

Tariff Modifications to Support Hybrid and Co-located Storage Resources

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Agenda

- **Project Background**
- **Interaction of HSR and CSR Revisions with Tariff Revisions filed in Compliance with FERC Order Nos. 2023 and 2023-A**
- **Additional Proposed Tariff Changes**
- **Next Steps**

Project Background

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- At the December 2022 BIC and MC meetings, tariff modifications to NYISO's interconnection procedures in OATT Attachment S (OATT 25) and Attachment X (OATT 30) were approved to support the implementation of the Hybrid Storage Resource (HSR) model as well as enhancements to the Co-located Storage (CSR) Resource and Fast-Start Resource (FSR) models
- Additional modifications to support further enhancements to the CSR model were approved at the 2024 BIC and MC meetings

FERC Order No. 2023/2023-A Compliance Filing Tariff Revisions

Overview of Tariff Changes

- On May 1, 2024, the NYISO filed its compliance filing with FERC Order Nos. 2023 and 2023-A, “Improvements to Generator Interconnection Procedures and Agreements”
- As part of the compliance filing, the NYISO interconnection procedures in OATT 25 and 30 were revised and consolidated into a new OATT Attachment HH (Section 40)
- Because the compliance filing is still pending, the NYISO plans, in the HSR Section 205 filing, to file both existing OATT 25 and 30 with the revisions approved by the MC in December 2022 and new OATT 40 with revisions approved by the MC in December 2022 to the extent not inconsistent with the new OATT 40, Attachment HH.
 - The tariff revisions posted with these meeting materials includes the OATT 25 and 30 tariff revisions as well as OATT 40 tariff revisions.
 - The HSR and CSR language is redlined on the new OATT 40 within the following sections:
 - OATT 40.2.3 Application of Standard Interconnection Procedures
 - OATT 40.5 Interconnection Requests/ Interconnection Service Options
 - OATT 40.5.5 Submission Requirements for Interconnection Request or CRIS-Only Request
 - OATT 40.5.6.2 Service Elections, Generally
 - OATT 40.5.6.5 Maximum Requested CRIS
 - OATT 40.5.6.6 Increases in Established CRIS Values
 - OATT 40.25.1 Interconnection Request
 - OATT 40.25.5 Facility Modification Request

OATT 40.2.3. Application of Standard Interconnection Procedures

- **The NYISO proposes the following language in OATT 40.2.3.2 to describe the allowable ERIS in the transition from a Facility with multiple Generators behind the same Point of Injection to standalone Generators:**
 - “If an existing Facility comprised of multiple Generators behind a single Point of Injection modifies its Facility to become one or more standalone Generators, the total ERIS of the standalone Generator(s) behind the single Point of Injection cannot exceed the Point of Injection limit.”
- **The language was developed to address a situation where a HSR's ESR suffered a forced outage, and the Market Participant elects to reconfigure the remaining Generators to each operate on a stand-alone basis instead of repairing the ESR. The proposed language is consistent with language that was included in OATT Section 30.3.1 that was approved by stakeholders in 2022.**

OATT 40.5 Interconnection Requests/ Interconnection Service Options

- **The NYISO proposes modifications to the following sections to align with the HSR tariff approved at the December 2022 BIC and MC meeting**
 - OATT 40.5.5 Submission Requirements for Interconnection Request or CRIS-Only Request
 - Consistent with language in OATT 30.3.1 approved by stakeholders in 2022
 - OATT 40.5.6.2 Service Elections, Generally
 - Consistent with language in OATT 30.3.2.2 approved by stakeholders in 2022
 - OATT 40.5.6.5 Maximum Requested CRIS
 - Consistent with language in OATT 25.8.1 approved by stakeholders in 2022
 - OATT 40.5.6.6 Increases in Established CRIS Values
 - Consistent with language in OATT 30.3.2.6 approved by stakeholders in 2022
- **See the tariff posted with today's materials for the complete scope of the proposed modifications**

OATT 40.25.1 Interconnection Request

- The NYISO proposes the following modification to OATT 40.25.1, “Appendix 1 to Attachment HH Interconnection Request,” which is consistent with language in OATT 30 Appendix 1 to Large Facility Interconnection Process approved by stakeholders in 2022:

2. This Interconnection Request is for [insert project name]: _____

_____, which is

(check one of the following):

A proposed new Generating Facility

A proposed Co-located Storage Resource

A proposed Hybrid Storage Resource

A proposed multi-unit Generating Facility not seeking to participate as a Co-located Storage Resource or Hybrid Storage Resource

A proposed new BTM:NG Resource

A proposed new Cluster Study Transmission Project

A material modification to a proposed or existing facility (e.g., an increase in the capacity of an existing facility beyond the permissible de minimis increases permitted under Section 40.2.3 of Attachment HH to the ISO OATT)

OATT 40.25.1 Interconnection Request, cont.

- The NYISO also proposes clarifying edits to Item No. 5 on the Interconnection Request form regarding the file types required for modeling data. This same edit is proposed to OATT 40.25.5 – the Facility Modification Request.

5. Attach modeling data files:*

- Power Flow model _____
- Short circuit model _____
- Dynamic models _____

*PSSE files must be in (1) .raw or .sav formats; (2) .idev format; and (3) .dvr format.

ASPEN files must be in .olr and .chf formats.

HSR and CSR Revisions No Longer Applicable under New OATT 40

- The following highlighted language in OATT 30.3.1 that was approved at the December 2022 BIC and MC is not included in proposed OATT 40.5 because alternative Interconnection Requests are not permitted under new OATT 40:

~~generator turbine and steam turbine connected at two different voltage levels).~~ A Developer may submit multiple Interconnection Requests for a single site only if the proposed Large Facilities are alternatives to each other.

- The edits to the Facilities Study Agreement data form approved at the December 2022 BIC and MC is not included in proposed OATT 40 because the study agreement in OATT 40 does not include this data form (the data form is contained only in the Interconnection Request form in 40.25.1)

HSR and CSR Revisions No Longer Applicable under New OATT 40

- The following language in OATT 30.3.2.2 that was approved at the December 2022 BIC and MC is no longer applicable, as the change to the interconnection process does not allow for modifications during the study process (with the exception of POI modifications within a short duration during the Customer Engagement Window):
 - “~~Prior to entering a Class Year Study, the Developer may modify its interconnection service evaluation election (whether the Large Facility requests ERIS or ERIS and CRIS) and, for Large Facilities comprised of multiple Generators, the requested allocation MW of ERIS and or CRIS among of any of its multiple units, to the extent the modification is not a Material Modification under Section 30.4.4 of this Attachment X to the OATT, when it executes submits the Class Year Study Agreement for its project in accordance with Section 30.8.1 of these Large Facility Interconnection Procedures. At that time, the Developer may~~ Permissible modifications prior to entering a Class Year Study include modifying the requested ERIS and CRIS for individual Generators within the multi-unit facility being evaluated in the same Interconnection Request; provided however, the total requested ERIS and CRIS for the Interconnection Request may not increase. The Developer can reduce the number of MW it initially requested to be evaluated for ERIS or CRIS, and such a reduction shall not constitute a Material Modification.”

HSR and CSR Revisions No Longer Applicable under New OATT 40, cont.

- The following language in OATT 30.4.4.2 that was approved at the December 2022 BIC and MC is no longer applicable, as there will not be another Class Year study, and therefore, combining two queue positions in the Class Year will not be possible:
 - “For a Project in the Interconnection Queue with a validated Interconnection Request on or before prior to ~~[insert effective date]~~, [effective date of HSR tariff revisions], the Developer may, prior to the return of the executed Interconnection Facility Study Agreement to the ISO, modify the Project by combining it with ~~another one or more~~ Projects – both projects having validated Interconnection Requests in the Interconnection Queue on or before [effective date], ~~even if there~~ regardless of whether the Projects are different technologies and regardless of whether the combined Project’s requested ERIS or CRIS increases as a result of combining the queue positions;”

Additional Proposed Tariff Changes

Overview of Additional Tariff Changes

- **In a final review of the HSR and CSR tariff modifications, the NYISO identified additional non-substantive or conforming changes to the following tariff sections:**
 - MST 2.6 Definitions
 - MST 15.4.2.1 Bidding and Bid Selection
- **Because the proposed changes are built on the redlines approved at the December 2022 BIC and MC and the March 2024 BIC and MC, the new proposed modifications are highlighted in yellow in the posted materials**

MST 2.6 Definitions

- The NYISO proposes a modification to the definition of “Fast-Start Resources” in MST 2.6 to clarify the intent of the enhanced Fast-Start Resource model
- The NYISO proposes the following modification to a portion of the definition:
 - “An enhanced Fast-Start Resource that is a Fixed Block Unit may not use its battery to ~~become a Dispatchable Resource~~ add a flexible operating range.”
- Fixed Block Units are eligible to submit ISO-Committed Flexible or Self-Committed Flexible offers, so they are already "Dispatchable."

MST 15.4.2.1 Bidding and Bid Selection

- **The NYISO proposes a modification to conform MST 15.4.2.1, “Bidding and Bid Selection” in Day-Ahead Markets to incorporate revisions to MST 15.4.3.1 that stakeholders approved in December of 2022.**
- **MST 15.4.3.1 addresses “Bidding and Bid Selection” in the Real-Time Markets.**

Next Steps

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- **The NYISO intends to file the proposed HSR and CSR tariff modifications with FERC by May 31**

Questions?

Our Mission & Vision



Mission

Ensure power system reliability and competitive markets for New York in a clean energy future



Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation