

November 17, 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 Enhancements to Tariff Revisions to Implement Co-located Storage Resources and Request for Waiver of 60-Day Prior Notice Period; Docket No. ER22-____-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 a limited set of enhancements to the Co-located Storage Resources (“CSR”) Tariff rules that the NYISO filed in January of this year in its “CSR Filing,”³ and the Commission accepted in its March 30, 2021 “CSR Order.”⁴ The additional Tariff revisions proposed in this filing are small in both scope and effect. They clarify how the NYISO’s market software will respond when a CSR injection or withdrawal Scheduling Limit⁵ conflicts with another limit; most likely a CSR Generator’s response rate, operating limit or storage limit.

The NYISO informed the Commission and its stakeholders that it expects to implement CSR in its markets by the end of 2021.⁶ The CSR Order required the NYISO to submit an

¹ 16 U.S.C. § 824d.

² 18 C.F.R. Part 35.

³ *New York Independent System Operator, Inc., Proposed Tariff Revisions to Implement Co-located Storage Resources*, Docket No. ER21-1001-000 (January 29, 2021) (“CSR Filing”).

⁴ *New York Independent System Operator, Inc., Order Accepting Proposed Tariff Revisions to Implement Participation Model for Co-located Storage Resources*, 174 FERC ¶ 61,242 (2021) (“CSR Order”).

⁵ Capitalized terms that are not defined in this filing letter are defined in the revisions to Section 1 of the OATT and Section 2 of the Services Tariff that the NYISO proposed in its CSR Filing. The NYISO proposes limited changes to the definition of “CSR Scheduling Limits” in this filing.

⁶ *See, e.g.*, CSR Filing at 2, 40; *New York Independent System Operator, Inc. Informational Report on Co-located Storage Resources Implementation Progress at 2* (August 2, 2021) (“Although the CSR project faces some risk of delay, the NYISO anticipates that it will be able to implement CSR in its Energy, Ancillary Services and Capacity markets by the end of 2021.”)

informational filing addressing its expected implementation date in August.⁷ Consistent with its statements to the Commission and to its stakeholders, the NYISO has worked diligently to implement CSR in 2021 and expects to be ready to implement CSR in mid-December. In order to permit the NYISO to fully implement CSR in its Energy, Ancillary Services and Capacity Markets in 2021,⁸ the NYISO respectfully requests that the Commission waive the 60-day prior notice requirement in order to permit the NYISO to make the Tariff revisions proposed in this filing effective with less than 60 days prior notice, on a flexible effective date in December of 2021. In Section III of this filing letter the NYISO demonstrates that its request for waiver of the 60-day prior notice requirement satisfies the “good cause” standard set forth in Section 205(d) of the Federal Power Act,⁹ and in Section 35.11 of the Commission’s regulations.¹⁰ The NYISO commits to provide at least two weeks prior notice to the Commission and to its stakeholders before making the Tariff revisions proposed in this filing effective.¹¹ The NYISO will make the revisions proposed in this filing effective at the same time it implements all of the other accepted, but not yet effective, CSR Tariff revisions.¹²

The Tariff revisions proposed in this filing were unanimously approved by the NYISO’s stakeholders at the October 13, 2021 Business Issues Committee meeting (“BIC”) and the October 27, 2021 Management Committee (“MC”) meeting. On November 16, 2021 the NYISO’s Board of Directors approved the proposed Tariff revisions for filing with the Commission.

⁷ CSR Order at P 47 (“[W]e direct NYISO to submit an informational filing on August 1, 2021 that reports on NYISO’s progress to test and complete the software changes needed to implement its CSR Participation Model and the estimated implementation date.”)

⁸ Some CSR rules, including the interconnection rules, became effective on March 31, 2021. This was done to permit Developers to start registering Generators to participate as CSR in advance of the anticipated effective date of the full implementation of CSR in the ISO-Administered Energy, Ancillary Services and Capacity Markets. *See* CSR Order at PP 1, 47.

⁹ 16 U.S.C. § 824d(d) (“The Commission, for good cause shown, may allow changes to take effect without requiring the sixty days’ notice herein provided for by an order specifying the changes so to be made and the time when they shall take effect and the manner in which they shall be filed and published.”)

¹⁰ *See* 18 C.F.R. §§ 35.3(1), 35.11 (2021).

¹¹ 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 Commission and Market Participants of the implementation date for the CSR market participation rules proposed in this filing. *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 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).

¹² Most of the changes proposed in this filing modify Tariff revisions that the Commission accepted in its CSR Order, that have not yet been made effective.

I. BACKGROUND

The Tariff revisions that the Commission accepted in its CSR Order 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 CSR. The rules require the two Generators¹³ participating 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.¹⁴ The NYISO’s Day-Ahead Security Constrained Unit Commitment (“SCUC”), and its Real-Time Commitment (“RTC”) and Real-Time Dispatch (“RTD”), are designed to 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. However, there are many other limits and constraints that SCUC, RTC and RTD must also account for while developing a least-production cost solution.

In testing its CSR software, the NYISO determined that it would not solve in some instances when the NYISO assigned a CSR injection or withdrawal Scheduling Limits the same priority as the operating limits that apply to the individual CSR Generators. The most relevant Generator operating limits are the response rates (ramp limits), upper operating limits (“UOL”), lower operating limits (“LOL”), upper storage limit (“USL”) and lower storage limit (“LSL”) of the two CSR Generators that share the relevant CSR Scheduling Limits.¹⁵ When a CSR injection or withdrawal Scheduling Limit is in conflict with another limit, the NYISO intends to temporarily relax the relevant CSR Scheduling Limit by the minimum amount and for the shortest time necessary to resolve the conflict.

The following simplified, hypothetical example illustrates the concern that the Tariff revisions proposed in this filing address. A 30 MW solar IPR and a 15 MW ESR are participating in the NYISO’s markets as a CSR. Their shared CSR injection Scheduling Limit is 20 MW. Each of the CSR Generators has a 1 MW/minute ramp rate. On a moderately sunny day, the solar IPR is producing 12 MW and the ESR is scheduled to inject 8 MW, so total Energy injections are equal to the 20 MW CSR injection Scheduling Limit. Then, an unexpected forced outage of some of the facilities at the CSR Generators’ shared point of injection (“POI”) occurs and the CSR injection Scheduling limit needs to be immediately reduced (derated) from 20 MW down to 4 MW. In the first RTD interval that incorporates the reduced (4 MW) CSR injection Scheduling Limit, RTD will ramp each of the CSR Generators’ output down at their maximum ramp rate of 1 MW/minute (5 MW per RTD interval * 2 Generators = 10 MW per RTD interval) in order to bring the CSR Generators’ output into compliance with the revised CSR injection Scheduling Limit as quickly as possible. Ramping the two CSR Generators down at maximum speed results in an IPR schedule of 7 MW and an ESR schedule of 3 MW at the end

¹³ An ESR is a type of Generator. A wind or solar IPR is also a type of Generator.

¹⁴ 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.

¹⁵ The ESR will have a USL and a LSL, the wind or solar IPR will not.

of the first post-limit change RTD interval. Total injections are 10 MW at the end of the first RTD interval, which exceeds the CSR injection Scheduling Limit of 4 MW.¹⁶ This temporary violation of the CSR injection Scheduling Limit is the concern that the Tariff revisions proposed in this filing address. In the second post-CSR injection Scheduling Limit change RTD interval, RTD will ramp the CSR Generators down to the 4 MW CSR injection Scheduling Limit and the concern will be resolved.

II. PROPOSED TARIFF REVISIONS

The Tariff revisions proposed in this filing clarify how SCUC, RTC and RTD will respond when they are not able to fully resolve a conflict between a CSR injection or withdrawal Scheduling Limits and another reliability limit—most likely the CSR Generators’ response rates, UOL, LOL, USL or LSL. The NYISO proposes to revise (1) the definition of “CSR Scheduling Limits,” which appears in both the Services Tariff and the OATT, and (2) provisions in Sections 15.4.2.1 and 15.4.3.1 of the Services Tariff that address how the NYISO implements the CSR injection and withdrawal Scheduling Limits.

The NYISO proposes the following redlined revisions to the first paragraph of the definition of CSR Scheduling Limits that the Commission accepted in its CSR Order:

CSR Scheduling Limits: The CSR injection Scheduling Limit is used to determine sets the maximum, the combined Regulation Capacity, Operating Reserve and Energy injection schedules for, and the maximum permitted net injection by a CSR’s Generators. The CSR withdrawal Scheduling Limit is used to determine sets the maximum, the combined Regulation Capacity and Energy withdrawal schedules for, and the maximum permitted net withdrawal by a CSR’s Generators.

For the reasons explained in Section I of this filing letter, the NYISO expects there may be rare instances when the combined Regulation Capacity, Operating Reserve and Energy injection schedules for a pair of CSR Generators temporarily exceed a CSR injection Scheduling Limit and cannot immediately be brought into compliance. When this occurs, SCUC, RTC and RTD will temporarily permit the CSR Generators’ net injections to exceed the CSR injection Scheduling Limit. The proposed revised language more accurately explains what SCUC, RTC and RTD will do when it is not possible to reduce net injections quickly enough to avoid a violation of the CSR injection Scheduling Limit. It is also possible for net withdrawals by the ESR that participates in a CSR to temporarily exceed the CSR withdrawal scheduling Limit. For this reason, the NYISO proposes reciprocal changes to the discussion of the CSR withdrawal Scheduling Limit in the definition above.

¹⁶ The CSR injection and withdrawal Scheduling Limits are expected to reflect the relevant facilities ability to inject or withdraw Energy on a sustained basis. The facilities at a CSR’s point of injection/point of withdrawal may be capable of supporting larger injections or withdrawals on a temporary basis. If necessary to protect its facilities, the NYISO expects the owner/operator would take emergency measures, which might include ramping down its Generators faster than the parameters provided to the NYISO would permit, or disconnecting Generators or at-risk facilities.

The NYISO proposes the following revisions to Sections 15.4.2.1 (which addresses Day-Ahead Market Bid selection) and 15.4.3.1 (which addresses Real-Time Market Bid selection) of the Market Services Tariff provisions that the Commission accepted in the CSR Order. The Tariff provision quoted below is identical in the two specified Tariff sections, as are the revisions NYISO proposes in this filing.

For Co-located Storage Resources the sum of the amount of Energy each Generator is scheduled to provide, the amount of Regulation Service the Energy Storage Resource is scheduled to provide, and the amount of each Operating Reserves product the Energy Storage Resource is scheduled to provide, shall ~~not exceed~~ account for the CSR injection Scheduling Limit consistent with ISO Procedures. The net amount of Energy that the CSR Generators are scheduled to withdraw, plus the amount of Regulation Service the Energy Storage Resource is scheduled to provide, shall ~~not exceed~~ account for the CSR withdrawal Scheduling Limit consistent with ISO Procedures.

For the reasons explained in the Background section of this filing letter, the NYISO cannot guarantee that “the sum of the amount of Energy each Generator is scheduled to provide, 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” will *never* exceed the CSR injection Scheduling Limit. To address this concern, the NYISO proposes more flexible revised Tariff language that correctly states the NYISO will account for the CSR injection Scheduling Limit when it determines the schedules for a pair of CSR Generators, but does not commit that NYISO will *never* schedule an Energy injection that exceeds the CSR injection Scheduling Limit. The proposed revisions recognize the reciprocal possibility that the net amount of Energy that the CSR Generators are scheduled to withdraw from the grid¹⁷ plus the amount of Regulation Service the ESR is scheduled to provide¹⁸ could, in rare circumstances, violate the CSR withdrawal Scheduling Limit.

The NYISO has already developed and its BIC and Operating Committee have already approved revisions to the ISO Procedures to implement the Tariff revisions proposed above.¹⁹ The proposed ISO Procedures add a few details about the NYISO’s implementation and provide the NYISO a limited degree of flexibility to modify or update its implementation, if necessary. The NYISO developed revisions to its Transmission and Dispatching Manual, Ancillary Services

¹⁷ Only the ESR will be scheduled to withdraw Energy, but the output of the wind or solar IPR is relevant to determining the CSR Generators’ combined net schedule.

¹⁸ The Automatic Generation Control (“AGC”) instruction that a Regulation Service provider receives from the NYISO every six seconds could instruct it to inject or withdraw Energy.

¹⁹ The BIC approved updates to the ISO Procedures on November 9, 2021. The Operating Committee approved updates to the ISO Procedures on November 12, 2021. The stakeholder-approved changes to the ISO Procedures will not take effect until the CSR rules become effective.

Manual and Day-Ahead Scheduling Manual.²⁰ The changes are all very similar in nature. They provide, in key part, as follows:

The NYISO may relax a CSR Scheduling Limit when it is in direct conflict with other limits. Conflicting limits are expected to be a response rate, upper storage limit (USL), lower storage limit (LSL), upper operating limit or lower operating limit of a CSR Generator. In all cases, the NYISO will relax the CSR Scheduling Limit by the minimum amount and for the shortest time period necessary to resolve the conflict.

The CSR Scheduling Limits are different from the other types of scheduling constraints the NYISO implements today. Because the NYISO does not have previous experience implementing these types of limits, a degree of implementation flexibility is desirable. Including implementation details in its manuals will permit the NYISO to bring necessary changes that comply with its Tariff rules to the stakeholders for their approval, if necessary.²¹

III. DEMONSTRATION OF GOOD CAUSE TO ABBREVIATE 60 DAY NOTICE PERIOD AND REQUEST FOR FLEXIBLE EFFECTIVE DATE

A. Demonstration of Good Cause to Abbreviate 60 Day Prior Notice Period

There is good cause for the Commission to permit the very limited set of Tariff revisions described above to become effective on less than 60 days prior notice, consistent with the standard set forth in Section 205(d) of the Federal Power Act,²² and in Section 35.11 of the Commission's regulations.²³ The NYISO provides both legal precedent and practical reasons to grant its request below.

In *Central Hudson Gas & Electric Company, et al.* (“*Central Hudson*”), the Commission explained:

We will generally grant waiver of the 60-day prior notice requirement in the following instances: (1) uncontested filings that do not change rates – such as notices of cancellation when the contract expires by its own terms and the

²⁰ The manual changes are available for review at the following link as meeting materials from the November 9, 2021 Business Issues Committee meeting. Link: <https://www.nyiso.com/business-issues-committee-bic-?meetingDate=2021-11-09>

²¹ A successful stakeholder vote at the Business Issues Committee or Operating Committee is ordinarily required to modify an approved procedure. See ISO Agreement Sections 8.01 and 9.01.

²² 16 U.S.C. § 824d(d) (“The Commission, for good cause shown, may allow changes to take effect without requiring the sixty days’ notice herein provided for by an order specifying the changes so to be made and the time when they shall take effect and the manner in which they shall be filed and published.”)

²³ See 18 C.F.R. §§ 35.3(1), 35.11 (2021).

customer does not desire an extension, changes in delivery points, **and changes in non-rate terms...**²⁴ [Emphasis added.]

The Tariff revisions proposed in this filing are consistent with the guidance the Commission provided in *Central Hudson*. The proposed Tariff revisions are not expected to be contested. They were approved by both the NYISO's BIC and its MC unanimously, with no abstentions. The proposed Tariff changes do not alter the rates the NYISO charges its customers. They only address how the NYISO will operate its system in the unlikely/rare event that a CSR injection or withdrawal Scheduling Limit conflicts with another operating limit. The proposed changes are all to non-rate terms and conditions of service. *Central Hudson* stated that the Commission will "generally grant" waiver under these circumstances. The Commission has routinely waived the standard sixty day notice period when presented with similar requests over the last three decades.

Practically speaking, the NYISO's stakeholders will have been aware of the proposed change to the NYISO's CSR rules for longer than 60 days if they take effect in mid-December, consistent with the NYISO's current implementation plan. The NYISO first discussed the need for a change with its stakeholders at a combined Market Issues Working Group/Installed Capacity Working Group meeting on October 5, 2021. The meeting materials provided in the link below discuss the same concern that this filing was developed to address.²⁵

Section 35.11 of the Commission's regulations requires the NYISO to explain (a) how and the extent to which the filing public utility and purchaser(s) will be affected if the notice requirement is not waived, and (b) the effects of the waiver, if granted, upon purchasers under other rate schedules. If the requested waiver is not granted, then the NYISO will not be able to implement its CSR rules in 2021 as it committed to do. Instead, NYISO would need to request an extension of time to permit the CSR Tariff rules the Commission accepted in its CSR Order to take effect in late January or February of 2022. The NYISO is not aware of any likely impact (positive or negative) on purchasers if the Commission does not waive the 60 day prior notice requirement, or on purchasers under other rate schedules. Consistent with the requirements of Section 35.11, the NYISO will serve a link to an electronic copy of this filing on all of its customers.

For the foregoing reasons, the Commission should determine that there is good cause to grant the NYISO's requested waiver and permit the Tariff revisions proposed in this filing to become effective on a flexible effective date in December of 2021 that is less than 60 days after the date of this filing.

B. Request for Flexible Effective Date in December, 2021

²⁴ *Cent. Hudson Gas & Elec. Corp.*, 60 FERC ¶ 61,106 (1992), *order on reh'g*, 61 FERC ¶ 61,089 (1992); *see also Prior Notice and Filing Requirements under Part II of the Federal Power Act*, 64 FERC ¶ 61,139, at 61,974-75, *order on reh'g*, 65 FERC ¶ 61,081 (1993).

²⁵ Link to October 5, 2021 Installed Capacity Working Group meeting materials: https://www.nyiso.com/documents/20142/25091789/CSR%20Tariff%20Updates_MIWG_10052021.pdf/ae41d68c-2316-5a7e-dcc0-daa524daf182

The NYISO requests a flexible effective date between December 6, 2021 and December 31, 2021 for all of the Tariff revisions proposed herein. On this effective date the NYISO will become able to permit CSR to participate in its Energy, Capacity and Ancillary Services Markets. 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 have been 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.²⁶

IV. STAKEHOLDER APPROVAL

The tariff revisions proposed in this filing were discussed with stakeholders at the NYISO's October 13, 2021 BIC meeting and its October 27, 2021 MC meeting. The proposed revisions were unanimously approved by both the BIC and the MC, with no abstentions at either meeting. On November 16, 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.

V. COMMUNICATIONS

Communications and correspondence regarding this filing should be directed to:

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²⁶ 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 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).

VI. LIST OF DOCUMENT SUBMITTED

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

1. A clean version of the proposed revisions to the OATT, with an effective date to be determined (Attachment I);
2. A blacklined version of the proposed revisions to the OATT, with an effective date to be determined (Attachment II);
3. A clean version of the proposed revisions to the Services Tariff, with an effective date to be determined (Attachment III); and
4. A blacklined version of the proposed revisions to the Services Tariff, with an effective date to be determined (Attachment IV).

VII. SERVICE

The NYISO will send a link to 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.

VIII. CONCLUSION

WHEREFORE, for the foregoing reasons the NYISO respectfully requests that (1) the Commission accept the Tariff revisions proposed in this filing without requiring any modifications, and (2) waive the 60 day prior notice requirement to permit the NYISO to make the Tariff revisions effective on a flexible effective date in December, 2021, consistent with Section III of this filing letter.

Respectfully submitted,

By: /s/ Alex M. Schnell

Alex M. Schnell

Assistant General Counsel,

Registered Corporate Counsel

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

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