

August 25, 2020

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., Compliance Filing; Energy Storage Resources, Docket No. ER19-467-000, *et al.*

Dear Ms. Bose:

On August 3, 2020 the Federal Energy Regulatory Commission (“Commission”) issued its *Order on Compliance and Addressing Arguments Raised on Rehearing* (the “August 2020 Order”) requiring the New York Independent System Operator, Inc. (“NYISO”) to assess transmission charges to an Energy Storage Resource (“ESR”)¹ when the ESR (i) is not being dispatched by the NYISO to provide a service, and (ii) is self-scheduled to withdraw Energy at a fixed MW quantity (*i.e.*, when it is Bid utilizing the Self-Committed Fixed bidding mode).² The NYISO submits this compliance filing to address the directive in paragraph 30 of the August 2020 Order.

The NYISO respectfully requests that the Commission accept the proposed tariff revisions within sixty-two days of this filing, *i.e.*, by October 26, 2020. As explained in Section IV of this filing letter, the NYISO requests an effective date of August 26, 2020 for its proposed compliance revisions, which is the same date as the remaining tariff revision effectuating the ESR participation model in compliance with Order No. 841.³

I. List of Documents Submitted

The NYISO submits the following documents with this filing letter:

¹ Capitalized terms that are not otherwise defined in this filing letter shall have the meaning specified in the NYISO’s Open Access Transmission Tariff (“OATT”) or in its Market Administration and Control Area Services Tariff (“Services Tariff”).

² *New York Independent System Operator, Inc.*, Order on Compliance Filing and Addressing Arguments Raised on Rehearing, 172 FERC ¶ 61,119 at P 30 (Aug. 3, 2020) (“August 2020 Order”).

³ See *New York Indep. Sys. Operator, Inc.* Compliance Filing Establishing Effective Date for Energy Storage Resource Participation Model, Docket No. ER19-467-000, *et al.* (Aug. 12, 2020); *New York Indep. Sys. Operator, Inc.* Compliance Filing Establishing Effective Date for Energy Storage Resource Participation Model, Docket No. ER20-1696-000 (Aug. 12, 2020); *New York Indep. Sys. Operator, Inc.* Compliance Filing Establishing Effective Date for Energy Storage Resource Participation Model, Docket No. ER20-2113-000 (Aug. 12, 2020).

1. A blacklined version of the NYISO OATT Section 2.7 containing the proposed compliance modifications (“Attachment I”); and
2. A clean version of the NYISO OATT Section 2.7 containing the proposed compliance modifications (“Attachment II”).

II. Background

On December 3, 2018, the NYISO submitted a compliance filing in response to Order No. 841⁴ proposing tariff revisions to establish a new participation model that recognizes the physical and operational characteristics of ESRs and facilitates their participation in the NYISO-administered Energy, Ancillary Services, and Installed Capacity markets.⁵ The NYISO amended its initial filing on May 31, 2019.⁶ On December 20, 2019, the Commission accepted the compliance filings in large part, but rejected certain elements of the NYISO’s proposal and directed the NYISO to submit a further compliance filing (the “December 2019 Order”).⁷ The Commission’s further compliance obligations included a requirement that the NYISO assess transmission charges to ESRs when they are withdrawing Energy for later injection to the grid, but are not being dispatched by the NYISO to provide a service in its markets.⁸

On February 18, 2020 the NYISO submitted a compliance filing addressing the directives of the December 2019 Order (the “February 2020 Filing”).⁹ The February 2020 Filing included a proposal to apply the existing Transmission Service Charge (“TSC”) and New York Power Authority Transmission Adjustment Charge (“NTAC”) to an ESR’s Actual Energy Withdrawals in the Real-Time Market when the ESR is not providing a service.¹⁰ An ESR is being dispatched by the NYISO to provide a service when it: (1) receives a real-time Operating Reserves Schedule; or (2) receives a real-time Regulation Service Schedule; or (3) is operating and is a

⁴ *Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order No. 841, 162 FERC ¶ 61,127 (February 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). All citations to Order No. 841 in this compliance filing are to the revised order included with the February 28, 2018, errata notice.

⁵ *New York Independent System Operator, Inc.*, Compliance Filing and Request for Extension of Time of Effective Date, Docket No. ER19-467-000 (December 3, 2018) (“December 2018 Filing”).

⁶ *New York Indep. Sys. Operator, Inc.* May 31, 2019 Amendment to Compliance Filing, Docket No. ER19-467-002.

⁷ *New York Independent System Operator, Inc.*, Order on Compliance Filing, 169 FERC ¶ 61,225 (2019) (“December 2019 Order”).

⁸ December 2019 Order at P 189. On January 21, 2020, the NYISO requested rehearing of the Commission’s determination. *See New York Indep. Sys. Operator, Inc.*, Request for Rehearing of New York Independent System Operator, Inc., Docket No. ER19-467-003 (January 21, 2020). The Commission denied the NYISO’s rehearing request. August 2020 Order at P 23.

⁹ *New York Indep. Sys. Operator, Inc.* February 18, 2020 Compliance Filing, Docket No. ER19-467-004 (hereinafter “February 2020 Filing”).

¹⁰ *Id.* at 8.

qualified Supplier of Voltage Support Service (“VSS”); or (4) is dispatched Out-of-Merit to meet NYCA or local system reliability.¹¹

The August 2020 Order accepted the NYISO’s proposal to exempt Energy Storage Resources from transmission charges when they are withdrawing Energy and dispatched to provide Operating Reserves, Regulation Service, and are Qualified Voltage Support Suppliers, as well as when the ESR is dispatched Out-of-Merit to withdraw Energy.¹² However, the Commission stated that “because these services are typically scheduled on top of a resource’s base energy schedule,” the NYISO needed to submit a further compliance filing to clarify that an ESR will be subject to the TSC and NTAC during intervals when it self-schedules to withdraw a fixed MW quantity of Energy, *i.e.*, when it Bids utilizing the Self-Committed Fixed bidding mode.¹³

III. Proposed Tariff Revisions

The August 2020 Order directed the NYISO to revise its Tariffs to explicitly state that ESRs that are withdrawing Energy and Bid utilizing the Self-Committed Fixed bidding mode will be required to pay TSC and NTAC. The NYISO proposes two additions to OATT Section 2.7 to address the Commission’s directive.

2.7.2.1 Transmission Service Charge...

2.7.2.1.5. Payable by Energy Storage Resources: Energy Storage Resources will pay a TSC directly to the Transmission Owner in whose Transmission District the Energy Storage Resource is located for Actual Energy Withdrawals by the Energy Storage Resource when it is not providing a service.

For purposes of this Section 2.7.2.1.5, an Energy Storage Resource is providing a “service” when it is withdrawing Energy if it also: (1) receives a Real-Time Market schedule for Operating Reserves; or (2) receives a RealTime Market schedule for Regulation Service; or (3) is a qualified Supplier of Voltage Support Service to the ISO in accordance with Section 15.2 of the ISO Services Tariff; or (4) is dispatched by the ISO as Out-of-Merit to meet NYCA or local system reliability in the same hour.

An Energy Storage Resource that submits Bids utilizing the Self-Committed Fixed bidding mode shall pay a TSC for its Actual Energy Withdrawals unless the Energy Storage Resource is either: (a) committed or dispatched by the ISO as Out-of-Merit to withdraw Energy in the same hour to address NYCA or local system reliability concerns, or (b) a qualified Supplier of Voltage Support Service to the ISO in accordance with Section 15.2 of the ISO Services Tariff.

¹¹ *Id.*

¹² August 2020 Order at P 30.

¹³ *Id.*

The NYISO proposes an almost identical set of compliance revisions to Section 2.7.2.4.4 of the OATT, which addresses the assessment of NTAC (rather than TSC) charges to ESRs when they are utilizing the Self-Committed Fixed bidding mode to withdraw Energy.

The proposed compliance revisions will subject an ESR that is withdrawing Energy and has submitted Bids utilizing the Self-Committed Fixed bidding mode to TSC and NTAC, unless: (i) the ESR is committed or dispatched to withdraw Energy Out-of-Merit in order to protect New York Control Area (“NYCA”) or local system reliability, or (ii) the ESR is a qualified Supplier of VSS. The inclusion of these two narrow exceptions was not expressly directed by the August 2020 Order. However, the August 2020 Order accepted the four “services” that the NYISO proposed as excepting an ESR from being assessed TSC and NTAC charges while it is withdrawing Energy to charge.¹⁴ As explained in greater detail below, ESRs that submit a Self-Committed Fixed Bid to withdraw Energy are required to respond to Out-of-Merit instructions from the NYISO and will provide VSS in the same manner as ESRs that submit flexible Bids and are eligible to be fully dispatched across their entire operating range to inject or withdraw Energy. Subjecting ESRs that submit Self-Committed Fixed Bids to withdraw Energy to TSC and NTAC charges when they are set Out-of-Merit for reliability by the NYISO, or when they are a qualified VSS Supplier would be inconsistent with the Commission’s directives in this proceeding and would unjustifiably treat similarly situated ESRs differently. Commission precedent allows the NYISO to propose a refinement to address the potential inconsistency in this compliance filing.¹⁵

A. ESRs that are Committed or Dispatched Out-of-Merit to Withdraw Energy in Order to Protect NYCA or Local System Reliability Should Not be Subject to TSC or NTAC Charges

The NYISO has the authority under its Tariffs to commit and/or dispatch a Resource Out-of-Merit at specified output limits and for specified time periods in order to meet Load and/or reliability requirements.¹⁶ This procedure is separate and distinct from the NYISO’s security constrained economic commitment and dispatch. The NYISO uses Out-of-Merit commitment and dispatch to address reliability concerns that its Real-Time Commitment (“RTC”) and RealTime Dispatch (“RTD”) software cannot “see”¹⁷ or cannot immediately address.

The NYISO might issue an Out-of-Merit instruction to an ESR to withdraw Energy for several reasons. One possibility is that the NYISO’s Operations Department determines that it will need the ESR to inject Energy to protect reliability later in the operating day, so it needs the ESR to begin to charge **immediately** so that the ESR will have Energy to discharge in two hours,

¹⁴ *Id.*

¹⁵ See, e.g., *New York Independent System Operator, Inc.*, 125 FERC ¶ 61,206 at P 41 (2008) (accepting proposed compliance revisions that were not explicitly directed by a compliance order when they addressed necessary implementation details).

¹⁶ See Services Tariff Sec. 2.15 (definition of Out-of-Merit).

¹⁷ For example, RTC and RTD may not respond to issues that arise on sub-transmission facilities that are not included in the NYISO’s system model.

when an anticipated reliability need will become manifest.¹⁸ A second possibility is that the NYISO might issue an Out-of-Merit instruction to an ESR to withdraw Energy in order to reduce transmission congestion at or near the ESR's location.¹⁹ Finally, the NYISO might issue an Out-of-Merit schedule for an ESR to withdraw Energy at a time when the NYISO needs localized VSS and LBMPs are low. As explained below, an ESR's inverter is capable of providing voltage support when an ESR is withdrawing Energy.

When the NYISO commits or dispatches a Resource (including, but not limited to, an ESR) Out-of-Merit, the NYISO effectively replaces the Resource's economic offer or self-determined schedule with the Out-of-Merit schedule the NYISO imposes. Even if an ESR Bids to withdraw Energy utilizing the Self-Committed Fixed bidding mode, the issuance of an Out-of-Merit schedule by the NYISO will replace the self-committed fixed schedule that the ESR submitted with a NYISO-determined Out-of-Merit schedule.

An ESR that has been committed and/or dispatched Out-of-Merit provides a reliability service that is completely independent of its selected bidding mode. An ESR that is committed or dispatched by the NYISO Out-of-Merit to withdraw Energy should not be assessed TSC or NTAC charges consistent with Order No. 841, the December 2019 Order, and the August 2020 Order because the ESR will be providing a reliability service. The Commission should accept the NYISO's proposed compliance revisions without modification.

B. ESRs that are Qualified Suppliers of Voltage Support Service Will Provide Voltage Support While They Are Withdrawing Energy and Should Not be Subject to TSC or NTAC Charges

In order to qualify to supply VSS a Generator must have an Automatic Voltage Regulator, be located inside the NYCA, and successfully perform the applicable Reactive Power testing.²⁰ Suppliers receive payment for providing VSS based on the demonstrated physical capability of the Resource to provide VSS.²¹ Qualified VSS Suppliers contribute to maintaining system voltage whenever they are operating. Neither the qualification to supply VSS, nor the payment for providing VSS are conditioned on the manner in which a Supplier schedules its Resource to operate.

The NYISO is in the process of finalizing proposed revisions to its Ancillary Services Manual to include additional inverter-based resources capable of providing VSS. A VSS

¹⁸ The Operations Department will know how much Energy the ESR has stored in its battery because the ESR is required to provide that information via telemetry in real-time.

¹⁹ RTD would be expected to issue the necessary instruction to the ESR if the problem arises on NYISO-modeled transmission facilities, but an Out-of-Merit instruction might need to be issued if local reliability issues are affecting sub-transmission facilities that are not included in the NYISO's system models, or if telemetry has failed and RTD is not receiving an accurate representation of system conditions at the ESR's location.

²⁰ See Services Tariff Sec. 15.2.1.1 and Section 3 of the NYISO's Ancillary Services Manual.

²¹ See Services Tariff Sec. 15.2.2.

Supplier will need to have functioning automatic voltage controlling equipment to be able to automatically respond to voltage control signals. This includes, but is not limited to, Automatic Voltage Regulators for non-inverter based resources and inverters capable of performing this function for inverter-based resources. An ESR with an inverter can provide VSS while it is injecting Energy and while it is withdrawing Energy.

In order to qualify to supply VSS, ESRs will be required to demonstrate their ability to lead and to lag the system, under normal operating conditions, both while they are injecting Energy and while they are withdrawing Energy. ESRs will need to be able to maintain a specific voltage level under both steady-state and post-contingency operating conditions, subject to the limitation of tested reactive capability and must be able to respond automatically to voltage control signals. Once qualified, ESRs do not submit a Bid to provide VSS. Instead, ESRs that are VSS Suppliers will be required to maintain functioning automatic voltage controlling equipment (Inverter) in service and in automatic voltage regulation mode **at all times**, unless instructed otherwise by the NYISO or by a Transmission Owner.²² This allows ESRs to help maintain system voltage whenever they are operating. VSS Suppliers are also required to respond to instructions that the ISO issues on an as-needed basis.

An ESR VSS Supplier's obligation to provide VSS is not tied, in any way, to the type of Energy schedule the ESR receives. An ESR that submits a Self-Committed Fixed offer to withdraw Energy and receives a Self-Committed Fixed schedule to withdraw Energy is required to maintain its inverter in service and in automatic voltage regulation mode while it is withdrawing Energy. The ESR is also required to respond if the NYISO calls on it to provide VSS while it is withdrawing Energy.

For the foregoing reasons, an ESR that is a VSS Supplier should not be assessed the TSC and NTAC consistent with the Commission's direction not to assess transmission charges to ESRs that are withdrawing Energy while they are being dispatched by the ISO to provide a service in the ISO Administered Markets.

IV. Proposed Effective Date

The NYISO respectfully requests that the Commission accept the proposed tariff revisions within sixty-two days of this filing, *i.e.*, by October 26, 2020. Commission action by that date will allow the NYISO to confidently proceed with its planned integration of ESRs in the wholesale markets it administers.

The NYISO requests an effective date of August 26, 2020, for the tariff amendments proposed in this filing. August 26, 2020 is the same date as the NYISO has proposed for all of the tariff revisions comprising its ESR participation model.²³ The proposed effective date will

²² The ESR's obligation to maintain automatic voltage controlling equipment will be consistent with a Generator's obligation to maintain an Automatic Voltage Regulator. *See* NYISO Ancillary Services Manual Section 3.7.2 and Services Tariff Section 15.2.3.4.

²³ *See New York Indep. Sys. Operator, Inc. Compliance Filing Establishing Effective Date for Energy Storage Resource Participation Model*, Docket No. ER19-467-000, *et al.* (Aug. 12, 2020); *New*

enable seamless integration of ESRs in the ISO-Administered Markets and provide greater certainty of market settlements to Market Participants. If, however, the Commission requires further compliance revisions, issuance of an order within sixty-two days, *i.e.*, by October 26, 2020, will permit the NYISO to make any necessary settlement adjustments within its existing billing and settlement framework.²⁴

V. Service

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

VI. Conclusion

Wherefore, for the foregoing reasons, the NYISO respectfully requests that the Commission accept this compliance filing, without requiring any modifications.

Respectfully submitted,

/s/ Gregory J. Campbell

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York Indep. Sys. Operator, Inc. Compliance Filing Establishing Effective Date for Energy Storage Resource Participation Model, Docket No. ER20-1696-000 (Aug. 12, 2020); *New York Indep. Sys. Operator, Inc.* Compliance Filing Establishing Effective Date for Energy Storage Resource Participation Model, Docket No. ER20-2113-000 (Aug. 12, 2020).

²⁴ See Services Tariff Section 7.4 (describing the “process and timeframe for review, challenge, and correction of Customer invoices”). Customer settlement information is subject to review, comment, and challenge by the Customer and correction or adjustment by the NYISO for errors at any time up to five (5) months from the date of the initial invoice. *Id.* at Section 7.4.1.