

February 14, 2022

**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. ER19-1949-000**

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 2021 pursuant to Section 30.3.4.2 of its Open Access Transmission Tariff (“OATT”)<sup>1</sup> and consistent with the requirements of Order Nos. 845 and 845-A.<sup>2</sup>

**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 2021.

**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  
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<sup>1</sup> 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.

<sup>2</sup> *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.<sup>3</sup> 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.<sup>4</sup> The Commission accepted the proposed revisions and independent entity variations on February 20, 2020.<sup>5</sup> Such requirements are set forth in Section 30.3.4.2 of Attachment X to the OATT.<sup>6</sup>

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.<sup>7</sup> As a result, Section 30.3.4.4 of the OATT required the NYISO 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

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<sup>3</sup> Order No. 845 at P 305.

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

<sup>5</sup> *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).

<sup>6</sup> 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.

<sup>7</sup> 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-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.

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 must continue to report to the Commission until it reports four consecutive calendar quarters without the calculated values exceeding 25 percent for two consecutive calendar quarters.<sup>8</sup> The NYISO has filed the report for the third and fourth quarters of 2020 and the first, second, and third quarters of 2021. The NYISO now files this report for the fourth quarter of 2021. This informational filing reports the reason(s) for delays without any allowance for Reasonable Efforts.<sup>9</sup>

## **B. Information on Study Delays**

### **1. Fourth Quarter 2021 Summary Interconnection Study Processing Metrics**

The NYISO posted the fourth quarter 2021 interconnection study processing metrics on the publicly available portion of its website.<sup>10</sup> Relevant study processing metrics are summarized as follows:

#### **Optional Interconnection Feasibility Study (“FES”)**

- NYISO completed one FES that exceeded the applicable study time referenced in Section 30.3.4.2.1 of the OATT.
- NYISO had six FESs that were ongoing at the end of the fourth quarter of 2021 and exceeded the applicable study time referenced in Section 30.3.4.2.1 of the OATT.

#### **System Reliability Impact Study (“SRIS”)**

- NYISO had forty-two SRISs that were ongoing at the end of the fourth quarter of 2021 and 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 that exceeded the applicable study time referenced in Section 30.3.4.2.3 of the OATT.

The NYISO, Transmission Owners, and applicable third-party consultants expended a total number of 12,545 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 2021.

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<sup>8</sup> OATT § 30.3.4.4.

<sup>9</sup> *Id.*

<sup>10</sup> The NYISO posted the summary interconnection study processing metrics for the fourth quarter of 2021 on January 30, 2022. The summary is available at <https://www.nyiso.com/documents/20142/12339243/LF-Interconnection-Study-Metrics-4rd-Quarter-2021.pdf/29b7f364-bb6f-1dc5-8251-acf311f4cf26>.

## 2. Details on Reasons for Delays for Fourth Quarter of 2021

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 2021 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 are categorized into six reasons—many of which apply across multiple projects.<sup>11</sup> For two 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 study. Other reasons for delay for the interconnection requests 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 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 six of the Interconnection Requests had delays related to administrative challenges. Two of the Interconnection Requests undergoing a FES were delayed due to technical challenges presented by the Point of Interconnections proposed by the Developer, and one was delayed due, in part, to revisions to the study base cases to incorporate changes to the system representation.

### **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.<sup>12</sup> For 20 of the Interconnection Requests undergoing an SRIS, delays resulted from required revisions to the data or diagrams provided by the Developer—primarily due to discrepancies or insufficient information identified during the study. Similarly, six 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, including, among other things, modifications to the configuration of the project(s) and a change to a proposed Point of Interconnection. Seventeen 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.

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<sup>11</sup> See Table A of Attachment A.

<sup>12</sup> See Table B of Attachment A.

Completion of the SRIS for 31 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. Twenty-four of the Interconnect Requests undergoing an SRIS had delays related to revisions to the study base cases caused by updates to the system representation to identify the required upgrades. Eleven of the Interconnection Requests had delays due to the need to complete an ongoing preliminary, non-binding evaluation of deliverability.<sup>13</sup>

Additionally, the interconnection study process metrics detailed in the OATT currently use a 90-calendar-day deadline for the completion of the SRIS.<sup>14</sup> In the revisions to the LFIP accepted by the Commission in January 2020, Section 30.7.4 of the OATT provides an additional 30 calendar days to complete an SRIS that includes a preliminary, non-binding evaluation of deliverability.<sup>15</sup> For the fourth quarter of 2021, one Interconnection Request that was ongoing at the end of the fourth quarter of 2021 and required to undergo a non-binding preliminary deliverability analysis exceeded the 90 calendar days but was still within in the 120-calendar-day deadline.<sup>16</sup>

### 3. Steps to Remedy Delays

For the above-mentioned delays, the NYISO resolved, or is working towards resolution of, many of the issues and challenges on a collaborative basis with the Developers and/or other involved entities without the need for dispute resolution or the involvement of the Commission. It is also important to note that the delays discussed in Attachment A and above are without accounting for an allowance of Reasonable Efforts. Therefore, they include common issues that will arise in studying proposed interconnections to a complex transmission system.

The NYISO's current processing of studies under the LFIP has also been affected by the significant, sustained growth in the volume of Large Facility Interconnection Requests. Additionally, more projects seek to interconnect in closer proximity to each other, resulting in added complexity in the studies. Both factors contribute to the current length of time that is required to complete the studies.

The NYISO continues to seek more resources and identify efficiencies to handle the large number of Interconnection Requests and increasing complexity of studies. For instance, the number of hours spent by the NYISO, Connecting Transmission Owners, and applicable third-party consultants on studies under the LFIP during the fourth quarter of 2021 increased to 12,545 hours. This is an increase by over 200 hours from the third quarter of 2021, which doubled the number of hours expended in the second quarter of 2021.

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<sup>13</sup> See Table B of Attachment A.

<sup>14</sup> See OATT § 30.3.4.2.2.

<sup>15</sup> 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).

<sup>16</sup> See *id.*

The NYISO also continues to evaluate and implement process enhancements that will limit unnecessary delays in performing interconnection studies under its LFIP to further address the increased volume of Interconnection Requests for renewable resources that are being proposed to address the New York's clean energy goals. The NYISO remains open to feedback from stakeholders for process improvements that may further reduce the potential for unnecessary delays. 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 copy of this filing to the official representative of each party to this proceeding, to the New York Public Service Commission, and to the New Jersey Board of Public Utilities. In addition, a complete copy of this filing will be posted on the NYISO's website at [www.nyiso.com](http://www.nyiso.com), and the NYISO will send an electronic link to this filing to the official representative of each of its customers and to each participant on its stakeholder committees.

#### **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,

/s/ Brian R. Hodgdon

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## **ATTACHMENT A**

### **Details of Interconnection Study Delays for 4th Quarter of 2021**

Consistent with the requirements of Section 30.3.4.2 of its Open Access Transmission Tariff (“OATT”) and Order Nos. 845 and 845-A,<sup>1</sup> the New York Independent System Operator, Inc. (“NYISO”) posted interconnection study metrics for Quarter 4 of 2021 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, 2021**

Queue #	Project: Project Name	FES Commenced Date	FES Draft Report for Review Due Date	Primary Driver(s) for Delay
1084	EGC BESS	8/3/2021	11/8/2021	5
0940	Glenwood Power Station BESS	8/19/2020	On-going	1, 2, 4 & 6
1037	East Sayre ESS	7/26/2021	On-going	4
1083	Tremont BESS	10/1/2021	On-going	1 & 4
1087	East Wind 1	4/30/2021	On-going	2, 4 & 5
1137	Orangeville Solar	7/28/2021	On-going	4
1138	Wintergreen Solar	7/23/2021	On-going	4

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

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<sup>1</sup> *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, 2021**

<b>Queue #</b>	<b>Project: Project Name</b>	<b>SRIS Commenced Date</b>	<b>SRIS Draft Report for Review Due</b>	<b>Primary Driver(s) for Delay</b>
0785	Erie-Wyoming County Solar	7/13/2021	On-going	3 & 4
0852	Niagara Dolomite Solar	6/30/2021	On-going	4 & 6
0866	North Country Wind	2/9/2021	On-going	1 & 4
0869	Tabletop Solar	4/30/2021	On-going	4
0871	Verona Solar Energy Center I	1/20/2021	On-going	1 & 4
0873	Verona Solar Energy Center II	1/20/2021	On-going	1 & 4
0912	Intrepid Storage 69	11/17/2020	On-going	1, 3, 5 & 6
0918	Intrepid Storage 138	11/17/2020	On-going	1, 3, 5 & 6
0941	South Hampton Power Station BESS	1/21/2021	On-going	3 & 5
0951	Cayuga Grid, LLC	7/28/2020	On-going	1, 3, 4 & 5
0952	Catskill Grid, LLC	7/28/2020	On-going	1, 3, 4, 5 & 6
1004	Mifflin	3/15/2021	On-going	1, 2, 4 & 6
1007	NYC Energy LLC - Phase 2	10/28/2020	On-going	1, 3, 4, 5 & 6
1009	Yellow Barn Solar	10/16/2020	On-going	1, 4 & 5
1010	Vineyard Wind I	4/2/2021	On-going	1, 3, 5 & 6
1012	Suffolk County Storage II	7/23/2021	On-going	3, 5 & 6
1013	Barrett Ridge Energy – PARs	10/12/2020	On-going	1, 2, 3 & 5
1021	EI East Shoreham	6/30/2021	On-going	1, 2, 3 & 4
1031	Mill Point Solar	1/8/2021	On-going	3 & 5
1036	Mainesburg ESS	6/17/2021	On-going	4 & 5
1040	Riverline Energy Center	4/2/2021	On-going	4
1041	Silverline Energy Center	1/21/2021	On-going	4 & 5
1042	Fort Edward Solar Farm (NY53)	6/30/2021	On-going	1, 3, & 5
1045	NY Wind Holdbrook 2 Uprate	1/21/2021	On-going	3, & 5
1046	Barrett Energy Storage Center	2/9/2021	On-going	1 & 5
1048	Declaration Energy Center	7/26/2021	On-going	4
1049	Holbrook Energy Center	5/12/2021	On-going	1, 4 & 5
1050	Holtsville Energy Center	4/16/2021	On-going	1, 4 & 5
1066	NY Wind – Mott Haven	12/18/2020	On-going	3 & 4
1068	Buchanan Point BESS	10/1/2021	On-going	4
1077	Rutland Center Solar	4/30/2021	On-going	3, 4 & 5
1080	Mineral Basin Solar Power	5/12/2021	On-going	4 & 5
1086	Buchanan Point BESS II	10/1/2021	On-going	4
1088	Harvest Hills Solar	1/21/2021	On-going	1, 4 & 5
1089	Flat Creek Solar	9/21/2021	On-going	3
1096	Allegany 2 Solar	4/30/2021	On-going	1 & 4
1103	Thousand Island Solar	5/26/2021	On-going	1, 2 & 4

1114	Wading River Energy Center	5/26/2021	On-going	2, 4 & 6
1117	CLIES 70MW	6/17/2021	On-going	4 & 6
1142	Minerva BESS I	9/21/2021	On-going	1, 2, 4, 5 & 6
1150	Moss Ridge Solar	10/1/2021	On-going	4 & 5
1153	Wood Street Battery Storage	10/1/2021	On-going	4 & 5

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 14<sup>th</sup> day of February 2022.

/s/ Mitchell W. Lucas

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