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*Language proposed as part of the ESR filing is shaded in grey*  
*Incremental changes are highlighted in yellow*  
*Incremental Changes from 4/8/19 Meeting are highlighted in green*

## **32.5 Appendices**

## **Appendix 1 - Glossary of Terms**

Terms used in the SGIP or SGIA with initial capitalization that are not defined in this Glossary shall have the meanings specified in Attachment X or Attachment S to the ISO OATT, or in Article 2 of the ISO Services Tariff.

**10 kW Inverter Process** – The procedure for evaluating an Interconnection Request for a certified inverter-based Small Generating Facility no larger than 10 kW that uses the Section 32.2 screens. The application process uses an all-in-one document that includes a simplified Interconnection Request, simplified procedures, and a brief set of terms and conditions. See SGIP Appendix 5.

**Affected System** – An electric system other than the transmission system owned, controlled or operated by the ISO or Connecting Transmission Owner that may be affected by the proposed interconnection.

**Affected System Operator** – Affected System Operator shall mean the operator of any Affected System.

**Affected Transmission Owner** – The New York public utility or authority (or its designated agent) other than the Connecting Transmission Owner that: (i) owns facilities used for the transmission of Energy in interstate commerce and provides Transmission Service under the Tariff, and (ii) owns, leases or otherwise possesses an interest in a portion of the New York State Transmission System where System Deliverability Upgrades, System Upgrade Facilities, or Network Upgrade Facilities are or will be installed pursuant to Attachment P, Attachment X, Attachment Z, or Attachment S to the ISO OATT.

**Applicable Reliability Standards** – The criteria, requirements and guidelines of the North American Electric Reliability Council, the Northeast Power Coordinating Council, the New York State Reliability Council and related and successor organizations, and the Transmission District to which the Interconnection Customer's Small Generating Facility is directly interconnected, as those criteria, requirements and guidelines are amended and modified and in effect from time to time; provided that no Party shall waive its right to challenge the applicability of or validity of any criterion, requirement or guideline as applied to it in the context of Attachment Z to the ISO OATT. For the purposes of the SGIP, this definition of Applicable Reliability Standards shall supersede the definition of Applicable Reliability Standards set out in Attachment X to the ISO OATT.

**Base Case** – The base case power flow, short circuit, and stability data bases used for the Interconnection Studies by the ISO, Connecting Transmission Owner or Interconnection Customer; described in Section 30.2.3 of the Large Facility Interconnection Procedures.

**Business Day** – Monday through Friday, excluding federal holidays.

**Capacity Resource Interconnection Service** – The service provided by the ISO to Interconnection Customers that satisfy the NYISO Deliverability Interconnection Standard or that are otherwise eligible to receive CRIS in accordance with Attachment S to the ISO OATT; such service being one of the eligibility requirements for participation as an ISO Installed Capacity Supplier.

**Class Year** shall mean the group of generation projects and Class Year Transmission Projects included in any particular Class Year Interconnection Facilities Study (Annual Transmission Reliability Assessment and/or Class Year Deliverability Study), in accordance with the criteria specified in Attachment S and in Attachment Z for including such projects.

**Class Year Project** shall mean an Eligible Class Year Project with an executed Class Year Interconnection Facilities Study Agreement that thereby becomes one of the group of generation and Class Year Transmission Projects included in any particular Class Year Interconnection Facilities Study (Annual Transmission Reliability Assessment and/or Class Year Deliverability Study), in accordance with the criteria specified in Attachment S and in Attachment Z for including such projects.

**Class Year Transmission Project** shall mean a Developer's proposed new transmission facility that will interconnect to the New York State Transmission System or a proposed upgrade—an improvement to, addition to, or replacement of a part of an existing transmission facility—to the New York State Transmission System, for which the Developer is eligible to request and does request Capacity Resource Interconnection Service, subject to the eligibility requirements set forth in the ISO Procedures. Class Year Transmission Projects shall not include Attachment Facilities, Network Upgrade Facilities, System Upgrade Facilities or System Deliverability Upgrades.

**Class Year Start Date** shall mean the deadline for Eligible Class Year Projects to enter a Class Year Interconnection Facilities Study, determined in accordance with Section 25.5.9 of Attachment S.

**Connecting Transmission Owner** – The New York public utility or authority (or its designated agent) that: (i) owns facilities used for the transmission of Energy in interstate commerce and provides Transmission Service under the Tariff, (ii) owns, leases or otherwise possesses an interest in the portion of the New York State Transmission System or Distribution System at the Point of Interconnection, and (iii) is a Party to the Standard Small Generator Interconnection Agreement.

**Distribution System** – The Transmission Owner's facilities and equipment used to distribute electricity that are subject to FERC jurisdiction, and are subject to the ISO's Large Facility Interconnection Procedures in Attachment X to the ISO OATT or Small Generator Interconnection Procedures in Attachment Z to the ISO OATT under FERC Order Nos. 2003 and/or 2006. For the purpose of the SGIP, the term Distribution System shall not include LIPA's distribution facilities.

**Distribution Upgrades** – The modifications or additions to the Transmission Owner's existing Distribution System at or beyond the Point of Interconnection that are required for the proposed

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project to connect reliably to the system in a manner that meets the NYISO Minimum Interconnection Standard. Distribution Upgrades do not include Interconnection Facilities or System Upgrade Facilities or System Deliverability Upgrades.

**Eligible Class Year Project:** Any Developer or Interconnection Customer that: (1) satisfies the criteria for inclusion in the next Class Year Interconnection Facilities Study, as those criteria are specified in Sections 25.5.9 and 25.6.2.3.1 of Attachment S to the OATT, Section 32.1.1.7 of this Attachment Z and/or Section 32.3.5.3.2 of this Attachment Z; or (2) that seeks evaluation in a Class Year Study to obtain or increase CRIS as permitted by Attachment S to the ISO OATT and satisfies the criteria for inclusion in the next Class Year Interconnection Facilities Study specified in Section 25.5.9 of Attachment S to the OATT.

**Energy Resource Interconnection Service** – The service provided by the ISO to interconnect the Interconnection Customer’s Small Generating Facility to the New York State Transmission System or Distribution System in accordance with the NYISO Minimum Interconnection Standard, to enable the New York State Transmission System to receive Energy and Ancillary Services from the Small Generating Facility, pursuant to the terms of the ISO OATT.

**Fast Track Process** – The procedure for evaluating an Interconnection Request for a certified Small Generating Facility that meets the eligibility requirements of Section 32.2.1 of the SGIP and includes the Section 32.2 screens, customer options meeting, and optional supplemental review.

**Force Majeure** – Any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, the absence of any necessary governmental approvals timely applied for, or any other cause beyond a Party’s control. A Force Majeure event does not include an act of negligence or intentional wrongdoing. For the purposes of this Attachment Z, this definition of Force Majeure shall supersede the definitions of Force Majeure set out in Section 2.11 of the ISO OATT.

**Good Utility Practice** – Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** – Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Interconnection Customer, the ISO, Affected Transmission Owner, Connecting Transmission Owner or any Affiliate thereof.

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**Interconnection Customer** – Any entity, including the Connecting Transmission Owner or any of its affiliates or subsidiaries, that proposes to interconnect its Small Generating Facility with the New York State Transmission System or the Distribution System.

**Interconnection Facilities** – The Connecting Transmission Owner’s Interconnection Facilities and the Interconnection Customer’s Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the New York State Transmission System or the Distribution System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or System Upgrade Facilities.

**Interconnection Request** – The Interconnection Customer’s request, in accordance with these procedures, (i) to interconnect a new Small Generating Facility to the New York State Transmission System or the Distribution System, or (ii) to materially increase the capacity of, or make a material modification to the operating characteristics of, an existing Small Generating Facility that is interconnected to the New York State Transmission System or the Distribution System. For the purposes of this Attachment Z, this definition of Interconnection Request shall supersede the definition of Interconnection Request set out in Attachment X to the ISO OATT.

**Interconnection Study** – Any study required to be performed under Sections 32.2 or 32.3 of the SGIP.

**Local System Upgrade Facilities** shall mean the System Upgrade Facilities necessary to physically interconnect a proposed project to the Connecting Transmission Owner’s transmission system, consistent with applicable interconnection and system protection design standards. Local System Upgrade Facilities include any electrical facilities required to make the physical connection (*e.g.*, a new ring bus for a line connection or facilities required to create a new bay for a substation connection). Local System Upgrade Facilities also include any system protection or communication facilities that may be required for protection of the Connecting Transmission Owner’s transmission facility (line or substation) involved in the interconnection. Local System Upgrade Facilities do not include System Upgrade Facilities required to mitigate any adverse reliability impact(s) of the project(s) identified through analysis such as power flow, short circuit, or stability (*e.g.*, replacement of a circuit breaker at a nearby substation that becomes overdutied as a result of the project(s)).

**Material Modification** – A modification that has a material adverse impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Minor Modification** – Modifications that will not have a material adverse impact on the cost or timing of any Interconnection Request.

**New York State Transmission System** - The entire New York State electric transmission system, which includes (i) the Transmission Facilities under ISO Operational Control; (ii) the Transmission Facilities Requiring ISO Notification; and (iii) all remaining transmission facilities within the New York Control Area.

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**NYISO Deliverability Interconnection Standard** – The standard that must be met, unless otherwise provided for by Attachment S to the ISO OATT, by (i) any generation facility larger than 2MW in order for that facility to obtain CRIS; (ii) any Class Year Transmission Project; (iii) any entity requesting External CRIS Rights, and (iv) any entity requesting a CRIS transfer pursuant to Section 25.9.5 of Attachment S to the ISO OATT. To meet the NYISO Deliverability Interconnection Standard, the Interconnection Customer must, in accordance with the rules in Attachment S to the ISO OATT, fund or commit to fund any System Deliverability Upgrades identified for its project in the Class Year Deliverability Study.

**NYISO Minimum Interconnection Standard** – The reliability standard that must be met by any generation facility or Class Year Transmission Project that is subject to ISO's Large Facility Interconnection Procedures in Attachment X to the ISO OATT or the ISO's Small Generator Interconnection Procedures in this Attachment Z, that is proposing to connect to the New York State Transmission System or Distribution System, to obtain ERIS. The Minimum Interconnection Standard is designed to ensure reliable access by the proposed project to the New York State Transmission System or to the Distribution System. The Minimum Interconnection Standard does not impose any deliverability test or deliverability requirement on the proposed interconnection.

**Open Class Year** – The Class Year open for new members pursuant to the Class Start Date deadline specified in Section 25.5.9 of Attachment S to the OATT.

**Party or Parties** – The ISO, Connecting Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** – The point where the Interconnection Facilities connect with the New York State Transmission System or the Distribution System.

**Queue Position** – The order of a valid Interconnection Request, Study Request, or Transmission Interconnection Application relative to all other such pending requests, that is established based upon the date and time of receipt of the valid request by the ISO, unless specifically provided otherwise in an applicable transition rule set forth in Attachment P, Attachment X or Attachment Z to the ISO OATT.

**Retired:** A Generator that has permanently ceased operating on or after the effective date of Section 5.18 of the Services Tariff either: i) pursuant to applicable notice; or ii) as a result of the expiration of its Mothball Outage or the expiration of its ICAP Ineligible Forced Outage.

**Small Generating Facility** – The Interconnection Customer's device-facility, no larger than 20 MW<sub>e</sub> for the production and/or storage for later injection of electricity identified in the Interconnection Request if proposing to interconnect to the New York State Transmission System or Distribution System, but shall not include (i) facilities proposing to simply receive power from the New York State Transmission System or the Distribution System; (ii) facilities proposing to interconnect to the New York State Transmission System or the Distribution System made solely for the purpose of generation with no wholesale sale for resale nor to net metering; (iii) facilities proposing to the New York State Transmission System or the Distribution System made solely for the purpose of net metering; (iv) facilities proposing to

interconnect to LIPA's distribution facilities; and (v) the Interconnection Customer's Interconnection Facilities. A facility, including but not limited to a Distributed Energy Resource, will be treated as a single Small Generating Facility if all assets units within the facility are behind a single facility meter, even if such assets units are different technology types. [these same revisions are incorporated in the SGIA glossary in Appx. 6, Attachment 1]

**Study Process** – The procedure for evaluating an Interconnection Request that includes the Section 32.3 scoping meeting, feasibility study, system impact study, and facilities study.

**System Deliverability Upgrades** – The least costly configuration of commercially available components of electrical equipment that can be used, consistent with Good Utility Practice and Applicable Reliability Requirements, to make the modifications or additions to the existing New York State Transmission System that are required for the proposed project to connect reliably to the system in a manner that meets the NYISO Deliverability Interconnection Standard for Capacity Resource Interconnection Service.

**System Upgrade Facilities** – The least costly configuration of commercially available components of electrical equipment that can be used, consistent with good utility practice and Applicable Reliability Requirements to make the modifications to the existing transmission system that are required to maintain system reliability due to: (i) changes in the system, including such changes as load growth and changes in load pattern, to be addressed in the form of generic generation or transmission projects; and (ii) proposed interconnections. In the case of proposed interconnection projects, System Upgrade Facilities are the modifications or additions to the existing New York State Transmission System that are required for the proposed project to connect reliably to the system in a manner that meets the NYISO Minimum Interconnection Standard.

**Upgrades** – The required additions and modifications to the Connecting Transmission Owner's portion of the New York State Transmission System or the Distribution System at or beyond the Point of Interconnection. Upgrades may be System Upgrade Facilities or System Deliverability Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

## **Appendix 2 - SMALL GENERATOR INTERCONNECTION REQUEST (Application Form)**

An Interconnection Request is considered complete when it provides all applicable and correct information required below, together with the required application fee, submitted to the ISO. Per SGIP section 32.1.5, documentation of the site control must be submitted with the Interconnection Request.

### **A. Preamble and Instructions**

An Interconnection Customer who requests an interconnection to the New York State Transmission System or the Distribution System must submit this Interconnection Request by e-mail to the ISO at NewProject@nyiso.com. The ISO will send a copy to the Connecting Transmission Owner.

### **B. Processing Fee or Deposit:**

If the Interconnection Request is submitted under the Fast Track Process, the non-refundable processing fee is \$500.

If the Interconnection Request is submitted under the Study Process, whether a new submission or an Interconnection Request that did not pass the Fast Track Process, the Interconnection Customer shall submit to the ISO a non-refundable application fee of \$1,000.

### **C. Interconnection Service Options**

An Interconnection Customer may interconnect its new Small Generating Facility by electing to take either Energy Resource Interconnection Service (“ERIS”) or ERIS and Capacity Resource Interconnection Service (“CRIS”). The rights and obligations associated with each alternative are different. The Interconnection Customer should consult Section 32.1.1.7 of the Small Generator Interconnection Procedures for additional information, and should direct any questions about the alternatives to the ISO.

### **D. Interconnection Customer Information**

Legal Name of the Interconnection Customer (or, if an individual, individual’s name)

Name of Interconnection Customer: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Facility Location (if different from above): \_\_\_\_\_

Telephone : \_\_\_\_\_



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E-Mail Address: \_\_\_\_\_

Additional Contact Information

Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

**E. Application Information**

Application is for:

\_\_\_\_\_ New Small Generating Facility

\_\_\_\_\_ Capacity addition to Existing Small Generating Facility

If capacity addition to existing facility, please describe: \_\_\_\_\_

Will the Small Generating Facility be used for any of the following?

Net Metering? Yes \_\_\_ No\_\_\_

To Supply Power to the Interconnection Customer? Yes \_\_\_ No\_\_\_

To Supply Power to Others Through Wholesale Sales Over the New York State

Transmission System or Distribution System? Yes \_\_\_ No\_\_\_

To Supply Power to a Host Load? Yes \_\_\_ No\_\_\_

For installations at locations with existing electric service to which the proposed Small Generating Facility will interconnect, provide:

\_\_\_\_\_  
(Local Electric Service Provider)

\_\_\_\_\_  
(Existing Account Number)

Local Electric Service Provider Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

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Telephone: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Project Name: \_\_\_\_\_

Project Description: \_\_\_\_\_

Requested Point of Interconnection: \_\_\_\_\_

Coordinates (i.e., latitude and longitude) of the Proposed Point of Interconnection: \_\_\_\_\_

Interconnection Customer's Proposed In-Service Date: \_\_\_\_\_

Interconnection Customer's Proposed Initial Synchronization Date: \_\_\_\_\_

Interconnection Customer's Proposed Commercial Operation Date: \_\_\_\_\_

#### **F. Small Generating Facility Information**

Data apply only to the Small Generating Facility, not the Interconnection Facilities.

##### **1. For Small Generating Facility other than a Distributed Energy Resource Comprised of a Single Unit:**

Energy Source: ☐ Solar ☐ Wind ☐ Hydro ☐ Hydro Type (e.g. Run-of-River): \_\_\_\_\_  
Diesel ☐ Natural Gas ☐ Fuel Oil ☐ Other (state type) \_\_\_\_\_

Prime Mover: ☐ Fuel Cell ☐ Recip Engine ☐ Gas Turb ☐ Steam Turb  
☐ Microturbine ☐ PV ☐ Other

Type of Generator: ☐ Synchronous ☐ Induction ☐ Inverter

Generator Nameplate Rating: \_\_\_\_\_ kW (Typical) Generator Nameplate kVAR: \_\_\_\_\_

If solar array, fixed, 1-axis, 2-axis, 2-axis flat panel, 2-axis CPV, CSP, etc.): \_\_\_\_\_

Interconnection Customer or Customer-Site Load: \_\_\_\_\_ kW (if none, so state)

Existing load? Yes ☐ No ☐

If existing load with metered load data, provide coincident Summer peak load: \_\_\_\_\_

If new load or existing load without metered load data, provide estimated coincident Summer peak load, together with supporting documentation for such estimated value:  
\_\_\_\_\_

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Typical Reactive Load (if known): \_\_\_\_\_

As applicable, for BTM:NG Resources, please also provide the following information:

Interconnection Customer or Customer-Site Load: \_\_\_\_\_ kW (if none, so state)

Existing load? Yes      No

If existing load with metered load data, provide coincident Summer peak load:

If new load or existing load without metered load data, provide estimated coincident Summer peak load:

Is the new load or existing load in the Transmission Owner's service area?

Yes      No      Local provider: \_\_\_\_\_

Maximum Physical Export Capability Requested: \_\_\_\_\_ kW

List components of the Small Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Is the prime mover compatible with the certified protective relay package? \_\_\_\_ Yes \_\_\_\_ No

Generator (or solar collector)

Manufacturer, Model Name & Number: \_\_\_\_\_

Version Number: \_\_\_\_\_

Nameplate Output Power Rating in kW: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Nameplate Output Power Rating in kVA: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Individual Generator Reactive Capability in kVAR

Leading: \_\_\_\_\_ Lagging: \_\_\_\_\_

If wind, total number of generators in wind farm to be interconnected pursuant to this

Interconnection Request: \_\_\_\_\_

Generator Height: \_\_\_\_\_ \_\_\_\_ Single phase \_\_\_\_ Three Phase

Inverter Manufacturer, Model Name & Number (if used): \_\_\_\_\_

Primary frequency response operating range for electric storage resources:

Minimum State of Charge: \_\_\_\_\_ (%) Maximum State of Charge: \_\_\_\_\_ (%)

In addition to the above information, as applicable, for **Energy Storage Resources** **Resources with Energy Duration Limitations**, please also provide the following information:

Inverter manufacturer, model name, number, and version: \_\_\_\_\_

\_\_\_\_\_

Energy storage capability (MWh): \_\_\_\_\_

Minimum Duration for full discharge (i.e., injection) (Hours): \_\_\_\_\_

Minimum Duration for full charge (i.e., withdrawal) (Hours): \_\_\_\_\_

Maximum withdrawal from the system (i.e., when charging) (MW): \_\_\_\_\_

Maximum sustained **four-hour** injection (in MW) **hour** over the Developer-selected duration: \_\_\_\_\_

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Primary frequency response operating range for electric storage resource: \_\_\_\_\_

Minimum State of Charge: \_\_\_\_\_ (%) Maximum State of Charge: \_\_\_\_\_ (%)

If requesting CRIS, indicate the maximum injection capability over the selected duration (e.g., 2.5 MW over 4 hours for a total of 10 MWh; e.g., 10 MWh over 4 hours): \_\_\_\_\_

**2. For a **Distributed Energy Resource** **Small Generating Facility Comprised of Multiple Units of the Same or Different Technology Type**:**

- a. Describe the composition of assets (including MW level) within the **Distributed Energy Resource** **facility**, including load reduction assets (e.g., 5 MW wind facility, 2 MW Energy Storage Resource and a load reduction resource with a maximum of 1 MW of load reduction):

- b. Maximum Injection Capability of entire **Distributed Energy Resource** **Small Generating Facility** over 1 hour: \_\_\_\_\_

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c. If the facility includes a Resource with Energy Duration Limitations and is requesting CRIS, indicate the maximum injection capability for the entire Distributed Energy Resource Small Generating Facility over the selected duration (e.g., 10 MWh over 4 hours):

d. Provide the following information for each asset/unit within the DER- Small Generating Facility:

Energy Source: Solar Wind Hydro Hydro Type (e.g. Run-of-River):  
Diesel Natural Gas Fuel Oil Other (state type)

Prime Mover: Fuel Cell Recip Engine Gas Turb Steam Turb  
Microturbine PV Other

Type of Generator: Synchronous Induction Inverter

Generator Nameplate Rating: kW (Typical) Generator Nameplate kVAR:

If solar array, fixed, 1-axis, 2-axis, 2-axis flat panel, 2-axis CPV, CSP, etc.):

Interconnection Customer or Customer-Site Load: kW (if none, so state)

Existing load? Yes No

If existing load with metered load data, provide coincident Summer peak load:

If new load or existing load without metered load data, provide estimated coincident Summer peak load, together with supporting documentation for such estimated value:

Typical Reactive Load (if known):

Maximum Physical Export Capability Requested: kW

List components of the Small Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
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1.

2.

3.

4.

5.

Is the prime mover compatible with the certified protective relay package? Yes No

Generator (or solar collector)

Manufacturer, Model Name & Number:

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Version Number: \_\_\_\_\_

Nameplate Output Power Rating in kW: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Nameplate Output Power Rating in kVA: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Individual Generator Reactive Capability in kVAR

Leading: \_\_\_\_\_ Lagging: \_\_\_\_\_

If wind, total number of generators in wind farm to be interconnected pursuant to this  
Interconnection Request: \_\_\_\_\_

Generator Height: \_\_\_\_\_ Single phase \_\_\_\_\_ Three Phase \_\_\_\_\_

If an Energy Storage Resource:

Inverter manufacturer, model name, number, and version: \_\_\_\_\_

Energy storage capability (MWh): \_\_\_\_\_

Minimum Duration for full discharge (i.e., injection) (Hours): \_\_\_\_\_

Minimum Duration for full charge (i.e., withdrawal) (Hours): \_\_\_\_\_

Maximum withdrawal from the system (i.e., when charging) (MW): \_\_\_\_\_

Maximum sustained four-hour injection in MW hours: \_\_\_\_\_

Primary frequency response operating range for electric storage resource: \_\_\_\_\_

Minimum State of Charge: \_\_\_\_\_ (%) Maximum State of Charge: \_\_\_\_\_ (%)

#### **G. Additional Information**

Enclose copy of site electrical one-line diagram showing the configuration of all Small Generating Facility equipment, current and potential circuits, and protection and control schemes. This one-line diagram must be signed and stamped by a licensed Professional Engineer if the Small Generating Facility is larger than 50 kW.

- Is One-Line Diagram Enclosed? \_\_\_\_ Yes \_\_\_\_ No

Enclose copy of any Site Control documentation that indicates the precise physical location of the proposed Small Generating Facility (e.g., USGS topographic map or other diagram or documentation).

- Site Control Documentation Enclosed? \_\_\_\_ Yes \_\_\_\_ No
- Site Control provided for the following number of acres: \_\_\_\_\_

#### **H. Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Interconnection Request is true and correct.

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For Interconnection Customer:

By (signature): \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Date: \_\_\_\_\_

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**Appendix 6 - Facilities Study Agreement**



## Attachment A to Facilities Study Agreement

Data to Be Provided by the Interconnection Customer with the Facilities Study Agreement

Provide location plan and simplified one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

On the one-line diagram, indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one-line diagram, indicate the location of auxiliary power. (Minimum load on CT/PT) Amps

Specify your Interconnection Service evaluation election as either Energy Resource Interconnection Service (“ERIS”) alone, or for both ERIS and some level of Capacity Resource Interconnection Service (“CRIS”); provided however that CRIS requested in this Facilities Study Agreement may not exceed 2 MW and may only be requested for a Small Generating Facility that is no larger than 2 MW. A request for CRIS above 2 MW or for a facility larger than 2 MW must be requested by executing a Class Year Interconnection Facilities Study Agreement pursuant in the form of the agreement contained in Appendix 2 to Section 30.14 of Attachment X to the OATT and cannot exceed the limits specified in Section 25.8.1 of Attachment S to ISO OATT.

Evaluation Election for ERIS: \_\_\_\_\_

Evaluation Election for CRIS: \_\_\_\_\_

One set of metering is required for each generation connection to the new ring bus or existing Connecting Transmission Owner station. Number of generation connections: \_\_\_\_\_

Will an alternate source of auxiliary power be available during CT/PT maintenance?

Yes \_\_\_\_ No \_\_\_\_

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes \_\_\_\_ No \_\_\_\_

(If Yes, indicate on the one-line diagram).

What type of control system or PLC will be located at the Small Generating Facility?

\_\_\_\_\_  
\_\_\_\_\_

What protocol does the control system or PLC use?

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Please provide a 7.5-minute quadrangle map of the site. Indicate the plant, station, transmission line, and property lines.

Bus length from generation to interconnection station:

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Physical dimensions of the proposed interconnection station:

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Line length from interconnection station to Connecting Transmission Owner's transmission line.

---

Tower number observed in the field. (Painted on tower leg):

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Number of third party easements required for transmission lines, if known:

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Is the Small Generating Facility located in Connecting Transmission Owner's service area?

Yes \_\_\_\_\_ No \_\_\_\_\_ If No, please provide name of local provider:

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Please provide the following proposed schedule dates:

Begin Construction Date: \_\_\_\_\_

In-Service Date: \_\_\_\_\_

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Initial Synchronization

Date: \_\_\_\_\_

Generation Testing

Date: \_\_\_\_\_

Commercial Operation

Date: \_\_\_\_\_

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**Appendix 7 - STANDARD SMALL GENERATOR INTERCONNECTION  
AGREEMENT (SGIA)**

## **Attachment 1 - Glossary of Terms**

**Affected System** – An electric system other than the transmission system owned, controlled or operated by the Connecting Transmission Owner that may be affected by the proposed interconnection.

**Affected System Operator** – Affected System Operator shall mean the operator of any Affected System.

**Affected Transmission Owner** – The New York public utility or authority (or its designated agent) other than the Connecting Transmission Owner that: (i) owns facilities used for the transmission of Energy in interstate commerce and provides Transmission Service under the Tariff, and (ii) owns, leases or otherwise possesses an interest in a portion of the New York State Transmission System where System Deliverability Upgrades or System Upgrade Facilities are installed pursuant to Attachment Z and Attachment S to the ISO OATT.

**Applicable Laws and Regulations** – All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority, including but not limited to Environmental Law.

**Applicable Reliability Standards** – The criteria, requirements and guidelines of the North American Electric Reliability Council, the Northeast Power Coordinating Council, the New York State Reliability Council and related and successor organizations, or the Transmission District to which the Interconnection Customer's Small Generating Facility is directly interconnected, as those criteria, requirements and guidelines are amended and modified and in effect from time to time; provided that no Party shall waive its right to challenge the applicability of or validity of any criterion, requirement or guideline as applied to it in the context of Attachment Z to the ISO OATT and this Agreement. For the purposes of this Agreement, this definition of Applicable Reliability Standards shall supersede the definition of Applicable Reliability Standards set out in Attachment X to the ISO OATT.

**Base Case** – The base case power flow, short circuit, and stability data bases used for the Interconnection Studies by NYISO, Connecting Transmission Owner or Interconnection Customer; described in Section 32.2.3 of the Large Facility Interconnection Procedures.

**Breach** - The failure of a Party to perform or observe any material term or condition of this Agreement.

**Business Day** – Monday through Friday, excluding federal holidays.

**Capacity Resource Interconnection Service** – The service provided by NYISO to Interconnection Customers that satisfy the NYISO Deliverability Interconnection Standard or that are otherwise eligible to receive CRIS in accordance with Attachment S to the ISO OATT; such service being one of the eligibility requirements for participation as a NYISO Installed Capacity Supplier.

**Connecting Transmission Owner** – The New York public utility or authority (or its designated agent) that: (i) owns facilities used for the transmission of Energy in interstate commerce and provides Transmission Service under the Tariff, (ii) owns, leases or otherwise possesses an interest in the portion of the New York State Transmission System or Distribution System at the Point of Interconnection, and (iii) is a Party to the Standard Small Generator Interconnection Agreement.

**Default** – The failure of a Party in Breach of this Agreement to cure such Breach under the Small Generator Interconnection Agreement.

**Distribution System** – The Transmission Owner’s facilities and equipment used to distribute electricity that are subject to FERC jurisdiction, and are subject to the NYISO’s Large Facility Interconnection Procedures in Attachment X to the ISO OATT or Small Generator Interconnection Procedures in Attachment Z to the ISO OATT under FERC Order Nos. 2003 and/or 2006. For the purpose of this Agreement, the term Distribution System shall not include LIPA’s distribution facilities.

**Distribution Upgrades** – The additions, modifications, and upgrades to the Connecting Transmission Owner’s Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer’s wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities or System Upgrade Facilities or System Deliverability Upgrades.

**Energy Resource Interconnection Service** – The service provided by NYISO to interconnect the Interconnection Customer’s Small Generating Facility to the New York State Transmission System or Distribution System in accordance with the NYISO Minimum Interconnection Standard, to enable the New York State Transmission System to receive Energy and Ancillary Services from the Small Generating Facility, pursuant to the terms of the ISO OATT.

**Force Majeure** – Any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party’s control. A Force Majeure event does not include an act of negligence or intentional wrongdoing. For the purposes of this Agreement, this definition of Force Majeure shall supersede the definitions of Force Majeure set out in Section 32.2.11 of the NYISO Open Access Transmission Tariff.

**Good Utility Practice** – Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

*Draft – For Discussion Purposes Only*

**Governmental Authority** – Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, NYISO, Affected Transmission Owner, Connecting Transmission Owner or any Affiliate thereof.

**Interconnection Customer** – Any entity, including the Transmission Owner or any of the affiliates or subsidiaries, that proposes to interconnect its Small Generating Facility with the New York State Transmission System or the Distribution System.

**Interconnection Facilities** – The Connecting Transmission Owner’s Interconnection Facilities and the Interconnection Customer’s Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the New York State Transmission System or the Distribution System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or System Upgrade Facilities.

**Interconnection Request** – The Interconnection Customer’s request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to materially increase the capacity of, or make a material modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the New York State Transmission System or the Distribution System. For the purposes of this Agreement, this definition of Interconnection Request shall supersede the definition of Interconnection Request set out in Attachment X to the ISO OATT.

**Interconnection Study** – Any study required to be performed under Sections 32.2 or 32.3 of the SGIP.

**Material Modification** – A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**New York State Transmission System** – The entire New York State electric transmission system, which includes: (i) the Transmission Facilities under ISO Operational Control; (ii) the Transmission Facilities Requiring ISO Notification; and (iii) all remaining transmission facilities within the New York Control Area.

**NYISO Deliverability Interconnection Standard** – The standard that must be met, unless otherwise provided for by Attachment S to the ISO OATT, by (i) any generation facility larger than 2MW in order for that facility to obtain CRIS; (ii) any Class Year Transmission Project proposing to interconnect to the New York State Transmission System and receive Unforced Capacity Delivery Rights; (iii) any entity requesting External CRIS Rights, and (iv) any entity requesting a CRIS transfer pursuant to Section 25.9.5 of Attachment S to the ISO OATT. To meet the NYISO Deliverability Interconnection Standard, the Interconnection Customer must, in accordance with the rules in Attachment S to the ISO OATT, fund or commit to fund any System Deliverability Upgrades identified for its project in the Class Year Deliverability Study.

**NYISO Minimum Interconnection Standard** – The reliability standard that must be met by any generation facility or Class Year Transmission Project that is subject to NYISO's Large Facility Interconnection Procedures in Attachment X to the ISO OATT or the NYISO's Small Generator Interconnection Procedures in this Attachment Z, that is proposing to connect to the New York State Transmission System or Distribution System, to obtain ERIS. The Minimum Interconnection Standard is designed to ensure reliable access by the proposed project to the New York State Transmission System or to the Distribution System. The Minimum Interconnection Standard does not impose any deliverability test or deliverability requirement on the proposed interconnection.

**Operating Requirements** – Any operating and technical requirements that may be applicable due to Regional Transmission Organization, Independent System Operator, control area, or the Connecting Transmission Owner's requirements, including those set forth in the Small Generator Interconnection Agreement. Operating Requirements shall include Applicable Reliability Standards.

**Party or Parties** – The NYISO, Connecting Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** – The point where the Interconnection Facilities connect with the New York State Transmission System or the Distribution System.

**Reasonable Efforts** – With respect to an action required to be attempted or taken by a Party under this Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** – The Interconnection Customer's ~~device-facility~~ no larger than 20 MW for the production and/or storage for later injection of electricity identified in the Interconnection Request if proposing to interconnect to the New York State Transmission System or Distribution System, but shall not include (i) facilities proposing to simply receive power from the New York State Transmission System or the Distribution System; (ii) facilities proposing to interconnect to the New York State Transmission System or the Distribution System made solely for the purpose of generation with no wholesale sale for resale nor to net metering; (iii) facilities proposing to the New York State Transmission System or the Distribution System made solely for the purpose of net metering; (iv) facilities proposing to interconnect to LIPA's distribution facilities; and (v) the Interconnection Customer's Interconnection Facilities. A facility, including but not limited to a Distributed Energy Resource, will be treated as a single Small Generating Facility if all resources within the facility are behind a single facility meter, even if such resources are different technology types. [same revisions as those proposed to Appx. 1 of Section 32.5]

**System Deliverability Upgrades** – The least costly configuration of commercially available components of electrical equipment that can be used, consistent with Good Utility Practice and Applicable Reliability Requirements, to make the modifications or additions to the existing New York State Transmission System that are required for the proposed project to connect reliably to the system in a manner that meets the NYISO Deliverability Interconnection Standard for Capacity Resource Interconnection Service.



**System Upgrade Facilities** – The least costly configuration of commercially available components of electrical equipment that can be used, consistent with good utility practice and Applicable Reliability Requirements to make the modifications to the existing transmission system that are required to maintain system reliability due to: (i) changes in the system, including such changes as load growth and changes in load pattern, to be addressed in the form of generic generation or transmission projects; and (ii) proposed interconnections. In the case of proposed interconnection projects, System Upgrade Facilities are the modification or additions to the existing New York State Transmission System that are required for the proposed project to connect reliably to the system in a manner that meets the NYISO Minimum Interconnection Standard.

**Tariff** – The NYISO’s Open Access Transmission Tariff, as filed with the FERC, and as amended or supplemented from time to time, or any successor tariff.

**Upgrades** – The required additions and modifications to the Connecting Transmission Owner’s portion of the New York State Transmission System or the Distribution System at or beyond the Point of Interconnection. Upgrades may be System Upgrade Facilities or System Deliverability Upgrades Distribution Upgrades. Upgrades do not include Interconnection Facilities.