apply 'pancaked' administrative fees on co-located resources.... [T]he IPR and ESR will independently be assessed charges under NYISO's Rate Schedule 1, which collects the NYISO annual budgeted costs and the annual FERC fee. This aspect of the proposal is unjust and unreasonable."²³ However, the Limited Protest does not present a valid cost causation argument for excusing ESRs and IPRs that participate in a CSR from paying ISO and FERC Charges on the same basis that NYISO assesses these fees to stand-alone ESRs, or to stand-alone wind or solar IPRs.

The need to ensure CSR Generator schedules and dispatch are consistent with the CSR Scheduling Limits is a CSR-specific concern. Implementing the CSR Scheduling Limits will require additional NYISO resources to be devoted to the scheduling and dispatch of Generators that participate in the ISO-Administered Markets as CSR.

²³ Limited Protest at 6.

Unless it is instructed to do otherwise by the Commission, the NYISO intends to assess ISO and FERC Charges to Generators that participate in a CSR for the scheduling and dispatch services that NYISO will provide to them on the same basis the NYISO assesses ISO and FERC Charges to stand-alone Generators of the same resource type.

D. The NYISO Stakeholder Process

The NYISO worked collaboratively with its stakeholders to develop the CSR market rules and the implementing Tariff revisions that it submitted to the Commission.²⁴ NY-BEST and ACE-NY participated in the NYISO stakeholder process as non-voting members; ESA and ACPA did not participate. The NYISO's Management Committee approved the CSR proposal with no votes against, but with abstentions. Several NYISO voting members that own or are in the process of developing wind or solar IPRs and ESRs in New York voted in favor of the CSR proposal at the Management Committee.²⁵ The CSR proposal reflects a just and reasonable balancing of stakeholder interests.

In the stakeholder process, NY-BEST, ACE-NY and other stakeholders raised a market design concern that assessing ISO and FERC Charges for Energy that is produced by the wind or solar IPR and withdrawn by its co-located ESR behind the CSR Generators' shared POI would

²⁴ The presentation that is posted for the NYISO's November 18, 2020 Management Committee meeting (at slides 29-31) identifies 19 working group meetings where the CSR proposal was developed and vetted with stakeholders. Link: https://www.nyiso.com/documents/20142/16885911/08%20Hybrid%20Storage_CSR.pdf/4794c242-a7dd-dc8e-7571-5b4d443a4198

²⁵ Link to the approved Minutes of the November 18, 2020 Management Committee Meeting: <https://www.nyiso.com/documents/20142/19386712/02%20Draft%20MC%20Meeting%20Minutes%20112020.pdf/b9872f87-d192-5ab0-6061-12004f9d49c3>

result in excessive administrative fees that could discourage use of the CSR participation model.²⁶ The concern was discussed in several stakeholder meetings.

The concerns about the assessment of ISO and FERC Charges did not gain broad traction with stakeholders. As explained above, a design goal of the CSR rules is to permit the wind or solar IPR and the ESR to each participate in the NYISO's markets as independent, distinct Generators. Stand-alone IPRs and ESRs are required to pay ISO and FERC Charges whenever they inject or withdraw Energy. The NYISO and its stakeholders decided that ISO and FERC Charges should be assessed to Generators that participate in a CSR in the same manner as such charges are assessed to stand-alone wind or solar IPRs and ESRs.²⁷

E. The Objections to Previously Accepted Tariff Provisions and the Request for a Compliance Filing Should Be Rejected

The CSR Filing does not propose any revisions to the Tariff rules that address NYISO's authority to assess ISO or FERC Charges to wind or solar IPRs for their injections, or to ESRs for their injections and negative injections.²⁸ The Limited Protest does not appear to question the justness or reasonableness of any of the Tariff revisions the NYISO submitted for the Commission's consideration in this docket. Instead, the Limited Protest (at 7-8) argues that the NYISO lacks Tariff authority to assess ISO and FERC Charges to a wind or solar IPR that

²⁶ NYISO does not believe NY-BEST or ACE-NY representatives raised the concerns about the adequacy of the NYISO's Tariffs that are included in the Protest, or the argument that the NYISO's assessment of FERC fees is inconsistent with 18 C.F.R. § 382.201(c)(1), in the NYISO stakeholder process.

²⁷ The rule the stakeholders approved is described on slide 60 of the appendix to NYISO's presentation to the Management Committee [link in n24, above]. The final Motion that the NYISO's stakeholders approved is posted with the Management Committee materials for November 18, 2020.

²⁸ On page 14 of the CSR Filing, the NYISO explains a change it proposes to conform the defined term Actual Energy Withdrawals that is in Section 2.1 of the Market Services Tariff to the same defined term in Section 1.1 of the OATT. There is language in the OATT definition that addresses ISO and FERC Charges that is not included in the Services Tariff definition, but should be. Although that language addressed ISO and FERC Charges, it is not relevant because wind or solar IPRs and ESR Generators are not assessed ISO or FERC Charges based on Withdrawal Billing Units for their injections or negative injections.

participates in a CSR for Energy it produces that is used to charge its co-located ESR. The Limited Protest also argues that the NYISO lacks Tariff authority to assess ISO and FERC Charges to an ESR that participates in a CSR when it withdraws Energy produced by its co-located IPR.

The defined term “Injection Billing Units” in Section 1.9 of the OATT States in part “For purposes of recovering the ISO annual budgeted costs and the annual FERC fee pursuant to Rate Schedule 1 of this ISO OATT, *Injection Billing Units shall include the absolute value of negative injections by Withdrawal-Eligible Generators.*” [Emphasis added.] An ESR is a type of Withdrawal-Eligible Generator.²⁹ The NYISO reads the quoted Tariff directive as empowering it to recover ISO and FERC Charges from ESRs that participate in a CSR when they withdraw Energy, irrespective of whether that Energy is produced by a co-located wind or solar IPR.

In response to the “confusion” expressed in footnote 4 of the Limited Protest, the expected configuration of all CSRs is that there will be one revenue quality meter at the POI.³⁰ The revenue quality data that the NYISO receives identifies the injections and withdrawals at the POI for an hour.³¹ As it does for other Generators, the NYISO will use telemetry data to determine each CSR Generator’s injections and withdrawals in each (approximately, five minute) RTD interval. Telemetry data is necessary for the NYISO to support grid reliability by maintaining situational awareness of each resource, and is also used to determine each Generator’s real-time settlement because Generator output and RTD prices can vary by

²⁹ See the definition of ESR in Section 2.5 of the Market Services Tariff.

³⁰ CSR Filing at 11 and 23.

³¹ The NYISO is not able to incorporate hourly, real-time revenue quality meter data from additional locations for CSR Generators. Doing so would increase implementation complexity and could delay the NYISO’s ability to implement CSR in its Markets.

interval.³² The NYISO trues-up the telemetry information it receives with the hourly revenue quality data it receives in its settlement process.

The argument on pages 8-9 of the Limited Protest that questions the consistency of the NYISO's rules with Section 382.201(c)(1) of the Commission's regulations³³ can be quickly addressed. There are no new Tariff rules proposed in the CSR Filing that apply to the assessment of FERC Charges to CSR Generators. All of the relevant Tariff rules (including but not limited to the definition of Injection Billing Unit) have already been considered and accepted for filing by the Commission.³⁴ Any questions concerning those previously accepted tariff provisions are beyond the proper scope of this Section 205 proceeding.

The request on page 9 of the Limited Protest that the NYISO be instructed to submit a compliance filing is unnecessary. If the Commission issues an Order instructing the NYISO on how to implement its existing Tariff rules to assess ISO and FERC Charges to the Generators that participate in a CSR, the NYISO will comply with the Commission's instructions regarding the application of those existing rules. There would be no need for a compliance filing to incorporate any such instructions into the Tariff.

³² See, e.g., Market Administration and Control Area Services Tariff Section 4.5.2.

³³ 18 C.F.R. § 382.201(c)(1).

³⁴ Section 6.1.15 of the NYISO's OATT addresses the calculation of FERC Charges. Section 6.1.15.2 of the OATT explicitly authorizes the NYISO to assess FERC Charges for some "Non-Physical Market Activities" including Virtual Transactions and Transmission Congestion Contracts. The rules that apply to Generators are in Section 6.1.15.1 of the OATT.

III. CONCLUSION

For the reasons explained above, the CSR Filing is just, reasonable, and not unduly discriminatory. The NYISO respectfully requests that the Commission reject the Limited Protest and issue an order on or before March 31, 2021 accepting the CSR Filing without condition or modification.

Respectfully submitted,

/s/ Alex M. Schnell

Alex M. Schnell

Assistant General Counsel/

Registered Corporate Counsel

New York Independent System Operator, Inc.

Dated: March 8, 2021

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

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding in accordance with the requirements of Rule 2010 of the Rules of Practice and Procedure, 18 C.F.R. §385.2010.

Dated at Rensselaer, NY this 8th day of March 2021.

/s/ Joy A. Zimmerlin

Joy A. Zimmerlin
New York Independent System Operator, Inc.
10 Krey Blvd.
Rensselaer, NY 12144
(518) 356-6207