

February 16, 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., Interconnection Study
Processing Metrics Informational Filing, Docket No. ER19-1949-___**

Dear Secretary Bose:

The New York Independent System Operator, Inc. (“NYISO”) hereby submits an informational filing containing interconnection study metrics for the fourth quarter of 2020 pursuant to Section 30.3.4.2 of its Open Access Transmission Tariff (“OATT”)¹ and consistent with the requirements of Order Nos. 845 and 845-A.²

I. List of Documents Submitted

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

Attachment A – Details of Interconnection Study Delays for Fourth Quarter of 2020

II. Communications and Correspondence

All communications, pleadings, and orders with respect to this proceeding should be directed to the following individuals:

Robert E. Fernandez, Executive Vice President & General Counsel
Karen Georgenson Gach, Deputy General Counsel
Raymond Stalter, Director, Regulatory Affairs
*Sara B. Keegan, Senior Attorney
*Brian R. Hodgdon, Senior Attorney

¹ Capitalized terms that are not otherwise defined in this filing shall have the meaning specified in Attachment X of the NYISO OATT and, if not defined therein, in Attachment S of the NYISO OATT and Section 1 of the NYISO OATT.

² *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, 83 Fed. Reg. 21342 (May 9, 2018), 163 FERC ¶ 61,043 (2018) (“Order No. 845”), *order on clarification and reh’g*, Order No. 845-A, 166 FERC ¶ 61,137 (2019) (“Order No. 845-A”). For convenience, unless otherwise specified, references in this filing to “Order No. 845” encompass Order Nos. 845 and 845-A.

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III. Discussion

A. Background

Order No. 845 modified the *pro forma* Large Generator Interconnection Agreement and *pro forma* Large Generator Interconnection Procedures to, among other things, require posting of interconnection study processing metrics on a quarterly basis and to file informational reports with the Commission if such metrics exceed the study deadlines for more than 25 percent of any study type for two consecutive quarters.³ On May 22, 2019, the NYISO filed revisions to its Large Facility Interconnection Procedures (“LFIP”), with certain independent entity variations, to comply with, among other things, the requirements to post interconnections study processing metrics on a quarterly basis and to file an informational report with the Commission in the event certain study metrics exceeded 25 percent for two consecutive calendar quarters.⁴ The Commission accepted the proposed revisions and independent entity variations on February 20, 2020.⁵ Such requirements are set forth in Section 30.3.4.2 of Attachment X to the OATT.⁶

In accordance with Section 30.3.4.3 of Attachment X to the OATT, the NYISO posted interconnection study metrics for the first and second quarters of 2020. In those quarters, more than 25 percent of Optional Feasibility Interconnection Studies and System Reliability Impact Studies listed in these metrics exceeded the study durations set forth in Sections 30.3.4.2.1 (E) and 30.3.4.2.2 (E), respectively.⁷ As a result, Section 30.3.4.4 of the OATT required the NYISO

³ Order No. 845 at P 305.

⁴ *New York Indep. Sys. Operator, Inc.*, Compliance Filing, Docket No. ER19-1949-000 (May 22, 2019).

⁵ *New York Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,117 at PP 60-62 (2020) (accepting the proposed revisions to the NYISO’s LFIP to comply with the interconnection study processing metrics requirements of Order No. 845).

⁶ For purposes of calculating the length of time of an interconnection study for purposes of the interconnection study processing metrics, the Commission accepted certain independent entity variations related to the commencement and completion of the study, as set forth in Section 30.3.4.2 of the OATT.

⁷ The interconnection study metrics for the first and second quarters of 2020 are posted to the publicly available portion of the NYISO’s and can be accessed at <https://www.nyiso.com/documents/20142/12339243/LF->

to, among other things, file a report with the Commission for the next four (4) consecutive calendar quarters describing the reason for each study or group of clustered studies that exceeded the deadline for completion and any steps taken by the NYISO to remedy these specific issues and, if applicable, prevent similar delays in the future. The NYISO has filed the report for the third quarter of 2020 and now files this report for the fourth quarter of 2020. This informational filing reports the reason(s) for delays without any allowance for Reasonable Efforts.⁸

B. Information on Study Delays

1. Fourth Quarter 2020 Summary Interconnection Study Processing Metrics

The NYISO posted the fourth quarter 2020 interconnection study processing metrics on the publicly available portion of its website.⁹ Relevant study processing metrics are summarized as follows:

Optional Interconnection Feasibility Study (“FES”)

- NYISO completed two (2) FESs that exceeded the applicable study time referenced in Section 30.3.4.2.1 of the OATT.
- NYISO had four (4) FESs that were ongoing at the end of the fourth quarter of 2020 and that exceed the applicable study time referenced in Section 30.3.4.2.1 of the OATT.

System Reliability Impact Study (“SRIS”)

- NYISO completed twenty-nine (29) SRISs that exceeded the applicable study time referenced in Section 30.3.4.2.2 of the OATT.
- NYISO had nineteen (19) SRISs that were ongoing at the end of the fourth quarter of 2020 and that exceeded the applicable study time referenced in Section 30.3.4.2.2 of the OATT.

Class Year Interconnection Facilities Study (“Class Year Study”)

- NYISO did not have any ongoing Class Year Studies for purposes of the metrics set forth in Section 30.3.4.2.3 of the OATT. The NYISO completed Class Year 2019 for purposes of this report in the third quarter of 2020.

[Interconnection-Study-Metrics-1st-Quarter-2020.pdf/9afc186f-f728-51c6-299c-31766496350f](https://www.nyiso.com/documents/20142/12339243/LF-Interconnection-Study-Metrics-1st-Quarter-2020.pdf/9afc186f-f728-51c6-299c-31766496350f) and <https://www.nyiso.com/documents/20142/12339243/LF-Interconnection-Study-Metrics-2nd-Quarter-2020.pdf/779ce8f9-e5eb-94a7-1270-0639df61c7fd>, respectively.

⁸ See OATT § 30.3.4.4.

⁹ The NYISO posted the summary interconnection study processing metrics for the fourth quarter of 2020 on January 29, 2021 and subsequently posted an update on February 11, 2021. The updated metrics are available at <https://www.nyiso.com/documents/20142/12339243/LF-Interconnection-Study-Metrics-4th-Quarter-2020.pdf/e6a584ea-5b6b-8d5e-a902-391e3e4c19ac>.

The NYISO, Transmission Owners, and applicable third-party consultants expended a total number of 11,155 hours towards interconnections studies for Interconnection Requests seeking to interconnect to the New York State Transmission System (or Distribution System as applicable) during the fourth quarter of 2020, representing an increase by approximately 200 hours from the third quarter of 2020.

2. Details on Reasons for Delays

Attachment A contains a list of Large Facility Interconnection Requests that either completed an interconnection study or have an interconnection study ongoing as of the end of the fourth quarter of 2020 that exceeded the applicable study time under Section 30.3.4.2 of the OATT. Each Interconnection Request has an explanation as to the major driver(s) for delay, which is categorized to identify trends across the Interconnection Requests that are the subject of this filing. The reasons for delay are described below for each type of study under the LFIP.

a. Optional Interconnection Feasibility Studies

For the Interconnection Requests undergoing a FES, the identified reasons for delays can be categorized into six reasons—many of which apply across multiple projects.¹⁰ For three of the Interconnection Requests, one of the drivers of delay was attributed to required revisions to the data and/or diagrams provided by the Developer due to discrepancies or insufficient information identified during the course of the study. Other reasons for delay that can be attributed to decisions made by the Developer in proposing the project or during the course of the study include (i) technical challenges due to the location where the Developer proposed to interconnect the project, (ii) multiple Points of Interconnection proposed by the Developer, and (iii) revisions to the project modeling information that the Developer requested during the course of the study. All of these drivers add to the amount of analysis needed to be completed and the complexity of the studies.

Completion of the FES for five of the Interconnection Requests was delayed due to administrative challenges. Such challenges ranged from technical difficulties with the electronic platforms used to exchange data among the entities involved in the study to delays in finalizing the specific tasks required of consultants or Transmission Owners for inputs into the study. One Interconnection Request undergoing a FES was delayed due in part to revisions to the study base cases caused by updates to the system representation in order to identify the required upgrades.

b. System Reliability Impact Studies

For the Interconnection Requests undergoing an SRIS, the identified reasons for delays are categorized into six reasons that are largely similar to those identified for the FES.¹¹ For 15 of the Interconnection Requests undergoing an SRIS, delays resulted from required revisions to

¹⁰ See Table A of Attachment A.

¹¹ See Table B of Attachment A.

the data or diagrams provided by the Developer—primarily due to discrepancies or insufficient information identified during the course of the study. Similarly, 17 projects required revisions to the project modeling data resulting from the Developer’s request to modify the Interconnection Request following the start of the study. The proposed changes to the Interconnection Requests varied, and for seven projects, the Developers proposed a change to the proposed interconnection location. Twenty-nine of the Interconnection Requests undergoing an SRIS had a delay attributed to technical challenges due to the proposed location of the interconnection selected by the Developer.

Completion of the SRIS for 34 of the Interconnection Requests was delayed due to administrative challenges related to, for example, the electronic information-sharing platforms and finalization of specific tasks that consultants or Transmission Owners needed to perform to provide inputs into the study. Eleven Interconnect Requests undergoing an SRIS were delayed due in part to revisions to the study base cases caused by updates to the system representation in order to identify the required upgrades.

Additionally, the interconnection study process metrics detailed in the OATT currently use a 90-calendar day deadline for the completion of the SRIS.¹² In revisions to the LFIP accepted by the Commission in January 2020, Section 30.7.4 of the OATT provides an additional 30 calendar days for an SRIS that includes a preliminary, non-binding evaluation of deliverability.¹³ For the fourth quarter of 2020, eleven SRISs that had a preliminary, non-binding evaluation of deliverability were completed within the 120-calendar day deadline but in excess of the 90 calendar days.¹⁴ Sixteen SRISs that were ongoing at the end of the fourth quarter for 2020 and that were required to undergo a non-binding preliminary deliverability analysis exceeded the 90 calendar days but were still within in the 120-calendar day deadline.¹⁵

3. Steps to Remedy Delays

The NYISO continues to evaluate process enhancements that will limit unnecessary delays in performing interconnection studies under its LFIP. For the above-mentioned delays, the NYISO resolved the issues and challenges on a collaborative basis with the Developer and/or other involved entities without the need for dispute resolution or the involvement of the Commission. It is important to note that the delays discussed in Attachment A and above are without accounting for an allowance of Reasonable Efforts and, therefore, capture common issues that will arise in studying proposed interconnections to a complex transmission system.

The fourth quarter of 2020 represents a significant increase in the number of projects undergoing SRIS at the same time. For example, the NYISO completed more than double the

¹² See OATT § 30.3.4.2.2.

¹³ See *New York Indep. Sys. Operator, Inc.*, Letter Order, Docket No. ER20-638-000 (January 31, 2020); *New York Indep. Sys. Operator, Inc.*, Proposed Revisions Regarding Interconnection Process Improvements, Docket No. ER20-638-000 at p 13 (December 19, 2019).

¹⁴ See Table B of Attachment A.

¹⁵ See *id.*

amount of SRISs in the third quarter of 2020 with a total of 57 Interconnection Requests with an SRIS underway in the fourth quarter of 2020. Even with this increased volume, the average time of completion slightly reduced.¹⁶ The influx of projects being studied is likely attributable to Developers seeking to be eligible for the start of the next Class Year Study, as well as the overall increase in the number of Interconnection Requests for renewable resources that are being proposed to address the New York's clean energy goals.

The NYISO implemented steps in the fourth quarter of 2020 to further educate Developers on the LFIP and ensuring open lines of communication among the parties engaged in the various interconnection studies. For example, the NYISO updated its Transmission Expansion and Interconnection Manual, as well as posted a guide containing frequently asked questions and video tutorials, that will provide more information to avoid unnecessary delays attributed to insufficient information or changes to the Interconnection Request during an ongoing study.¹⁷ In addition, the NYISO switched to a new electronic information-sharing platform that has been in effect for the first quarter of 2021 to improve the exchange of data among the entities involved in a study. However, these measures could take several calendar quarters before their impact will be reflected in the study metrics reported under Section 30.3.4.2 of the OATT.

The NYISO remains open to feedback from stakeholders for process improvements that may further reduce the potential for unnecessary delays. The NYISO, in conjunction with the Transmission Owners, continues to work to streamline the process by evaluating and improving coordination of administrative-type tasks, such as consultant agreements and coordination of study analyses for inputs into the various studies. However, many of the challenges are specific to individual Interconnection Requests, and will still need to be addressed at the time they are identified.

IV. Service

The NYISO will send an electronic link to this filing to the official representative of each party to this proceeding, 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.

¹⁶ See summary interconnection study metrics for the fourth quarter of 2020, *available at*: <https://www.nyiso.com/documents/20142/12339243/LF-Interconnection-Study-Metrics-4th-Quarter-2020.pdf/e6a584ea-5b6b-8d5e-a902-391e3e4c19ac>.

¹⁷ The above-referenced resources are available on the NYISO's publicly available website: https://www.nyiso.com/documents/20142/2924447/tei_mnl.pdf/b2f926e9-2faa-2c42-5a09-2402cdb8bacc?t=1606832043251, <https://www.nyiso.com/documents/20142/3625950/UG-21-TEI+Guide-v1.0-Final.pdf/2c727b38-9b4f-1d29-d967-1736d37aca28?t=1608300294768>, and <https://www.nyiso.com/online-learning>.

V. Conclusion

Wherefore, the NYISO respectfully requests that the Commission accept this informational filing as required by Section 30.3.4.2 of Attachment X to the OATT.

Respectfully submitted,

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ATTACHMENT A

Details of Interconnection Study Delays for Fourth Quarter of 2020

Consistent with the requirements of Section 30.3.4.2 of its Open Access Transmission Tariff (“OATT”) and Order Nos. 845 and 845-A,¹ the New York Independent System Operator, Inc. (“NYISO”) posted interconnection study metrics for Quarter 4 of 2020 to its OASIS or a publicly accessible portion of its website. The interconnection study metrics provided summary statistics on the processing of Interconnection Studies for Large Facilities, as well as Interconnection Requests (“IR”) for Large Facilities that were withdrawn during the reporting quarter.

Tables A and B below provide the summary of notable drivers for the delayed projects during the quarter.

Table A – Delayed FES as of December 31, 2020

Queue #	Project: Project Name	FES Commenced Date	FES Draft Report for Review Due Date	Primary Driver(s) for Delay
0949	Port Jefferson PS BESS	7/2/2020	10/6/2020	1 & 4
0973	Wildwood-Riverhead ES	6/29/2020	10/6/2020	2, 3 & 4
0920	White Spring Solar	7/31/2020	on-going	4
0940	Glenwood PS BESS	8/19/2020	on-going	1, 2, 4 & 6
1001	Empire State Connector II	9/23/2020	on-going	1, 2, 3 & 5
1011	Vineyard Wind II	10/12/2020	on-going	4 & 5

Notes:

- (1) Revisions required to the data and/or diagram provided by the Developer
- (2) Multiple POIs proposed by the Developer resulting in the need for additional analysis
- (3) Project modeling revisions due to Developer’s request to modify the project
- (4) Administrative challenges (*e.g.*, technical issues with electronic platform to exchange information among the NYISO, Developer, consultants and/or CTOs, or finalization of project-specified agreement with consultants and/or CTOs for scope of technical work required to study)
- (5) Technical challenges due to the POI(s) proposed by the Developer
- (6) Revisions to study base cases due to system representation updates

¹ *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, 83 Fed. Reg. 21342 (May 9, 2018), 163 FERC ¶ 61,043 (2018) (“Order No. 845”), *order on clarification and reh’g*, Order No. 845-A, 166 FERC ¶ 61,137 (2019) (“Order No. 845-A”). For convenience, unless otherwise specified, references in this filing to “Order No. 845” encompass Order Nos. 845 and 845-A.

Table B – Delayed SRIS as of December 31, 2020

Queue #	Project: Project Name	SRIS Commenced Date	SRIS Draft Report for Review Due	Primary Driver(s) for Delay
0680	Long Island Offshore Wind	1/10/2020	11/9/2020	1, 2 & 5
0766	NY Wind Holbrook	3/10/2020	10/1/2020	1, 3 & 4
0789	Atlantic Shores Offshore Wind 8	9/19/2019	7/1/2020	1, 3, 4 & 5
0790	Atlantic Shores Offshore Wind 9	8/1/2019	7/20/2020	1, 3, 4 & 5
0792	LI Offshore Wind Connection	12/17/2019	11/13/2020	1, 2 & 5
0800	Rich Road Solar Energy Center	8/5/2020	11/24/2020	1 & 4
0825	Setauket Energy Storage	5/12/2020	9/30/2020	3 & 4
0830	Astoria Energy Storage 2	12/17/2019	9/4/2020	3 & 4
0834	Parking Lot Battery Energy Storage	3/27/2020	9/30/2020	3 & 4
0835	Dock Battery Energy Storage	3/27/2020	9/30/2020	3 & 4
0840	Swiftsure Energy Storage	10/21/2019	7/29/2020	3 & 4
0859	Ridge View Solar Energy Center	3/10/2020	10/1/2020	4
0864	NY38 Solar	10/21/2019	11/6/2020	1 & 2
0878	Pirates Island	4/17/2020	9/30/2020	1
0881	New Bremen Solar	8/5/2020	11/30/2020	2 & 3
0882	Riverside Solar	8/5/2020	11/30/2020	2 & 3
0887	CH Uprate	1/9/2020	10/23/2020	4
0907	Harlem River Yard	5/28/2020	9/22/2020	3
0925	Clermont 1	4/17/2020	10/12/2020	4
0929	Morris Ridge Battery Storage	4/17/2020	10/20/2020	4 & 5
0931	Astoria Energy Storage	5/28/2020	9/10/2020	3 & 4
0942	KCE NY 21	7/13/2020	11/4/2020	3 & 4
0950	Orleans Solar	5/12/2020	11/20/2020	1, 2, 4 & 5
0956	Holbrook Energy Storage	5/12/2020	10/23/2020	4
0957	Holtsville Energy Storage	5/12/2020	10/28/2020	4
0965	Yaphank Energy Storage	6/29/2020	12/17/2020	2, 3, 4 & 6
0966	Suffolk County Storage	7/31/2020	12/21/2020	2, 4 & 6
0967	KCE NY 5	6/17/2020	10/27/2020	1, 2 & 4
0971	East Setauket Energy Storage	6/29/2020	12/16/2020	2, 4 & 6
0751	Stony Brook Storage	7/13/2020	On-going	4, 5 & 6
0801	Prattsburgh Wind Farm	3/27/2020	On-going	2 & 3
0805	Oxbow Hill Solar	9/9/2020	On-going	1 & 3

0857	Columbia Solar Energy Center	8/5/2020	On-going	3 & 4
0858	Genesee Rd Solar Energy Center	4/20/2020	On-going	3
0860	Rosalen Solar Energy Center	8/19/2020	On-going	3 & 4
0880	Brookside Solar	7/14/2020	On-going	1 & 3
0883	Garnet Energy Center	6/25/2020	On-going	2 & 3
0939	Far Rockaway PS BESS	6/25/2020	On-going	3, 4 & 6
0951	Cayuga Grid, LLC	7/28/2020	On-going	3, 4 & 5
0952	Catskill Grid, LLC	7/28/2020	On-going	3, 4, 5 & 6
0953	Sugar Maple Solar	8/18/2020	On-going	4 & 5
0954	Empire Solar	6/17/2020	On-going	2, 3 & 5
0958	EI Oceanside	4/27/2020	On-going	1, 2, 3 & 4
0959	EI Oceanside 2	4/27/2020	On-going	1, 2, 3 & 4
0974	KCE NY 19	7/2/2020	On-going	4
0982	West Babylon PS BESS	7/31/2020	On-going	1, 2, 4 & 6
0987	NY Wind Holbrook 2	7/2/2020	On-going	3 & 4
0994	KCE NY 22	6/17/2020	On-going	2, 3 & 6

Notes:

- (1) Revisions required to the data and/or diagram provided by the Developer
- (2) Project modeling revisions due to Developer's request to modify the project, including, but not limited to, a change in the proposed POI
- (3) Technical challenges due to the POI(s) proposed by the Developer
- (4) Administrative challenges (*e.g.*, technical issues with electronic platform to exchange information among the NYISO, Developer, consultants and/or CTOs, or finalization of project-specified agreement with consultants and/or CTOs for scope of technical work required to study)
- (5) Revisions to study base cases due to system representation updates
- (6) Project underwent or undergoing preliminary, non-binding evaluation of deliverability.

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 16th day of February, 2021.

/s/ Mohsana Akter

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