32 Attachment Z – Small Generator Interconnection Procedures (SGIP) (Applicable to Generating Facilities No Larger Than 20 MW)

# 32.1 Application

# 32.1.1 Applicability

32.1.1.1 These Small Generator Interconnection Procedures ("SGIP") apply to interconnections of Small Generating Facilities to the New York State Transmission System, and interconnections to the Distribution System subject to Federal Energy Regulatory Commission jurisdiction. These procedures do not apply to the following interconnections: (1) interconnections proposing only tomade simply to receive, and not to inject, power from the New York State Transmission System and/or the Distribution System; (2) nor to-interconnections proposed made solely for the purpose of generation with no wholesale sale for resale; (3) nor to interconnections proposed solely for the purpose of net metering; (4) interconnection to the Distribution System proposing to participate in the ISO markets solely through an Aggregation; and (5). These procedures do not apply to interconnections to LIPA's distribution facilities. LIPA will continue to administer the interconnection process for generators connecting to its distribution facilities and perform all required studies on its distribution system under its own tariffs and procedures. For a generating facility not subject to the SGIP that is qualified to participate in a NYISO market pursuant to applicable ISO Procedures, it will be deemed to have ERIS in the MW amount of the generating facility's net seasonal capacity (in aggregate where it includes multiple energy production devices), as memorialized in the applicable interconnection agreement with the respective Connecting Transmission Owner. Under these procedures, a request to interconnect a certified Small Generating Facility (See Appendices 3 and 4 for description of certification criteria) to the Connecting

Transmission Owner's Distribution System shall be evaluated under the Section 32.2 Fast Track Process if the eligibility requirements of Section 32.2.1 are met. A request to interconnect a certified inverter-based Small Generating Facility no larger than 10 kilowatts (kW) shall be evaluated under the Appendix 5 10 kW Inverter Process. A request to interconnect a Small Generating Facility no larger than 20 megawatts (MW) that does not meet the eligibility requirements of Section 32.2.1, or does not pass the Fast Track Process or the 10 kW Inverter Process, shall be evaluated under the Section 32.3 Study Process.

- 32.1.1.2 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Appendix I or the body of these procedures. Capitalized terms used herein that are not defined in the Glossary of Terms in Appendix I or in the body of these procedures shall have the meanings specified in Section 32.1 or Attachment S or Attachment X of the ISO OATT.
- 32.1.1.3 Neither these procedures nor the requirements included hereunder apply to Small Generating Facilities interconnected or approved for interconnection prior to 60 Business Days after the effective date of these procedures accepted by the Federal Energy Regulatory Commission in compliance with Order No. 2006, provided, however, that requests to interconnect Small Generating Facilities submitted after that effective date must be made pursuant to these procedures, as amended. These procedures shall apply to any existing interconnected Small Generating Facility to the extent that there is a material modification to the facility or the Interconnection Facility, if that facility as modified remains a Small Generating Facility.

- 32.1.1.4 Prior to submitting its Interconnection Request (Appendix 2), the Interconnection Customer may ask the ISO's interconnection contact employee or office whether the proposed interconnection is subject to these procedures. The ISO, after consultation with the appropriate Transmission Owner, shall respond within 15 Business Days. Upon request from the ISO, a Transmission Owner shall provide requested information to the ISO necessary to make this determination (*e.g.*, whether the proposed interconnection point is on a distribution or transmission facility and if distribution, whether there is already one or more generators connecting to that facility making wholesale sales).
- 32.1.1.5 Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. The Federal Energy Regulatory Commission expects all ISOs and RTOs, Connecting Transmission Owners, Market Participants, and Interconnection Customers interconnected with electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.
- 32.1.1.6 References in these procedures to an interconnection agreement are to the Small Generator Interconnection Agreement (SGIA).
- 32.1.1.7 A new Small Generating Facility wishing to sell Energy and Ancillary

  Services must first elect Energy Resource Interconnection Service and satisfy the

NYISO Minimum Interconnection Standard, which does not impose any deliverability requirement. All new Small Generating Facilities must satisfy the NYISO Minimum Interconnection Standard.

A new Small Generating Facility larger than 2 MW wishing to become a qualified Installed Capacity Supplier in accordance with the ISO Services Tariff and related ISO Procedures must first elect Capacity Resource Interconnection Service ("CRIS") and satisfy the NYISO Deliverability Interconnection Standard in addition to the NYISO Minimum Interconnection Standard. A Small Generating Facility larger than 2 MW electing CRIS must execute a Class Year Interconnection Facilities Study Agreement in the form of Appendix 2 to Attachment X of the ISO OATT and satisfy the requirements of Section 30.8.1 of Attachment X, as applicable. At that time, the Interconnection Customer must specify the MW of CRIS that it is requesting; provided, however, the Small Generating Facility's requested Capacity Resource Interconnection Service cannot exceed the limits specified in Section 25.8.1 of Attachment S to the ISO OATT. The ISO will then place the Small Generating Facility in the then Open Class Year and evaluate the Small Generating Facility for deliverability, as a Class Year Project, following the same rules and procedures in Attachment S to the ISO OATT applicable to other Class Year Projects being evaluated for deliverability. Inclusion in the Class Year will only be for the determination of System Deliverability Upgrade costs and Deliverable MW unless the Small Generating Facility is being included in the Class Year for the determination of System Upgrade Facility cost responsibility pursuant to Section 32.3.5.3.2 of the SGIP.

For Small Generating Facilities interconnected or completely studied for interconnection before the projects in Class Year 2007, the CRIS level for those Small Generating Facilities will be set at the highest DMNC recorded during five Summer Capability periods measured in

accordance with the rules set forth in Section 25.9.3.1 of Attachment S to the ISO OATT. Prior to the establishment of a Small Generating Facility's first DMNC value for a Summer Capability Period, the CRIS level will be set at the Small Generating Facility's nameplate MW. A Small Generating Facility 2 MW or smaller (inclusive of all Generators in a Small Generating Facility comprised of multiple Generators) may elect CRIS without being evaluated for deliverability under Attachment S to the ISO OATT. In all cases, the new Small Generating Facility will interconnect using the SGIA contained in this Attachment Z. Once it is established for them, Small Generating Facilities may retain their CRIS in accordance with the rules set forth in Section 25.9.3 of Attachment S to the ISO OATT.

# 32.1.2 Pre-Application

32.1.2.1 The ISO shall designate an employee or office from which information on the application process and on an Affected System can be obtained through informal requests from the Interconnection Customer presenting a proposed project for a specific site. The name, telephone number, and e-mail address of such contact employee or office shall be made available on the ISO's Internet web site. Electric system information provided to the Interconnection Customer should include relevant system studies, Interconnection Studies, Base Case Data and other materials useful to an understanding of an interconnection at a particular point on the New York State Transmission System or Distribution System, to the extent such provision does not violate confidentiality provisions of prior agreements or critical infrastructure requirements. The ISO, with the required information about distribution facilities from the appropriate Connecting

Transmission Owner, shall comply with reasonable requests for such information pursuant to this Section 32.1.2.

32.1.2.2 In addition to the information described in Section 32.1.2.1, which may be provided in response to an informal request, an Interconnection Customer may submit a formal written request form along with a non-refundable fee of \$1000 for a pre-application report on a proposed project at a specific site. The preapplication fee shall be divided between the ISO and the Connecting Transmission Owner as follows: one-third to the ISO and two-thirds to the Connecting Transmission Owner. Within two (2) Business Days of receiving the pre-application report request form, the ISO shall provide a copy of the preapplication request form to the appropriate Connecting Transmission Owner. The Connecting Transmission Owner shall return the pre-application report, completed to the extent required under this section 32.1.2.2 within fifteen (15) Business Days of receipt of the pre-application request form from the ISO. The ISO, with the required information about distribution facilities from the appropriate Connecting Transmission Owner, shall provide the pre-application data described in Section 32.1.2.3 to the Interconnection Customer within 20 Business Days of receipt of the completed request form and payment of the \$1000 fee. The pre-application report produced by the ISO, in consultation with the appropriate Connecting Transmission Owner, is non-binding, does not confer any rights, and the Interconnection Customer must still successfully apply to interconnect to the Connecting Transmission Owner's system. The written preapplication report request form shall include the information in Sections

- 32.1.2.2.1 through 32.1.2.2.9 below to clearly and sufficiently identify the location of the proposed Point of Interconnection.
- 32.1.2.2.1 Project contact information, including name, address, phone number, and email address.
- 32.1.2.2.2 Project location (street address with nearby cross streets, town, and county).
- 32.1.2.2.3 Meter number, pole number, or other equivalent information identifying proposed Point of Interconnection, if available
- 32.1.2.2.4 Generator type (*e.g.*, solar, wind, combined heat and power, etc.) (for Small Generating Facilities comprised of multiple technologies, identify all technology types within the facility (*i.e.*, the Generators behind the single Point of Injection that comprise the facility)).
- 32.1.2.2.5 Total Size of the Small Generating Facility, and if comprised of multiple Generators, size of each individual Generator behind the single Point of Injection (alternating current kW).
- 32.1.2.2.6 Single or three phase generator configuration.
- 32.1.2.2.7 Stand-alone generator (no outside load, not including station service Yes or No?).
- 32.1.2.2.8 Is new service requested? Yes or No? If there is existing service, include the customer account number, site minimum and maximum current or proposed electric loads in kW (if available) and specify if the load is expected to change.

- 32.1.2.2.9 Indication as to whether the requestor intends to use the facility to engage in wholesale sales over the New York State Transmission System or Distribution System.
- Using the information provided in the pre-application report request form 32.1.2.3 in Section 32.1.2.2, the ISO, in consultation with the appropriate Connecting Transmission Owner, will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Interconnection. This selection by the ISO, in consultation with the appropriate Connecting Transmission Owner, does not necessarily indicate, after application of the screens and/or study, that this would be the circuit the project ultimately connects to. The Interconnection Customer must request additional pre-application reports if information about multiple Points of Interconnection is requested. The ISO, in consultation with the Connecting Transmission Owner, shall determine whether the proposed interconnection is subject to the interconnection procedures set forth in this Attachment Z of the ISO OATT. If the pre-application report request form seeks information about a Point of Interconnection that is not subject to the interconnection procedures set forth in this Attachment Z of the ISO OATT, the Connecting Transmission Owner Customer shall follow the applicable state tariff, rules or procedures regarding generator interconnections. Subject to Section 32.1.2.4, the pre-application report will include the following information:
- 32.1.2.3.1 Total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Interconnection.

- 32.1.2.3.2 Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (*i.e.*, amount of generation online) likely to serve the proposed Point of Interconnection.
- 32.1.2.3.3 Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (*i.e.*, amount of generation in the queue) likely to serve the proposed Point of Interconnection.
- 32.1.2.3.4 Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Interconnection (*i.e.*, total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).
- 32.1.2.3.5 Substation nominal distribution voltage and/or transmission line nominal voltage if applicable.
- 32.1.2.3.6 Nominal distribution circuit voltage at the proposed Point of Interconnection.
- 32.1.2.3.7 Approximate circuit distance between the proposed Point of Interconnection and the substation.
- 32.1.2.3.8 Relevant line section(s)/station(s) actual or estimated peak load and minimum load data, including daytime minimum load as described in Section 32.2.4.4.1.1 below and absolute minimum load, when available.
- 32.1.2.3.9 Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Interconnection and the substation/area. Identify whether the substation has a load tap changer.

- 32.1.2.3.10 Number of phases available at the proposed Point of Interconnection. If a single phase, distance from the three-phase circuit.
- 32.1.2.3.11 Limiting conductor ratings from the proposed Point of Interconnection to the distribution substation.
- 32.1.2.3.12 Whether the Point of Interconnection is located on a spot network, grid network, or radial supply.
- 32.1.2.3.13 Based on the proposed Point of Interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.
- 32.1.2.4 The pre-application report need only include existing data. A pre-application report request does not obligate the ISO or the Connecting

  Transmission Owner to conduct a study or other analysis of the proposed generator in the event the data is not readily available. If the ISO, in consultation with the Connecting Transmission Owner, cannot complete all or some of a pre-application report due to lack of available data, the ISO shall provide the

  Interconnection Customer with a pre-application report that includes the data that is available. The provision of information on "available capacity" pursuant to

  Section 32.1.2.3.4 does not imply that an interconnection up to this level may be completed without impacts since there are many variables studied as part of the interconnection review process, and data provided in the pre-application report may become outdated at the time of the submission of the complete

  Interconnection Request. Notwithstanding any of the provisions of this section,

the ISO, in consultation with the Connecting Transmission Owner, shall, in good faith, include data in the pre-application report that represents the best available information at the time of reporting.

# 32.1.3 Interconnection Request

An Interconnection Customer proposing to interconnect a new Small Generating Facility to the New York State Transmission System or to the Distribution System, or proposing a modification to an existing Small Generating Facility that is a material modification pursuant to Section 32.1.4 of this Attachment Z shall submit its Interconnection Request to the ISO together with a non-refundable \$1,000 application fee. The application fee shall be divided equally between the NYISO and Connecting Transmission Owner(s). An Interconnection Customer seeking to return a Small Generating Facility to service after it is Retired must submit a new Interconnection Request as a new facility. An Interconnection Customer returning a Small Generating Facility to service prior to the expiration or termination of its Mothball Outage or ICAP Ineligible Forced Outage need not submit a new Interconnection Request unless the Small Generating Facility is proposing to materially increase the capacity of, or make a material modification to an existing Small Generating Facility such as would otherwise trigger a new Interconnection Request pursuant to Section 32.1.4.2 of this Attachment Z.

The Interconnection Request shall be date- and time-stamped by the ISO upon receipt and a copy shall be sent by the ISO to the Connecting Transmission Owner. The ISO's date- and time-stamp applied to the Interconnection Request at the time of its original submission shall be accepted as the qualifying date- and time-stamp for the purposes of any timetable in these procedures. The Interconnection Customer shall be notified of receipt by the ISO within three Business Days of receiving the Interconnection Request. The ISO, after consulting with the

Connecting Transmission Owner, shall notify the Interconnection Customer within ten Business Days of the receipt of the Interconnection Request as to whether the Interconnection Request is complete or incomplete. If the Interconnection Request is incomplete, the ISO shall provide along with the notice that the Interconnection Request is incomplete, a written list detailing all information that must be provided to complete the Interconnection Request. The Interconnection Customer will have ten Business Days after receipt of the notice to submit the listed information or to request an extension of time to provide such information. If the Interconnection Customer does not provide the listed information or a request for an extension of time within the deadline, the Interconnection Request will be deemed withdrawn. An Interconnection Request will be deemed complete upon submission of the listed information to the ISO.

- 32.1.3.1 If the Interconnection Request is to interconnect to a distribution facility, the ISO will consult with the Connecting Transmission Owner to determine whether the SGIP apply.
- 32.1.3.2 The expected Commercial Operation Date of the new Small Generating Facility or proposed increase in capacity of the existing Small Generating Facility provided in the Interconnection Request shall be no more than ten (10) years from the date the Interconnection Request is received by the ISO. Extensions of Commercial Operation Dates for Small Generating Facilities are subject to the provisions of Section 30.4.4.5 of Attachment X to the OATT.

## **32.1.4** Modification of the Small Generating Facility

32.1.4.1 Modification of a Proposed Small Generating Facility in the ISO's

Interconnection Queue

Any proposed modification to machine data or equipment configuration or to the interconnection site of the Small Generating Facility under evaluation in the SGIP is a material modification to the Small Generating Facility unless such modification is deemed non-material by the ISO, the Connecting Transmission Owner, and the Interconnection Customer. If deemed material, the Interconnection Customer may withdraw the requested modification, or the material modification shall be deemed a withdrawal of the Interconnection Request and shall require submission of a new Interconnection Request, unless, following notification by the ISO that the proposed modification is material, the Interconnection Customer proposes further modifications or mitigation to ameliorate the material impact of the proposed modification in a reasonable period of time.

Notwithstanding the foregoing, for a Project in the Interconnection Queue prior to March 31, 2021, the Interconnection Customer may, prior to the return of the executed facilities study agreement to the ISO, modify the Project by combining it with another Project in the Interconnection Queue subject to the requirements set forth in Section 30.4.4.2 of Attachment X to the ISO OATT.

## 32.1.4.2 Modification of an Existing Small Generating Facility

32.1.4.2.1 Material Increase in Capacity of the Small Generating Facility. A modification to materially increase the capacity of an existing Small Generating Facility or a modification to the operating characteristics of an existing Small Generating Facility deemed material by the ISO will be a material modification requiring a new Interconnection Request for the incremental increase and/or modified Small Generating Facility.

An increase in the capacity of an existing Small Generating Facility is a material increase for purposes of this Section 32.1.4.2.1 unless the increase (a) is not associated with any

equipment changes or is associated with equipment changes determined by the ISO to be non-material; and (b) is an increase in the Small Generating Facility's baseline ERIS level that is equal to or less than two (2) megawatts and which provides for a total output of the Small Generating Facility of no more than twenty (20) megawatts. The addition of load reduction capability to a Small Generating Facility is not a material modification for purposes of this Section 32.1.4.2.1.

For purposes of this Section 32.1.4.2.1, the baseline ERIS level of an existing Small Generating Facility is (a) the greater of (i) the existing Small Generating Facility's CRIS level determined as a facility pre-dating Class Year 2007 pursuant to Section 25.9.3.1 of Attachment S of the OATT, if applicable; or (ii) the final maximum summer megawatt electrical output studied for ERIS in the ISO's interconnection process for the existing Small Generating Facility; or (b) if neither (a)(i) nor (a)(ii) are applicable, the baseline ERIS level is the value reflected in the Small Generating Facility's interconnection agreement or other applicable documentation governing the Small Generating Facility's interconnection; however, if the Small Generating Facility has requested a modification to its facility to decrease its size, and such modification has been deemed nonmaterial by the ISO, the decreased MW level will be a cap on its baseline ERIS. If the existing Small Generating Facility is a BTM:NG Resource, the increase in existing capacity will be measured based on the increase from the existing gross capability of the generator to the proposed gross capability. Notwithstanding the above, if the existing Small Generating Facility is a temperature sensitive unit, the maximum capacity of which varies based on ambient temperature, the increase in existing capacity will be measured based on the largest increase from the existing capacity to the proposed capacity at the same temperature, i.e., at the same temperature along the maximum megawatt electrical output versus temperature curves.

#### 32.1.5 Site Control

Documentation of site control must be submitted with the Interconnection Request. Site control may be demonstrated through:

- Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Small Generating Facility;
- 32.1.5.2 An option to purchase or acquire a leasehold site for such purpose; or
- 32.1.5.3 An exclusivity or other business relationship between the Interconnection

  Customer and the entity having the right to sell, lease, or grant the Interconnection

  Customer the right to possess or occupy a site for such purpose.

# **32.1.6 Queue Position**

The ISO shall assign a Queue Position based upon the date- and time-stamp of the Interconnection Request. The Queue Position of each Interconnection Request will be used to determine the order of initiating Interconnection Studies, and the study assumptions to be used in the analyses conducted under Section 32.2 and Section 32.3 of these procedures. Provided, however, Attachment S of the ISO OATT will be used to determine the cost responsibility for any System Upgrade Facilities or System Deliverability Upgrades necessary to accommodate the interconnection, as required by Section 32.3.5.3.2 of these procedures. The ISO shall maintain a single interconnection queue that combines Interconnection Requests evaluated under these procedures and those evaluated under Attachment X to the OATT. Interconnection Requests may be studied serially or in clusters for the purpose of the system impact study or facilities study. The ISO may evaluate Small Generating Facilities moving forward in the same time frame that contribute to Local System Upgrade Facilities to determine their *pro rata* cost responsibility for such Local System Upgrade Facilities. Small Generating Facilities evaluated

in a cluster study that trigger non-Local System Upgrade Facilities must be evaluated in a Class Year Interconnection Facilities Study pursuant to Section 32.3.5.3.2 of this Attachment Z.

# 32.1.7 Interconnection Requests Submitted Prior to the Effective Date of the SGIP

Nothing in this SGIP affects an Interconnection Customer's Queue Position assigned before the effective date of this SGIP. The Parties agree to complete work on any interconnection study agreement executed prior to the effective date of this SGIP in accordance with the terms and conditions of that interconnection study agreement. Any new studies or additional work will be completed pursuant to this SGIP.

#### 32.2 Fast Track Process

# 32.2.1 Applicability

The Fast Track Process is available to an Interconnection Customer proposing to interconnect its Small Generating Facility with a Connecting Transmission Owner's Distribution System if the Small Generating Facility's capacity does not exceed the size limits identified in the table below. Small Generating Facilities below these limits are eligible for review under the Fast Track Process. However, eligibility for the Fast Track Process is distinct from the Fast Track Process itself, and eligibility does not imply or indicate that a Small Generating Facility will pass the Fast Track Process screens in Section 32.2.2.1 below or the supplemental review screens in Section 32.2.4.4 below.

Eligibility for the Fast Track Process is determined based upon the generator type, the size of the generator, voltage of the line and the location of and type of line at the Point of Interconnection. All Small Generating Facilities connecting to lines greater than 69 kilovolt (kV) are ineligible for the Fast Track Process regardless of size. All synchronous and induction machines must be no larger than 2 MW to be eligible for the Fast Track Process, regardless of location. For certified inverter-based systems, the size limit varies according to the voltage of the line at the proposed Point of Interconnection. Certified inverter-based Small Generating Facilities located within 2.5 electrical circuit miles of a substation and on a mainline (as defined in the table below) are eligible for the Fast Track Process under the higher thresholds according to the table below. In addition to the size threshold, the Interconnection Customer's proposed Small Generating Facility must meet the codes, standards, and certification requirements of Appendices 3 and 4 of these procedures, or the ISO, in consultation with the Connecting

Transmission Owner, has to have reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

Fast Track Eligibility for Inverter-Based Systems			
Line Voltage	Fast Track Eligibility Regardless of Location	Fast Track Eligibility on a Mainline <sup>1</sup> and $\leq 2.5$ Electrical Circuit Miles from Substation <sup>2</sup>	
< 5 kV	≤ 500 kW	≤ 500 kW	
≥ 5 kV and < 15 kV	≤ 2 MW	≤ 3 MW	
≥ 15 kV and < 30 kV	≤3 MW	≤ 4 MW	
≥ 30 kV and ≤ 69 kV	≤ 4 MW	≤ 5 MW	

<sup>&</sup>lt;sup>1</sup> For purposes of this table, a mainline is the three-phase backbone of a circuit. It will typically constitute lines with wire sizes of 4/0 American wire gauge, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil.

#### 32.2.2 Initial Review

Within 15 Business Days after the ISO notifies the Interconnection Customer it has received a complete Interconnection Request, the ISO, in consultation with the Connecting Transmission Owner, shall perform an initial review using the screens set forth below, shall notify the Interconnection Customer of the results, and include with the notification copies of the analysis and data underlying the determinations under the screens.

#### **32.2.2.1** Screens

32.2.2.1.1 The proposed Small Generating Facility's Point of Interconnection must be on a portion of the Connecting Transmission Owner's Distribution System.

An Interconnection Customer can determine this information about its proposed interconnection location in advance by requesting a pre-application report pursuant to Section 32.1.2.

- 32.2.2.1.2 For interconnection of a proposed Small Generating Facility to a radial distribution circuit, the aggregated generation, including the proposed Small Generating Facility, on the circuit shall not exceed 15% of the line section annual peak load as most recently measured at the substation. A line section is that portion of a Connecting Transmission Owner's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line.
- 32.2.2.1.3. For interconnection of a proposed Small Generating Facility to the load side of spot network protectors, the proposed Small Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5% of a spot network's maximum load or 50 kW.<sup>1</sup>
- <sup>1</sup> A spot network is a type of Distribution System found within modern commercial buildings to provide high reliability of service to a single customer. (<u>Standard Handbook for Electrical Engineers</u>, 11th edition, Donald Fink, McGraw Hill Book Company.)
- 32.2.2.1.4. The proposed Small Generating Facility, in aggregation with other generation on the distribution circuit, shall not contribute more than 10% to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.
- 32.2.2.1.5. The proposed Small Generating Facility, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5% of the short circuit interrupting capability; nor shall the

interconnection be proposed for a circuit that already exceeds 87.5% of the short circuit interrupting capability.

32.2.2.1.6. Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on the Connecting Transmission Owner's electric power system due to a loss of ground during the operating time of any anti-islanding function.

<b>Primary Distribution Line</b>	Type of Interconnection to	Result/Criteria
Type	Primary Distribution Line	
Three-phase, three wire	3-phase or single phase,	Pass screen
	phase-to-phase	
Three-phase, four wire	Effectively-grounded 3 phase	Pass screen
	or Single-phase, line-to-	
	neutral	

- 32.2.2.1.7 If the proposed Small Generating Facility is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Small Generating Facility, shall not exceed 20 kW.
- 32.2.2.1.8 If the proposed Small Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.
- 32.2.2.1.9 The Small Generating Facility, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Small Generating Facility proposes to interconnect shall not

- exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (*e.g.*, three or four transmission busses from the point of interconnection).
- 32.2.2.1.10 No construction of facilities by the Connecting Transmission Owner on its own system shall be required to accommodate the Small Generating Facility.
- 32.2.2.2 If the proposed interconnection passes the screens, the Interconnection Request shall be approved and the ISO will provide the Interconnection Customer and the Connecting Transmission Owner a draft interconnection agreement within five Business Days after the determination.
- 32.2.2.3 If the proposed interconnection fails the screens, but the ISO, in consultation with the Connecting Transmission Owner, determines that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the ISO shall provide the Interconnection Customer and the Connecting Transmission Owner a draft interconnection agreement within five Business Days after the determination. To the extent appropriate, the ISO shall notify any Affected System or Connecting Transmission Owner prior to the determination to allow for potential input by the Affected System or Connecting Transmission Owner. For purposes of this section, Affected System may include the portions of the New York State Transmission System that may be potentially affected.
- 32.2.2.4 If the proposed interconnection fails the screens, but the ISO, in consultation with the Connecting Transmission Owner, does not or cannot determine from the initial review that the Small Generating Facility may

nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider Minor Modifications or further study, the ISO shall provide the Interconnection Customer with the opportunity to attend a customer options meeting.

# **32.2.3** Customer Options Meeting

If the ISO, in consultation with the Connecting Transmission Owner, determines the Interconnection Request cannot be approved without: (1) Minor Modifications at minimal cost, (2) a supplemental study or other additional studies or actions, or (3) incurring significant cost to address safety, reliability, or power quality problems, the ISO shall notify the Interconnection Customer of that determination within five Business Days after the determination and provide copies of all data and analyses underlying its conclusion. Within ten Business Days of the ISO's determination, the ISO shall offer to convene a customer options meeting with the Interconnection Customer and the Connecting Transmission Owner to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine, in consultation with the Connecting Transmission Owner, what further steps are needed to permit the Small Generating Facility to be connected safely and reliably. At the time of notification of the ISO's determination, or at the customer options meeting:

32.2.3.1 The Connecting Transmission Owner shall offer to perform facility modifications or Minor Modifications to the Connecting Transmission Owner's electric system (*e.g.*, changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Connecting Transmission Owner's electric system. If the Interconnection Customer agrees to pay for the modifications to the Connecting Transmission

- Owner's electric system, the ISO will provide the Interconnection Customer and the Connecting Transmission Owner with a draft interconnection agreement within ten Business Days of the customer options meeting; or
- 32.2.3.2 The ISO shall offer to perform a supplemental review in accordance with Section 32.2.4 and provide a non-binding good faith estimate of the costs of such review; or
- 32.2.3.3 The ISO shall offer to continue evaluating the Interconnection Request under the Section 3 Study Process.

# **32.2.4** Supplemental Review

- Customer shall agree in writing and submit a deposit to the ISO for the estimated costs of the supplemental review in the amount of the good faith estimate of the costs of such review by the ISO, in consultation with the Connecting

  Transmission Owner, both within 15 Business Days of the offer. If the written agreement and deposit have not been received by the ISO within that timeframe, the Interconnection Request shall continue to be evaluated under the Section 32.3

  Study Process unless it is withdrawn by the Interconnection Customer.
- 32.2.4.2 The Interconnection Customer may specify the order in which the ISO, in consultation with the Connecting Transmission Owner, will complete the screens in Section 32.2.4.4.
- 32.2.4.3 The Interconnection Customer shall be responsible for the ISO's and the Connecting Transmission Owner's actual costs for the supplemental review conducted by the ISO. The Interconnection Customer must pay any review costs

that exceed the deposit within 20 Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the ISO will return such excess within 20 Business Days of the invoice without interest.

- Within 30 Business Days following receipt of the deposit for a 32.2.4.4 supplemental review, the ISO, in consultation with the Connecting Transmission Owner, shall: (1) perform a supplemental review using the screens set forth below; (2) notify in writing the Interconnection Customer of the results; and (3) include with the notification copies of the analysis and data underlying the ISO's and Connecting Transmission Owner's determination under the screens. Unless the Interconnection Customer provided instructions for how to respond to the failure of any of the supplemental review screens below at the time the Interconnection Customer accepted the offer of supplemental review, the ISO shall notify the Interconnection Customer following the failure of any of the screens, or if it is unable to perform the screen in Section 32.2.4.4.1, within two Business Days of making such determination to obtain the Interconnection Customer's permission to: (1) continue evaluating the proposed interconnection under this Section 32.2.4.4; (2) terminate the supplemental review and continue evaluating the Small Generating Facility under Section 32.3; or (3) terminate the supplemental review upon withdrawal of the Interconnection Request by the Interconnection Customer.
- 32.2.4.4.1 Minimum Load Screen: Where 12 months of line section minimum load data (including onsite load but not station service load served by the proposed Small Generating Facility) are available, can be calculated, can be estimated from

existing data, or determined from a power flow model, the aggregate generating facility capacity on the line section is less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed Small Generating Facility. If minimum load data is not available, or cannot be calculated, estimated or determined, the ISO, in consultation with the CTO, shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification under Section 32.2.4.4.

- 32.2.4.4.1.1 The type of generation used by the proposed Small Generating Facility will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of this screen. Solar photovoltaic (PV) generation systems with no battery storage use daytime minimum load (*i.e.*, 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV systems utilizing tracking systems), while all other generation uses absolute minimum load.
- 32.2.4.4.1.2 When this screen is being applied to a Small Generating Facility that serves some station service load, only the net injection into the Connecting Transmission Owner's electric system will be considered as part of the aggregate generation.
- 32.2.4.4.1.3 The ISO, in consultation with the Connecting Transmission Owner will not consider as part of the aggregate generation for purposes of this screen generating facility capacity known to be already reflected in the minimum load data.

- 32.2.4.4.2 Voltage and Power Quality Screen: In aggregate with existing generation on the line section: (1) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) the voltage fluctuations is within acceptable limits as defined by Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, or utility practice similar to IEEE Standard 1453; and (3) the harmonic levels meet IEEE Standard 519 limits.
- 32.2.4.4.3 Safety and Reliability Screen: The location of the proposed Small

  Generating Facility and the aggregate generation capacity on the line section do

  not create impacts to safety or reliability that cannot be adequately addressed

  without application of the Study Process. The ISO, in consultation with the

  Connecting Transmission Owner, shall give due consideration to the following

  and other factors in determining potential impacts to safety and reliability in

  applying this screen.
- 32.2.4.4.3.1 Whether the line section has significant minimum loading levels dominated by a small number of customers (*e.g.*, several large commercial customers).
- 32.2.4.4.3.2 Whether the loading along the line section is uniform or even.
- 32.2.4.4.3.3 Whether the proposed Small Generating Facility is located in close proximity to the substation (*i.e.*, less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Interconnection is a mainline rated for normal and emergency ampacity.

- 32.2.4.4.3.4 Whether the proposed Small Generating Facility incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.
- 32.2.4.4.3.5 Whether operational flexibility is reduced by the proposed Small

  Generating Facility, such that transfer of the line section(s) of the Small

  Generating Facility to a neighboring distribution circuit/substation may trigger overloads or voltage issues.
- 32.2.4.4.3.6 Whether the proposed Small Generating Facility employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.
- 32.2.4.5 If the proposed interconnection passes the supplemental screens in Sections 32.2.4.4.1, 32.2.4.4.2, and 32.2.4.4.3 above, the Interconnection Request shall be approved and the ISO will provide the Interconnection Customer and the Connecting Transmission Owner with an executable interconnection agreement with the timeframes established in Sections 32.2.4.5.1 and 32.2.4.5.2 below. If the proposed interconnection fails any of the supplemental review screens and the Interconnection Customer does not withdraw its Interconnection Request, it shall continue to be evaluated under the Section 32.3 Study Process consistent with Section 32.2.4.5.3 below.
- 32.2.4.5.1 If the proposed interconnection passes the supplemental screens in Sections 32.2.4.4.1, 32.2.4.4.2, and 32.2.4.4.3 above and does not require construction of facilities by the Connecting Transmission Owner on its own

- system, the interconnection agreement shall be provided within ten Business Days after the notification of the supplemental review results.
- 32.2.4.5.2 If interconnection facilities or Minor Modifications to the Connecting
  Transmission Owner's system are required for the proposed interconnection to
  pass the supplemental screens in Sections 32.2.4.4.1, 32.2.4.4.2, and 32.2.4.4.3
  above, and the Interconnection Customer agrees to pay for the modifications to
  the Connecting Transmission Owner's electric system, the interconnection
  agreement, along with a non-binding good faith estimate for the interconnection
  facilities and/or Minor Modifications, shall be provided to the Interconnection
  Customer within 15 Business Days after receiving written notification of the
  supplemental review results.
- 32.2.4.5.3 If the proposed interconnection would require more than interconnection facilities or Minor Modifications to the Connecting Transmission Owner's system to pass the supplemental screens in Sections 32.2.4.4.1, 32.2.4.4.2, and 32.2.4.4.3 above, the ISO shall notify the Interconnection Customer, at the same time it notifies the Interconnection Customer with the supplemental review results, that the Interconnection Request shall be evaluated under the Section 32.3 Study Process unless the Interconnection Customer withdraws its Small Generating Facility.

## 32.3 Study Process

#### **32.3.1** General Provisions

- 32.3.1.1 Except as otherwise provided in the SGIPs, the Section 32.3 Study Process shall be used by an Interconnection Customer proposing to interconnect its Small Generating Facility with the New York State Transmission System or Distribution System if the Small Generating Facility is no larger than 20 MW and does not meet the eligibility requirements of Section 32.2.1 or did not pass the Fast Track Process or the 10 kW Inverter Process.
- 32.3.1.2 The Interconnection Studies conducted under these procedures shall consist of analyses designed to identify the Interconnection Facilities and Upgrades required for the reliable interconnection of the Small Generating Facility to the New York State Transmission System or the Distribution System. These Interconnection Studies will be performed in accordance with Applicable Reliability Standards. The ISO will perform, or cause to be performed, the Interconnection Studies with input, as required, from the Connecting Transmission Owner.

## 32.3.2 Scoping Meeting

32.3.2.1 A scoping meeting will be held within ten Business Days after the

Interconnection Request is deemed complete, or as otherwise mutually agreed to
by the Parties. The ISO, the Connecting Transmission Owner, and the

Interconnection Customer will bring to the meeting personnel, including system
engineers and other resources as may be reasonably required to accomplish the
purpose of the meeting. Before a Connecting Transmission Owner participates in

a scoping meeting with its Affiliates, the ISO shall post on its OASIS an advance notice of the Connecting Transmission Owner's intent to do so.

32.3.2.2 The purpose of the scoping meeting is to discuss the Interconnection Request and review existing studies relevant to the Interconnection Request. The Parties shall further discuss whether the ISO should perform an optional feasibility study or proceed directly to a system impact study, or a facilities study, or an interconnection agreement. The Connecting Transmission Owner and Affected Transmission Owner(s), identified pursuant to Section 32.4.10 of this Attachment Z, shall be prepared to provide input regarding proposed Point(s) of Interconnection and configurations. If, within five (5) Business Days after the Scoping Meeting, the Interconnection Customer advises the ISO that it elects to proceed with an optional feasibility study, the ISO shall provide the Interconnection Customer and the Connecting Transmission Owner, as soon as possible, a non-binding good faith estimate of the cost and timeframe to perform the study. At the Interconnection Customer's option, the ISO, Connecting Transmission Owner or the Interconnection Customer may provide input regarding alternative Point(s) of Interconnection and configurations at the Scoping Meeting to evaluate in the optional feasibility study. On the basis of the meeting, the Interconnection Customer shall designate its Point of Interconnection and one or more alternative Point(s) of Interconnection. An Interconnection Customer electing to evaluate alternative Point(s) of Interconnection must proceed through an optional feasibility study and must select the definitive Point of Interconnection for the proposed Small Generating Facility no later than the

commencement of the interconnection study following the optional feasibility study.

32.3.2.3 The scoping meeting may be omitted by mutual agreement. In order to remain in consideration for interconnection, an Interconnection Customer who has requested an optional feasibility study must submit the study deposit pursuant to Section 32.3.3.2 of this Attachment Z and technical data requested by the ISO within fifteen (15) Business Days from the ISO's notice providing a good faith estimate of the cost and timeframe of the study. If the Interconnection Customer does not provide the required study deposit within fifteen (15) Business Days after the ISO's notice to the Interconnection Customer and the Connecting Transmission Owner of the good faith estimate of the cost and timeframe for completing the optional feasibility study, the Interconnection Customer will be subject to withdrawal. If the Interconnection Customer does not provide all required technical data, the ISO shall notify the Interconnection Customer of the deficiency and the Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such ability to cure technical deficiencies does not apply to failure to submit the required deposit. The ISO shall notify the Interconnection Customer and the Connecting Transmission Owner that the optional feasibility study has commenced following receipt of the required deposit and once the ISO deems the required technical data sufficient.

If the Interconnection Customer opts to forego the optional feasibility study, the Interconnection Customer shall, within five (5) Business Days after the Scoping Meeting advise

the ISO that it elects not to proceed with an optional feasibility study, after which the ISO shall, as soon as practicable, provide the Interconnection Customer and the Connecting Transmission Owner, a non-binding good faith estimate of the cost and timeframe to perform the system impact study.

# 32.3.3 Optional Feasibility Study Scope and Procedures

- 32.3.3.1 The optional feasibility study shall identify any potential adverse system impacts that would result from the interconnection of the Small Generating Facility.
- 32.3.3.2 A deposit of \$10,000 or \$30,000, depending upon the scope of analysis requested by the Interconnection Customer pursuant to Section 32.3.3.3 of this Attachment Z, must be submitted to the ISO within fifteen (15) Business Days of the ISO's notice of the good faith estimate of the cost and timeframe to perform the study.
- 32.3.3.3 The optional feasibility study may consist of any of the following technical analyses as described in the study scope:

  For a \$10,000 optional feasibility study deposit, Interconnection Customer may request the following limited analyses:
- (1) Conceptual breaker-level one-line diagram of existing system where project proposes to interconnect (i.e., how to integrate the Small Generating Facility into the existing system); and/or
- (2) Review of feasibility/constructability of conceptual breaker-level one-line diagram of the proposed interconnection (e.g., space for additional breaker bay in

- existing substation; identification of cable routing concerns inside existing substation; environmental concerns inside the substation).
- For a \$30,000 optional feasibility study deposit, Interconnection Customer may request the following detailed analyses:
- (1) Development of conceptual breaker-level one-line diagram of existing NYS

  Transmission System or Distribution System where the Small Generating Facility
  proposes to interconnect (i.e., how to integrate the Small Generating Facility into
  the existing system);
- (2) Review of feasibility/constructability of a conceptual breaker-level one-line diagram of the proposed interconnection (e.g., space for additional breaker bay in existing substation or identification of cable routing concerns inside existing substation);
- (3) Preliminary review of local protection, communication, grounding issues associated with the proposed interconnection;
- (4) Power flow, short circuit and/or bus flow analyses; and/or
- (5) Identification of Connecting Transmission Owner Interconnection Facilities and Local System Upgrade Facilities with a non-binding good faith estimate of cost responsibility and a non-binding good faith estimated time to construct.
  The scope of the optional feasibility study will be provided to the Interconnection Customer and Connecting Transmission Owner for review and comment. After the study scope is finalized, the ISO will provide the final scope to the Connecting Transmission Owner and the Interconnection Customer. The Connecting Transmission Owner shall indicate its agreement to the optional feasibility study

- scope by signing it and promptly returning it to the ISO, such agreement not to be unreasonably withheld.
- 32.3.3.4 The ISO may request additional information from the Interconnection

  Customer and Connecting Transmission Owner as may reasonably become

  necessary consistent with Good Utility Practice during the course of the optional
  feasibility study. Upon request from the ISO for additional information required
  for or related to the optional feasibility study, the Interconnection Customer and
  Connecting Transmission Owner shall provide such additional information in a
  prompt manner.
- 32.3.3.5 Connecting Transmission Owner and any Affecting Transmission Owners, together with the Interconnection Customer, will be provided with drafts of the optional feasibility study report for review. Review and comments shall be provided to the ISO within fifteen (15) Business Days of receipt.
- impacts and the ISO, Connecting Transmission Owner and Interconnection

  Customer all agree no system impact study is required, the ISO shall notify the

  Interconnection Customer and the Connecting Transmission Owner within five

  (5) Business Days of the completion of the optional feasibility study that the

  system impact study has been waived and shall send the Interconnection

  Customer and the Connecting Transmission Owner a facilities study agreement,

  which shall include an outline of the scope of the study and a non-binding good

  faith estimate of the cost and timeframe to perform the facilities study. If no

  additional facilities are required, the ISO shall send the Interconnection Customer

and Connecting Transmission Owner a draft interconnection agreement within five (5) Business Days.

32.3.3.7 If the optional feasibility study shows the potential for adverse system impacts, the review process shall proceed to the system impact study.

## 32.3.4 System Impact Study

32.3.4.1 The Interconnection Customer shall advise the ISO that it elects to proceed with a system impact study within five (5) Business Days after either the delivery of the final optional feasibility study report to the Interconnection Customer or the scoping meeting, if the Interconnection Customer opts to forego the optional feasibility study. As soon as practicable after receipt of such election from the Interconnection Customer, the ISO shall provide to the Interconnection Customer and Connecting Transmission Owner a good faith estimate of the cost and timeframe for completing the system impact study.

A system impact study shall identify and detail the electric system impacts that would result if the proposed Small Generating Facility were interconnected without project modifications or electric system modifications, focusing on the adverse system impacts identified in the optional feasibility study, or to study potential impacts, including but not limited to those identified in the scoping meeting. A system impact study shall evaluate the impact of the proposed interconnection on the reliability of the electric system.

32.3.4.2 If the ISO, Connecting Transmission Owner and Interconnection

Customer mutually agree that no system impact study is required, , the ISO shall send the Interconnection Customer and the Connecting Transmission Owner a

facilities study agreement (in the form of Appendix 6) as soon as practicable after (1) transmittal of the final optional feasibility study report; or (2) confirmation that the ISO, Connecting Transmission Owner and Interconnection Customer mutually agree to waive the system impact study if the Interconnection Customer elects to skip the optional feasibility study. The ISO shall include, with the facilities study agreement tendered to the Interconnection Customer, an outline of the scope of the facilities study and a non-binding good faith estimate of the cost and timeframe to perform the study.

- 32.3.4.3 In order to remain under consideration for interconnection, unless the system impact study is waived upon mutual agreement of the ISO, Connecting Transmission Owner and Interconnection Customer, the Interconnection Customer must submit the required system impact study deposit set forth in Section 32.3.4.4 of this Attachment Z and the technical data requested by the ISO to the ISO within fifteen (15) Business Days of the ISO's notice of good faith estimate of the cost and timeframe to perform the system impact study.
- 32.3.4.4 A deposit of \$50,000 for the system impact study must be submitted by the Interconnection Customer within fifteen (15) Business Days of the ISO's notice of good faith estimate of the cost and timeframe to perform the system impact study to the Interconnection Customer. If the Interconnection Customer does not provide the required study deposit within fifteen (15) Business Days after the ISO's notice to the Interconnection Customer and the Connecting Transmission Owner of the good faith estimate of the cost and timeframe for completing the SIS, the Interconnection Customer will be subject to withdrawal.

If the Interconnection Customer does not provide all required technical data, the ISO shall notify the Interconnection Customer of the deficiency and the Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such ability to cure technical deficiencies does not apply to failure to submit the required deposit. The ISO shall notify the Interconnection Customer and the Connecting Transmission Owner that the system impact study has commenced following receipt of the required deposit and once the ISO deems the required technical data sufficient.

- 32.3.4.5 The scope of and cost responsibilities for a system impact study shall be described in the system impact study scope. The scope of the system impact study will be provided to the Interconnection Customer and Connecting Transmission Owner for review and comment. After the study scope is finalized, the ISO will provide the final scope to the Connecting Transmission Owner and the Interconnection Customer. The Connecting Transmission Owner shall indicate its agreement to the system impact study scope by signing it and promptly returning it to the ISO, such agreement not to be unreasonably withheld. For an Interconnection Customer proposing an incremental increase in output to an existing Small Generating Facility, the total output of which does not exceed 20 MW, the system impact study scope may be narrowed upon mutual agreement among the ISO, Connecting Transmission Owner and Interconnection Customer.
- 32.3.4.6 The ISO may request additional information from the Interconnection

  Customer and Connecting Transmission Owner as may reasonably become

  necessary consistent with Good Utility Practice during the course of the system

impact study. Upon request from the ISO for additional information required for or related to the system impact study, Interconnection Customer and Connecting Transmission Owner shall provide such additional information in a prompt manner.

- 32.3.4.7 Affected Systems shall participate in the system impact study and provide all information necessary to prepare the study.
- 32.3.4.8 Connecting Transmission Owner and any Affecting Transmission Owners, together with Interconnection Customer, will be provided drafts of the system impact study report for review. Review and comments shall be provided to the ISO within fifteen (15) Business Days of receipt.

### 32.3.5 Facilities Study

32.3.5.1 If a system impact study(s) is required, once the required system impact study(s) is completed, a system impact study report shall be prepared by the ISO and transmitted to the Interconnection Customer and the Connecting

Transmission Owner. As soon as practicable after transmittal of the final system impact study report, the ISO will tender a facilities study agreement to the

Interconnection Customer and Connecting Transmission Owner. If a system impact study(s) is not required, the NYISO shall provide the Interconnection

Customer and the Connecting Transmission Owner with a facilities study agreement as soon as practicable after that determination. Each facilities study agreement shall include an outline of the scope of the facilities study and a non-binding good faith estimate of the cost and timeframe to perform the facilities study.

- 32.3.5.2 In order to remain under consideration for interconnection, unless the ISO, Connecting Transmission Owner and Interconnection Customer mutually agree to waive the facilities study, the Interconnection Customer must return the completed facilities study agreement within 30 Calendar Days, together with the required technical data set forth in Appendix 6 and the required deposit equal to the non-binding good faith estimate of the cost and timeframe to perform the facilities study. The Interconnection Customer, ISO and Connecting Transmission Owner shall execute the facilities study agreement no later than ten (10) Business Days after the ISO confirms receipt of the executed facilities study agreement, the study deposit and required technical data from the Interconnection Customer. The ISO shall provide a copy of the fully executed facilities study agreement to the Interconnection Customer and Connecting Transmission Owner.
- 32.3.5.3 The facilities study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the system impact study(s), as appropriate.

  Connecting Transmission Owner and any Affecting Transmission Owners, together with the Interconnection Customer, will be provided with drafts of the facilities study report for review. Review and comments shall be provided to the ISO within fifteen (15) Business Days of receipt.
- 32.3.5.3.1 The Interconnection Customer shall be responsible for the cost of the Interconnection Facilities and Distribution Upgrades necessary to accommodate its Interconnection Request.

32.3.5.3.2 The Interconnection Customer shall be responsible for the cost of any System Upgrade Facilities determined by an Interconnection Study to be necessary to accommodate the Interconnection Request. Such Interconnection Study shall be of sufficient detail and scope to assure that this determination can be made. If any System Upgrade Facilities other than Local System Upgrade Facilities are determined to be necessary to accommodate the Interconnection Request, the Small Generating Facility shall be evaluated as a member of the next Class Year, and the Interconnection Customer's cost responsibility shall be determined in accordance with Attachment S. All other Small Generating Facilities (i.e., those for which no System Upgrade Facilities or only Local System Upgrade Facilities have been identified as necessary to accommodate the Interconnection Request) shall complete an individual Facilities Study, if required, under these Small Generator Interconnection Procedures; provided however, a Small Generating Facility that requires no System Upgrade Facilities or only Local System Upgrade Facilities may elect to enter a Class Year Study for evaluation of its requested ERIS and elective System Upgrade Facilities, to the extent permitted by Section 25.6.1.4.1 of Attachment X to the OATT. The standard described above in this Section regarding when a Small Generating Facility must enter a Class Year will apply to Small Generating Facilities being considered for entry into Class Year 2011 and beyond. To the extent appropriate, the ISO will notify any Affected System or transmission owner prior to the determination that System Upgrade Facilities are necessary, to allow for potential input by the Affected System or transmission owner. For purposes of this section,

Affected System may include the portions of the New York State Transmission System that may be potentially affected. If the Interconnection Customer elects CRIS, and its Small Generating Facility is larger than 2 MW, it will be evaluated as a member of the next Class Year to determine the Interconnection Customer's responsibility for System Deliverability Upgrades in accordance with Attachment S.

- 32.3.5.3.3 At any time prior to the Class Year Start Date, as specified in Section 25.5.9 of Attachment S to the OATT, the Interconnection Customer may elect to proceed under this Section 32.3.5.3.3. Pending the outcome of the Class Year cost allocation process, the Interconnection Customer can elect to proceed with the interconnection of its Small Generating Facility if in the SGIA (i) it agrees in writing to accept the final cost allocation results determined in the Class Year in accordance with Attachment S, (ii) it agrees in writing to pay cash or post Security in accordance with Attachment S in that Class Year; and (iii) it agrees in writing to operate its Small Generating Facility within the limits of the current New York State Transmission System, as determined by the ISO, in consultation with the Connecting Transmission Owner; pursuant to Section 32.3.5.3.4 of the SGIP.
- 32.3.5.3.4 Upon the request and at the expense of the Interconnection Customer, the ISO, in consultation with the Connecting Transmission Owner, will perform operating studies on a timely basis to determine the extent to which the Interconnection Customer's Small Generating Facility can be operated prior to the installation of any System Upgrade Facilities or System Deliverability Upgrades

required for that Small Generating Facility. Such tests shall be consistent with Applicable Reliability Standards and Good Utility Practice. To the extent appropriate, the ISO will notify any Affected System or transmission owner prior to the determination to allow for potential input by the Affected System or transmission owner. For purposes of this section, Affected System may include the portions of the New York State Transmission System that may be potentially affected. The ISO and Connecting Transmission Owner shall promptly notify the Interconnection Customer of the results of these studies and shall permit the Small Generating Facility to operate consistent with the results of such studies.

32.3.5.4 Design for any required Interconnection Facilities and/or Upgrades shall be performed under the facilities study agreement, these procedures and, if applicable, Attachment S of the ISO OATT. The ISO may contract with consultants to perform activities required under the facilities study agreement. The Parties may agree to allow the Interconnection Customer to separately arrange for the design of some of the Interconnection Facilities. In such cases, facilities design will be reviewed and/or modified prior to acceptance by the Connecting Transmission Owner, under the provisions of the facilities study agreement. If the Parties agree to separately arrange for design and construction, and provided security and confidentiality requirements can be met, the ISO and/or Connecting Transmission Owner shall make sufficient information available to the Interconnection Customer in accordance with confidentiality and critical infrastructure requirements to permit the Interconnection Customer to obtain an independent design and cost estimate for any necessary facilities.

- 32.3.5.5 A deposit of the good faith estimated costs for the facilities study will be required from the Interconnection Customer.
- 32.3.5.6 The scope of and cost responsibilities for the facilities study are described in the facilities study agreement in the form of Appendix 6. ISO may request additional information from the Interconnection Customer and Connecting Transmission Owner as may reasonably become necessary consistent with Good Utility Practice during the course of the facilities study. Upon request from the ISO for additional information required for or related to the facilities study, the Interconnection Customer and Connecting Transmission Owner shall provide such additional information in a prompt manner.
- 32.3.5.7 As soon as practicable upon completion of the facilities study, and with the agreement of the Interconnection Customer to pay for Interconnection Facilities and Upgrades identified in the facilities study, the ISO shall provide the Interconnection Customer and the Connecting Transmission Owner a draft interconnection agreement.
- 32.3.5.8 With the completed facilities study agreement, the Interconnection

  Customer shall submit to the ISO an updated proposed In-Service Date, an

  updated proposed Initial Synchronization Date and an updated proposed

  Commercial Operation Date every ninety (90) Calendar Days.

# 32.4 Provisions that Apply to All Interconnection Requests

#### 32.4.1 Reasonable Efforts

The ISO, in consultation with the Connecting Transmission Owner, shall make reasonable efforts to meet all time frames provided in these procedures unless the ISO, Connecting Transmission Owner and Interconnection Customer agree to a different schedule. If either the ISO or Connecting Transmission Owner cannot meet a deadline provided herein, it shall notify the Interconnection Customer, explain the reason for the failure to meet the deadline, and provide an estimated time by which it will complete the applicable interconnection procedure in the process.

# **32.4.2 Disputes**

- 32.4.2.1 The ISO, Connecting Transmission Owner and Interconnection Customer agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.
- 32.4.2.2 In the event of a dispute, the Parties will first attempt to promptly resolve it on an informal basis. If the Parties cannot promptly resolve the dispute on an informal basis, then any Party shall provide the other Parties with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.
- 32.4.2.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, any Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.
- 32.4.2.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (*e.g.*, mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in

resolving their dispute. The result of this dispute resolution process will be binding only if the Parties agree in advance. DRS can be reached at 1-877-337-2237 or via the internet at <a href="http://www.ferc.gov/legal/adr.asp">http://www.ferc.gov/legal/adr.asp</a>.

- 32.4.2.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-third of any costs paid to neutral third-parties.
- 32.4.2.6 If no Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then any Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of these procedures.

# **32.4.3** Interconnection Metering

Any metering necessitated by the use of the Small Generating Facility shall be installed at the Interconnection Customer's expense in accordance with Federal Energy Regulatory Commission, state, or local regulatory requirements or the Connecting Transmission Owner's specifications.

### 32.4.4 Commissioning

Commissioning tests of the Interconnection Customer's installed equipment shall be performed pursuant to applicable codes and standards. The ISO and Connecting Transmission Owner must be given at least five Business Days written notice, or as otherwise mutually agreed to by the Parties, of the tests and may be present to witness the commissioning tests.

### 32.4.5 Confidentiality

32.4.5.1 Certain information exchanged by the Parties during the administration of these procedures shall constitute confidential information ("Confidential Information") and shall be subject to this Section 32.4.5. Confidential

Information shall mean any confidential and/or proprietary information provided by one Party to another Party or Parties that is clearly marked or otherwise designated "Confidential." For purposes of these procedures, all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such. Confidential Information shall include, without limitation, information designated as such by the ISO Code of Conduct contained in Attachment F to the ISO OATT.

- 32.4.5.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted to or divulged by Governmental Authorities (after notice to the other Parties and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce an interconnection agreement entered into pursuant to these procedures. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under these procedures, or to fulfill legal or regulatory requirements.
- 32.4.5.2.1. Each Party shall employ at least the same standard of care to protect

  Confidential Information obtained from the other Parties as it employs to protect

  its own Confidential Information.
- 32.4.5.2.2. Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential

Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

32.4.5.3 Notwithstanding anything in this Section 32.4.5 to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Section 32.4.5, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public disclosure. Each Party is prohibited from notifying the other Parties prior to the release of the Confidential Information to FERC. The Party shall notify the other Parties when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

# 32.4.6 Comparability

The ISO shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this document. The ISO and Connecting Transmission Owner shall use the same reasonable efforts in processing and analyzing Interconnection Requests from all

Interconnection Customers, whether the Small Generating Facility is owned or operated by the Connecting Transmission Owner, its subsidiaries or affiliates, or others.

### **32.4.7** Record Retention

The ISO and Connecting Transmission Owner shall maintain for three years records, subject to audit, of all Interconnection Requests received under these procedures, the times required to complete Interconnection Request approvals and disapprovals, and justification for the actions taken on the Interconnection Requests.

### 32.4.8 Interconnection Agreement

As soon as practicable upon completion of all required interconnection studies, or, if the Interconnection Customer elects to enter a Class Interconnection Facilities Study, upon completion of the decision process described in Section 25.8 of Attachment S for the Class Interconnection Facilities Study and acceptance by the Interconnection Customer of its Attachment S cost allocation, and satisfaction of the Security posting requirements described in Attachment S, the ISO shall tender to the Interconnection Customer and Connecting Transmission Owner a draft Standard Small Generator Interconnection Agreement together with draft attachments completed to the extent practicable. Upon such tender, the Interconnection Customer shall provide the ISO with an updated proposed In-Service Date, an updated proposed Initial Synchronization Date, and an updated proposed Commercial Operation Date. Such dates are subject to the limitations set forth in Section 30.4.4.5 of Attachment X to the OATT.

The draft Standard Small Generator Interconnection Agreement shall be in the form of the ISO's Commission-approved Standard Small Generator Interconnection Agreement, which is in Appendix 7 to this Attachment Z. Unless otherwise agreed by the Parties, if the Interconnection Customer does not sign the interconnection agreement, or ask that it be filed

unexecuted within six (6) months after tender of the draft interconnection agreement, the Interconnection Request shall be deemed withdrawn. After the interconnection agreement is signed by the Parties, the interconnection of the Small Generating Facility shall proceed under the provisions of the interconnection agreement.

### 32.4.9 Termination of the Standard Small Generator Interconnection Agreement

The classification of a Small Generating Facility as Retired will be grounds for the termination of the Small Generator Interconnection Agreement (SGIA). The ISO will file with the Federal Energy Regulatory Commission a notice of termination of the SGIA as soon as practicable after the Small Generating Facility is Retired. The termination of a non-conforming *pro forma* SGIA will be effective only upon acceptance by the Federal Energy Regulatory Commission of the notice of termination and proposed effective date. Upon the effective date of the termination of the SGIA, access to the Point of Interconnection of the Small Generating Facility will be available on a non-discriminatory basis pursuant to the ISO's applicable interconnection and transmission expansion processes and procedures.

### 32.4.10 Coordination with Affected Systems

The ISO shall coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System operators, as soon as they are identified – either by their own accord, by the Connecting Transmission Owner, or by the ISO – and, if possible, include those results (if available) in its applicable interconnection study within the time frame specified in these procedures. The ISO will include such Affected System operators in all meetings held with the Interconnection Customer as required by these procedures. The Interconnection Customer will cooperate with the ISO and Connecting Transmission Owner in all matters related to the conduct of studies and the determination of

modifications to Affected Systems. Each Affected System Operator and/or Affected System shall cooperate with the ISO and Connecting Transmission Owner with whom interconnection has been requested in all matters related to the conduct of studies and the determination of modifications to Affected Systems. The Parties to this Agreement shall cooperate in good faith to provide each other, Affected System Operators and Affected Systems the information necessary to carry out the terms of the SGIP and the SGIA.

For identified Affected Transmission Owner(s) of facilities electrically adjacent to the Point of Interconnection and that have design criteria, operational criteria or other local planning criteria applicable to either (1) the substation to which the Interconnection Customer proposes to interconnect; or (2) the substation that will be required to be built to accommodate the interconnection, the ISO shall provide such Affected Transmission Owner(s) with the opportunity to review and provide comments on all study scopes, study reports and drafts thereof for the project, and will be included on communications regarding the project and meetings discussing the project or any of its studies, where such communications or meetings involve the ISO, Interconnection Customer and Connecting Transmission Owner. The ISO shall include in the appropriate interconnection study proposed studies requested by such an identified Affected Transmission Owner to the extent such studies are reasonably justified in accordance with Good Utility Practice.

# 32.4.11 Capacity of the Small Generating Facility

### 32.4.11.1 Increases in Capacity and Capacity Resource Interconnection Service

If an existing Small Generating Facility requests an increase in capacity, such increase requires a new Interconnection Request if the increase is a material increase pursuant to Section 32.1.4.2.1. For a material increase, If the Interconnection Request is for the incremental increase

in capacity for an existing Small Generating Facility, and the Interconnection Request shall be evaluated on the basis of the new total capacity of the Small Generating Facility; provided however, if the proposed increase will make the Small Generating Facility's total capacity exceed 20 MW, the incremental increase must be evaluated under the Large Facility Interconnection Procedures and the modified facility will be a Large Generating Facility requiring an amendment to the SGIA to conform to the LGIA.

For material increases in the capacity subject to a new Small Generator Interconnection Request, the reliability impact of all increases in the capacity of an existing Small Generating Facility will be evaluated by applying the NYISO Minimum Interconnection Standard. An existing Small Generating Facility interconnected with Capacity Resource Interconnection Service may, over the life of the facility, increase its Capacity Resource Interconnection Service by a total of 2 MW above its originally established Capacity Resource Interconnection Service value without having the deliverability of that 2 MW increase evaluated under the NYISO Deliverability Interconnection Standard; provided however, for facilities comprised of multiple Generators, this CRIS increase is permitted only at the facility (i.e., Project) level, not at the individual Generator level. A facility that receives a CRIS increase pursuant to this Section 32.4.11.1, to the extent it later combines with another facility or Project to become a co-located resource (e.g., a Co-located Storage Resource or Distributed Energy Resource), is not eligible for any additional CRIS increase above a single increase up to 2 MW, without proceeding through a deliverability evaluation in a Class Year Study or Expedited Deliverability Study. The deliverability impact of all increases greater than 2 MW over the life of the facility will be evaluated by applying the NYISO Deliverability Interconnection Standard in accordance with the SGIP and Attachment S to the ISO OATT.

- 32.4.11.2 If the Interconnection Request is for a Small Generating Facility comprised of multiple Generators behind the same Point of Interconnection, the Interconnection Request shall be evaluated on the basis of the aggregate capacity of the multiple Generators. For a Co-located Storage Resource, the aggregate capacity of the multiple Generators is the aggregate of the maximum injection capability of each individual Generator. If the Interconnection Request is for a Small Generating Facility comprised of multiple Generators, the Interconnection Customer must request ERIS for the Small Generating Facility, such ERIS to be allocated among the multiple Generators comprising the Small Generating Facility as requested by the Interconnection Customer in its Interconnection Request; provided however, the requested allocation for ERIS for the Intermittent Power Resource in a Co-located Storage Resource cannot exceed the Point of Injection limit plus the full withdrawal capability of the Energy Storage Resource.
- 32.4.11.3 The Interconnection Request shall be evaluated using the maximum capacity that the Small Generating Facility is capable of injecting into the Connecting Transmission Owner's electric system. However, if the maximum capacity that the Small Generating Facility is capable of injecting into the Connecting Transmission Owner's electric system is limited (*e.g.*, through the use of a control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must obtain the ISO's and Connecting Transmission Owner's agreement, with such agreement not to be unreasonably withheld, that the manner in which the Interconnection Customer proposes to implement such a limit will not adversely affect the safety and

reliability of the Connecting Transmission Owner's system. If the Connecting Transmission Owner does not so agree, then the Interconnection Request must be withdrawn or revised to specify the maximum capacity that the Small Generating Facility is capable of injecting into the Connecting Transmission Owner's electric system without such limitations. Furthermore, nothing in this section shall prevent a Connecting Transmission Owner from considering an output higher than the limited output, if appropriate, when evaluating system protection impacts.

# 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 Section 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 ("CRIS") – 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 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.

**Commercial Operation** shall mean the status of a Small Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of a Small Generating Facility shall mean the date on which the Small Generating Facility commences Commercial Operation as agreed to by the Parties.

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 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 Project 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.

**Initial Synchronization Date** shall mean the date upon which the Small Generating Facility is initially synchronized and upon which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Connecting Transmission Owner's Interconnection Facilities to obtain back feed power.

**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. For purposes of the Interconnection Request, a facility comprised of multiple Generators behind the same Point of Injection (as defined in Section 1.16 of the ISO OATT) will be considered a single Small Generating Facility, provided the Interconnection Request identifies a single Interconnection Customer.

**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.

NYISO Deliverability Interconnection Standard – The standard that must be met, unless otherwise provided for by Attachment S to the ISO OATT, by any of the following requesting CRIS: (i) any generation facility larger than 2MW; (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 Large Facility that is subject to ISO's Large Facility Interconnection Procedures in Attachment X to the ISO OATT or Small Generating Facility that is subject to 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.

**Project**: The proposed facility as described in a single Interconnection Request, to the extent permitted by Attachments X or Z to the ISO OATT, as applicable. For facilities not 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, the Project refers to the facility as described in a single Class Year Study Agreement or Expedited Deliverability Studies Agreement, to the extent permitted by Attachment S to the ISO OATT.

**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 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 or for the purpose of nor to net metering; (iii) facilities proposing to interconnect 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) facilities proposing to interconnect to the Distribution System solely for the purpose of participating in the ISO markets through an Aggregation; and (v) the Interconnection Customer's Interconnection Facilities. A facility comprised of multiple Generators will be treated as a single Small Generating Facility if all Generators within the facility are behind the same Point of Interconnection, even if such Generators are different technology types.

**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 interconnections, 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.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in onsite test operations and commissioning of the Small Generating Facility prior to Commercial Operation.

**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 through the interconnection portal on the NYISO website. 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) (must be a single individual or entity)

Name of Interconnection Customer:			
Contact Person:			
Mailing Address:			
City:	State:	Zip:	
Facility Location (if differe	nt from above):		
Telephone:			

E-Mail Address:	
Additional Contact Info	rmation
Contact Name:	
Title:	
Telephone:	
E-Mail Address:	
E. Application Inf	ormation
	New Small Generating Facility  Capacity addition to Existing Small Generating Facility
If capacity addition to e	xisting facility, please describe:
Net Metering? You Supply Power To Supply Power Transmission Sy	er to the Interconnection Customer? Yes No er to Others Through Wholesale Sales Over the New York State  vstem or Distribution System? Yes No er to a Host Load? Yes No  tions with existing electric service to which the proposed Small
(Local Electric Service	Provider) (Existing Account Number)
Local Electric Service I	Provider Contact Name:
Title:	
Address:	
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. Describe the composition of assets (including MW level) within the 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):			
2. Maximum Injection Capability of entire Small Generating Facility over 1 hour:			
3. If the facility includes a Resource with Energy Duration Limitations, indicate the maximum			
injection capability for the entire Small Generating Facility over the selected duration (e.g.,			
10 MW over 4 hours):			
4. Provide the following information for each Generator within the Small Generating Facility:			
Energy Source:SolarWindHydroHydro Type ( <u>e.g.</u> Run-of-River):			
DieselNatural GasFuel Oil Other (state type)			

Generator Nameplate Rating:MW (Typical) Generator Nameplate MVAR:
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?
YesNo Local provider:
List components of the Small Generating Facility equipment package that are currently certified:
Equipment Type Certifying Entity
1
Generator (or solar collector)
Manufacturer, Model Name & Number:
Version Number:
Nameplate Output Power Rating in MW: (Summer) (Winter)
Nameplate Output Power Rating in MVA: (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 phaseThree Phase

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

Inverter manufacturer,	model name,	, number	, and version:	
Energy storage capabil	lity (MWh):			
Minimum Duration for	r full discharg	ge (i.e., ii	njection) (Hours):	
Minimum Duration for	r full charge (	i.e., with	ndrawal) (Hours):	
Maximum withdrawal	from the syst	tem (i.e.,	when charging) (MW):	
Maximum sustained in	jection (in M	W) over	the Developer-selected duration:	
Primary frequency resp	onse operati	ng range	for electric storage resource:	
			Maximum State of Charge:	(%)
a.				
If wind, total number of gener	ators in wind	farm to	be interconnected pursuant to this	
Interconnection Request:				
Generator Height: Single p	ohase	Thre	e Phase	
If an Energy Storage Resource	e:			
Inverter manufacturer, mo	del name, nui	mber, an	d version:	
Energy storage capability (	(MWh):			
Minimum Duration for ful	l discharge (i	.e., injec	tion) (Hours):	
Minimum Duration for ful	l charge (i.e.,	withdra	wal) (Hours):	
Maximum withdrawal from	m the system	(i.e., wh	en charging) (MW):	
Maximum sustained four-l	•			
Primary frequency respons	J			
Minimum State of Charge:	1 0	(%)	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.

For Interconnection Customer:	
By (signature):	
Name (type or print):	
Title:	
Company:	
Date:	

# ATTACHMENT A TO APPENDIX 2 – SMALL GENERATOR INTERCONNECTION REQUEST– Terms and Conditions of Interconnection Study(ies)

These terms and conditions for the study	y of a Small Generating Facility or material
modification to an existing Small Generating Fa	Facility proposed in the Interconnection Request
dated("the Project")_and submitted	ed by
	, a organized and
existing under the laws of the State of	("Interconnection Customer") sets forth
the respective obligations between Interconnect	tion Customer and the New York Independent
System Operator, Inc., a not-for-profit corporati	tion organized and existing under the laws of the
State of New York ("NYISO") (hereinafter the	"Terms and Conditions"). By signing below,
Interconnection Customer confirms its understa	anding and acceptance of the Terms and
Conditions	

### RECITALS

WHEREAS, the Interconnection Customer is proposing the Project; and

**WHEREAS**, the Interconnection Customer is already interconnected with the New York State Transmission System (or the Distribution System, as applicable) or desires to interconnect the Small Generating Facility with the New York State Transmission System (or the Distribution System, as applicable); and

**WHEREAS**, the Interconnection Customer has requested NYISO to perform one or more of the following studies: Optional Feasibility Study or System Impact Study to assess the impact of the Project on the New York State Transmission System (or Distribution System, as applicable) and any Affected Systems;

**Now, THEREFORE**, in consideration of and subject to the terms and conditions contained herein, the Interconnection Customer and NYISO agree as follows:

- 1.0 When used in under these Terms and Conditions, with initial capitalization, the terms specified shall have the meanings specified in Section 32.1.1.2 of the Small Generator Interconnection Procedures ("SGIP").
- 2.0 The Interconnection Customer shall elect and NYISO shall cause to be performed, in accordance with the NYISO Open Access Transmission Tariff ("OATT"), one or more of the following: Optional Feasibility Study consistent with Section 32.3.3 of the SGIP, or System Impact Study consistent Section 32.3.4 of the SGIP, collectively referred to as the "Studies." The terms of the SGIP, as applicable, are incorporated by reference herein.
- 3.0 The scopes for the Studies that the Interconnection Customer elects or is required to be performed in connection with its Interconnection Request and in accordance with the SGIP shall be subject to the assumptions developed by the Interconnection Customer, NYISO, and the Connecting Transmission Owner(s) at the respective scoping meetings for each study and detailed in final written scopes in accordance with Sections 32.3.3.3 and 32.3.4.5 of the SGIP.

4.0 Each study performed in connection with the Interconnection Request and these Terms and Conditions will be based on the technical information provided by the Interconnection Customer in the Interconnection Request and shall build upon the results any study conducted under these Terms and Conditions, if applicable. NYISO reserves the right to request additional information from the Interconnection Customer as may reasonable become necessary consistent with Good Utility Practice during the course of the Studies (including dynamic modeling data). If the Interconnection Customer modifies its designated Point of Interconnection, the Interconnection Request, or the technical information provided in the Interconnection Request, the time to complete the Studies may be extended. The Interconnection Customer shall bear any increased costs to complete the Studies as a result of a modification under this Section 4.0 of these Terms and Conditions.

### 5.0 Optional Feasibility Study.

- 5.1 If elected by the Interconnection Customer, the Optional Feasibility Study shall provide, as necessary, the following analyses for the purpose of identifying any potential adverse system impacts that would result from the interconnection of the Small Generating Facility as proposed:
  - If the Interconnection Customer elects to perform an Optional Interconnection Feasibility Study with a limited analysis (i.e., \$10,000 study deposit), the study shall analyze, to the extent selected by the Interconnection Customer:
    - conceptual breaker-level one-line diagram of existing system where Project proposes to interconnect (i.e., how to integrate the Small Generating Facility into the existing system); and/or
    - review of feasibility/constructability of conceptual breaker-level one-line diagram of the proposed interconnection (e.g., space for additional breaker bay in existing substation; identification of cable routing concerns inside existing substation; environmental concerns inside the substation).
  - If the Interconnection Customer elects to perform an Optional Interconnection Feasibility Study with a detailed analysis (i.e., \$30,000 study deposit), the study report shall provide, to the extent selected by the Interconnection Customer:
    - conceptual breaker-level one-line diagram of existing New York State Transmission System or Distribution System where the Large Facility proposes to interconnect (i.e., how to integrate the Large Facility into the existing system);
    - o review of the feasibility/constructability of a conceptual breaker-level one-line diagram of the proposed interconnection (e.g., space

- for additional breaker bay in existing substation or identification of cable routing concerns inside existing substation);
- o preliminary review of local protection, communication, and grounding issues associated with the proposed interconnection;
- o power flow, short circuit, and/or bus flow analyses; and/or
- o preliminary identification of Connecting Transmission Owner Attachment Facilities and Local System Upgrade Facilities with a non-binding good faith cost estimate of the Interconnection Customer's cost responsibility and a non-binding good faith estimated time to construct.
- 5.2 The Optional Feasibility Study shall model the impact of the Small Generating Facility regardless of purpose in order to avoid the further expense and interruption for reexamination of feasibility and impacts if the Interconnection Customer later changes the purpose for which the Small Generating Facility is being installed.
- 5.3 The Optional Feasibility Study shall include, at the Interconnection Customer's cost, the feasibility of any interconnection at a proposed Project site where there could be multiple potential Points of Interconnection, as requested by the Interconnection Customer.
- 6.0 System Impact Study.
  - 6.1 The System Impact Study, unless otherwise waived upon the mutual agreement of the Interconnection Customer, NYISO, and the Connecting Transmission Owner(s) in accordance with Section 32.3.4 of the SGIP, shall consist of a short circuit analysis, a stability analysis, a power flow analysis, voltage drop and flicker studies, protection and set point coordination studies, and grounding reviews, as necessary. The System Impact Study shall state the assumptions upon which it is based, state the results of the analyses, and provide the requirement or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. The system impact study report shall provide a list of facilities that are required as a result of the Interconnection Request and non-binding good faith estimates of cost responsibility and time to construct.
  - The System Impact Study shall consider all generating facilities and Class Year Transmission Projects (and with respect to paragraph 6.1.3 below, any identified Upgrades associated with such higher queued interconnection) that, on the date the System Impact Study commences under the SGIP,
    - are directly interconnected with the New York State Transmission System or distribution facilities;

- are interconnected with Affected Systems and may have an impact on the proposed interconnection;
- have accepted their cost allocation for System Upgrade Facilities and posted security for such System Upgrade Facilities in accordance with Attachment S to the OATT; and
- have no queue position but have executed an interconnection agreement or requested that an unexecuted interconnection agreement be filed with the Federal Energy Regulatory Commission ("FERC").
- Affected Systems may participate in the preparation of a System Impact Study, with a division of costs among such entities as they may agree. All Affected Systems shall be afforded an opportunity to review and comment on the System Impact Study to the extent the proposed interconnection potentially adversely impacts the Affected System's electric system. NYISO shall have an additional twenty (20) Business Days to complete a System Impact Study requiring review by Affected Systems.
- 7.0 The Interconnection Customer shall provide NYISO with a deposit for each study elected or required to be performed in connection with its proposed interconnection in accordance with Section 32.3.3.2 of the SGIP for an Optional Feasibility Study and/or Section 32.3.4.4 of the SGIP for a System Impact Study.
- 8.0 Any study costs incurred by NYISO shall be based on its actual costs, including applicable taxes, and will be invoiced to the Interconnection Customer after each respective study is completed and delivered to the Interconnection Customer, which will include a summary of professional time. The applicable rates that NYISO shall use to calculate its actual costs shall be provided to the Interconnection Customer at the time that NYISO provides the good faith estimate of the cost for each study elected or required to be performed in connection with the Interconnection Request and under these Terms and Conditions.
- 9.0 The Interconnection Customer shall pay all invoice amounts in excess of the deposit or other cash security without interest within thirty (30) calendar days after receipt of the invoice. If the deposit or other cash exceeds the invoiced fees, NYISO shall refund such excess amounts within thirty (30) calendar days of the invoice without interest. If the Interconnection Customer disputes an amount to be paid, the Interconnection customer shall pay the disputed amount to NYISO or into an interest bearing escrow account, pending resolution of the dispute in accordance with Section 32.4.2 of the SGIP. To the extent that the dispute is resolved in the Interconnection Customer's favor, that portion of the disputed amount will be returned to the Interconnection Customer with interest at rates applicable to refunds under the Commission's regulations. To the extent that the dispute is resolved in NYISO's favor, the portion of any escrowed funds and interest will be released to NYISO. NYISO and subcontractor consultants hired by NYISO shall not be obligated to perform or continue to perform any Interconnection Study work for the

Interconnection Customer unless the Interconnection Customer has paid all amounts in compliance herewith.

### 10.0 Miscellaneous.

- 10.1 Accuracy of Information. Except as the Interconnection Customer may otherwise specify in writing when it provides information to NYISO under these Terms and Conditions, the Interconnection Customer represents and warrants that the information it provides to NYISO shall be accurate and complete as of the date the information is provided. The Interconnection Customer shall promptly provide NYISO with any additional information needed to update information previously provided.
- 10.2 Disclaimer of Warranty. In preparing the Studies, NYISO and any subcontractor consultants hired by it shall have to rely on information provided by the Interconnection Customer, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, neither NYISO nor any subcontractor consultant hired by NYISO makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy, content, or conclusions of the Studies performed under these Terms and Conditions. The Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.
- 10.3 Limitation of Liability. In no event shall NYISO or its subcontractor consultants be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with these Terms and Conditions or the Studies performed or any reliance on the Studies by the Interconnection Customer or third parties, even if NYISO or its subcontractor consultants have been advised of the possibility of such damages. Nor shall any NYISO or its subcontractor consultants be liable for any delay in delivery or for the non-performance or delay in performance of its obligations under these Terms and Conditions.
- 10.4 Third-Party Beneficiaries. Without limitation of Sections 10.2 and 10.3 under these Terms and Conditions, the Interconnection Customer further agrees that subcontractor consultants hired by NYISO to conduct or review, or to assist in the conducting or reviewing, one or more of the Studies requested under the Interconnection Request shall be deemed third-party beneficiaries of these Sections 10.2 and 10.3 under these Terms and Conditions.
- 10.5 Term and Termination. The obligations to conduct the Studies and under these Terms and Conditions shall be effective from the date hereof and, unless earlier terminated under these Terms and Conditions, shall continue in effect until the

- Studies are completed. The Interconnection Customer or NYISO may terminate their obligations under these Terms and Agreement upon the withdrawal of the Interconnection Customer's Interconnection Request under the SGIP.
- 10.6 Governing Law. These Terms and Conditions and any study performed thereunder shall be governed by and construed in accordance with the laws of the State of New York, without regard to any choice of laws provisions.
- 10.7 Severability. In the event that any part of these Terms and Conditions are deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from these Terms and Conditions and the obligations under these Terms and Conditions shall continue in full force and effect as if each part was not contained herein.
- 10.8 Amendment. No amendment, modification, or waiver of any term or condition hereof shall be effective unless set forth in writing and signed by the Interconnection Customer and NYISO hereto.
- 10.9 Survival. All warranties, limitations of liability, and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 10.10 Independent Contractor. Developer agrees that NYISO shall at all times be deemed to be an independent contractor and none of its employees or the employees of its subcontractors shall be considered to be employees of the Interconnection Customer as a result of performing any work under these Terms and Conditions.
- 10.11 No Implied Waivers. The failure of the Interconnection Customer or NYISO to insist upon or enforce strict performance of any of the provisions of these Terms and Conditions shall not be construed as a waiver or relinquishment to any extent of such party's right to insist or rely on any such provision, rights, and remedies in that or any other instances; rather, the same shall be and remain in full force and effect.
- 10.12 Successors and Assigns. The obligations under these Terms and Conditions, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Interconnection Customer and NYISO and their respective successors and assigns.

<b>IN WITNESS THEREOF,</b> the Interconnection Customer has agreed to accept and be bound by the Terms and Conditions by its duly authorized officers or agents execution on the day and year first below written.	
Insert name of Interconnection Customer]	
By:	
Title:	

## Date: \_\_\_\_\_\_Appendix 3 - Certification Codes and Standards

IEEE1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)

UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems

IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems

NFPA 70 (2002), National Electrical Code

IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems

IEEE Std C37.90.2 (1995), IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms NEMA MG 1-1998, Motors and Small Resources, Revision 3

IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1

## **Appendix 4 - Certification of Small Generator Equipment Packages**

- 1.0 Small Generating Facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation if: (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in SGIP Appendix 3, (2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and (3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.
- 2.0 The Interconnection Customer must verify that the intended use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.
- 3.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for an on-site commissioning test by the parties to the interconnection nor follow-up production testing by the NRTL.
- 4.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.
- 5.0 Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface components' labeling and listing performed by the NRTL, no further design review, testing or additional equipment on the customer side of the point of common coupling shall be required to meet the requirements of this interconnection procedure.
- 6.0 An equipment package does not include equipment provided by the utility.
- 7.0 Any equipment package approved and listed in a state by that state's regulatory body for interconnected operation in that state prior to the effective date of these small generator interconnection procedures shall be considered certified under these procedures for use in that state.

## Appendix 5 - Application, Procedures, and Terms and Conditions for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10 kW ("10 kW Inverter Process")

- 1.0 The Interconnection Customer ("Customer") completes the Interconnection Request ("Application") and submits it to the ISO. The ISO will send a copy to the Connecting Transmission Owner.
- 2.0 The ISO acknowledges to the Customer receipt of the Application within three Business Days of receipt.
- 3.0 The ISO, in consultation with the Connecting Transmission Owner, evaluates the Application for completeness and notifies the Customer within ten Business Days of receipt that the Application is or is not complete and, if not, advises what material is missing.
- 4.0 The ISO, in consultation with the Connecting Transmission Owner, verifies that the Small Generating Facility can be interconnected safely and reliably using the screens contained in the Fast Track Process in the SGIP. The ISO has 15 Business Days to complete this process. Unless the ISO, in consultation with the Connecting\_Transmission Owner, determines and demonstrates that the Small Generating Facility cannot be interconnected safely and reliably, the ISO approves the Application and returns it to the Customer, with a copy to the Connecting Transmission Owner. Note to Customer: Please check with the ISO before submitting the Application if disconnection equipment is required.
- 5.0 After installation, the Customer returns the Certificate of Completion to the ISO, and sends a copy to the Connecting Transmission Owner. Prior to parallel operation, the ISO, in consultation with the Connecting Transmission Owner, may inspect the Small Generating Facility for compliance with standards which may include a Connecting Transmission Owner witness test, and may schedule appropriate metering replacement, if necessary. The Customer shall cooperate with the ISO and the Connecting Transmission Owner to assure that the required inspection, witness test and/or metering replacement are completed within the timeframes outlined below.
- Generating Facility is authorized. If the witness test is not satisfactory, the Connecting Transmission Owner has the right to disconnect the Small Generating Facility. The Customer has no right to operate in parallel until a witness test has been performed, or previously waived on the Application. The Connecting Transmission Owner is obligated to complete this witness test within ten Business Days of the receipt of the Certificate of Completion, unless the Connecting Transmission Owner and Customer agree otherwise. If the Connecting Transmission Owner does not inspect within ten Business Days or by mutual agreement of the Parties, the witness test is deemed waived.

- 7.0 Contact Information The Customer must provide the contact information for the legal applicant (i.e., the Customer). If another entity is responsible for interfacing with the ISO and Connecting Transmission Owner, that contact information must be provided on the Application.
- 8.0 Ownership Information Enter the legal names of the owner(s) of the Small Generating Facility. Include the percentage ownership (if any) by any utility or public utility holding company, or by any entity owned by either.
- 9.0 UL1741 Listed This standard ("Inverters, Converters, and Controllers for Use in Independent Power Systems") addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL1741. This "listing" is then marked on the equipment and supporting documentation.
- 10.0 The ISO is available to help resolve any disputes that may arise out of the proposed interconnection, in accordance with the procedures set forth in Section 32.4.2 of the SGIP in Attachment Z of the ISO OATT.

# Application for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than $10\mathrm{kW}$

This Application is considered complete when it provides all applicable and correct information required below. Per SGIP section 32.1.5, documentation of the site control must be submitted with the Interconnection Request. Additional information to evaluate the Application may be required.

## **Processing Fee**

A non-refundable processing fee of \$100 must accompany this Application.

Interconnection Customer		
Name of Interconnection Customer:		
Address:		
City:	State:	Zip:
Telephone: E-Mail Address:		
Point of Contact		
Name:		
Company:		
Address:		
City:	State:	Zip:
Telephone:		
E-Mail Address:		
Owner of the facility (include % owner	rship by any electric utility):	
Small Generating Facility Information Location (if different from above):		
Electric Service Company:		
Account Number		

Inverter Manufacturer: Model		
Nameplate Rating: (kW) (kVA) (AC Volts)		
Single Phase Three Phase		
System Design Capacity: (kW) (kVA)		
Customer-Site Load:MW (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:		
Prime Mover: Photovoltaic Reciprocating Engine Fuel Cell Fuel Cell		
Turbine Other		
Energy Source: Solar Wind Hydro Diesel Natural Gas		
Fuel Oil Other (describe)		
Is the equipment UL1741 Listed? Yes No		
If Yes, attach manufacturer's cut-sheet showing UL1741 listing		
Estimated Installation Date: Estimated In-Service Date:		
The 10kW Inverter Process is available only for inverter-based Small Generating Facilities no larger than 10kW that meet the codes, standards, and certification requirements of Appendices 3 and 4 of the SGIP, or the ISO, in consultation with the Connecting Transmission Owner, has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate. If the review or testing raises safety issues, the Small Generating Facility will not be allowed to commence parallel operation until the issues are resolved.		
List components of the Small Generating Facility equipment package that are currently certified:		
Equipment Type Certifying Entity  1  2  3.		

4	
5	
Interconnection Customer Signature	
Application is true. I agree to abide by the	f my knowledge, the information provided in this he Terms and Conditions for Interconnecting an No Larger than 10kW and return the Certificate of Facility has been installed.
Signed:	
Title:	
Contingent Approval to Interconnect the	Small Generating Facility
(For ISO and Connecting Transm	nission Owner use only)
	erating Facility is approved contingent upon the Terms verter-Based Small Generating Facility No Larger than mpletion.
Connecting Transmission Owner Signatu	ire:
Title:	Date:
Connecting Transmission Owner waives	inspection/witness test Yes No
ISO Signature:	
Title:	Date:
Small Generating Facility Certificate of	of Completion
Is the Small Generating Facility owner-in	nstalled? YesNo
Interconnection Customer:	
Contact Person:	
Address:	
Location of the Small Generating Facility	

City:	State:	Zip Code:
Telephone:		
E-Mail Address:		
Electrician:		
Name:		
Address:		
City:	State:	Zip Code:
Telephone:		
E-Mail Address:		
License number:		
Date Approval to Install Facility gran	ited by the Connecting Transr	mission Owner:
<u>Inspection:</u>		
The Small Generating Facility has be	en installed and inspected in	compliance with the local
building/electrical code of		
Signed (Local electrical wiring inspe	ctor, or attach signed electrica	al inspection):
Print Name:		
Date:		
As a condition of interconnec a copy of the signed electrical permit contact information below):		a copy of this form along with ag Transmission Owner (insert
Name:		

City, State ZIP:		_
E-mail:		
Name:		_
Connecting Transmission Owner:		_
Address:		_
City, State ZIP:		_
E-mail:		
Approval to Energize the Small Generating Facility Owner use only)  Energizing the Small Generating Facility:		
Conditions for Interconnecting an Inverter-Based 10kW		
ISO Signature:		
Title:	Date:	
Connecting Transmission Owner Signature:		
Title:	Date:	

## Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW ("Terms and Conditions")

## 1.0 Construction of the Facility

The Interconnection Customer (the "Customer") may proceed to construct (including operational testing not to exceed two hours) the Small Generating Facility when the ISO approves the Interconnection Request (the "Application") and returns it to the Customer.

## 2.0 **Interconnection and Operation**

The Customer may operate Small Generating Facility and interconnect with the Connecting Transmission Owner's Distribution System once all of the following have occurred:

- 2.1 Upon completing construction, the Customer will cause the Small Generating Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- 2.2 The Customer returns the Certificate of Completion to the ISO and the Connecting Transmission Owner, and
- 2.3 The Connecting Transmission Owner has either:
- 2.3.1 Completed its inspection of the Small Generating Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes. All inspections must be conducted by the Connecting Transmission Owner, at its own expense, within ten Business Days (unless the Parties agree otherwise) after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. The Connecting Transmission Owner shall provide a written statement that the Small Generating Facility has passed inspection or shall notify the Customer of what steps it must take to pass inspection as soon as practicable after the inspection takes place; or
- 2.3.2 If the Connecting Transmission Owner does not schedule an inspection of the Small Generating Facility within ten business days after receiving the Certificate of Completion, the witness test is deemed waived (unless the Parties agree otherwise), unless the Interconnection Customer has not provided a reasonable opportunity for such inspection; or
- 2.3.3 The Connecting Transmission Owner waives the right to inspect the Small Generating Facility.
- 2.4 The Connecting Transmission Owner has the right to disconnect the Small Generating Facility in the event of improper installation or failure to return the Certificate of Completion.

2.5 Revenue quality metering equipment must be installed and tested in accordance with applicable ANSI standards.

## 3.0 Safe Operations and Maintenance

The Customer shall be fully responsible to operate, maintain, and repair the Small Generating Facility as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

## 4.0 Access

The Connecting Transmission Owner shall have access to the disconnect switch (if the disconnect switch is required) and metering equipment of the Small Generating Facility at all times. The Connecting Transmission Owner shall provide reasonable notice to the Customer when possible prior to using its right of access.

## 5.0 **Disconnection**

The Connecting Transmission Owner may temporarily disconnect the Small Generating Facility upon the following conditions, until the conditions no longer exist:

- 5.1 For scheduled outages upon reasonable notice.
- 5.2 For unscheduled outages or emergency conditions.
- 5.3 If the Small Generating Facility does not operate in the manner consistent with these Terms and Conditions, the ISO OATT and Applicable Reliability Standards.
- 5.4 The Connecting Transmission Owner shall inform the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

### 6.0 **Indemnification**

The Parties shall at all times indemnify, defend, and save the other Parties harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the indemnified Party's action or inactions of its obligations under this agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

### 7.0 **Insurance**

The Interconnection Customer and Connecting Transmission Owner shall each follow all applicable insurance requirements imposed by New York State. All insurance policies must be maintained with insurers authorized to do business in New York State, and all policies must be in place ten Business Days prior to the operation of the Inverter-Based Small Generating Facility. The Interconnection Customer and Connecting Transmission Owner shall notify each other whenever

an accident or incident recurs that is covered by such insurance, whether or not such coverage is sought. The Interconnection Customer's insurance requirements shall be specified in an attachment to these Terms and Conditions.

#### 8.0 **Limitation of Liability**

Each Party's liability to the other Parties for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any e

	act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall any Party be liable to any other Parties for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under paragraph 6.0.
9.0	<b>Termination</b> The agreement to operate in parallel shall become effective when executed by the Parties and shall continue in effect until The agreement may be terminated earlier under the following conditions:
9.1	<b>By the Customer</b> By providing written notice to the NYISO and the Connecting Transmission Owner.
9.2	By the ISO and the Connecting Transmission Owner If the Small Generating Facility fails to operate for any consecutive 12 month period or the Customer fails to remedy a violation of these Terms and Conditions.
9.3	Permanent Disconnection In the event this Agreement is terminated, the Connecting Transmission Owner shall have the right to disconnect its facilities or direct the Customer to disconnect

shall have the right to disconnect its facilities or direct the Customer to disconnect its Small Generating Facility.

#### 9.4 **Survival Rights**

This Agreement shall continue in effect after termination to the extent necessary to allow or require any Party to fulfill rights or obligations that arose under the Agreement.

#### 10.0 **Assignment/Transfer of Ownership of the Facility**

This Agreement shall survive the transfer of ownership of the Small Generating Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the NYISO and the Connecting Transmission Owner.

Interconnection Customer: Connecting Transmission Ow	
By:	By:

Name:	Name:
Date:	Date:
New York Independent System Operator, Inc.	
By:	
Name:	
Date:	

## **Appendix 6 - Facilities Study Agreement**

THIS AGREEMENT is made and entered into thisday of	
20 by and among organized and existing under the laws of the State ("Interconnection Customer"),	
("Interconnection Customer"), New York Independent System Operator, Inc., a not-for-profit corporation organized and existing under the laws of the State of New York ("NYISO") and	
existing under the laws of the State of New York ("Connecting Transmission Owner"). Interconnection Customer, the NYISO and the Connecting Transmission Owner each may be referred to as a "Party," or collectively as the "Parties."	эe
RECITALS	
WHEREAS, Interconnection Customer is proposing to develop a Small Generating Facility generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by Interconnection Customer on and	
<b>WHEREAS</b> , the Interconnection Customer desires to interconnect the Small Generating Fa with the New York State Transmission System or the Distribution System;	icility
<b>WHEREAS</b> , the NYISO has completed a system impact study and provided the results of study to the Interconnection Customer; and	said
WHEREAS, the Interconnection Customer elects to be evaluated for [ Interconnection Service, and has requested the NYISO to perform, or cause to be performed facilities study to specify and estimate the cost of the equipment, engineering, procurement construction work needed to physically and electrically connect the Small Generating Facility with the New York State Transmission System or the Distribution System.	and
<b>NOW, THEREFORE</b> , in consideration of and subject to the mutual covenants contained the Parties agreed as follows:	erein
1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in Section 32.1.1.2 of the SGIP.	ıve
2.0 The Interconnection Customer elects and the NYISO shall cause a facilities study to performed in accordance with the requirements of Attachment Z of the NYISO Ope Access Transmission Tariff.	
3.0 The scope of the facilities study shall be subject to data provided in Attachment A to Agreement and shall be made an exhibit thereto.	this
4.0 The facilities study shall specify and estimate the cost of the equipment, engineering	5,

procurement and construction work (including overheads) needed to implement the

conclusions of the system impact study(s) and to complete any additional power flow and other analysis, including deliverability analysis, that may be appropriate. The facilities study shall also identify (1) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment, (2) the nature and estimated cost of the Connecting Transmission Owner's Interconnection Facilities and Upgrades necessary to accomplish the interconnection, and (3) an estimate of the time required to complete the construction and installation of such facilities.

- 5.0 The Connecting Transmission Owner may propose to group facilities required for more than one Interconnection Customer in order to minimize facilities costs through economies of scale, but any Interconnection Customer may require the installation of facilities required for its own Small Generating Facility if it is willing to pay the costs of those facilities in accordance with the SGIP.
- 6.0 The Interconnection Customer shall provide to the NYISO a deposit or other commercially reasonable security in an amount equal to the good faith estimated facilities study costs.
- 7.0 Except to the extent required by the ISO OATT Attachment S Class Year study and cost allocation process, in cases where Upgrades are required, the facilities study must be completed within 45 Business Days of the receipt of this Agreement. In cases where no Upgrades are necessary, and the required facilities are limited to Interconnection Facilities, the facilities study must be completed within 30 Business Days.
- 8.0 Once the facilities study is completed, a facilities study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the facilities study must be completed and the facilities study report transmitted within 30 Business Days of the Interconnection Customer's agreement to conduct a facilities study.
- 9.0 Interconnection Customer may, within 30 Calendar Days after receipt of the draft report, provide written comments to the NYISO, which the NYISO shall include in the final report. The NYISO shall issue the final facilities study report within 15 Business Days of receiving Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. The NYISO may reasonably extend such fifteen-day period upon notice to Interconnection Customer if Interconnection Customer's comments require the NYISO to perform additional analyses or make other significant modifications prior to the issuance of the final facilities study report. Upon request, the NYISO shall provide Interconnection Customer supporting documentation, workpapers, and databases or data developed in the preparation of the facilities study, subject to confidentiality arrangements consistent with Section 32.4.5 of the SGIP.
- 10.0 Within ten Business Days of providing a draft facilities study report to Interconnection Customer, the NYISO, the Connecting Transmission Owner, and Interconnection Customer shall meet to discuss the results of the facilities study.

- 11.0 Except for study costs allocated to the Interconnection Customer as a member of a Class Year, any Connecting Transmission Owner and NYISO that incurs study costs shall be based on their actual costs, including applicable taxes, and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.
- The Interconnection Customer shall pay all invoice amounts in excess of the deposit or 12.0 other security without interest within 30 calendar days after receipt of the invoice. If the deposit or other cash security exceeds the invoiced fees, the NYISO shall refund such excess within 30 calendar days of the invoice without interest. If the Interconnection Customer disputes an amount to be paid the Interconnection Customer shall pay the disputed amount to the NYISO or into an interest bearing escrow account, pending resolution of the dispute in accordance with Section 32.4.2 of the SGIP. To the extent the dispute is resolved in the Interconnection Customer's favor, that portion of the disputed amount will be returned to the Interconnection Customer with interest at rates applicable to refunds under the Commission's regulations. To the extent the dispute is resolved in the NYISO's favor, that portion of any escrowed funds and interest will be released to the NYISO. The Connecting Transmission Owner and the NYISO shall not be obligated to perform or continue to perform any Interconnection Study work for the Interconnection Customer unless the Interconnection Customer has paid all amounts in compliance herewith.
- 13.0 Governing Law, Regulatory Authority, and Rules. The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of New York, without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.
- 14.0 <u>Amendment.</u> The Parties may amend this Agreement by a written instrument duly executed by the Parties.
- 15.0 <u>No Third-Party Beneficiaries.</u> This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

## 16.0 Waiver

- 16.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement.

Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the NYISO. Any waiver of this Agreement shall, if requested, be provided in writing.

- 17.0 <u>Multiple Counterparts.</u> This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 18.0 <u>No Partnership.</u> This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- 19.0 <u>Severability.</u> If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.
- 20.0 <u>Subcontractors.</u> Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.
  - 20.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the NYISO or the Connecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.
  - 20.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.
- 21.0 <u>Reservation of Rights</u>. Nothing in this Agreement shall alter the right of the NYISO or Connecting Transmission Owner to make unilateral filings with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under Section 205 or any other applicable provision of the

Federal Power Act and FERC's rules and regulations thereunder which rights are expressly reserved herein, and the existing rights of Interconnection Customer to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations are also expressly reserved herein; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

## [Insert name of Connecting Transmission Owner]

Signed	
Name (Printed):	
Title	
[Insert name of Interconnection Custor	mer]
Signed	
Name (Printed):	
Title	
New York Independent System Operat	tor, Inc.
Signed	
Name (Printed):	
Title	

## **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 entering a Class Year Study or Expedited Deliverability Study, subject to the eligibility and entry requirements for such studies specified by Attachment S to the ISO OATT.

Evaluation Election for ERIS:
If requesting ERIS for a Small Generating Facility comprised of multiple Generators, specify the allocation of requested ERIS among such Generators:
Evaluation Election for CRIS (only for Projects 2 MW or smaller):
If requesting CRIS for a Small Generating Facility 2 MW or smaller that is comprised of multiple Generators, specify the allocation of requested CRIS among such Generators:
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?		
Please provide a 7.5-minute quadrangle maline, and property lines. Bus length from generation to interconnect	ap of the site. Indicate the plant, station, transmission tion station:	
Physical dimensions of the proposed interest	connection station:	
Line length from interconnection station to	o Connecting Transmission Owner's transmission line.	
Tower number observed in the field. (Pair	nted on tower leg):	
Number of third party easements required	for transmission lines, if known:	
Is the Small Generating Facility located in Connecting Transmission Owner's service area?  Yes No If No, please provide name of local provider:		
Please provide the following proposed sch	edule dates:	
Begin Construction	Date:	
In-Service	Date:	

Initial Synchronization	Date:
Generation Testing	Date:
Commercial Operation	Date:

Appendix 7 - STANDARD SMALL GENERATOR INTERCONNECTION AGREEMENT (SGIA) (Applicable To Generating Facilities No Larger Than 20 MW)

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This Standard Small Generator Interconnection Agr	reement ("Agreement" or "SGIA") is made
and entered into this day of	, 20, by and among the New York
Independent System Operator, Inc., a not-for-profit	corporation organized and existing under the
laws of the State of New York ("NYISO") and	a
organized and existing u	nder the laws of the State of New York
("Connecting Transmission Owner"), and	, a
organized and existing under the la	ws of the State of
("Interconnection Customer") each hereinafter some	etimes referred to individually as "Party" or
referred to collectively as the "Parties."	

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

## **Article 1 Scope and Limitations of Agreement**

## 1.1 Applicability

This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Attachment 5.

## 1.2 Purpose

This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the New York State Transmission System or the Distribution System.

## 1.3 Scope of Interconnection Service

- 1.3.1 The NYISO will provide [ ] Interconnection Service to Interconnection Customer at the Point of Interconnection.
- 1.3.2 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any, or applicable provisions of NYISO's or Connecting Transmission Owner's tariffs. The Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity in accordance with the applicable provisions of the ISO OATT and Connecting Transmission Owner's tariff. The execution of this Agreement does not constitute a request for, nor agreement to, provide Energy, any Ancillary Services or Installed Capacity under the NYISO Services Tariff or any Connecting Transmission Owner's tariff. If Interconnection Customer wishes to supply or purchase Energy, Installed Capacity or Ancillary Services, then Interconnection Customer will make application to do so in accordance with the NYISO Services Tariff or Connecting Transmission Owner's tariff.

## 1.4 Limitations

Nothing in this Agreement is intended to affect any other agreement by and among the NYISO, Connecting Transmission Owner and the Interconnection Customer, except as otherwise expressly provided herein.

## 1.5 Responsibilities of the Parties

- 1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.
- 1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its

- Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.
- 1.5.3 The Connecting Transmission Owner shall construct, operate, and maintain its Interconnection Facilities and Upgrades covered by this Agreement in accordance with this Agreement, and with Good Utility Practice.
- 1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Connecting Transmission Owner or Affected Systems.
- 1.5.5 The Connecting Transmission Owner and Interconnection Customer shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own unless otherwise specified in the Attachments to this Agreement. Each of those Parties shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Connecting Transmission Owner and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the Connecting Transmission Owner's electric system, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.
- 1.5.6 The NYISO shall coordinate with all Affected Systems to support the interconnection. The Connecting Transmission Owner shall cooperate with the NYISO in these efforts.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Connecting Transmission Owner and any Affected Systems for a defined under-frequency or over-frequency condition, or an undervoltage or over-voltage condition, as tested pursuant to section 2.1 of this agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Transmission Owner's automatic load-shed program. The Transmission Owner

shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Owner and any Affected Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Owner and any Affected Systems during system disturbances within a range of under-frequency and overfrequency conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. The term "voltage ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Transmission Owner and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis.

## **1.6** Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to: (1) the rules and procedures concerning the operation of generation set forth in the NYISO tariffs or ISO Procedures or the Connecting Transmission Owner's tariff; (2) any requirements consistent with Good Utility Practice or that are necessary to ensure the safe and reliable operation of the Transmission System or Distribution System; and (3) the Operating Requirements set forth in Attachment 5 of this Agreement.

## 1.7 Metering

The Interconnection Customer shall be responsible for the Connecting Transmission Owner's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

## 1.8 Reactive Power and Primary Frequency Response

- 1.8.1 Power Factor Design Criteria
  - 1.8.1.1 Synchronous Generation. The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the NYISO or the Transmission Owner in whose Transmission District the Small Generating Facility interconnects has established different requirements that apply to all similarly situated generators in the New York Control Area or Transmission District (as applicable) on a comparable basis, in accordance with Good Utility Practice.
  - 1.8.1.2 Non-Synchronous Generation. The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the NYISO or the Transmission Owner in whose Transmission District the Small Generating Facility interconnects has established a different power factor range that applies to all similarly situated non-synchronous generators in the control area or Transmission District (as applicable) on a comparable basis, in accordance with Good Utility Practice. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two. This requirement shall only apply to newly interconnecting non-synchronous generators that have not yet executed a Facilities Study Agreement as of September 21, 2016.
- 1.8.2 The NYISO is required to pay the Interconnection Customer for reactive power, or voltage support service, that the Interconnection Customer provides from the Small Generating Facility in accordance with Rate Schedule 2 of the NYISO Services Tariff.
- 1.8.3 Primary Frequency Response. Interconnection Customer shall ensure the primary frequency response capability of its Small Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term "functioning governor or equivalent controls" as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in system frequency and autonomously adjust the Small Generating Facility's real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and ±0.036 Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved Applicable Reliability Standard providing for equivalent or more stringent

parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Small Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved Applicable Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Small Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Small Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved Applicable Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify NYISO that the primary frequency response capability of the Small Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Small Generating Facility with the New York State Transmission System, Interconnection Customer shall operate the Small Generating Facility consistent with the provisions specified in Articles 1.8.3.1 and 1.8.3.2 of this Agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Small Generating Facilities.

1.8.3.1 Governor or Equivalent Controls. Whenever the Small Generating Facility is operated in parallel with the New York State Transmission System, Interconnection Customer shall operate the Small Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with NYISO, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved Applicable Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor and equivalent controls to NYISO and/or the Connecting Transmission Owner upon request. If Interconnection Customer needs to operate the Small Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify NYISO and the Connecting Transmission Owner, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Small Generating Facility's governor or equivalent controls to a minimum whenever the Small Generating Facility is operated in parallel with the New York State Transmission System.

- 1.8.3.2 Timely and Sustained Response. Interconnection Customer shall ensure that the Small Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Small Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Small Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. An Applicable Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.
- 1.8.3.3 Exemptions. Small Generating Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from Articles 1.8.3, 1.8.3.1, and 1.8.3.2 of this Agreement. Small Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability requirements in accordance with the droop and deadband capability requirements specified in Article 1.8.3, but shall be otherwise exempt from the operating requirements in Articles 1.8.3, 1.8.3.1, 1.8.3.2, and 1.8.3.4 of this Agreement.
- 1.8.3.4 Electric Storage Resources. Interconnection Customer interconnecting an electric storage resource shall establish an operating range in Attachment 5 of its SGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Articles 1.8.3, 1.8.3.1, 1.8.3.2, and 1.8.3.3 of this Agreement. Attachment 5 shall specify whether the operating range is static or dynamic, and shall consider (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric storage resources due to manufacturer specification; and (6) any other relevant factors agreed to by the NYISO, Connecting Transmission Owner, and Interconnection Customer. If the operating range is dynamic, then Attachment 5

must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Article 1.8.3.2 of this Agreement when it is online and dispatched to inject electricity to the New York State Transmission System and/or receive electricity from the New York State Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the New York State Transmission System and/or dispatched to receive electricity from the New York State Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

# 1.9 Capitalized Terms

Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement. Capitalized terms used herein that are not so defined shall have the meanings specified in Appendix 1 of Attachment Z, Section 25.1.2 of Attachment S, or Section 30.1 of Attachment X of the ISO OATT.

#### Article 2. Inspection, Testing, Authorization, and Right of Access

### 2.1 Equipment Testing and Inspection

- 2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the NYISO and the Connecting Transmission Owner of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Connecting Transmission Owner may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the NYISO and Connecting Transmission Owner a written test report when such testing and inspection is completed. The Small Generating Facility may not commence parallel operations if the NYISO, in consultation with the Connecting Transmission Owner, finds that the Small Generating Facility has not been installed as agreed upon or may not be operated in a safe and reliable manner.
- 2.1.2 The NYISO and Connecting Transmission Owner shall each provide the Interconnection Customer written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the NYISO or Connecting Transmission Owner of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

#### 2.2 Authorization Required Prior to Parallel Operation

- 2.2.1 The NYISO, in consultation with the Connecting Transmission Owner, shall use Reasonable Efforts to list applicable parallel Operating Requirements in Attachment 5 of this Agreement. Additionally, the NYISO, in consultation with the Connecting Transmission Owner, shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The NYISO and Connecting Transmission Owner shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.
- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the New York State Transmission System or the Distribution System without prior written authorization of the NYISO. The NYISO, in consultation with the Connecting Transmission Owner, will provide such authorization once the NYISO receives notification that the Interconnection Customer has complied with all applicable parallel Operating Requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

## 2.3 Right of Access

- 2.3.1 Upon reasonable notice, the NYISO and/or Connecting Transmission Owner may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the NYISO and Connecting Transmission Owner at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.
- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the NYISO and Connecting Transmission Owner each shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on them by this Agreement or if necessary to meet their legal obligation to provide service to their customers.
- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

#### **Article 3** Effective Date, Term, Termination, and Disconnection

#### 3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The NYISO and Connecting Transmission Owner shall promptly file, or cause to be filed, this Agreement with FERC upon execution, if required. If the Agreement is disputed and the Interconnection Customer requests that it be filed with FERC in an unexecuted form, the NYISO shall file, or cause to be filed, this Agreement and the NYISO shall identify the disputed language.

### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of ten years from the Effective Date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

#### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the NYISO and Connecting Transmission Owner 20 Business Days written notice. The NYISO may terminate this Agreement after the Small Generating Facility is Retired.
- 3.3.2 Any Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the New York State Transmission System or the Distribution System, as applicable. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such non-terminating Party otherwise is responsible for these costs under this SGIA.
- 3.3.4 The termination of this Agreement shall not relieve any Party of its liabilities and obligations, owed or continuing at the time of the termination. The Interconnection Customer shall pay all amounts in excess of any deposit or other security without interest within 30 calendar days after receipt of the invoice for such amounts. If the deposit or other security exceeds the invoice, the Connecting Transmission Owner shall refund such excess within 30 calendar days of the invoice without interest. If the Interconnection Customer disputes an amount to

be paid the Interconnection Customer shall pay the disputed amount to the Connecting Transmission Owner or into an interest bearing escrow account, pending resolution of the dispute in accordance with Article 10 of this Agreement. To the extent the dispute is resolved in the Interconnection Customer's favor, that portion of the disputed amount will be returned to the Interconnection Customer with interest at rates applicable to refunds under the Commission's regulations. To the extent the dispute is resolved in the Connecting Transmission Owner's favor, that portion of any escrowed funds and interest will be released to the Connecting Transmission Owner.

3.3.5 The limitations of liability, indemnification and confidentiality provisions of this Agreement shall survive termination or expiration of this Agreement.

#### 3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

#### 3.4.1 Emergency Conditions

"Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the NYISO or Connecting Transmission Owner, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the New York State Transmission System or Distribution System, the Connecting Transmission Owner's Interconnection Facilities or the electric systems of others to which the New York State Transmission System or Distribution System is directly connected; or (3) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the NYISO or Connecting Transmission Owner may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The NYISO or Connecting Transmission Owner shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the NYISO and Connecting Transmission Owner promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the New York State Transmission System or Distribution System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of each Party's facilities and operations, its anticipated duration, and the necessary corrective action.

#### 3.4.2 Routine Maintenance, Construction, and Repair

The NYISO or Connecting Transmission Owner may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the New York State Transmission System or Distribution System when

necessary for routine maintenance, construction, and repairs on the New York State Transmission System or Distribution System. The NYISO or the Connecting Transmission Owner shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The NYISO and Connecting Transmission Owner shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

#### 3.4.3 Forced Outages

During any forced outage, the NYISO or Connecting Transmission Owner may suspend interconnection service to the Interconnection Customer to effect immediate repairs on the New York State Transmission System or the Distribution System. The NYISO shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the NYISO shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

#### 3.4.4 Adverse Operating Effects

The NYISO or Connecting Transmission Owner shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the New York State Transmission System, the Distribution System or Affected Systems, or if disconnection is otherwise required under Applicable Reliability Standards or the ISO OATT. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the NYISO or Connecting Transmission Owner may disconnect the Small Generating Facility. The NYISO or Connecting Transmission Owner shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

## 3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the NYISO and Connecting Transmission Owner before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the New York State Transmission System or the Distribution System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the prior written authorization of the NYISO and Connecting Transmission Owner, the Connecting Transmission Owner shall have the right to temporarily disconnect the Small Generating Facility. If disconnected, the Small Generating Facility will not be reconnected until the unauthorized modifications are authorized or removed.

#### 3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the New York State Transmission System and Distribution System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

# Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades

#### 4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The NYISO, in consultation with the Connecting Transmission Owner, shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, the NYISO, and the Connecting Transmission Owner.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Connecting Transmission Owner's Interconnection Facilities, as set forth in Attachment 2 to this Agreement.

## **4.2 Distribution Upgrades**

The Connecting Transmission Owner shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Connecting Transmission Owner and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer. The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with owning, operating, maintaining, repairing, and replacing the Distribution Upgrades, as set forth in Attachment 6 to this Agreement.

# Article 5. Cost Responsibility for System Upgrade Facilities and System Deliverability Upgrades

### 5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires System Upgrade Facilities or System Deliverability Upgrades.

#### 5.2 System Upgrades

The Connecting Transmission Owner shall procure, construct, install, and own the System Upgrade Facilities and System Deliverability Upgrades described in Attachment 6 of this Agreement. To the extent that design work is necessary in addition to that already accomplished in the Class Year Interconnection Facilities Study for the Interconnection Customer, the Connecting Transmission Owner shall perform or cause to be performed such work. If all the Parties agree, the Interconnection Customer may construct System Upgrade Facilities and System Deliverability Upgrades.

- 5.2.1 As described in Section 32.3.5.3 of the SGIP in Attachment Z of the ISO OATT, the responsibility of the Interconnection Customer for the cost of the System Upgrade Facilities and System Deliverability Upgrades described in Attachment 6 of this Agreement shall be determined in accordance with Attachment S of the ISO OATT, as required by Section 32.3.5.3.2 of Attachment Z. The Interconnection Customer shall be responsible for all System Upgrade Facility costs as required by Section 32.3.5.3.2 of Attachment Z or its share of any System Upgrade Facilities and System Deliverability Upgrades costs resulting from the final Attachment S process, as applicable, and Attachment 6 to this Agreement shall be revised accordingly.
- 5.2.2 Pending the outcome of the Attachment S cost allocation process, if applicable, the Interconnection Customer may elect to proceed with the interconnection of its Small Generating Facility in accordance with Section 32.3.5.3 of the SGIP.

### **5.3** Special Provisions for Affected Systems

For the repayment of amounts advanced to the Affected System Operator for System Upgrade Facilities or System Deliverability Upgrades, the Interconnection Customer and Affected System Operator shall enter into an agreement that provides for such repayment, but only if responsibility for the cost of such System Upgrade Facilities is not to be allocated in accordance with Attachment S of the ISO OATT. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to the Affected System Operator as well as the repayment by the Affected System Operator.

### Article 6. Billing, Payment, Milestones, and Financial Security

### 6.1 Billing and Payment Procedures and Final Accounting

- 6.1.1 The Connecting Transmission Owner shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by those Parties. The Interconnection Customer shall pay all invoice amounts within 30 calendar days after receipt of the invoice.
- 6.1.2 Within three months of completing the construction and installation of the Connecting Transmission Owner's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Connecting Transmission Owner shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Connecting Transmission Owner for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Connecting Transmission Owner shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Connecting Transmission Owner within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Connecting Transmission Owner shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.
- 6.1.3 If the Interconnection Customer disputes an amount to be paid, the Interconnection Customer shall pay the disputed amount to the Connecting Transmission Owner or into an interest bearing escrow account, pending resolution of the dispute in accordance with Article 10 of this Agreement. To the extent the dispute is resolved in the Interconnection Customer's favor, that portion of the disputed amount will be credited or returned to the Interconnection Customer with interest at rates applicable to refunds under the Commission's regulations. To the extent the dispute is resolved in the Connecting Transmission Owner's favor, that portion of any escrowed funds and interest will be released to the Connecting Transmission Owner.

#### 6.2 Milestones

Subject to the provisions of the SGIP, the Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure event, it shall immediately notify the other Parties of the reason(s) for not meeting the milestone and: (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone

shall not unreasonably withhold agreement to such an amendment unless: (1) it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

#### **6.3** Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Connecting Transmission Owner's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Connecting Transmission Owner, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Connecting Transmission Owner and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Connecting Transmission Owner's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Connecting Transmission Owner under this Agreement during its term. The Connecting Transmission Owner may draw on any such security to the extent that the Interconnection Customer fails to make any payments due under this Agreement. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Connecting Transmission Owner, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Connecting Transmission Owner and must specify a reasonable expiration date.
- 6.3.3 Notwithstanding the above, Security posted for System Upgrade Facilities for a Small Generating Facility required to enter the Class Year process, or cash or Security provided for System Deliverability Upgrades, shall meet the requirements for Security contained in Attachment S to the ISO OATT.

# Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default

### 7.1 Assignment

This Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns. This Agreement may be assigned by any Party upon 15 Business Days prior written notice and opportunity to object by the other Parties; provided that:

- 7.1.1 A Party may assign this Agreement without the consent of the other Parties to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the NYISO and the Connecting Transmission Owner of any such assignment. A Party may assign this Agreement without the consent of the other Parties in connection with the sale, merger, restructuring, or transfer of a substantial portion of all of its assets, including the Interconnection Facilities it owns, so long as the assignee in such a transaction directly assumes all rights, duties and obligation arising under this Agreement.
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the NYISO or Connecting Transmission Owner, for collateral security purposes to aid in providing financing for the Small Generating Facility.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Parties for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall any Party be liable to the other Parties for any indirect, special, consequential, or punitive damages.

#### 7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

- 7.3.2 Each Party (the "Indemnifying Party") shall at all times indemnify, defend, and hold harmless the other Parties (each an "Indemnified Party") from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, the alleged violation of any Environmental Law, or the release or threatened release of any Hazardous Substance, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties (any and all of these a "Loss"), arising out of or resulting from: (i) the Indemnified Party's performance under this Agreement on behalf of the Indemnifying Party, except in cases where the Indemnifying Party can demonstrate that the Loss of the Indemnified Party was caused by the gross negligence or intentional wrongdoing by the Indemnified Party, or (ii) the violation by the Indemnifying Party of any Environmental Law or the release by the Indemnifying Party of a Hazardous Substance.
- 7.3.3 If a Party is entitled to indemnification under this article as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.3.4 If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this article, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual loss, net of any insurance or other recovery.
- 7.3.5 Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

## 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, no Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

## 7.5 Force Majeure

- 7.5.1 As used in this article, a "Force Majeure Event" shall mean "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 article, this definition of Force Majeure shall supersede the definitions of Force Majeure set out in Section 32.10.1 of the ISO OATT.
- 7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event ("Affected Party") shall promptly notify the other Parties, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Parties informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

#### 7.6 Breach and Default

- 7.6.1 No Breach of this Agreement shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event or the result of an act or omission of the other Parties. Upon a Breach, the non-breaching Party shall give written notice of such Breach to the Breaching Party. Except as provided in article 7.6.2, the Breaching Party shall have 60 calendar days from receipt of the Breach notice within which to cure such Breach; provided however, if such Breach is not capable of cure within 60 calendar days, the Breaching Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Breach notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.
- 7.6.2 If a Breach is not cured as provided in this article, or if a Breach is not capable of being cured within the period provided for herein, a Default shall exist and the non-defaulting Parties acting together shall thereafter have the right to terminate this Agreement, in accordance with article 3.3 hereof, by written notice to the defaulting Party at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not those Parties terminate this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other

- damages and remedies to which they are entitled at law or in equity. The provisions of this article shall survive termination of this Agreement.
- 7.6.3 In cases where the Interconnection Customer has elected to proceed under Section 32.3.5.3 of the SGIP, if the Interconnection Request is withdrawn or deemed withdrawn pursuant to the SGIP during the term of this Agreement, this Agreement shall terminate.

#### **Article 8. Insurance**

- 8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. Such insurance coverage is specified in Attachment 7 to this Agreement. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in New York State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Connecting Transmission Owner, except that the Interconnection Customer shall show proof of insurance to the Connecting Transmission Owner no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient creditworthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.
- 8.2 The NYISO and Connecting Transmission Owner agree to maintain general liability insurance or self-insurance consistent with the existing commercial practice. Such insurance or self-insurance shall not exclude the liabilities undertaken pursuant to this Agreement.
- 8.3 The Parties further agree to notify one another whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

### Article 9. Confidentiality

- 9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such. Confidential Information shall include, without limitation, information designated as such by the NYISO Code of Conduct contained in Attachment F to the ISO OATT.
- 9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.
  - 9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Parties as it employs to protect its own Confidential Information.
  - 9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.
  - 9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § lb.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public disclosure. Each Party is prohibited from notifying the other Parties to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Parties to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.
  - 9.4 Consistent with the provisions of this article 9, the Parties to this Agreement will cooperate in good faith to provide each other, Affected Systems, Affected System

Operators, and state and federal regulators the information necessary to carry out the terms of the SGIP and this Agreement.

### Article 10. Disputes

- 10.1 The NYISO, Connecting Transmission Owner and Interconnection Customer agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.
- 10.2 In the event of a dispute, the Parties will first attempt to promptly resolve it on an informal basis. The NYISO will be available to the Interconnection Customer and Connecting Transmission Owner to help resolve any dispute that arises with respect to performance under this Agreement. If the Parties cannot promptly resolve the dispute on an informal basis, then any Party shall provide the other Parties with a written Notice of Dispute. Such notice shall describe in detail the nature of the dispute.
- 10.3 If the dispute has not been resolved within two Business Days after receipt of the notice, any Party may contact FERC's Dispute Resolution Service ("DRS") for assistance in resolving the dispute.
- 10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. The result of this dispute resolution process will be binding only if the Parties agree in advance. DRS can be reached at 1-877-337-2237 or via the internet at http://www.ferc.gov/legal/adr.asp.
- 10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-third of any costs paid to neutral third-parties.
- 10.6 If any Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then any Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### Article 11. Taxes

- 11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.
- 11.2 Each Party shall cooperate with the other Parties to maintain the other Parties' tax status. Nothing in this Agreement is intended to adversely affect the tax status of any Party including the status of NYISO, or the status of any Connecting Transmission Owner with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds. Notwithstanding any other provisions of this Agreement, LIPA, NYPA and Consolidated Edison Company of New York, Inc. shall not be required to comply with any provisions of this Agreement that would result in the loss of tax-exempt status of any of their Tax-Exempt Bonds or impair their ability to issue future tax-exempt obligations. For purposes of this provision, Tax-Exempt Bonds shall include the obligations of the Long Island Power Authority, NYPA and Consolidated Edison Company of New York, Inc., the interest on which is not included in gross income under the Internal Revenue Code.
- 11.3 LIPA and NYPA do not waive their exemptions, pursuant to Section 201(f) of the FPA, from Commission jurisdiction with respect to the Commission's exercise of the FPA's general ratemaking authority.
- 11.4 Any payments due to the Connecting Transmission Owner under this Agreement shall be adjusted to include any tax liability incurred by the Connecting Transmission Owner with respect to the interconnection request which is the subject of this Agreement. Such adjustments shall be made in accordance with the provisions of Article 5.17 of the LGIA in Attachment X of the ISO OATT. Except where otherwise noted, all costs, deposits, financial obligations and the like specified in this Agreement shall be assumed not to reflect the impact of applicable taxes.

#### **Article 12. Miscellaneous**

### 12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of New York, without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

#### 12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by the Parties, or under article 12.12 of this Agreement.

#### 12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns. Notwithstanding the foregoing, any subcontractor of the Connecting Transmission Owner or NYISO assisting either of those Parties with the Interconnection Request covered by this Agreement shall be entitled to the benefits of indemnification provided for under Article 7.3 of this Agreement and the limitation of liability provided for in Article 7.2 of this Agreement.

#### 12.4 Waiver

- 12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2 Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the NYISO. Any waiver of this Agreement shall, if requested, be provided in writing.

## 12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.

### **12.6** Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects the NYISO, the Connecting Transmission Owner, Market Participants, and Interconnection Customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Parties, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Parties. The notifying Party shall: (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Parties copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided,

however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Parties to the extent provided for in Articles7.2 and 7.3 above for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the NYISO or Connecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.
- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

Nothing in this Agreement shall alter the right of the NYISO or Connecting Transmission Owner to make unilateral filings with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder which rights are expressly reserved herein, and the existing rights of the Interconnection Customer to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations are also expressly reserved herein; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

#### Article 13. Notices

If to the Interconnection Customer:

City:

Attention:

Connecting Transmission Owner:

#### 13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

	Interconnection Cu Attention: Address: City: Phone:	stomer: State:	Zip:	
	If to the Connecting Transi	mission Owne	r:	
	Connecting Transm Attention: Address: City: Phone:	nission Owner State:	: Zip:	
	If to the NYISO:			
	Attention: Address: City: Phone:	State:	Zip: :	
13.2	Billing and Payment			
	Billings and payments shall	ll be sent to the	e addresses set out below:	
	Interconnection Customer: Attention: Address:			

Zip:

State:

Address:		
City:	State:	Zip:

#### 13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Interconnection Customer:
Attention:
Address:
City: State: Zip:
Phone:
E-mail:

If to the Connecting Transmission Owner:

Connecting Transmission Owner:

Attention: Address:

City: State: Zip:

Phone: E-mail:

If to the NYISO:

Attention:

Address:

City: State: Zip:

Phone:

E-mail: interconnectionsupport@nyiso.com

## 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Interconnection Customer:

Pl	ity: hone: -mail:	State:	Zip:
Connectin	ng Transmission Ow	ner's Operating	g Representative:
C	onnecting Transmiss	sion Owner:	
A C: Pl	ttention: ddress: ity: hone: -mail:	State:	Zip:
NYISO's	Operating Represen	ntative:	
A	ttention:		

# 13.5 Changes to the Notice Information

Address: City:

Phone:

Attention: Address:

Either Party may change this information by giving five Business Days written notice prior to the effective date of the change.

State:

E-mail: interconnectionsupport@nyiso.com

Zip:

# **Article 14. Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the New York Independent System Operator, Inc.

By:	
Name:	
Title:	
Date:	
For the	Connecting Transmission Owner
By:	
Name:	
Title:	
Date:	
For the	Interconnection Customer
By:	
Name:	
Title:	

#### **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.

**Commercial Operation** shall mean the status of the Small Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation, notice of which must be provided to the NYISO in the form of Attachment 9 to this Agreement.

**Commercial Operation Date** of a Small Generating Facility shall mean the date on which the Large Generating Facility commences Commercial Operation as agreed to by the Parties, notice of which must be provided to the NYISO in the form of Attachment 9 to this Agreement.

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.

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.

**Initial Synchronization Date** shall mean the date upon which the Small Generating Facility is initially synchronized and upon which Trial Operation begins, notice of which must be provided to the NYISO in the form of Attachment 9.

**In-Service Date** shall mean the date upon which the Developer reasonably expects it will be ready to begin use of the Connecting Transmission Owner's Interconnection Facilities to obtain back feed power.

**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 any of the following requesting CRIS: (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 Large Facility that is subject to NYISO's Large Facility Interconnection Procedures in Attachment X to the ISO OATT or Small Generating Facility that is subject to 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 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 interconnect 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; (v) facilities proposing to interconnect to the Distribution System solely for the purpose of participating in the ISO markets through an Aggregation; and (vi) the Interconnection Customer's Interconnection Facilities. A facility will be treated as a single Small Generating Facility if all Generators within the facility are behind a single Point of Interconnection, even if such units are different technology types.

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 interconnections, 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.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in onsite test operations and commissioning of the Small Generating Facility prior to Commercial Operation.

**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.

# Attachment 2 - Detailed Scope of Work, Including Description and Costs of the Small Generating Facility, Interconnection Facilities, and Metering Equipment

Equipment, including the Small Generating Facility, Interconnection Facilities, and metering equipment shall be itemized and identified as being owned by the Interconnection Customer, or the Connecting Transmission Owner. The NYISO, in consultation with the Connecting Transmission Owner, will provide a best estimate itemized cost, including overheads, of its Interconnection Facilities and metering equipment, and a best estimate itemized cost of the annual operation and maintenance expenses associated with its Interconnection Facilities and metering equipment.

**Attachment 3 - One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities, Metering Equipment, and Upgrades** 

# **Attachment 4 - Milestones**

Critical milestones and responsibility as agreed to by the Parties:

	Milestone/Date	Responsible Party
(1) (2)		
(3)		
(3)		
(4)		
(5)		
(5)		
(6)		
(7)		
(8)		
(-)		
(9)		
(10)		
(10)		

# Attachment 5 - Additional Operating Requirements for the New York State Transmission System, the Distribution System and Affected Systems Needed to Support the Interconnection Customer's Needs

The NYISO, in consultation with the Connecting Transmission Owner, shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the New York State Transmission System or the Distribution System.

# Attachment 6 - Connecting Transmission Owner's Description of its Upgrades and Best Estimate of Upgrade Costs

The NYISO, in consultation with the Connecting Transmission Owner, shall describe Upgrades and provide an itemized best estimate of the cost, including overheads, of the Upgrades and annual operation and maintenance expenses associated with such Upgrades. The Connecting Transmission Owner shall functionalize Upgrade costs and annual expenses as either transmission or distribution related.

The cost estimate for System Upgrade Facilities and System Deliverability Upgrades shall be taken from the ISO OATT Attachment S cost allocation process or applicable Interconnection Study, as required by Section 32.3.5.3.2 of Attachment Z. The cost estimate for Distribution Upgrades shall include the costs of Distribution Upgrades that are reasonably allocable to the Interconnection Customer at the time the estimate is made, and the costs of any Distribution Upgrades not yet constructed that were assumed in the Interconnection Studies for the Interconnection Customer but are, at the time of the estimate, an obligation of an entity other than the Interconnection Customer.

The cost estimates for Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades are estimates. The Interconnection Customer is ultimately responsible for the actual cost of the Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades needed for its Small Generating Facility, as that is determined under Attachments S, X, and Z of the ISO OATT.

# **Attachment 7 - Insurance Coverage**

# Attachment 8 – Initial Synchronization Date

[Date]
[NYISO Address]
[Connecting Transmission Owner Address]
Re: Small Generating Facility
Dear:
On [Date] [Interconnection Customer] initially synchronized the Small Generating Facilit [specify units, if applicable]. This letter confirms that [Interconnection Customer]'s Initial Synchronization Date was [specify].
Thank you.
[Signature]
[Interconnection Customer Representative]

# **Attachment 9 – Commercial Operation Date**

[Date]
[NYISO Address]
[Connecting Transmission Owner Address]
Re: Small Generating Facility
Dear:
On [Date] [Interconnection Customer] has completed Trial Operation of Unit No This letter confirms that [Interconnection Customer] commenced Commercial Operation of the Small Generating Facility [specify units, as applicable], effective as of [Date plus one day]. Thank you.
[Signature]
[Interconnection Customer Representative]