

## BOARD AGENDA SUMMARY SHEET

<b>Committee or Board:</b> Finance and Audit	<b>Date:</b> December 13, 2019	<b>Board Meeting Date:</b> December 18, 2019
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**For All Board Voting Items:**

**Title of Agenda Item:** Recommendation to Approve Tariff Changes

**Consent Agenda:** ☐Yes ☒No

**Accompanying Presentation:** ☐Yes ☒No

**LIPA Presenter:** Justin Bell

**PSEG Long Island Presenter:** N/A

**For Finance Approval Items Only:**

**Budget** ☐; **Plan of Finance** ☐; **Tariff Changes** ☒; **Other** ☐ (describe below)

<b>Requested Action:</b>	The Committee is requested to recommend that the Board approve changes to the Authority's Tariff to implement modifications to the Authority's pole attachment rates and PSEG Long Island's Smart Grid Small Generator Interconnection Procedures consistent with recent orders of the New York Public Service Commission. The proposed changes will (1) set a standard cost-based rate for pole attachments of wireless and wired communication equipment and (2) provide additional clarity to applicants for interconnection under the SGIP.
<b>Summary:</b> <b>(include proposed amendments to Board Policies, if applicable)</b>	<p>Staff proposes to update the Tariff for Electric Service to set a standard rate for new wireless pole attachments located in public rights-of-way. Previously, the rate was set at a negotiated rate on a case-by-case basis in a written agreement between the customer and the Authority. Pursuant to the November Pole Attachment Order, LIPA Staff proposes to establish a standard annual rate per foot of space occupied by the wireless pole attachment, using the methodology adopted in Case 16-M-0330, of \$13.62 per foot. Additionally, the Authority Staff proposes to revise the wired attachment rate to \$13.62 per attachment to ensure non-discriminatory approach between wireless and wired pole attachment rates.</p> <p>Staff proposes six modifications to the SGIP to implement the July Order and the October Order. Additionally, Staff proposes two other modifications to the SGIP that are essential to continue to allow applicants in unique situations safely interconnect to LIPA's grid, and several ministerial edits. These proposed changes are more fully described on Pages 4 – 5 of the accompanying memorandum.</p>

## **FOR CONSIDERATION**

December 18, 2019

**TO:** The Finance and Audit Committee of the Board of Trustees  
**FROM:** Thomas Falcone  
**SUBJECT:** Recommendation to Approve Tariff Changes

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### **Requested Action**

The Finance and Audit Committee (the “Committee”) of the Board of Trustees (the “Board”) is requested to recommend that the Board approve changes to the Authority’s Tariff for Electric Service (“Tariff”) to implement modifications to the Authority’s pole attachment rates and PSEG Long Island’s Smart Grid Small Generator Interconnection Procedures (“SGIP”) consistent with recent orders of the New York Public Service Commission (the “Commission” or “PSC”). The proposed changes will (1) set a standard cost-based rate for pole attachments of wireless and wired communication equipment and (2) provide additional clarity to applicants for interconnection under the SGIP.

### **Background of Pole Attachment Rate Changes**

Over the last 20 years, the Commission has taken several actions to remove barriers to entry in the telecommunications market, including promoting standard rates and processes for wired attachments to utility poles. In June 1997, the Commission ordered New York’s investor-owned utilities to establish a specific rate methodology for wired attachments by adopting the Federal Communications Commission (FCC) calculation of rates applicable to “horizontal cable” and wired attachments. At that time, the Commission determined that the price and terms for wireless (i.e. non-wired) attachments should be determined through negotiations.

In April 2004, the Commission adopted an order<sup>1</sup> that introduced a standard rate methodology for wireless attachments to the Niagara Mohawk Power Corporation d/b/a National Grid’s distribution poles. At that time, the Commission did not extend this methodology to other utility pole owners.

In 2011, the FCC opined that “wireless providers are entitled to the same rate [] as other telecommunication carriers.”<sup>2</sup> In 2015, the FCC further attempted to harmonize regulatory treatment for pole attachments<sup>3</sup>. The FCC construct is based on cost-based pole attachment methodology.

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<sup>1</sup> Case 03-E-1578, *Joint Petition of Niagara Mohawk Power Corp. and National Grid Comm. Inc.*, Order Approving Petition with Modifications (issued April 7, 2004).

<sup>2</sup> FCC Numbers WC 07-245 and GN 09-51, *In the Matter of Implementation of Section 224 of the Act, A National Broadband Plan for Our Future*, Report and Order and Order on Reconsideration (adopted April 7, 2011) (FCC 2011 Order).

<sup>3</sup> FCC WC Docket No. 07-245, GN Docket No. 09-51, *Order on Reconsideration* (adopted November 24, 2015) (FCC 2015 Order).

In 2016, The Wireless Association (“CTIA”) filed a petition (the “Petition”) with the Commission seeking a proceeding to update and clarify wireless pole attachment policies. The Petition sought an order declaring, *inter alia*, that the Commission’s regulation of pole attachments applies, in a non-discriminatory manner, to wireless facilities attached to the utility poles and that the Commission’s rate principles for wireless attachments reflect the FCC’s telecommunications rate methodology.

After an extended period of deliberation, the Commission issued an *Order Approving Petition in Part and Continuing Proceeding*,<sup>4</sup> issued and effective March 14, 2019 (the “March Pole Attachment Order”). In the March Pole Attachment Order, the Commission established an interim rental rate to be charged for new wireless pole attachments in public rights-of-way. The Commission’s interim wireless pole attachment rate is a cost-of-service-based rate per foot of space occupied by the pole attachment, using a cost allocation methodology consistent with the FCC’s formula. In the March Pole Attachment Order, the Commission also announced a new phase of the pole attachment proceeding that includes a more comprehensive review of pole attachment policy, including both wireless and wired attachments, and explores innovative approaches to the rates, terms, and conditions for attachment in the various areas of a pole.

On July 16, 2019, the Commission issued an *Order Suspending Wireless Pole Attachment Rate Tariff Filings and Granting a Filing Extension to the New York Municipal Power Agency*, suspending implementation of the interim wireless attachment rates set forth in the March Pole Attachment Order until November 28, 2019, and ordering the investor-owned utilities to review wired attachment rates and update them if needed.

On November 18, 2019, the Commission issued an *Order Establishing Updated Pole Attachment Rates with Modifications* (the “November Pole Attachment Order”), which directed each utility to reset its wired pole attachment rates so as to be “non-discriminatory” (i.e. in parity) with respect to the utility’s newly established wireless rates. The November Pole Attachment Order further directed the New York Municipal Power Agency and Jamestown, both of which are municipal-owned utilities, to update their pole attachment rates to be in parity with those of National Grid, which has the lowest pole attachment rates of the Investor Owned Utilities, based on the rationale that it would not be cost-effective for the municipal utilities to develop unique applications of the FCC methodology given differences between the investor-owned and municipal utility accounting and regulatory frameworks.

### Proposed Action on Pole Attachment Rates

The Authority Staff proposes to update the Tariff for Electric Service to set a standard rate for new wireless pole attachments located in public rights-of-way. Previously, the rate was set at a negotiated rate on a case-by-case basis in a written agreement between the customer and the Authority. Pursuant to the November Pole Attachment Order, LIPA Staff proposes to establish a standard annual rate per foot of space occupied by the wireless pole attachment, using the

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<sup>4</sup> Case 16-M-0330, *Petition of CTIA The Wireless Association to Initiate a Proceeding to Update and Clarify Wireless Pole Attachment Protections*, Order Approving Petition in Part and Continuing Proceeding (issued and effective March 14, 2019).

methodology adopted in Case 16-M-0330, of \$13.62 per foot.<sup>5</sup> Additionally, the Authority Staff proposes to revise the wired attachment rate to \$13.62 per attachment to ensure non-discriminatory approach between wireless and wired pole attachment rates.

The Authority will provide rental space to CATV and telecommunications companies for the purpose of installing cables, wires, amplifiers and wireless equipment to specific Company-owned poles within an agreed area. An agreement may be required between the Authority and each CATV or telecommunications company, as outlined in the “Definitions of Space Allocation on LIPA Distribution Poles” document which describes the requirements for attaching cables, wires, amplifiers and wireless equipment. The “Definitions of Space Allocation on LIPA Distribution Poles” document, which is available upon request from PSEG Long Island, provides the provisions needed to ensure the safety of our line workers when making electrical repairs.

#### Background of Smart Grid Small Generator Interconnection Procedure Changes

On April 19, 2018, the Commission issued an *Order Modifying Standardized Interconnection Requirements* (the “SIR”) in Case 18-E-0018 (the “April Order”), which was subsequently implemented by the Authority on December 19, 2018.

On June 8, 2018, members of the statewide Interconnection Policy Working Group and Interconnection Technical Working Group filed a petition for clarification of the April Order (the “Petition”).<sup>6</sup>

On July 13, 2018, the Commission issued an order granting clarification of the SIR (the “July Order”), which addressed some issues raised by the Petition and deferred others for additional working group consideration and public comment. Subsequently, on October 18, 2018, following additional working group consideration and public comment, the Commission issued an order addressing the previously deferred issues from the Petition (the “October Order”). The issues addressed by the Commission in the July Order and the October Order are summarized in the next section of this proposal memorandum.

#### Proposed Action on of Smart Grid Small Generator Interconnection Procedure Changes

Staff proposes six modifications to the SGIP to implement the July Order and the October Order. Additionally, Staff proposes two other modifications to the SGIP that are essential to continue to allow applicants in unique situations to safely interconnect to LIPA’s grid, and several ministerial edits. The proposed changes are as follows:

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<sup>5</sup> Because the FCC formula includes inputs that—while commonly reviewed in investor-owned utility rate cases—are not reviewed in a public power or municipal utility rate case, the Department of Public Service accepted PSEG Long Island’s proposal in its 2015 rate case (Matter No. 15- E-00262) that the Authority should adopt the pole attachment fees of the New York investor owned utility with the lowest such fee. Pursuant to this rationale, the Authority now proposes to adopt the pole attachment fees of National Grid, for both wireless and wired attachments, which is \$13.62 per foot of space occupied by the attachment, per year.

<sup>6</sup> Case 18-E-0018, *In the Matter of Proposed Amendments to the New York State Standardized Interconnection Requirements (SIR) for Small Distributed Generators, Order Modifying Standardized Interconnection Requirements*; Issued and Effective April 19, 2018.).

## ***NYS SIR Modifications***

1. **Increased time for applicants to make initial payments (systems above 50 KW up to 5 MW):** To be consistent with the New York State SIR, Staff proposes to update the SGIP to increase the number of days for applicants to make advanced payments from 60 days to 90 days under Section 1.C, Step 7. This proposal will increase the amount of time applicants have to make initial payments.
2. **Clarification of when the applicant will receive a signed Interconnection Agreement:** Staff proposes to modify Section D, “Payments & Construction Milestones” of the SGIP to state that, for projects 5 MW and under, a signed Standardized Interconnection Agreement will be returned to the applicant within 15 business days of receipt of initial payment. This proposal is consistent with the updates to the New York State SIR.<sup>7</sup>
3. **Clarification on commencement of design work:** Staff proposes to modify Section D “Payments & Construction Milestones” to clarify that design work would commence in accordance with the in-service timeline. This proposal is consistent with the updates to the New York State SIR.
4. **Clarification of when an application is deemed complete:** Staff proposes to modify Section E, “Application Process for Energy Storage Systems (ESS)” Step 2, by removing the language “Once an application has been deemed complete” and replacing it with “Following the completion of Step 3 in Section I.B, or upon passing the Preliminary or Supplemental Screening Analysis in Step 4 in Section I.C” to prompt the next step in the process. This proposal is consistent with the updates to the New York State SIR.
5. **Changes in the Energy Storage System Application Requirements (Appendix J):** Staff proposes to add in language for applicants to identify whether the application is for a new Stand-Alone or Hybrid Energy Storage System project or a change to the operating characteristics of an existing renewable system, allowing for modifications on existing interconnected systems. This proposal is consistent with the updates to the New York State SIR.

## ***Additional Requested Updates to SGIP***

1. **Definitions of Business Day and Force Majeure Event:** LIPA Staff proposes to modify in Section III, the term Business Day. This proposed change will better align with LIPA’s service provider’s (PSEG Long Island) definition of a Business Day. Additionally, it is proposed to add Force Majeure Event to the Glossary of Terms, with the understanding that any deadlines in the SGIP will be extended to the extent they are affected by a Force Majeure Event.

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<sup>7</sup> The NYS SIR is limited to interconnections 5 megawatts and under. While the PSEG Long Island SGIP also governs interconnections between 5 megawatts and 10 megawatts, the recent PSC orders do not apply to projects of such larger size. Larger projects require additional analysis to ensure proper interconnection to the grid prior to the Standard Interconnection Agreement being returned.

2. **Providing timing flexibility for interconnection of emerging technologies:** LIPA's Staff is proposing to modify the SGIP for the evaluation of emerging technologies. With the possibility for new untested technologies (e.g. regenerative breaking for electrified trains) to interconnect to LIPA's grid, it recognizes that these new emerging technologies may require special studies and testing to determine their impact on the grid. This proposal would allow for additional study time to interconnect technologies that have not previously interconnected to LIPA's system. However, PSEG Long Island will commit to using its best efforts to meet the standard SGIP timelines. In addition, once an emerging technology is successfully interconnected to the grid, any future applications for that technology would follow the standard timelines outlined in the SGIP. This will set expectations for these new technologies and allow the time necessary to ensure the connections do not interfere with safe and reliable electricity for all customers.
3. **Miscellaneous edits:** Staff proposes additional ministerial changes to terms that do not affect the content of the document. Changes include:
  - Change the term "Interconnection and Metering Standards" to "Interconnection and Metering Requirements"
  - Change the term "Interconnection Guide" to "Interconnection Procedures and Requirements"
  - Change the term "Metering Standards" to "Metering Requirements"
  - Removal of duplicate language under Appendix J.

### Financial Impact

Annual wireless pole attachment revenue for 2019 is \$118,668.29. There are currently 29 wireless pole attachments with rates which were negotiated at a market-based rate. Assuming the wireless pole attachment customers will relocate their wireless pole attachments and terminate their current contract, all current wireless communication attachments will be priced \$13.62 per foot per attachment. Assuming most wireless pole attachments occupy two feet, the proposed annual miscellaneous revenue from the current wireless pole attachments is estimated to be \$790.<sup>8</sup>

This proposal significantly lowers the cost of wireless attachments, which in combination with market forces will likely lead to an increase the number of wireless attachments in the service territory to more than 29. This is a new market for wireless carriers and the number of attachments is expected to increase, which will partially offset the loss of miscellaneous revenue. However, no known forecast of new attachments exists for the Long Island service territory.

Projected annual wired pole attachment revenue for 2019 is \$4,285,987. The increase from \$11.92 to \$13.62 will increase wired pole attachment revenue by \$586,729 annually.

The proposed changes to the SGIP have no financial impact.

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<sup>8</sup> The estimation of \$790 is based on a \$13.62 per foot pole attachment rate multiplied by 29 attachments multiplied by two feet respectively.

## Department of Public Service Input

The DPS has provided a letter recommending adopting of these Tariff modifications. The DPS provided feedback and input throughout the process of developing the Tariffs. Feedback provided by DPS early in the development process was incorporated into the original Tariff proposals.

Feedback provided by DPS since the release of the original Tariff proposals is reflected in the final Tariff redlines. The following changes have been made since the release of the original Tariff proposals:

1. Originally, LIPA Staff had proposed adopting a wireless pole attachment rate of \$17.12, which is the rate adopted by Rochester Gas & Electric (“RG&E”), whose wired pole attachment rate the Authority previously adopted in its 2015 rate case. Since RG&E’s rate is no longer the lowest among the investor-owned utilities, the DPS recommended that the Authority instead adopt the new lower rate, which is National Grids, for the reasoning described in footnote 5. The Authority has modified the proposed tariff leaves consistent with this recommendation.
2. The DPS suggested revisions to the SGIP proposal to clarify language and further increase uniformity with the New York State SIR. The Authority has modified the proposed SGIP consistent with this recommendation.

## Public Input

The Authority held two public comment sessions on the proposed tariff changes, one in Suffolk County, held on November 12, 2019, and one in Nassau County held on November 13, 2019. No members of the public commented on these proposals at the public comment sessions.

Written comments were received from one stakeholder and are summarized here. The commenter, Crown Castle, is a telecommunication provider with pre-existing wireless pole attachments in LIPA’s service territory that are currently subject to a negotiated rate that is significantly higher than the newly proposed, generally applicable tariffed wireless rate of \$13.62 per foot. In the original proposal memorandum, LIPA Staff noted that existing wireless pole attachment customers could terminate their existing contracts by relocating (or removing then reattaching) their existing attachments, thereby receiving the newly proposed rate. Crown Castle commented that all wireless pole attachments, whether presently existing or installed after the effective date of the tariff changes, should be subject to the new formula rate from the day such rate takes effect. Crown Castle reasoned that moving existing wireless facilities from one LIPA pole to another should not be a prerequisite to benefit from the rate change and would result in considerable inefficiencies and capacity degradation should telecommunications service providers be forced to move wireless facilities in order to take advantage of the new rates. The Authority agrees and will allow lessees of existing wireless pole attachments to terminate their existing negotiated rate contracts, upon request, and to receive the newly proposed wireless pole attachment rate, subject to the “Definitions of Space Allocation on LIPA Distribution Poles” document described above.

## Recommendation:

For the foregoing reasons, I recommend that the Committee recommend to the Board the

approval of the modifications to the Tariff for Electric Service described herein and set forth in the accompanying resolutions.

Attachments

**Exhibit A-1** Resolution Recommending Approval of the Pole Attachment Tariff Changes

**Exhibit A-2** Resolution Recommending Approval of the SGIP Changes

**Exhibit B** Pole Attachment Tariff Redline (final proposed tariff reflecting comments compared to current tariff)

**Exhibit C** SGIP Redline (final proposed SGIP reflecting comments compared to current SGIP)

**Exhibit D** Original Pole Attachment Tariff Proposal (not reflecting comments)

**Exhibit E** Original SGIP Tariff Proposal (not reflecting comments)

**Exhibit F** DPS Letter of Recommendation



**RECOMMENDATION TO APPROVE MODIFICATIONS TO LIPA'S TARIFF  
RELATED TO POLE ATTACHMENTS**

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**WHEREAS**, the Board of Trustees of the Long Island Power Authority (the "Authority") has adopted a Board Policy on Customer Value and Affordability, which sets forth the Board's commitment to establishing rates that are comparable to similarly situated regional utilities and consistent with New York Public Service Commission policy; and

**WHEREAS**, the proposal is consistent with the Board Policy on Customer Value and Affordability; and

**WHEREAS**, the Department of Public Service is supportive of this proposal; and

**WHEREAS**, following the issuance of public notice in the State Register on September 11, 2019, public hearings were held in Suffolk County, on November 12, 2019, and in Nassau County, on November 13, 2019, and the public comment period has since expired;

**NOW, THEREFORE, BE IT RESOLVED**, that for the reasons set forth herein and in the accompanying Memorandum, the Finance and Audit Committee hereby recommends approval of the proposed modifications to the Authority's Tariff to be effective January 1, 2020; and be it further

**RESOLVED**, that the Finance and Audit Committee hereby recommends that the Chief Executive Officer and his designees be authorized to carry out all actions deemed necessary or convenient to implement this Tariff; and be it further

**RESOLVED**, that the Finance and Audit Committee hereby recommends that the Tariff amendments reflected in the attached redlined Tariff leaves be approved.

Dated: December 18, 2019

**RECOMMENDATION TO APPROVE MODIFICATIONS TO LIPA'S TARIFF FOR ELECTRIC SERVICE RELATED TO THE SMART GRID SMALL GENERATOR INTERCONNECTION PROCEDURES**

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**WHEREAS**, the Board of Trustees of the Long Island Power Authority (the "Authority") has adopted a Board Policy on Resource Planning, Energy Efficiency and Renewable Energy, which sets forth the Board's commitment to integrating cost-effective distributed energy production and storage technologies into the Authority's electric transmission and distributions system, and enabling the economic and secure dispatch of resources deployed within the distribution system and within customer premises (the "Board Policy on Resource Planning"); and

**WHEREAS**, the proposal is consistent with the Board Policy on Resource Planning; and

**WHEREAS**, the Department of Public Service is supportive of this proposal; and

**WHEREAS**, following the issuance of public notice in the State Register on September 11, 2019, public hearings were held in Suffolk County, on November 12, 2019, and in Nassau County, on November 13, 2019, and the public comment period has since expired;

**NOW, THEREFORE, BE IT RESOLVED**, that for the reasons set forth herein and in the accompanying Memorandum, the Finance and Audit Committee hereby recommends approval of the proposed modifications to the Smart Grid Small Generator Interconnection Procedures ("SGIP") to be effective January 1, 2020; and be it further

**RESOLVED**, that the Finance and Audit Committee hereby recommends that the Chief Executive Officer and his designees be authorized to carry out all actions deemed necessary or convenient to implement this proposal; and be it further

**RESOLVED**, that the Finance and Audit Committee hereby recommends that the SGIP amendments reflected in the attached redlined SGIP be approved.

Dated: December 18, 2019

**IV. Billing Process and Payment of Bills (continued):****C. Charges for Miscellaneous Services:****1. Pole Attachment**

The Authority will provide rental space to CATV and telecommunications companies for the purpose of installing cables, wires, amplifiers and wireless equipment to specific Authority-owned poles, within an agreed area on the pole. A contract may be made between the Authority and each CATV or telecommunications company outlined in the "Definitions of Space Allocation on LIPA Distribution Poles" for attaching cables, wires, amplifiers and wireless equipment.

The annual charge for pole attachments to utility poles by cable television systems and other wire line communications system that occupy the same space on the pole is ~~\$11.98~~\$13.62 per pole per year, plus the applicable amounts for payments in lieu of revenue taxes.

The annual charges for attachments of wireless communications facilities to utility poles and towers prior to January 1, 2020 are subject to negotiation on a case-by-case basis of a written agreement between the party seeking the attachment(s) and the Authority. The charge for attachments of wireless communication facilities to utility poles and towers located in Public Right-of-Way, authorized on or after January 1, 2020, is \$13.62 per foot times the number of feet on the pole occupied by the wireless equipment, per year, plus the applicable amounts for payments in lieu of revenue taxes. For each piece of wireless equipment attached, the occupied space measurement shall reflect the overall length of the equipment and mounting hardware plus six inches, rounded up to the next whole foot. The number of feet occupied for wireless communication facilities shall exclude conduits, risers, and electrical meters.

The annual charge for decorative, festival, or holiday attachments that are seasonal or temporary- attachments ~~other than wire line communications system attachments or wireless communications facilities~~ is \$6.19 per pole per year, plus the applicable amounts for payments in lieu of revenue taxes, which may be prorated on a daily basis for attachments that are ~~seasonal or temporary~~ in place for less than a year. The Authority may require that attachments be made pursuant to the terms of a written agreement with the Authority which permits attachment to utility poles and towers. Consistent with the Authority's written policy, the Authority may waive the pole attachment fee for temporary or seasonal attachments that support a patriotic, civic, or ceremonial purpose, or where the tangible value of the attachment is nominal to both parties.

**2. Interest on Customer Deposits**

The Authority will pay interest on Customer Deposits at the applicable annual rate specified on a Statement of Interest on Customer Deposits to be prepared and maintained on file by the Authority. The rate will be derived by subtracting a 1.75% administrative cost allowance from the current yield on "A" rated intermediate term municipal debt. The rate will be updated on January 1 of each year to reflect current market conditions.

**3. No-Access Charge**

The Authority's charge when it cannot gain access to the Customer's meter after attempts to do so will be:

- (a) \$25 per month for Residential accounts
- (b) \$100 per month for Nonresidential accounts

**4. Uncollectible Payment Handling Charge**

The Authority will charge the Customer a twenty dollar (\$20.00) handling charge plus applicable taxes and assessments. This handling charge includes any amount the Authority

paid to its bank for handling the instrument if it receives a check or other negotiable financial instrument in payment for any bill, charge, or deposit that is not collectible, for any reason.

5. Late Payment Charge

The Authority's charge for late payment of bills for the accounts of all customers as specified in Section IV. D. 4 will be one and one-half percent (1.5%) for each monthly billing period to all amounts billed, but for which the Authority has not received payment by the "Pay by" date on the bill, which will be not less than twenty (20) days after the date payment is due.

Residential customers are not responsible for late payment charges on amounts billed, if the bill is subject to a pending complaint with the Department of Public Service or the Manager pursuant to Section VI. of the Tariff, except that any such late payment charge may be imposed retroactively if the complaint is finally resolved in favor of the Authority.



**Smart Grid Small Generator Interconnection Procedures  
For Distributed Generators and Energy Storage Systems Less than 10 MW Connected in Parallel  
with LIPA's Radial Distribution Systems**

Revised January 1, ~~2019~~2020

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## Section I. Application Process

### Section I.A. Introduction

The Smart Grid Small Generator Standardized Interconnection Procedures (“SGIP”) administered by PSEG Long Island, as the service provider and agent for LIPA, provides a framework for processing applications for interconnection to LIPA’s Distribution System for:

- i. Interconnection of new distributed generation facilities with an AC nameplate rating of less than 10 MW (aggregated on the customer side of the point of common coupling (PCC))
- ii. Interconnection of new energy storage system (ESS) facilities with an AC inverter/converter nameplate rating of 10 MW or less aggregated on the customer side of the PCC that may be stand-alone systems or combined with existing or new DG (Hybrid Projects); however, maximum export capacity onto the utility distribution system is capped at an AC nameplate rating or AC inverter/converter nameplate rating of 10 MW or less;
- iii. Modifications to existing distributed generation facilities and/or ESS facilities with an nameplate rating of less than 10 MW (aggregated on the customer side of the PCC) that have been interconnected to the LIPA Distribution System and where an existing contract between the applicant and LIPA is in place.
- iv. For new distributed generation facilities less than 10 MW, interconnection to specific voltage level of the LIPA System will be determined during the study phase of the application process.
- v. New distributed generation facilities 10 MW and above must connect to LIPA’s transmission system and make application to the NYISO under its Small Generator Interconnection Procedures (SGIP) or Large Generator Interconnection Procedures (LGIP), as applicable.
- vi. PSEG Long Island will use reasonable efforts to adhere to the specific timeline set forth in the SGIP. However, additional time may be needed to conduct research, studies, and other tasks necessary for interconnection of new technologies. Once such a system is successfully interconnected, it will no longer be considered a new technology, and PSEG Long Island will follow the timelines in accordance with this agreement.

If a Distributed Generation or Energy Storage System is neither designed to operate nor operating in parallel with LIPA’s System, such equipment is not subject to these requirements.

The application procedures set forth in Section I are organized to facilitate efficient review of potential interconnections to LIPA’s Distribution System. This document will help ensure that applicants are aware of the technical interconnection requirements and LIPA’s interconnection policies and practices. This SGIP and related procedures will also provide applicants with an understanding of the process and information required to allow PSEG Long Island to review and accept the applicants’ equipment for interconnection in a reasonable and expeditious manner.

The application procedures for up to 10 MW distributed generator interconnections to LIPA’s Distribution System are detailed in Section I and organized for three categories of generator interconnections. Section I.B addresses application procedures for systems of less than 50 kW as well as inverter-based systems above 50 kW up to 300 KW that have been certified and tested in accordance with UL 1741. Section I.C addresses application procedures for systems above 50 kW up to 5 MW. Section



I.D addresses application procedures above 5 MW up to 10 MW. All systems 0-5 MW are eligible to use web- based application procedures, which are detailed in Section I.E.

For systems sized between 0-5 MW, the time required to complete the process will reflect the complexity of the proposed project. Projects using previously submitted designs certified per the requirements of Section II.H will move through the process more quickly, and several steps may be satisfied with an initial application depending on the detail and completeness of the application and supporting documentation submitted by the applicant. Applicants submitting systems utilizing certified equipment however, are not exempt from providing PSEG Long Island with complete design packages necessary for PSEG Long Island to verify the electrical characteristics of the generator systems, the interconnecting facilities, and the impacts of the applicants' equipment on LIPA's Distribution System.

The application process and the attendant services are offered on a non-discriminatory basis. PSEG Long Island will clearly identify its costs related to the applicants' interconnections, specifically those costs PSEG Long Island would not have incurred but for the applicants' interconnections. PSEG Long Island will keep a log of all applications, milestones met, and justifications for application-specific requirements. The applicants are to be responsible for payment of all costs, as provided for herein.

All interconnections to LIPA's Distribution System are subject to the Smart Grid SGIP set forth in Section II. These requirements detail the technical interconnection requirements and PSEG Long Island interconnection policies and practices. Where specific standards or requirements are applicable to a specific type of system or to a system of a particular kW or MW value, such limitations are noted in the applicable standards.

Currently, LIPA does not allow any interconnection of Distributed Generation in Underground secondary Network Areas of the LIPA distribution system.

All application timelines shall commence the next Business Day following receipt of information from the applicant.

Additional technical references and requirements are included in "PSEG Long Island's Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA's Distribution System" document which addresses such matters as the following:

- Voltage Response
- Frequency Response
- Reconnection to LIPA's Distribution System
- Induction Generators
- Inverters
- Minimum Protective Functions
- Metering
- Islanding
- Operating Requirements
- Disconnect Switch
- Power Quality
- Power Factor
- Equipment Certification (new section)
- Verification Testing (new section)
- Preliminary Screening Analysis
- Other technical requirements

All Interconnection Customers must comply with “PSEG Long Island’s Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA’s Distribution System” document, as it may be modified by LIPA from time to time.

All SGIP applicants that are subject to the Business Practices for Distributed Energy Resource Suppliers (BP-DERS) that are in non-compliance of the BP-DERS may be subject to the suspension of their application for interconnection to LIPA’s Distribution System.

A glossary of terms used herein is provided in Section III.

### **Section I.B. Application Process Steps for Systems 50 kW or Less (Expedited/Fast Track Process)**

**Exception 1:** For inverter based systems above 50 kW up to 300 kW, applicants may follow the expedited application process outlined in this section provided that the inverter based system has been certified and tested in accordance with the most recent revision of UL 1741 and its supplement A (SA), and PSEG Long Island has approved the project accordingly. PSEG Long Island has ten (10) Business Days upon receipt of the original application submittal to determine if the application is complete, project is eligible for the expedited process, and whether it is approved for interconnection if eligible for expedited process. PSEG Long Island shall notify the applicant in writing of its findings upon review of the application. If PSEG Long Island determines that the inverter based system is not eligible for the expedited application process, the applicant can:

1) Proceed with the remaining steps of Section I.C of the SGIP (Systems above 50 kW up to 5 MW);

**Exception 2:** For non-inverter based system 50 kW or less, the applicant should be aware that additional information and review time may be required by PSEG Long Island (refer to Step 3). The applicant must include the items required in Step 5 of the Application Process Steps for Systems above 50 kW up to 5 MW in its original application. This exception should not be considered the rule, but used by PSEG Long Island only in justified situations. PSEG Long Island has ten (10) Business Days upon receipt of the original application submittal to determine if the application is complete, project is eligible for expedited process, and whether it is approved for interconnection if eligible for expedited process. PSEG Long Island shall notify the applicant in writing of its findings upon review of the application. If PSEG Long Island determines that the non-inverter based system is not eligible for the expedited application process, the applicant can:

1) Proceed with the remaining steps of Section I.C of the SGIP (Systems above 50 kW up to 5 MW);

#### **STEP 1: Initial Communication from the Potential Applicant**

Communication could range from a general inquiry to a completed application.

#### **STEP 2: The Inquiry is reviewed by PSEG Long Island to Determine the Nature of the Project**

Technical staff from PSEG Long Island discusses the scope of the interconnection with the potential applicant (either by phone or in person) and provide a copy of the SGIP document and any LIPA specific technical specifications that may apply. A PSEG Long Island representative will be designated to serve as the single point of contact for the applicant (unless PSEG Long Island informs the applicant otherwise) in coordinating the potential applicant’s project with PSEG Long Island.

### **STEP 3: Potential Applicant Files an Application**

The potential applicant submits an application package to PSEG Long Island. No application fee is required for systems 50 kW or less.

A complete application package will consist of all items detailed in Appendix F. PSEG Long Island strongly prefers electronic submission of all documents, including electronic signatures, whenever possible. PSEG Long Island has ten (10) Business Days upon receipt of the original application submittal to determine if the application is complete, meets the SGIP technical requirements in Section II, and approved for interconnection if all other requirements are met. PSEG Long Island shall notify the applicant by email, fax, or other form of written communication. If the application is deemed not complete by PSEG Long Island, PSEG Long Island shall provide an explanation of the deficiencies identified and a list of the additional information required from the applicant. Once it has received the required information, PSEG Long Island shall notify the applicant of the acceptance or rejection of the application within ten (10) Business days. If the applicant fails to submit the additional information requested by PSEG Long Island to address the deficiencies, PSEG Long Island within thirty (30) Business Days following the date of PSEG Long Island's written notification, the application shall be removed from the queue and no further action on the part of PSEG Long Island is required.

If PSEG Long Island accepts the application, the notification of acceptance to the applicant shall include an executed LIPA Standardized Interconnection Contract and the applicant may proceed with the proposed installation. PSEG Long Island shall also indicate in its response to the applicant whether or not it plans to witness the testing and verification process in person.

An application will be placed in PSEG Long Island's interconnection inventory once it is accepted as complete. If the final acceptance as set out in Step 6 below is not completed within twelve (12) months of receipt of such executed copy of the Standardized Interconnection Contract as a result of applicant inactivity or other failure to pursue diligently the timely completion of the interconnection, PSEG Long Island has the right to notify the applicant by email and U.S. first class mail with delivery receipt confirmation that the applicant's project will be removed from PSEG Long Island's interconnection inventory if the applicant does not respond within thirty (30) Business Days of the issue of such notification and provide a project status update and justification as to why the project should remain in PSEG Long Island's interconnection inventory for an additional period of time.

With respect to an applicant proposing to install a system rated 25 kW or less, that is to be net-metered, if PSEG Long Island determines that it is necessary to install a dedicated transformer(s) or other equipment to protect the safety and adequacy of electric service provided to other customers, the applicant shall be informed of its responsibility for the actual costs for installing the dedicated transformer(s) and other safety equipment. LIPA's Tariff for Electric Service (the "Tariff") specifies the maximum responsibility each applicant shall have with respect to the actual cost of the dedicated transformer(s) and other safety equipment. The applicant will pay the cost estimate as provided in Section D.

### **STEP 4: System Installation**

The applicant will install the system according to PSEG Long Island accepted design and the equipment manufacturer's requirements. If there are substantive design variations from the originally accepted system diagram, a revised system diagram (and other drawings for non-inverter based systems) shall be submitted by the applicant for PSEG Long Island review and acceptance. All inverter based systems will be allowed to interconnect to the LIPA system for a period not to exceed two hours, for the sole purpose of ensuring proper operation of the installed equipment.

For net metered systems as defined in Section II.B.6, any modifications related to existing metering configurations to allow for net metering shall be completed by PSEG Long Island prior to Step 5. PSEG Long Island shall complete the necessary metering changes within ten (10) Business Days of receiving a request from the applicant.

#### **STEP 5: The Applicant's Facility is tested in Accordance with the Smart Grid SGIP**

Verification testing will be performed by the applicant in accordance with the written verification test procedure provided by the equipment manufacturer. If PSEG Long Island requested to witness the testing and verification process in person as required in Step 3, the applicant shall provide a written letter of notification to PSEG Long Island that the system installation is completed, including any applicable inspections and authorization. After receipt of notification, the verification testing will be conducted within ten (10) Business Days of system installation at a mutually agreeable time, and PSEG Long Island shall be given the opportunity to witness the tests. If PSEG Long Island opts not to witness the test, the applicant will send PSEG Long Island within five (5) days of the test a written notification, certifying that the system has been installed and tested in compliance with the Smart Grid SGIP; PSEG Long Island - accepted design and the equipment manufacturer's instructions. The applicant's facility will be allowed to commence parallel operation upon satisfactory completion of the tests in Step 5. The applicant must have complied with and must continue to comply with all contractual and technical requirements.

#### **STEP 6: Final Acceptance**

Within five (5) Business Days of receiving the written notification of successful test completion from Step 5, PSEG Long Island will issue to the applicant a formal letter of acceptance for interconnection. If the test was not completed successfully, the project must be modified to pass the test, or the project shall be withdrawn from the PSEG Long Island queue. Within five (5) Business Days of the completion of the on-site verification, PSEG Long Island will issue to the applicant either a formal letter of acceptance for interconnection or a detailed explanation of the deficiencies in the system.

### **Section I.C. Application Process Steps for Systems above 50 KW up to 5 MW**

For inverter based systems above 50 kW up to 300 kW, certified and tested in accordance with the most recent revision of UL 1741, and its supplement SA, applicants are encouraged, but not required, to use the expedited application process (Section I.B).

PSEG Long Island has ten (10) Business Days upon receipt of the original application submittal to determine if the application is complete and whether it is eligible for interconnection. PSEG Long Island shall notify the applicant in writing of its findings upon review of the application. If PSEG Long Island determines that the DG system cannot be interconnected or requires additional information be submitted and/or additional review time is needed, the applicant can work with PSEG Long Island on an appropriate timeframe and approval schedule agreeable to both parties.

Currently, LIPA does not allow interconnection of Distributed Generation in Underground secondary Network Areas of the LIPA distribution system.

#### **STEP 1: Initial Communication from the Potential Applicant.**

Communication could range from a general inquiry to a completed application.

#### **STEP 2: The Inquiry is reviewed by PSEG Long Island to Determine the Nature of the Project.**

Technical staff from PSEG Long Island may discuss the scope of the interconnection with the potential applicant (either by phone or in person) and shall provide a copy of the SGIP and any PSEG Long Island specific technical specifications that may apply. A PSEG Long Island representative shall be designated to serve as the single point of contact for the applicant in coordinating the potential applicant's project with PSEG Long Island. At this time the applicant may also request that a Pre-Application Report (see Appendix D herein) be provided by PSEG Long Island. The applicant shall provide a non-refundable fee of \$750 with its request for completion of the Pre-Application Report. The Pre-Application Report shall be provided to the applicant within ten (10) Business Days of receipt of the form and payment of the fee. The Pre-Application Report will be non-binding and shall only provide the electrical system data and information requested that is readily available to PSEG Long Island. Should the applicant formally apply to interconnect their proposed DG project within fifteen (15) Business Days of receipt of PSEG Long Island's Pre-Application Report, the \$750 will be applied towards the application fee in Step 3.

#### **STEP 3: Potential Applicant Files an Application.**

The potential applicant submits an application to PSEG Long Island in the name of the customer. A complete application package will consist of all items detailed in Appendix F. Electronic submission of all documents is acceptable, inclusive of electronic signature whenever possible. If a Pre-Application Report has been provided to the customer, and an application is received by PSEG Long Island within fifteen (15) Business Days of the date of issue of the Pre-Application Report, a \$750 credit will be applied towards the application fee. Otherwise, payment of a non-refundable \$750 application fee is required. PSEG Long Island shall review the application to determine whether it is complete in accordance with Appendix F, and whether any additional information is required from the applicant. PSEG Long Island shall notify the applicant in writing within ten (10) Business Days following receipt of the application. If the application is not complete, PSEG Long Island's notification shall specify what is missing from the application and provide a list of additional information needed. PSEG Long Island shall notify the applicant by email, fax, or other form of written communication.

The applicant shall submit to PSEG Long Island all items required by Appendix F, and provide additional information identified by PSEG Long Island. If the applicant has failed to do so within thirty (30) Business Days following the date of PSEG Long Island's notification, the application shall be deemed withdrawn and no further action on the part of PSEG Long Island is required.

If the required documentation is presented in this step, PSEG Long Island may move to Step 4 and perform the required reviews and allow the process to proceed as expeditiously as possible.

A completed application shall be placed in the interconnection queue maintained by PSEG Long Island.

If the required documentation is presented in this step, it will allow PSEG Long Island to move to Step 4 and perform the required reviews and allow the process to proceed as expeditiously as possible.

PSEG Long Island will refund any advance payments for services or construction not yet completed should the applicant be removed from PSEG Long Island's interconnection inventory. If the costs incurred by PSEG Long Island exceed the advance payments made by the applicant prior to removal from the interconnection inventory, the applicant will receive a bill for any balance due to PSEG Long Island.

#### **STEP 4: PSEG Long Island Conducts a Preliminary Review and Develops a Cost Estimate for the Coordinated Electric System Interconnection Review (CESIR).**

PSEG Long Island shall perform a Preliminary Screening Analysis of the proposed system interconnection utilizing the technical screens A through F detailed in Appendix G. The Preliminary Analysis shall be completed and a written response detailing the results of each screen and the overall outcome of the Preliminary Analysis shall be sent to the applicant within fifteen (15) Business Days of the completion of Step 3. Depending on the results of the Preliminary Analysis and the subsequent choices of the applicant, the following process or processes will apply:

If the Preliminary Screening Analysis finds that the applicant's proposed system passes all of the relevant technical screens (*i.e.*, screens P1 through P8) and is in compliance with the Interconnection Requirements outlined in Section II, there are no requirements for Interconnection Facilities or Distribution Upgrades. As such PSEG Long Island will return an executed Standardized Interconnection Contract to the applicant and the applicant may proceed with the interconnection process.

If the Preliminary Screening Analysis finds that the applicant's proposed system cannot pass all of the relevant technical screens (*i.e.*, screens P1 through P8), PSEG Long Island shall provide the technical reasons, data and analysis supporting the Preliminary Analysis results in writing. The applicant shall notify PSEG Long Island within ten (10) Business Days following such notification whether to (i) proceed to a Preliminary Screening Analysis results meeting, (ii) proceed to Supplemental Screening Review, (iii) proceed to a full CESIR, or (iv) withdraw the Interconnection Request. If the applicant fails to notify PSEG Long Island of their decision within thirty (30) Business Days of notification of the Preliminary Analysis results, the Interconnection Request shall be removed from the queue and no further action on the part of PSEG Long Island is required.

- i. If the applicant chooses to proceed to a Preliminary Screening Analysis results meeting and modifications that obviate the need for Supplemental Screening Analysis are identified, and the applicant and PSEG Long Island agree to such modifications, PSEG Long Island shall return a signed and executed Standardized Interconnection Contract within fifteen (15) Business Days of the Preliminary Analysis results meeting if no Interconnection Facilities or Distribution Upgrades are required. The applicant shall notify PSEG Long Island within fifteen (15)

Business Days following such notification indicating the intention of the applicant to revise its application as requested and proceed with the interconnection process.

If Interconnection Facilities or Distribution Upgrades are required and agreed to, PSEG Long Island shall provide the applicant with a non-binding cost estimate of any Interconnection Facilities or Distribution Upgrades within fifteen (15) Business Days of the Preliminary Screening Analysis results meeting. The applicant will pay the cost estimate as provided in Section D.

If the applicant chooses to proceed to a Preliminary Screening Analysis results meeting and modifications that obviate the need for Supplemental Analysis are not identified and agreed to, the applicant shall notify PSEG Long Island within ten (10) business days of the meeting of their intention to (i) proceed to Supplemental Screening Analysis, (ii) proceed to a full CESIR, or (iii) withdraw the Interconnection Request. If the applicant fails to notify PSEG Long Island of their decision within thirty (30) business days, the Interconnection Request shall be removed from the queue and no further action on the part of PSEG Long Island is required.

- ii. Applicants that elect to proceed to Supplemental Screening Analysis shall provide a nonrefundable fee of \$2,500 with their response; however, actual costs up to a maximum of \$5,000 will be billable to the applicant upon reconciliation of utility costs as defined in Step 11 or exit from the interconnection queue. PSEG Long Island shall complete the Supplemental Analysis within twenty (20) Business Days, absent extraordinary circumstances, following authorization and receipt of the fee. If the Supplemental Analysis finds that the applicant's proposed system passes all of the relevant technical screens (i.e. screens S1 through S13) and is in compliance with the Interconnection Requirements outlined in Section II, then there are no requirements for Interconnection Facilities or Distribution Upgrades. Thus, PSEG Long Island will return a signed and executed Standardized Interconnection Contract to the applicant within fifteen (15) Business Days of providing the applicant the results of the Supplemental Review and the applicant may proceed with the interconnection process. The applicant will sign and return the contract within fifteen (15) Business Days after receipt from PSEG Long Island and proceed with the interconnection process.

If the Supplemental Screening Analysis finds that the applicant's proposed system cannot pass all of the relevant technical screens (i.e., screens S1 through S13), PSEG Long Island shall provide the technical reasons, data, and analysis supporting the Supplemental Analysis results in writing. The applicant shall notify PSEG Long Island within ten (10) Business Days following such notification whether to (i) proceed to a Supplemental Screening Analysis results meeting, (ii) proceed to a full CESIR, or (iii) withdraw the Interconnection Request. If the applicant fails to notify PSEG Long Island of their decision within thirty (30) Business Days of notification of the Preliminary Analysis results, the Interconnection Request shall be removed from the queue and no further action on the part of PSEG Long Island is required.

- i. If the applicant chooses to proceed to a Supplemental Screening Analysis results meeting, and modifications that obviate the need for a CESIR are identified, and the applicant and PSEG Long Island agree to such modifications, PSEG Long Island shall return a signed and executed Standardized Interconnection Contract within fifteen (15) Business Days of the Preliminary Analysis results meeting if no Interconnection Facilities or Distribution Upgrades are required. The applicant will sign and return the contract within 15 Business Days after receipt from PSEG Long Island and proceed with the interconnection process.

If Interconnection Facilities or Distribution Upgrades are required and agreed to, PSEG Long

Island shall provide the applicant with a non-binding cost estimate of any Interconnection Facilities or Distribution Upgrades within fifteen (15) Business Days of the Supplemental Screening Analysis results. The applicant will pay the cost estimate as provided in Section D.

- ii. If the applicant chooses to proceed to a Supplemental Review results meeting and modifications that obviate the need for CESIR are not identified and agreed to, the applicant shall notify PSEG Long Island, within ten (10) business days of the meeting, of the applicant's intention to proceed to a full CESIR or withdraw the application. If the applicant fails to notify PSEG Long Island of applicant's decision within thirty (30) Business Days of notification of the Supplemental Analysis results, the application shall be removed from the queue and no further action on the part of PSEG Long Island is required.
- iii. If the applicant and PSEG Long Island are unable to identify or agree to modifications that enable the applicant to pass either the Initial or Supplemental Analysis or if the applicant chooses at any time in the above process to proceed directly to a CESIR, PSEG Long Island shall provide the applicant with an estimate of costs associated with the completion of the CESIR within five (5) Business Days of the final notification to/from the applicant. The applicant shall notify PSEG Long Island within ten (10) business days of receiving this cost estimate of their intention to proceed to a full CESIR and move on to Step 5 or to withdraw their application.

An accepted application will be placed in PSEG Long Island's interconnection inventory upon PSEG Long Island's receipt of the Standardized Interconnection Contract executed by the applicant. If the final acceptance as set out in Step 11 below is not completed within twelve (12) months of receipt of such executed copy of the Standardized Interconnection Contract as a result of applicant inactivity, PSEG Long Island has the right to notify the applicant by email and U.S. first class mail with delivery receipt confirmation that the applicant's project will be removed from PSEG Long Island's interconnection inventory if the applicant does not respond within thirty (30) Business Days of the issue of such notification and provide a project status update and justification as to why the project should remain in PSEG Long Island's interconnection inventory for an additional period of time.

#### **STEP 5: Applicant Commits to the Completion of the CESIR**

The applicant will indicate his commitment to the CESIR cost estimate by confirming agreement within ten (10) business days of receipt. If the customer declines the agreement, the application will be closed. Prior to commencement of the CESIR, the applicant shall provide the following information to PSEG Long Island:

- i. A complete detailed interconnection design package
- ii. Proof of site control and by executing the New York State Standard Site Control Certification Form, Appendix H
- iii. The name and phone number and agent letter of authorization (if appropriate) of the individual(s) responsible for addressing technical and contractual questions regarding the proposed system, and•,
- iv. If applicable, advanced payment of the costs associated with the completion of the CESIR

The complete detailed interconnection design package shall include:

- (1) Electrical schematic drawings reflecting the complete proposed system design which are easily interpreted and of a quality necessary for a full interconnection. The drawings shall show all electrical components proposed for the installation and their connections to the existing on-site electrical system from that point to the PCC and shall be clearly marked to distinguish between



new and existing equipment. For those systems proposed to be interconnected at a system voltage of 1000 volts or greater, the drawings shall be sealed by a NYS licensed Professional Engineer.

- (2) A complete listing of all interconnection devices proposed for use at the PCC. A set of specifications for this equipment shall be provided by the applicant upon request from PSEG Long Island.
- (3) The written verification test procedure provided by the equipment manufacturer, if such procedure is required by this document. For non-inverter based systems, testing equipment must be capable of measuring that protection settings operate within the appropriate times and thresholds set forth in Section II.
- (4) Three (3) copies of the following information:
  - a. Proposed three line diagram of the generation system showing the interconnection of major electrical components within the system. Proposed equipment ratings clearly needs to indicate:
    - i. Number, individual ratings, and type of units comprising the above rating;
    - ii. General high voltage bus configuration and relay functions; and
    - iii. Proposed generator step-up transformer MVA ratings, impedances, tap settings and winding voltage ratings.
  - b. Electrical studies as requested by PSEG Long Island to demonstrate that the design is within acceptable limits, inclusive and limited to the following: system fault, relay coordination, flicker, voltage drop, and harmonics. This shall include all relay, communication, and controller set points.

If PSEG Long Island determines that the detailed interconnection design package provided by the applicant is incomplete or otherwise deficient, PSEG Long Island shall notify the applicant within ten (10) Business Days and provide an explanation of the deficiencies identified and a list of what is required by the applicant. Unless otherwise notified by PSEG Long Island, the CESIR review period begins upon confirmed receipt and acceptance of the applicants interconnection design package and associated fees.

If the applicant fails to provide PSEG Long Island authorization to proceed, CESIR fee, and information requested within thirty (30) Business Days of the request, the application shall be removed from the queue and no further action on the part of PSEG Long Island is required.

#### **STEP 6: PSEG Long Island Completes the CESIR**

The CESIR will consist of two parts:

- (1) A detailed review and explanation of the impacts to the utility system associated with the interconnection of the proposed system, and
- (2) A detailed review and explanation of the proposed system's compliance with the applicable criteria set forth below.

A CESIR will be performed by PSEG Long Island to determine if the proposed generation on the circuit results in any protective coordination, fault current, thermal, voltage, power quality, or equipment stress concerns.

The CESIR shall be completed within sixty (60) Business Days of receipt of the information set forth in Step 5. For systems utilizing type-tested equipment, the time required to complete the CESIR may be reduced. PSEG Long Island shall complete the CESIR within sixty (60) Business Days, absent extraordinary circumstances, following authorization, receipt of the CESIR fee, and complete information set forth in Step 5. If the applicant fails to provide PSEG Long Island authorization to proceed, CESIR fee and information requested within thirty (30) Business Days, the interconnection request shall be removed from the queue and no further action on the part of PSEG Long Island is required.

The applicant and PSEG Long Island may agree to allow up to an additional forty (40) Business Days beyond the time specified above for completion of the CESIR, provided that no other application is adversely impacted

Upon completion of the CESIR, PSEG Long Island will provide the following, in writing, to the applicant:

- (1) LIPA system impacts, if any;
- (2) notification of whether the proposed system meets the applicable criteria considered in the CESIR process;
- (3) if applicable, a description of where the proposed system is not in compliance with these requirements;
- (4) Subject to subsections (a) through (d) below, a good faith, detailed estimate of the total cost of completion of the interconnection of the proposed system and/or a statement of cost responsibility for a dedicated transformer(s) or other required interconnection equipment which is valid for sixty (60) Business Days. This estimate must meet the following requirements:
  - (a) with respect to an applicant that is not to be net-metered, an estimate shall be provided and shall include the costs associated with any required modifications to the LIPA System, administration, metering, and on-site verification testing;
  - (b) with respect to an applicant that is to be net-metered, the costs associated with any required modifications to the LIPA System, administration, metering, and on-site verification testing;
  - (c) the applicant shall be informed that it is responsible for one-half of such costs; and
  - (d) LIPA's Tariff for Electric Service section I(C) sets forth the responsibility each applicant shall have with respect to the actual cost of the dedicated transformer(s) and other safety equipment.

PSEG Long Island cost estimates provided in the CESIR shall be detailed and broken down by specific equipment requirements, material needs, labor, overhead, and any other categories or efforts incorporated in the estimate. Contingencies associated with the cost estimates shall not exceed +/- 25%.

#### **STEP 7: Applicant Commits to PSEG Long Island Construction of LIPA's System Modifications.**

The applicant and PSEG Long Island will execute a standardized contract for interconnection as set forth in Appendix A and the applicant will provide PSEG Long Island with an advance payment of 30% of PSEG Long Island's estimated costs as identified in Step 6 within ~~sixty (60)~~ninety (90) Business Days of the execution of the contract.

PSEG Long Island is not required to procure any equipment or materials, or perform design and engineering work associated with the project, or begin construction until 30% deposit payment has been received. Progress payments will be required during construction and any excess will be reconciled and

invoiced to the Applicant after Step 10. Invoice payments are due within thirty (30) Business Days of receipt.

#### **STEP 8: Project Construction.**

The applicant will build the facility in accordance with PSEG Long Island -accepted design. PSEG Long Island will commence construction/installation of system modifications and metering requirements as identified through the CESIR in Step 6. LIPA system modifications will vary in construction time depending on the extent of work and equipment required. The schedule for this work is to be discussed and agreed upon with the applicant in Step 6.

#### **STEP 9: The Applicant's Facility is tested in Accordance with the Standardized Interconnection Requirements.**

The verification testing will be performed in accordance with the written test procedures provided in Step 5 and any site-specific requirements identified by PSEG Long Island in Step 6. The final testing will be conducted within ten (10) Business Days of complete installation at a mutually agreeable time, and PSEG Long Island shall be given the opportunity to witness the tests. If PSEG Long Island opts not to witness the test, the applicant will send PSEG Long Island within five (5) days of the test a written notification, certifying that the system has been installed and tested in compliance with the Smart Grid SGIP, PSEG Long Island -accepted design, and the equipment manufacturer's instructions.

#### **STEP 10: Interconnection.**

The applicant's facility will be allowed to commence parallel operation upon satisfactory completion of the tests in Step 9. In addition, the applicant must have complied with and must continue to comply with the contractual and technical requirements.

#### **STEP 11: Final Acceptance and PSEG Long Island Cost Reconciliation.**

If PSEG Long Island witnessed the verification testing, then, within ten (10) Business Days of the completion of such testing, PSEG Long Island will issue to the applicant either a formal letter of acceptance for interconnection or a detailed explanation of the deficiencies in the system. If PSEG Long Island did not witness the verification testing, then, within ten (10) Business Days of receiving the written test notification from Step 9, PSEG Long Island will either issue to the applicant a formal letter of acceptance for interconnection, or will request that the applicant and PSEG Long Island set a date and time to witness operation of the DG system. This witnessed verification testing must be completed within twenty (20) Business Days after being requested. Within ten (10) Business Days of the completion of any such witnessed testing, PSEG Long Island will issue to the applicant either a formal letter of acceptance for interconnection or a detailed explanation of the deficiencies in the DG system.

At this time, PSEG Long Island shall prepare and submit to the applicant a final reconciliation statement of its actual costs minus the application fee and advance payments made by the applicant. Within twenty (20) Business Days after delivery of the reconciliation statement, the applicant will receive either a bill for any balance due or a reimbursement for overpayment as determined by the utility's reconciliation. The applicant may contest the reconciliation with the utility. If the utility's final reconciliation invoice states a balance due from the applicant, unless it is challenged by a formal complaint interposed by the applicant, it shall be paid to the utility within thirty (30) business days or the utility reserves the right to lock the generating system offline. If the utility's final reconciliation invoice states a reimbursement for overpayment to be paid by the utility, unless the reimbursement amount is challenged by a formal complaint interposed by the applicant, it shall be paid to the applicant ~~within thirty (30) business days.~~



## Section I. D. Payment and Construction Milestones

Applicants are responsible for payment of utility system modification cost estimates in accordance with the following rules and deadlines. All project costs will be subject to Appendix E, where applicable.

The applicant and PSEG Long Island will execute a standardized contract for interconnection ~~as set forth in Appendix A~~ and the applicant will provide PSEG Long Island with an advance payment of 30% of PSEG Long Island's estimated costs as identified in Step 6 within ninety (90) Business Days. ~~Within fifteen (15) Business Days of~~After receiving the payment, PSEG Long Island will provide the applicant, a signed ~~New York State Standardized Interconnection Contract in the form of Appendix A~~ Agreement, via electronic communication. This will be provided within fifteen (15) Business Days for all projects sized five (5) megawatts and under.

PSEG Long Island is not required to procure any equipment or materials, or perform design and engineering work associated with the project or begin construction until 30% deposit payment has been received. Progress payments will be required during construction and any excess will be reconciled and invoiced to the Applicant after ~~Step 10: interconnection~~. Invoice payments are due within thirty (30) Business Days of receipt.

If the applicant does not return the signed contract within the time allowed, the application shall be removed from PSEG Long Island's interconnection queue, and no further action on the part of PSEG Long Island is required.

Within thirty (30) Business Days of receiving the 30% payment, the PSEG Long Island shall provide an initial construction schedule to the applicant (consistent with Appendix K). ~~The utility~~PSEG Long Island shall commence design work in accordance with its guidance and consider the developer's input on scheduling. If the applicant does not make a payment due under this section in the time required, the application shall be removed from the PSEG Long Island's interconnection queue with no further action required of PSEG Long Island.

If the applicant withdraws or is removed from the interconnection queue at any point after making a payment required under this section, any unspent portions of these payments will be refunded to the applicant consistent with the timelines described in Section C, Step 11.

If a local permitting moratorium prevents an applicant from meeting the above timelines, PSEG Long Island may grant affected project applicants an extension. To be granted an extension of the required timelines, the applicant must submit the New York State Standard Moratorium Attestation Form, Appendix I. Upon the applicant's payment of 30% expected upgrade costs, if applicant has received its CESIR, returned the executed Interconnection Contract, and submitted the Attestation Form to PSEG Long Island. If applicable, any unused portion of the 30% payment shall be refunded if the project does not move forward after receiving an extension.

If the final acceptance as set out in Section C, Step 11 is not completed within twelve (12) months of the date the applicant returns the executed New York State Standardized Contract as a result of applicant inactivity, PSEG Long Island has the right to notify the applicant by email or U.S. first class mail with delivery receipt confirmation that the applicant's project will be removed from the PSEG Long Island's interconnection queue if the applicant does not respond within thirty (30) Business Days of the issue of such notification and provide a project status update and/or justification as to why the project should remain in the PSEG Long Island's interconnection inventory for an additional period of time.

## Section I.E. Application Process for Energy Storage Systems

Except as provided in this Section, the rules in Sections B and C shall apply to applications to: construct new Hybrid Projects; construct new stand-alone storage; add an ESS to an existing DG facility; and change the operating mode of an existing Hybrid Project or stand-alone storage facility. Whether an application will be handled under Section B or C will be determined by the sum of the AC nameplate ratings of all DG facilities and ESS facilities comprising the proposed Hybrid Project

### **Step 1. The Application**

An applicant proposing a Hybrid Project or stand-alone ESS shall complete and submit Appendix J with Appendix F.

The owner of an existing DG facility may apply to add an ESS by submitting completed Appendix J to PSEG Long Island at any time.

For all projects involving ESS, PSEG Long Island shall review the application and respond within the time frames provided in Section B or C, as applicable.

Following interconnection of a Hybrid Project or a stand-alone ESS, the owner may apply to PSEG Long Island to change the operating characteristics of the storage component. To initiate review, the owner shall submit completed Appendix J specifying the proposed new operating characteristics to PSEG Long Island.

### **Step 2. Protection and Control Review**

When performing screening analysis and system impact studies associated with ESS, operating characteristics including maximum export and import capacity shall be utilized, except that fault current contribution shall be evaluated based on aggregate AC nameplate rating. PSEG Long Island's technical review shall determine whether the proposed facility, operating per the characteristics identified in the application (Appendix J), can be safely and reliably interconnected to the LIPA's distribution system. The applicant shall pay the costs for the utility's review in advance.

Following the completion of Step 3 in Section I.B., or upon passing the Preliminary or Supplemental Screening Analysis in Step 4 in Section I.C., ~~Once an application has been deemed complete~~, based on the application and proposed operating parameters, PSEG Long Island will determine if a Protection and Control Review is required. PSEG Long Island will notify the applicant of this determination. The applicant will have thirty (30) Business Days from the notification to pay the nonrefundable fee for the review, which shall be calculated as \$500 plus \$4/kW capped at \$3000. PSEG Long Island shall have twenty (20) Business Days to perform the review and provide the results to the applicant, including a description of any modifications to the control systems that PSEG Long Island determines are necessary.

Within ten (10) Business Days of an applicant's request, PSEG Long Island shall discuss the results of the Protection and Control Review. Following the discussion, the applicant will have twenty (20) Business Days to determine whether or not to accept any required modifications to the control system and take the next step in the process as defined in Section B or C, as applicable, or to withdraw the application.

For all applications relating to ESS, PSEG Long Island's written report of its technical review shall include a completed Attachment I, as defined below, specifying the operating parameters studied for the proposed facility. PSEG Long Island and the applicant shall discuss the listed operating parameters promptly after delivery of the study results to the applicant.

For ESS applications requiring a CESIR, PSEG Long Island will provide the applicant with any additional testing procedures required in connection with the ESS, using the applicant's load management control systems to limit reverse power. PSEG Long Island will provide this information with the CESIR results.

### **Step 3. Contract and Payment for Utility Construction Costs**

An applicant proposing a Hybrid Project, stand-alone storage, or the addition of ESS to an existing DG facility shall execute the Standardized Interconnection Contract for Systems including Energy Storage, and make payment to PSEG Long Island for its estimated construction costs within the time required by Section D.

Each contract shall include a completed Attachment I, which shall specify the operating parameters for the interconnected ESS after consultation with the applicant.

An applicant proposing to change the operating characteristics listed in Appendix J for an existing ESS shall sign an amendment to its interconnection agreement.

### **Section I. F. Application Process (Study Process) Steps for Systems above 5 MW and less than 10 MW**

Applicability:

- i. The Study Process shall be used by an Interconnection Customer proposing to interconnect or modify its Small Generator with LIPA's Distribution System, if the Small Generator, upon interconnection or after modification, is above 5 MW and less than 10 MW.<sup>5</sup> 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 Generator to the LIPA Distribution System. These Interconnection Studies will be performed in accordance with Applicable Reliability Standards.
- ii. The study process shall determine the appropriate voltage level for the interconnection of the new distributed generation facilities.

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<sup>5</sup> New distributed generation facilities 10 MW and above must connect to LIPA's transmission system and comply with the NYISO Small Generator Interconnection Procedures (SGIP) or Large Generator Interconnection Procedures (LGIP), as applicable. This would include the following requirements:

- a. An Interconnection Customer who requests an interconnection to the LIPA Transmission System must submit this Interconnection Request by hand delivery, mail, e-mail, or fax to the NYISO. The NYISO will send a copy to the Connecting Transmission Owner.
- b. NYISO will determine whether they will direct the study process or allow the Connecting Transmission Owner to conduct the process.
- c. If NYISO allows the Connecting Transmission Owner to conduct the process the following requirements shall apply.

### **STEP 1: Initial Communication from the Potential Applicant.**

Communication could range from a general inquiry to a completed application.

### **STEP 2: The Inquiry is reviewed by PSEG Long Island to Determine the Nature of the Project.**

Technical staff from PSEG Long Island discusses the scope of the interconnection with the potential applicant (either by phone or in person) to determine what specific information and documents (such as an application, contract, technical requirements, specifications, listing of qualified type- tested equipment/systems, application fee information, applicable rate schedules, and metering requirements) will be provided to the potential applicant. The preliminary technical feasibility of the project at the proposed location may also be discussed at this time. All such information and a copy of the standardized interconnection requirements must be sent to the applicant within three (3) Business Days following the initial communication from the potential applicant, unless the potential applicant indicates otherwise. A PSEG Long Island representative will be designated to serve as the single point of contact for the applicant (unless PSEG Long Island informs the applicant otherwise) in coordinating the potential applicant's project with PSEG Long Island.

### **STEP 3: Potential Applicant Files an Application.**

The potential applicant submits an application to PSEG Long Island. The submittal must include the completed standard Interconnection Request application form, including a copy of equipment certification to UL 1741 as applicable, a three line diagram specific to the proposed system, a letter of authorization (if applicant is agent for the customer), and payment of a non-refundable \$750 application fee. Within five (5) Business Days of receiving the application, PSEG Long Island will notify the applicant of receipt and whether the application has been completed adequately. It is in the best interest of the applicant to provide PSEG Long Island with all pertinent technical information as early as possible in the process. If the required documentation is presented in this step, it will allow PSEG Long Island to perform the required reviews and allow the process to proceed as expeditiously as possible.

### **STEP 4: Scoping Meeting**

4.1 A scoping meeting will be held within ten (10) Business Days after the Interconnection Request is deemed complete, or as otherwise mutually agreed to by the Parties. PSEG Long Island 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.

4.2 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 PSEG Long Island should perform a feasibility study or proceed directly to a system impact study, or a facilities study, or an interconnection agreement. If the Parties agree that a feasibility study should be performed, PSEG Long Island shall provide the Interconnection Customer, as soon as possible, but not later than five (5) Business Days after the scoping meeting, a feasibility study agreement (Appendix F1) including an outline of the scope of the study and a non- binding good faith estimate of the cost to perform the study.

4.3 The scoping meeting may be omitted by mutual agreement. In order to remain in consideration for interconnection, an Interconnection Customer who has requested a feasibility study must return the executed feasibility study agreement within fifteen (15) Business Days. If



the Parties agree not to perform a feasibility study, PSEG Long Island shall provide the Interconnection Customer, no later than five (5) Business Days after the scoping meeting, a system impact study agreement (Appendix G1) including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.

#### **STEP 5: Feasibility Study**

5.1 The feasibility study shall identify any potential adverse system impacts that would result from the interconnection of the Small Generator.

5.2 A deposit of the lesser of fifty (50%) percent of the good faith estimated feasibility study costs or earnest money of \$10,000 is required from the Interconnection Customer.

5.3 The scope of and cost responsibilities for the feasibility study are described in Appendix F.

5.4 If the feasibility study shows no potential for adverse system impacts, PSEG Long Island shall send the Interconnection Customer a facilities study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study. If no additional facilities are required, PSEG Long Island shall send the Interconnection Customer an executable interconnection agreement within five (5) Business Days.

5.5 If the feasibility study shows the potential for adverse system impacts, the review process shall proceed to the appropriate system impact study(s).

#### **STEP 6: System Impact Study**

6.1 A system impact study shall identify and detail the electric system impacts that would result if the proposed Small Generator were interconnected without project modifications or electric system modifications, focusing on the adverse system impacts identified in the 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.

6.2 If no transmission system impact study is required, but potential electric power distribution system adverse system impacts are identified in the scoping meeting or shown in the feasibility study, a distribution system impact study must be performed. PSEG Long Island shall send the Interconnection Customer a distribution system impact study agreement within fifteen (15) Business Days of transmittal of the feasibility study report, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or following the scoping meeting if no feasibility study is to be performed.

6.3 In instances where the feasibility study or the distribution system impact study shows potential for transmission system adverse system impacts, within five (5) Business Days following transmittal of the study report, PSEG Long Island shall send the Interconnection Customer a transmission system impact study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, if such a study is required.

6.4 If a transmission system impact study is not required, but electric power distribution system adverse system impacts are shown by the feasibility study to be possible and no

distribution system impact study has been conducted, PSEG Long Island shall send the Interconnection Customer a distribution system impact study agreement.

6.5 If the feasibility study shows no potential for transmission system or distribution system adverse system impacts, PSEG Long Island shall send the Interconnection Customer either a facilities study agreement (Appendix H1), including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or an executable interconnection agreement, as applicable.

6.6 In order to remain under consideration for interconnection, the Interconnection Customer must return executed system impact study agreements, if applicable, within thirty (30) Business Days.

6.7 A deposit of the good faith estimated costs for each system impact study will be required from the Interconnection Customer.

6.8 The scope of and cost responsibilities for a system impact study are described in the attached system impact study agreement.

#### **STEP 7: Facilities Study**

7.1 Once the required system impact study(s) is completed, a system impact study report shall be prepared and transmitted to the Interconnection Customer along with a facilities study agreement within five (5) Business Days, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the facilities study. In the case where one or both impact studies are determined to be unnecessary, a notice of the fact shall be transmitted to the Interconnection Customer within the same timeframe.

7.2 In order to remain under consideration for interconnection, or, as appropriate, in PSEG Long Island's interconnection queue, the Interconnection Customer must return the executed facilities study agreement or a request for an extension of time within thirty (30) Business Days.

7.3 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).

7.3.1 PSEG Long Island shall determine whether the interconnection impacts the New York Transmission System and requires System Upgrade Facilities.

7.3.2 The Interconnection Customer shall be responsible for the cost of any System Upgrade Facilities only if PSEG Long Island, based on an Interconnection Study, determines (i) that System Upgrade Facilities are necessary to accommodate the Interconnection Request, and (ii) that the electrical contribution of the project to the need for those System Upgrade Facilities is greater than the *de minimis* impacts defined in Section IV.G.6.f of Attachment S to the NYISO OATT. Such Interconnection Study shall be of sufficient detail and scope to assure that these determinations can be made. If both determinations are made, then the Small Generator shall be evaluated as a member of the next NYISO Class Year, and the Interconnection Customer's cost responsibility shall be determined in accordance with the NYISO's Attachment S procedures.

If the Interconnection Customer elects Capacity Resource Interconnection Service, and its Small Generator is larger than 2 MW, it will be evaluated, by the NYISO, as a member of the next Class

Year to determine the Interconnection Customer's responsibility for System Deliverability Upgrades in accordance with Attachment S to the NYISO OATT.

7.3.3 If the determination is made that an Interconnection Customer's project must be included in the NYISO Class Year, that interconnection customer shall be entitled to expedite its interconnection process in accordance with sections 3.5.3.3 and 3.5.3.4 of the NYISO Small Generator Interconnection Procedures.

7.3.4 If PSEG Long Island determines that the interconnection impacts the New York Transmission System, PSEG Long Island shall notify the NYISO within five (5) Business Days of such determination.

7.4 Design for any required Interconnection Facilities and/or Upgrades shall be performed under the facilities study agreement. PSEG Long Island may contract with consultants to perform activities required under the facilities study agreement. The Interconnection Customer and PSEG Long Island 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 PSEG Long Island, 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, PSEG Long Island 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.

7.5 A deposit of the good faith estimated costs for the facilities study will be required from the Interconnection Customer.

7.6 The scope of and cost responsibilities for the facilities study are described in the attached facilities study agreement.

7.7 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, PSEG Long Island shall provide the Interconnection Customer an executable interconnection agreement within five (5) Business Days.

#### **STEP 8: Applicant Commits to PSEG Long Island Construction of LIPA's System Modifications.**

The applicant and PSEG Long Island will execute an interconnection agreement as set forth in Appendix M and the applicant will provide PSEG Long Island with an advance payment for PSEG Long Island's estimated costs as identified in Step 6 (estimated costs will be reconciled with actual costs in Step 11).

#### **STEP 9: Project Construction.**

The applicant will build the facility in accordance with PSEG Long Island -accepted design. PSEG Long Island will commence construction/installation of system modifications and metering requirements as identified in Step 6. LIPA system modifications will vary in construction time depending on the extent of work and equipment required. The schedule for this work is to be discussed and agreed upon with the applicant in Step 6.

#### **STEP 10: The Applicant's Facility is tested in Accordance with the Standardized Interconnection Requirements.**

The verification testing will be performed in accordance with the written test procedure provided in Step 5 and any site-specific requirements identified by PSEG Long Island in Step 6. The final testing will be conducted within ten (10) Business Days of complete installation at a mutually agreeable time, and PSEG Long Island shall be given the opportunity to witness the tests. If PSEG Long Island opts not to witness the test, the applicant will send PSEG Long Island within five (5) days of the test a written notification, certifying that the system has been installed and tested in compliance with the Smart Grid SGIP, PSEG Long Island -accepted design, and the equipment manufacturer's instructions.

#### **STEP 11: Interconnection.**

The applicant's facility will be allowed to commence parallel operation upon satisfactory completion of the tests in Step 10. In addition, the applicant must have complied with and must continue to comply with the contractual and technical requirements.

#### **STEP 12: Final Acceptance and PSEG Long Island Cost Reconciliation.**

If PSEG Long Island witnessed the verification testing, then, within ten (10) Business Days of the test, PSEG Long Island will issue to the applicant either a formal letter of acceptance for interconnection or a detailed explanation of the deficiencies in the system. If PSEG Long Island did not witness the verification testing, then, within ten (10) Business Days of receiving the written test notification from Step 9, PSEG Long Island will either issue to the applicant a formal letter of acceptance for interconnection, or will request that the applicant and PSEG Long Island set a date and time for an on-site verification and witness operation of the system. This joint on-site verification must be completed within twenty (20) Business Days after being requested. Within ten (10) Business Days of the completion of the on-site verification, PSEG Long Island will issue to the applicant either a formal letter of acceptance for interconnection or a detailed explanation of the deficiencies in the system. ~~At this time,~~ PSEG Long Island will ~~also~~ reconcile its actual costs related to the applicant's project against the application fee and advance payments made by the applicant. The applicant will receive either a bill for any balance due or a reimbursement for overpayment as determined by PSEG Long Island's reconciliation: after PSEG LI finishes the final reconciliation process.

#### **Section I. G. Web-Based Standard Interconnection Application and Information (If available)**

PSEG Long Island shall implement and maintain a web-based system to provide customers and contractors current information regarding the status of their Smart Grid SGIP application process. The system shall be customer specific and post the current status of the Smart Grid SGIP process. At a minimum the following content shall be provided:

- (1) The applicant's name and project/application identification number.  
Description of the project, including at a minimum, the project's type (energy source), size, metering, and location.
- (2) SGIP project application status, including all the steps completed and to be completed, along with corresponding completion/deadline dates associated with each step.
  - a. If the next action is to be taken by PSEG Long Island, the expected date that action will be completed.
  - b. If the next action is to be taken by the applicant, what exactly is required and a contact for more information,

- (3) Information regarding any outstanding information request made by PSEG Long Island of the applicant, and
- (4) The status of all amounts paid and/or due to PSEG Long Island by the applicant.

Access shall be available for the customer and their contractor, such that both can access the information. The web site must be, however, secure and private from unauthorized access.

The PSEG Long Island web site shall also provide the ability for applicants to submit their application for interconnection via the web. The web based application process will be consistent with Appendix B of this Smart Grid Small Generator Interconnection Procedures for Distributed Resources less than 10 MW Connected in Parallel with LIPA Distribution Systems (“Smart Grid SGIP”) and include the ability to attach associated documentation or drawings associated with each project. Electronic signatures will be accepted by PSEG Long Island on associated documentation for this process. Section II. Interconnection Requirements

## Section II. Interconnection Requirements

### Section II.A. Provisions that Apply to All Interconnection Requests

**All interconnection requests made pursuant to these Procedures shall be subject to the following terms:**

1. **Compliance with Deadlines.** PSEG Long Island shall make reasonable efforts to meet all time frames provided in these procedures unless PSEG Long Island and the Interconnection Customer agree to a different schedule. If PSEG Long Island 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.
2. **Meter Installation** Any metering necessitated by the use of the Small Generator shall be installed at the Interconnection Customer's expense in accordance with PSEG Long Island's specifications.
3. **Queue Position.** PSEG Long Island shall maintain a single queue for requests to interconnect to LIPA's Distribution System by a Small Generator. PSEG Long Island 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 cost responsibility for the Upgrades necessary to accommodate the interconnection. At PSEG Long Island's option, Interconnection Requests may be studied serially or in clusters for the purpose of the system impact study.
4. **Withdrawal of Application.** The applicant may withdraw its application at any time by written notice of such withdrawal to PSEG Long Island. Such withdrawal will not relieve the applicant from any costs incurred by PSEG Long Island to process the application up to the time of withdrawal.
5. **Effect of Modification to Machine Data or Equipment Configuration.** Any modification to machine data or equipment configuration or to the interconnection site of the Small Generator not agreed to in writing by PSEG Long Island and the Interconnection Customer may be deemed a withdrawal of the Interconnection Request and may require submission of a new Interconnection Request, unless proper notification of each Party by the other and a reasonable time to cure the problems created by the changes are undertaken.
6. **Infrastructure Security.** Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. PSEG Long Island complies with the recommendations offered by the President's Critical Infrastructure Protection Board (established by Executive Order 13231 of October 16, 2001) and best practice recommendations from the electric reliability authority. All small generators interconnecting to LIPA's facilities shall meet applicable standards for electric system infrastructure and operational security, including physical, operational and security practices.

In addition to any other requirements set forth in the SGIP regarding confidential information, Interconnection Customer shall comply with PSEG Long Island's requirements, as they may change from time to time, for protecting and maintaining the

confidentiality of Critical Energy Infrastructure Information, as defined in 18 CFR Section 388.113, as it may be amended from time to time, and execute such Non-Disclosure Agreements as may be required by PSEG Long Island.

7. **NYISO Matters.**

- a. PSEG Long Island shall notify the NYISO of all interconnection requests over 2 MW that are determined to have an impact on the New York Transmission System and require System Upgrade Facilities as determined pursuant to Section II of these procedures.
- b. A new Small Generator whose output may be sold into the wholesale energy, capacity and ancillary services markets operated by the New York Independent System Operator must make an election as to whether it will interconnect on a minimum interconnection basis pursuant to Energy Resource Interconnection Service or whether it will elect Capacity Resource Interconnection Service and satisfy the NYISO Deliverability Interconnection Standard.
- c. PSEG Long Island shall notify the NYISO of all interconnection requests electing Capacity Resource Interconnection Service and coordinate with the NYISO regarding necessary studies, procedures and standards applicable to such request.

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

- a. Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Small Generator;
- b. An option to purchase or acquire a leasehold site for such purpose; or
- c. 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.

9. **Disputes.** The Parties agree to use their commercially reasonable efforts to settle promptly any disputes or claims arising out of or relating to this Smart Grid SGIP through negotiation conducted in good faith between executives having authority to reach such a settlement. Either Party, may, by written notice to the other Party, refer any such dispute or claim for advice or resolution to mediation by a suitable mediator. The mediator shall be chosen by the mutual agreement of the Parties. If the Parties are unable to agree on a mediator each Party shall designate a qualified mediator who, together with the mediator designated by the other, shall choose a single mediator for the particular dispute or claim. If the mediator chosen is unable, within thirty (30) days of such referral to reach a determination, then either party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of these procedures.

- a. Unless otherwise agreed to in writing or prohibited by applicable law, the Parties shall continue to provide service, honor all commitments under these procedures, and continue to make payments in accordance with these procedures during the course of any dispute resolution under this Article and during the pendency of any action at law or in equity relating hereto.

- b. Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

Upon execution of a contract for interconnection between the Interconnection Customer and PSEG Long Island as set forth in Appendices A and J (as applicable), the dispute resolution terms of such contract shall govern all disputes between the parties to the interconnection contract.

## 10. Confidentiality

### a. Claim of Confidentiality

- i. In connection with the application procedures and interconnection review requirements under Sections I and II, the Parties may exchange information that is deemed to be confidential whether such information is provided in written, oral, electronic or other format (“Confidential Information”). The Party disclosing such Confidential Information is referred to herein as the “Disclosing Party” and the Party receiving such Confidential Information is referred to herein as the “Receiving Party.” The Disclosing Party shall mark all written Confidential Information as “Confidential,” “Proprietary” or the like and in the case of Confidential Information that is communicated orally, the Disclosing Party shall within thirty (30) days follow up such communication with a writing addressed to the Receiving Party generally describing such information and identifying it as Confidential Information. The Parties acknowledge that all information disclosed by the Interconnection Customer in connection with costs, pricing or operation of the Small Generator shall be treated as Confidential Information whether or not such information is marked or identified as Confidential Information. PSEG Long Island shall not disclose such Confidential Information without Interconnection Customer’s written consent, which may be withheld in Interconnection Customer’s sole discretion, unless PSEG Long Island is otherwise required by law to make such disclosure.
- ii. The Receiving Party shall protect the Confidential Information from disclosure to third parties consistent with the provisions of this Section II.A.10 and subject to applicable law, provided however, a Receiving Party may disclose Confidential Information to its Affiliates, Lenders, employees, agents or representatives of such Receiving Party, where such Affiliate, Lender, employee, agent or representative expressly agrees to be bound by the terms of this Section II.A.10 and provided further that the Receiving Party shall be liable for any breach by its Affiliates, Lenders, employees, agents or representatives.
- iii. It is further understood and agreed that money damages would not be sufficient remedy for any breach of this Section II.A.10, and that if a Party breaches this Section II.A.10, the Party disclosing Confidential Information to such breaching Party shall be entitled to specific performance and injunctive and other equitable relief as a remedy for any such breach. The breaching Party agrees to waive any requirement for the posting of a bond in connection with any such remedy. Such remedy shall not be deemed to be the exclusive remedy for breach of this Section II.A.10 but shall be in addition to all other remedies available at law or equity. In the event of any legal action based upon or arising out of this Section II.A.10, the



prevailing Party in such action shall be entitled to recover reasonable attorney's fees and costs from the other Party.

- b. Compliance with Law. If either Party is required by law to disclose Confidential Information of the other Party (by oral questions, interrogatories, requests for information or documents, subpoena, civil investigative demands, regulation, statute or otherwise), the Party required to make such disclosure will (i) notify the other Party and provide the other Party the opportunity to review the Confidential Information, and (ii) provide the other Party the opportunity to seek a protective order or other appropriate remedy. In the event that a protective order or other remedy is not obtained or is not pursued within a reasonable period of time, the Party required to make disclosure or such Party's representatives will furnish only that portion of the Confidential Information that it is legally required to disclose and the Party required to make disclosure will request that confidential treatment be accorded the Confidential Information by relevant third parties.
- c. Compliance with the Freedom of Information Law. If PSEG Long Island is requested by a third party to disclose Confidential Information pursuant to the Freedom of Information Law ("FOIL"), PSEG Long Island will (i) notify Generator of the request and provide Generator the opportunity to review the Confidential Information; (ii) provide Generator the opportunity to provide information regarding the need for confidential treatment; (iii) evaluate the third party's request for disclosure and Generator's request for confidential treatment; and (iv) determine if the Confidential Information is subject to disclosure under FOIL. If PSEG Long Island determines that the Confidential Information is subject to disclosure, it will provide prompt written notice of such determination to Generator so that Generator may seek a protective order or other appropriate remedy. If Generator does not obtain a protective order or no formal proceeding has been initiated by Generator within a reasonable period of time after PSEG Long Island provides notice to Generator of its intent to make public the Confidential Information, then PSEG Long Island may disclose such information with no liability or further obligation to Generator.
- d. Treatment of Otherwise Publicly Available Documents. Notwithstanding anything to the contrary in this Article, neither Party shall be required to hold confidential any information that (i) becomes publicly available other than through disclosure by the Receiving Party; (ii) is independently developed by the Receiving Party; or (iii) becomes available to the Receiving Party without restriction from a third party, provided that such third party is not bound by a confidentiality agreement with the Disclosing Party or its representatives. Should any person or entity seek to legally compel a Receiving Party (by oral questions, interrogatories, requests for information or documents, subpoena, civil investigative demands, regulation, statute or otherwise) to disclose any Confidential Information, the Receiving Party will provide the Disclosing Party prompt written notice so that the Disclosing Party may seek a protective order or other appropriate remedy. In the event that a protective order or other remedy is not obtained, the Receiving Party or the Receiving Party's representative will furnish only that portion of the Confidential Information that it is legally required to disclose and the Receiving Party will request that confidential treatment be accorded the Confidential Information by relevant third parties.
- e. Term of Confidentiality. The obligations set forth in this Article shall survive expiration or termination of this Agreement.

- 11. **Application of Industry Electrical Standards.** Where the interconnection requirements set forth in Sections I and II refer to an industry electrical standard, including standards

adopted or promulgated by Underwriters Laboratories (UL), the Institute of Electrical and Electronics Engineers (IEEE) and American National Standards Institute (ANSI) the applicable standard will be the version of that designated standard that is in effect on the date upon which the Interconnection Customer submits, and PSEG Long Island receives, a completed application for interconnection with PSEG Long Island's Distribution System.

12. **Standard Contract Terms.** Standard contract terms have been established for the contract for interconnection of a Small Generator between 0 kW and 5 MW set forth in Appendix A and the interconnection agreement for a Small Generators sized more than 5 MW and less 10 MW set forth in Appendix M. The contract for interconnection is a standard form that will be executed by PSEG Long Island and the Interconnection Customer in the form set forth in Appendix A and only supplemented as noted within such form with information specific to the Small Generator and Interconnection Customer.

With respect to the execution of an interconnection agreement for a Small Generator more than 5 MW and less than 10 MW as set forth in Appendix M, any technical standards and requirements set forth in such agreement shall not be modified to be inconsistent with requirements of Sections I and II herein. With respect to all other terms of the interconnection agreement, modifications of such non-technical terms shall be limited to those necessary to reflect any specific circumstances of the proposed Small Generator (such as the status of the Interconnection Customer as a governmental entity). PSEG Long Island reserves all rights and is under no obligation to accept requests for modification of the standard contract terms set forth in Appendix A or M.

The obligations under the Appendix A (Long Island Lighting Company D/B/A LIPA Standardized Contract for Interconnection of Distributed Generation and/or Energy Storage Equipment with Capacity of 5 MW or Less Connected in Parallel with the LIPA Distribution Systems), shall be binding on any successor owner of the Unit. If the Unit is sold LIPA may require the new Unit owner to sign an amended agreement.

## **Section II.B. Design Requirements**

### **Common**

The generator-owner shall provide appropriate protection and control equipment, including a protective device that utilizes an automatic disconnect device that will disconnect the generation in the event that the portion of the LIPA System that serves the generator is de-energized for any reason or for a fault in the generator-owner's system. The generator-owner's protection and control equipment shall be capable of automatically disconnecting the generation upon detection of an islanding condition and upon detection of a LIPA system fault.

The type and size of the generation facility is based on electrical generator nameplate data (AC output).

The generator-owner's protection and control scheme shall be designed to ensure that the generation remains in operation when the frequency and voltage of the LIPA System is within the limits specified by the required operating ranges. Upon request from PSEG Long Island, the generator-owner shall provide documentation detailing compliance with the requirements set forth in this document.

The specific design of the protection, control and grounding schemes will depend on the size and characteristics of the generator-owner's generation, as well the generator-owner's load level, in addition to the characteristics of the particular portion of LIPA's system where the generator- owner is interconnecting.

The generator-owner shall have, as a minimum, an automatic disconnect device(s) sized to meet all applicable local, state, and federal codes and operated by over and under voltage and over and under frequency protection. For three-phase installations, the over and under voltage function should be included for each phase and the over and under frequency protection on at least one phase. All phases of a generator or inverter interface shall disconnect for voltage or frequency trip conditions sensed by the protective devices. Voltage protection shall be wired phase to ground for single phase installations and for applications using wye grounded-wye grounded service transformers.

The settings below are listed for single-phase and three-phase applications using wye grounded- wye grounded service transformers or wye grounded-wye grounded isolation transformers. For applications using other transformer connections, a site-specific review will be conducted by PSEG Long Island and the revised settings identified in Step 6 of the Application Process.

The requirements set forth in this document are intended to be consistent with those contained in IEEE STD 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems. The requirements in IEEE STD 1547 above and beyond those contained in this document shall be followed.

Please refer to PSEG Long Island's Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA's Distribution System for technical requirements for interconnection of DG in parallel with LIPA's Distribution System. Applicant shall comply with PSEG Long Island's Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA's Distribution System document, as it may be modified by LIPA from time to time. The document can be found at the following link:

<https://www.psegliny.com/aboutpseglongisland/ratesandtariffs/sgip>

### **Interconnection Inventory**

PSEG Long Island periodically provides information to the NYS Department of Public Service regarding PSEG Long Island's SGIP inventory.

### **Section III. Glossary of Terms**

**Affected System:** An electric system, other than LIPA's Transmission System, that may be affected by the proposed interconnection.

**Applicable Reliability Standards:** The applicable 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 as well as the reliability criteria, requirements and guidelines adopted by PSEG Long Island and/or LIPA.

**Automatic Disconnect Device:** An electronic or mechanical switch used to isolate a circuit or piece of equipment from a source of power without the need for human intervention.

~~**Business Day:** Any day on which the Federal Reserve Member Banks in New York City are open for business, and shall extend from 8:00 a.m. until 5:00 p.m. local time for each Party's principal place of business.~~

~~**Business Day:** Monday through Friday, excluding PSEG Long Island holidays and any day PSEG Long Island is activated for storms related restoration activities or Force Majeure Events.~~

**Capacity Resource Interconnection Service:** The service provided to interconnect generating facilities in accordance with the NYISO Deliverability Interconnection Standard; as such term is defined and set forth in Attachment S of the NYISO OATT, in order to qualify such generator to be an installed capacity supplier to the NYISO wholesale capacity markets.

**Cease to Energize:** Cessation of energy flow capability

**Coordinated Electric System Interconnection Review:** Any studies performed by PSEG Long Island to ensure that the safety and reliability of the electric grid with respect to the interconnection of distributed generation as discussed in this document.

**Customer-Generator:** A LIPA customer who owns or operates electric generating equipment located and used at the customer's premises, and/or the customer's agent.

**Dedicated Transformer:** A transformer with a secondary winding that serves only one customer.

**Direct Transfer Trip:** Remote operation of a circuit breaker by means of a communication channel.

**Disconnect (verb):** To isolate a circuit or equipment from a source of power. If isolation is accomplished with a solid-state device, "Disconnect" shall mean to cease the transfer of power.

**Disconnect Switch:** A mechanical device used for isolating a circuit or equipment from a source of power.

**Distributed Energy Resources (DER):** Energy sources that consist of distributed generation facilities or energy storage systems or any combination thereof.

**Distributed Generation (DG):** Generation facilities and Energy Storage Systems supplementing on-site load or non-centralized electric power production facilities interconnected at the distribution side of an electric power system.

**Distribution System:** LIPA's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. Voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades:** The additions, modifications, and upgrades to LIPA's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generator 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.

**Draw-out Type Circuit Breaker:** Circuit breakers that are disconnected by physically separating, or racking, the breaker assembly away from the switchgear bus.

**Electric Power System (EPS):** Refers to LIPA's electric power system used to provide transmission and/or distribution services to its customers.

**Energy Storage System (ESS):** A commercially-available mechanical, electrical or electro-chemical means to store and release electrical energy, and its associated electrical inversion device and control functions that may stand-alone or be paired with a distributed generator at a point of common coupling.

**Energy Resource Interconnection Service:** The service provided to interconnect generating facilities on a minimum interconnection standard basis which enables the delivery of energy and ancillary services from the Small Generator into the NYISO wholesale markets.

**Farm Waste, Net Meter, Farm Applicant:** A farm applicant who is proposing to install a farm waste anaerobic digester generating system, not to exceed 1 MW, at a farm, per the requirements of LIPA Tariff for Electric Service.

**Force Majeure Event:** "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: terrorism, acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this procedure, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will 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 will be entitled to suspend or modify its performance of obligations under this procedure, other than the obligation to make payments then due or becoming due under this procedure, but 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.

**Fuel Cell, Net Meter, Residential Applicant:** A residential applicant who is proposing to install a fuel cell electric generating system located and used at the applicant's premises, not to exceed a combined rated capacity of not more than 10 kW, per the requirements of LIPA Tariff for Electric Service.

**Fuel Cell, Net Meter, Non-Residential Applicant:** A non-residential applicant who is proposing to install a fuel cell electric generating system located and used at the applicant's premises, not to exceed a combined rated capacity of not more than 2 MW, per the requirements of LIPA Tariff for Electric Service.

**Generator-Owner:** An applicant to operate on-site power generation equipment in parallel with the LIPA grid per the requirements of this document.

**Good Utility Practice:** Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry in the State of New York during the term of this Agreement, or any of the practices, methods or acts which, in the exercise of reasonable judgment in light of the facts known at the time a decision is made, could have been expected to accomplish the desired results at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practices is

not intended to be limited to the optimum practice, method or act to the exclusion of all others, but rather to delineate acceptable practices, methods or acts generally accepted by a significant portion of the electric utility industry operating in the State of New York.

**Hybrid Project:** A facility that operates, or is planned to operate, as a distributed generator paired with an energy storage system at a point of common coupling.

**Interconnection Customer:** The owner of the Unit or any entity that proposes to interconnect with LIPA's Distribution System.

**Interconnection Facilities:** The equipment and facilities on LIPA's system necessary to permit operation of the Unit in parallel with LIPA's system.

**Interconnection Request:** The Interconnection Customer's request, in accordance with the Smart Grid SGIP, to interconnect a new Small Generator, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generator that is interconnected with LIPA's Transmission System.

**Islanding:** A condition in which a portion of the LIPA System that contains both load and distributed generation is isolated from the remainder of the LIPA System. (Adopted from IEEE 929.)

**LIPA System:** The electric transmission and distribution system owned by LIPA and operated by PSEG Long Island Electric Utility SERVCO and consisting of all real and personal property, equipment, machinery, tools and materials, and other similar items relating to the transmission and distribution of electricity to PSEG Long Island's customers.

**LIPA Transmission System:** The facilities and equipment owned by LIPA, and operated by PSEG Long Island Electric Utility SERVCO that are used to provide transmission service.

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

**Micro-Combined Heat and Power, Net Meter, Residential Applicant:** A residential applicant who is proposing to install a micro-combined heat and power (Micro-CHP) generating system located and used at the applicant's premises, not to exceed 10 kW, per the requirements of LIPA Tariff for Electric Service.

**Micro-Hydroelectric, Net Meter, Residential Applicant:** A residential applicant who is proposing to install a micro-hydroelectric generating equipment located and used at the applicant's premises, not to exceed 25 kW, per the requirement of LIPA Tariff for Electric Service.

**Micro-Hydroelectric, Net Meter, Non-Residential Applicant:** A non-residential applicant who is proposing to install a micro-hydroelectric generating equipment located and used at the applicant's premises, not to exceed 2 MW, per the requirement of LIPA Tariff for Electric Service.

**PSEG Long Island:** PSEG Long Island LLC, acting through its subsidiary, Long Island Electric Utility Servco LLC.

**PSEG Long Network Upgrades:** Additions, modifications, and upgrades to LIPA's Transmission System required at or beyond the point at which the Small Generator interconnects with LIPA's Distribution System. Network Upgrades do not include Distribution Upgrades.

**New York State Transmission System:** New York State Transmission System shall mean 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.

**Party or Parties** means LIPA and Customer individually or jointly. T&D Manager is not a party to the agreements referenced in this SGIP, and is executing and administering such agreements on behalf of LIPA as LIPA's agent.

**Maximum Export:** The maximum export capacity of an Energy Storage System to the distribution grid at the Point of Common Coupling communicated by the Applicant and studied as such by PSEG Long Island per their review of the impacts on LIPA's system based on the operating characteristic of the Energy Storage System.

**Maximum Import:** The maximum import capacity of an Energy Storage System from the distribution grid at the Point of Common Coupling communicated by the Applicant and studied as such by PSEG Long Island per their review of the impacts on LIPA's system based on the operating characteristic of the Energy Storage System.

**Point of Common Coupling:** The point at which the interconnection between the electric utility and the customer interface occurs. Typically, this is the customer side of PSEG Long Island revenue meter.

**Point of Interconnection:** The point where the Interconnection Facilities connect with LIPA's Distribution System, which shall include the Point of Common Coupling.

**Preliminary Review:** A review of the generator-owner's proposed system capacity, location on the LIPA System, system characteristics, and general system regulation to determine if the interconnection is viable.

**Protective Device:** A device that continuously monitors a designated parameter related to the operation of the generation system that operates if preset limits are exceeded

**PSEG Long Island Net Metering Rules:** LIPA's Tariff for Electric Service in Tariff leaves 34A through 34H, and all other provisions of the LIPA Tariff for Electric Service also apply.

**Queue Position:** The order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, which is established based upon the date and time of receipt of the valid Interconnection Request by PSEG Long Island.

**Remote Net Metering:** Remote Net Metering allows certain types of customers and/or distributed generation technology (see tables in Section II) the option to apply excess generation credits from the customer's generator to certain other meters on property that is owned or leased by the same customer and located within the service territory of the same utility to which the customer-generator's net energy meters are interconnected and within the same load zone.

**Required Operating Range:** The range of magnitudes of LIPA system voltage or frequency where the generator-owner's equipment, if operating, is required to remain in operation for the purposes of compliance with UL 1741. Excursions outside these ranges must result in the automatic disconnection of the generation within the prescribed time limits.

**Safety Equipment:** Includes dedicated transformers or equipment and facilities to protect the safety and adequacy of electric service provided to other customers.

**Solar, Net Meter, Residential Applicant:** A residential applicant who is proposing to install a photovoltaic generating system, not to exceed 25 kW, in an owner occupied residence per the requirements of LIPA Tariff for Electric Service.

**Solar, Net Meter, Non-Residential Applicant:** A non-residential applicant who is proposing to install a solar generating system located and used at the applicant's premises, not to exceed 2 MW, pursuant to LIPA Tariff for Electric Service

**Small Generator:** Interconnection Customer's device for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities. Small Generator means the distributed generation facilities and Energy Storage System approved by the T&D Manager with a nameplate capacity of 5 MW or less located on the Interconnection Customer's premises at the time T&D Manager approves such generator for operation in parallel with LIPA's system.

**Stand-Alone Storage:** An energy storage system that is solely connected to a point of common coupling and not paired with a distributed generator.

**Study Process:** The procedure for evaluating an Interconnection Request that includes the Scoping Meeting, Feasibility Study, System Impact Study, and Facilities Study.

**System Upgrade Facilities:** In the case of proposed interconnection projects, System Upgrade Facilities are the modifications or additions to the existing New York State Transmission System that are required for the proposed project to connect reliably to the system in a manner that meets the NYISO interconnection standards.

**Unit:** The distributed generation facilities and Energy Storage System approved by the T&D Manager with a nameplate capacity of 10 MW or less located on the Interconnection Customer's premises at the time T&D Manager approves such Unit for operation in parallel with LIPA's system. This Agreement relates only to such Unit, but a new agreement shall not be required if the Interconnection Customer makes physical alterations to the Unit that do not result in an increase in its nameplate capacity. The nameplate generating and energy storage capacity of the Unit shall not exceed 10 MW in aggregate.

**Upgrades:** The required additions and modifications to LIPA's Distribution System or Transmission System at or beyond the Point of Interconnection. Upgrades may be System Upgrade Facilities, Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Utility Grade Relay:** A relay that is constructed to comply with, as a minimum, the most current version of the following standards for non-nuclear facilities:

<u>Standard</u>	<u>Conditions Covered</u>
<u>ANSI/IEEE C37.90</u>	Usual Service Condition Ratings Current and Voltage Maximum design for all relay AC and DC auxiliary relays Make and carry ratings for tripping contacts Tripping contacts duty cycle Dielectric tests by manufacturer



	Dielectric tests by user
<u>ANSI/IEEE C37.90.1</u>	Surge Withstand Capability (SWC) Fast Transient Test
<u>IEEE C37.90.2</u>	Radio Frequency Interference
<u>IEEE C37.98</u>	Seismic Testing (fragility) of Protective and Auxiliary Relays
<u>Standard</u>	<u>Conditions Covered</u>
<u>ANSI C37.2</u>	Electric Power System Device Function Numbers
<u>IEC 255-21-1</u>	Vibration
<u>IEC 2555-22-2</u>	Electrostatic Discharge
<u>IEC 25 5-5</u>	Insulation (Impulse Voltage Withstand)

**Verification Test:** A test performed upon initial installation and repeated periodically to determine that there is continued acceptable performance.

**Wind, Net Meter, Residential Applicant:** A residential applicant who is proposing to install a wind electric generating system, not to exceed a combined rated capacity of 25 kW, located and used at the applicant's primary residence, per the requirements of LIPA Tariff for Electric Service.

**Wind, Net Meter, Non-Residential Applicant:** A non-residential applicant who is proposing to install a wind electric generating system located and used at the applicant's premises, not to exceed 2 MW, pursuant to LIPA Tariff for Electric Service.

**Wind, Net Meter, Farm Applicant:** A farm applicant who is proposing to install a wind electric generating system, not to exceed a combined rated capacity of 500 kW, located and used at the applicant's primary residence, per the requirements of LIPA Tariff for Electric Service.

## APPENDIX A

### Appendix A- Standardized Contract For Systems 5MW Or Less

**LONG ISLAND LIGHTING COMPANY D/B/A LIPA  
STANDARDIZED CONTRACT  
FOR INTERCONNECTION OF DISTRIBUTED GENERATION AND/OR ENERGY STORAGE  
EQUIPMENT  
WITH CAPACITY OF 5 MW OR LESS  
CONNECTED IN PARALLEL WITH THE LIPA DISTRIBUTION SYSTEMS**

**Customer Information:**

Name:

\_\_\_\_\_

Address:

\_\_\_\_\_

Telephone:

\_\_\_\_\_

Fax:

\_\_\_\_\_

Email:

\_\_\_\_\_

Installation Address (if different):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Unit Application/PAM No.

\_\_\_\_\_

**Utility Information:**

Name: Long Island Electric Utility Servco LLC  
("T&D Manager") as acting agent and on  
behalf of **LONG ISLAND LIGHTING  
COMPANY d/b/a LIPA ("LIPA")**

Address: 175 E. Old Country Road, E.O.B  
Hicksville, NY 11801

Telephone: (516) 949-8295

Email: \_\_\_\_\_

Account Number: \_\_\_\_\_

## APPENDIX A

### DEFINITIONS

**“Dedicated Facilities”** means the equipment and facilities on LIPA’s system necessary to permit operation of the Unit in parallel with LIPA’s system.

**“Delivery Service”** means the services LIPA may provide to deliver capacity or energy generated by Customer to a buyer to a delivery point(s), including related ancillary services.

**“Energy Storage System”** means a commercially-available mechanical, electrical or electro-chemical means to store and release electrical energy, and its associated electrical inversion device and control functions that may stand-alone or be paired with a distributed generator at a point of common coupling.

**“Interconnection Customer”** means the owner of the Unit or any entity that proposes to interconnect with LIPA’s Distribution System.

**“Interconnection Facilities”** means the equipment and facilities on LIPA’s system necessary to permit operation of the Unit in parallel with LIPA’s system.

**“Net energy metering”** means the use of a net energy meter to measure, during the billing period applicable to a customer-generator, the net amount of electricity supplied by an electric corporation and provided to the corporation by a customer-generator.

**“Premises”** means the real property where the Unit is located.

**“Smart Meter”** means advanced metering infrastructure (AMI). For additional information refer to <https://www.psegliny.com/page.cfm/SMART>

**“Party” or “Parties”** means LIPA and Interconnection Customer individually or jointly.

**“Smart Grid SGIP”** means the PSEG Long Island Smart Grid Small Generator Interconnection Procedures For Distributed Generators and Energy Storage Systems Less than 10 MW Connected in Parallel with LIPA’s Radical Distribution System which are applicable to new and modifications to existing distributed generation units with a nameplate capacity less than 10 MW connected in parallel with the LIPA distribution system, posted at <https://www.psegliny.com/files.cfm/SGIP.pdf>.

**“T&D Manager,”** also referred to herein as **“PSEG Long Island,”** means PSEG Long Island LLC through its operating subsidiary, Long Island Electric Utility Servco LLC, which has managerial responsibility for the day-to-day the operational maintenance of, and capital investment to, the electric transmission and distribution system owned by LIPA as of January 1, 2014, pursuant to that Amended Restated Operations Services Agreement, dated as of December 31, 2013, as amended from time to time (the “OSA”) or any other similar agreement or arrangement, or any successor or assignee thereof providing certain operation, maintenance and other services to LIPA.

**“Unit”** means the distributed generation facilities and Energy Storage System approved by the T&D Manager with a nameplate capacity of 5 MW or less located on the Interconnection Customer’s premises at the time T&D Manager approves such Unit for operation in parallel with LIPA’s system. This Agreement relates only to such Unit, but a new agreement shall not be required if the Interconnection Customer makes physical alterations to the Unit that do not result in an increase in its nameplate capacity. The nameplate generating and energy storage capacity of the Unit shall not exceed 5 MW in aggregate.

## APPENDIX A

### I. TERM AND TERMINATION

**1.1 Term:** This Agreement shall become effective when executed by both Parties and shall continue in effect until terminated.

**1.2 Termination:** This Agreement may be terminated as follows:

- a. The Interconnection Customer may terminate this Agreement at any time, by giving T&D Manager and LIPA sixty (60) days' written notice.
- b. Failure by the Interconnection Customer to seek final acceptance by T&D Manager within twelve (12) months after completion of T&D Manager's construction process described in the Smart Grid SGIP shall automatically terminate this Agreement.
- c. Either Party may, by giving the other Party at least sixty (60) days' prior written notice, terminate this Agreement in the event that the other Party is in default of any of the material terms and conditions of this Agreement. The terminating Party shall specify in the notice the basis for the termination and shall provide a reasonable opportunity to cure the default.
- d. LIPA may, by giving the Interconnection Customer at least sixty (60) days' prior written notice, terminate this Agreement for cause. The Interconnection Customer's non-compliance with any modification to the Smart Grid SGIP, unless the Interconnection Customer's installation is "grandfathered," shall constitute good cause.

**1.3 Disconnection and Survival of Obligations:** Upon termination of this Agreement the Unit will be disconnected from LIPA's system. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

**1.4 Suspension:** This Agreement will be suspended during any period in which the Interconnection Customer is not eligible for delivery service from LIPA.

## APPENDIX A

### II. SCOPE OF AGREEMENT

**2.1 Scope of Agreement:** This Agreement relates solely to the conditions under which LIPA and the Interconnection Customer agree that the Unit may be interconnected to and operated in parallel with LIPA's system.

**2.2 Electricity Not Covered:** Neither LIPA nor T&D Manager shall have any duty under this Agreement to account for, pay for, deliver, or return in kind any electricity produced by the Facility and delivered into LIPA's system unless the system is net metered pursuant to LIPA's Net Metering Rules.

### III. INSTALLATION, OPERATION AND MAINTENANCE OF UNIT

**3.1 Compliance with Smart Grid SGIP:** Subject to the provisions of this Agreement, T&D Manager shall be required to interconnect the Unit to LIPA's system, for purposes of parallel operation, if T&D Manager accepts the Unit as in compliance with the Smart Grid SGIP. The Interconnection Customer shall have a continuing obligation to maintain and operate the Unit in compliance with the Smart Grid SGIP.

**3.2 Observation of the Unit - Construction Phase:** T&D Manager may, in its discretion and upon reasonable notice, conduct reasonable on-site verifications during the construction of the Unit. Whenever the T&D Manager chooses to exercise its right to perform observations herein it shall specify to the Interconnection Customer its reasons for its decision to perform the observation. For purposes of this paragraph and paragraphs 3.3 through 3.5, the term "on-site verification" shall not include testing of the Unit, and verification tests shall not be required except as provided in paragraphs 3.3 and 3.4.

**3.3 Observation of the Unit - Ten-day Period:** T&D Manager may conduct on-site verifications of the Unit and observe the execution of verification testing within a reasonable period of time, not exceeding ten (10) Business Days after system installation. The Interconnection Customer's facility will be allowed to commence parallel operation upon satisfactory completion of the verification test. The Interconnection must have complied with and must continue to comply with all contractual and technical requirements.

**3.4 Observation of the Unit - Post-Ten-day Period:** If T&D Manager does not perform an on-site verification of the Unit and observe the execution of verification testing within the ten-day period, the Interconnection Customer will send T&D Manager within five (5) days of the verification testing a written notification certifying that the Unit has been installed and tested in compliance with the SGIP, T&D Manager -accepted design and the equipment manufacturer's instructions. The Interconnection Customer may begin to produce energy upon satisfactory completion of the verification test. After receiving the verification test notification, T&D Manager, on behalf of LIPA will either issue to the Interconnection Customer a formal letter of acceptance for interconnection, or may request that the Interconnection Customer and T&D Manager set a date and time to conduct an on-site verification of the Unit and make reasonable inquiries of the Interconnection Customer, but only for purposes of determining whether the verification tests were properly performed. The Interconnection Customer shall not be required to perform the verification tests a second time, unless irregularities appear in the verification test report or there are other objective indications that the tests were not properly performed in the first instance.

**3.5 Observation of the Unit - Operations:** T&D Manager may conduct on-site verification of the operations of the Unit after it commences operations if T&D Manager has a reasonable basis for doing so based on its responsibility to provide continuous and reliable utility service or as authorized by the provisions of LIPA's Retail Electric Tariff relating to the verification of such installations generally.

## APPENDIX A

**3.6 Costs of Dedicated Facilities:** During the term of this Agreement, T&D Manager shall design, construct and install the Dedicated Facilities. The Interconnection Customer shall be responsible for paying the incremental capital cost of such Dedicated Facilities attributable to the Interconnection Customer's Unit. Except as set forth in the "Operating Instructions" for the Unit, all costs associated with the operation and maintenance of the Dedicated Facilities after the Unit first produces energy shall be the responsibility of LIPA.

### IV. DISCONNECTION OF THE UNIT

**4.1 Emergency Disconnection:** T&D Manager may disconnect the Unit, without prior notice to the Interconnection Customer (a) to eliminate conditions that constitute a potential hazard to Company personnel or the general public; (b) if pre-emergency or emergency conditions exist on the LIPA System; (c) if T&D Manager observes a hazardous condition relating to the Unit in an inspection; or (d) if the Interconnection Customer has tampered with any protective device. T&D Manager shall notify the Interconnection Customer of the emergency if circumstances permit.

**4.2 Non-Emergency Disconnection:** T&D Manager may disconnect the Unit, after notice to the responsible party has been provided and a reasonable time to correct, consistent with the conditions, has elapsed, if (a) the Interconnection Customer has failed to make available records of verification tests and maintenance of his protective devices; (b) the Unit system interferes with Company equipment or equipment belonging to other customers of LIPA; (c) the Unit adversely affects the quality of service of adjoining customers or (d) the Energy Storage System does not operate in compliance with the operating parameters and limits described in Appendix J.

**4.3 Disconnection by Interconnection Customer:** The Interconnection Customer may disconnect the Unit at any time.

**4.4 LIPA Obligation to Cure Adverse Effect:** If, after the Interconnection Customer meets all interconnection requirements, the operations of LIPA are adversely affecting the performance of the Unit or the Interconnection Customer's premises, T&D Manager shall immediately take appropriate action to eliminate the adverse effect. If T&D Manager determines that LIPA needs to upgrade or reconfigure its system the Interconnection Customer will not be responsible for the cost of new or additional equipment beyond the point of common coupling between the Interconnection Customer and LIPA.

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### V. ACCESS

**5.1 Access to Premises:** T&D Manager shall have access to the disconnect switch of the Unit at all times. At reasonable hours and upon reasonable notice consistent with Section III of this Agreement, or at any time without notice in the event of an emergency (as defined in paragraph 4.1), T&D Manager and LIPA shall have access to the Premises.

**5.2 Company and Interconnection Customer Representatives:** T&D Manager shall designate, and shall provide to the Interconnection Customer, the name and telephone number of a representative or representatives who can be reached at all times to allow the Interconnection Customer to report an emergency and obtain the assistance of T&D Manager. For the purpose of allowing access to the premises, the Interconnection Customer shall provide T&D Manager with the name and telephone number of a person who is responsible for providing access to the Premises.

**5.3 Company Right to Access Company-Owned Facilities and Equipment:** If necessary for the purposes of this Agreement, the Interconnection Customer shall allow LIPA or T&D Manager access to LIPA's equipment and facilities located on the Premises. To the extent that the Interconnection Customer does not own all or any part of the property on which LIPA is required to locate its equipment or facilities to serve the Interconnection Customer under this Agreement, the Interconnection Customer shall secure and provide in favor of LIPA or T&D Manager the necessary rights to obtain access to such equipment or facilities, including easements if the circumstances so require.

### VI. DISPUTE RESOLUTION

**6.1 Good Faith Resolution of Disputes:** Each Party agrees to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner.

**6.2 Mediation:** If a dispute arises under this Agreement, and if it cannot be resolved by the Parties within ten (10) Business Days after written notice of the dispute, the parties agree to submit the dispute to mediation by a mutually acceptable mediator, in a mutually convenient location in New York State, in accordance with the then current CPR Institute for Dispute Resolution Mediation Procedure. The Parties agree to participate in good faith in the mediation for a period of up to ninety (90) days.

**6.3 Escrow:** If there are amounts in dispute of more than two thousand dollars (\$2,000), the Customer shall either place such disputed amounts into an independent escrow account pending final resolution of the dispute in question, or provide to LIPA an appropriate irrevocable standby letter of credit in lieu thereof; provided however, that an Interconnection Customer that is an agency or instrumentality of the Federal government, or an agency or instrumentality of the New York State government, shall not be required to place such disputed amounts into escrow if the establishment of such an escrow would be inconsistent with applicable Federal or State law or regulations.

### VII. INSURANCE

**7.1 Recommendation for Insurance:** The Interconnection Customer is not required to provide general liability insurance coverage as part of this Agreement, the Smart Grid SGIP, or any other LIPA requirement. Due to the risk of incurring damages however, LIPA recommends that every distributed generation customer protect itself with insurance.

## APPENDIX A

**7.2 Effect:** The inability of LIPA to require the Interconnection Customer to provide general liability insurance coverage for operation of the Unit is not a waiver of any rights LIPA may have to pursue remedies at law against the Interconnection Customer to recover damages.

**7.3** With respect to an Interconnection Customer who owns and/or operates solar, Farm Waste, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell, Wind, or Hybrid Electric Generating Equipment (as these terms are defined in the LIPA Tariff), T&D Manager may require the Interconnection Customer to:

- (i) Comply with additional safety or performance standards in addition to those specified in LIPA's "Smart Grid Small Generator Interconnection Procedures";
- (ii) Perform or pay for additional tests;
- (iii) Purchase additional liability insurance when the total rated generating capacity of the electric generating equipment that provides electricity to LIPA through the same local feeder line exceeds twenty (20%) of the rated capacity of the total feeder line.

## VIII. MISCELLANEOUS PROVISIONS

**8.1 Beneficiaries:** This Agreement is intended solely for the benefit of the parties hereto, and if a party is an agent, its principal. Nothing in this Agreement shall be construed to create any duty to, or standard of care with reference to, or any liability to, any other person. T&D Manager is not a party to this Agreement, and is executing and administering this agreement on behalf of LIPA as LIPA's agent. T&D Manager shall have all rights of a Party hereunder with respect to accuracy of information, Force Majeure, limitations of liability, indemnification, and disclaimers of warranty.

**8.2 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, such portion or provision shall be deemed separate and independent, and the remainder of this Agreement shall remain in full force and effect.

**8.3 Entire Agreement:** This Agreement constitutes the entire Agreement between the parties and supersedes all prior agreements or understandings, whether verbal or written.

**8.4 Waiver:** No delay or omission in the exercise of any right under this Agreement shall impair any such right or shall be taken, construed or considered as a waiver or relinquishment thereof, but any such right may be exercised from time to time and as often as may be deemed expedient. In the event that any agreement or covenant herein shall be breached and thereafter waived, such waiver shall be limited to the particular breach so waived and shall not be deemed to waive any other breach hereunder.

**8.5 Applicable Law:** This Agreement shall be governed by and construed in accordance with the law of the State of New York, without regard to any choice of law provisions. However, if the Interconnection Customer is an agency or instrumentality of the United States Government, this Agreement shall be governed by the applicable laws of the United States of America and, to the extent that there is no applicable or controlling federal law, the laws of the State of New York, without regard to conflicts of law principles.

**8.6 Amendments:** This Agreement shall not be amended unless the amendment is in writing and signed by T&D Manager on behalf of LIPA and the Interconnection Customer.

**8.7 Force Majeure: For purposes of this Agreement.** "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or



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circumstances, but only to the extent they satisfy the preceding requirements: terrorism, acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will 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 will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but 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.

**8.8 Assignment to Corporate Party:** At any time during the term, the Interconnection Customer may assign this Agreement to a corporation or other entity with limited liability, provided that the Interconnection Customer obtains the consent of T&D Manager on behalf of LIPA. Such consent will not be withheld unless T&D Manager on behalf of LIPA can demonstrate that the corporate entity is not reasonably capable of performing the obligations of the assigning Interconnection Customer under this Agreement.

**8.9 Assignment to Individuals:** At any time during the term, an Interconnection Customer may assign this Agreement to another person, other than a corporation or other entity with limited liability, provided that the assignee is the owner, lessee, or is otherwise responsible for the Unit. The obligations under the Appendix A (Long Island Lighting Company D/B/A LIPA Standardized Contract for Interconnection of Distributed Generation and/or Energy Storage Equipment with Capacity of 5 MW or Less Connected in Parallel with the LIPA Distribution Systems), shall be binding on any successor owner of the Unit. If the Unit is sold LIPA may require the new Unit owner to sign an amended agreement.

**8.10 Permits and Approvals:** Interconnection Customer shall obtain all environmental and other permits lawfully required by governmental authorities prior to the construction and for the operation of the Unit during the term of this Agreement.

## APPENDIX A

**8.11 Limitation of Liability:** Neither by inspection, if any, or non-rejection, nor in any other way, does LIPA or T&D Manager give any warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Interconnection Customer or leased by the Interconnection Customer from third parties, including without limitation the Unit and any structures, equipment, wires, appliances or devices appurtenant thereto.

### ACCEPTED AND AGREED:

**Long Island Electric Utility Service LLC  
acting as agent of and on behalf of  
Long Island Lighting Company d/b/a LIPA**

**[Customer]**

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Print)

Name: \_\_\_\_\_  
(Print)

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

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

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

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

## APPENDIX B

### Appendix B - Standardized Application For Inverter Based Systems

**LONG ISLAND LIGHTING COMPANY D/B/A LIPA  
STANDARIZED APPLICATION  
FOR  
INTERCONNECTION OF INVERTER BASED DISTRIBUTED GENERATION AND ENERGY  
STORAGE EQUIPMENT  
IN PARALLEL WITH THE LIPA DISTRIBUTION SYSTEM**

**CHECK IF:** Standard SGIP Project \_\_\_\_\_ or Feed in Tariff Project \_\_\_\_\_

**Customer:**

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

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

LIPA Account Number: \_\_\_\_\_

**Installation Address** (Street, City, State, ZIP): \_\_\_\_\_

**Applicant Organization:** \_\_\_\_\_

Applicant Contact: \_\_\_\_\_ Title: \_\_\_\_\_

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

**Agent (if any):** \_\_\_\_\_

**Agent Organization:** \_\_\_\_\_

**Agent Contact:** \_\_\_\_\_ Title: \_\_\_\_\_

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

**Consulting Engineer or Contractor:**

**Organization:** \_\_\_\_\_

**Contact:** \_\_\_\_\_ Title: \_\_\_\_\_

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

**Estimated In-Service Date:** \_\_\_\_\_

**Electric Service: Indicate if Existing** \_\_\_\_\_ or New Service \_\_\_\_\_

Capacity: \_\_\_\_\_ Amperes \_\_\_\_\_ Voltage: \_\_\_\_\_ Volts Service Character: ( ) Single Phase ( )

Three Phase Secondary 3 Phase Transformer Connection ( ) Wye ( ) Delta

## APPENDIX B

**Location of Protective Interface Equipment on Property:** (include address if different from customer address) \_\_\_\_\_

### Solar Panel Information:

Panel Manufacturer: \_\_\_\_\_

Model No. \_\_\_\_\_ Version No. \_\_\_\_\_

Panel Power Rating: \_\_\_\_\_ kW (DC)

Quantity of Panels: \_\_\_\_\_

Total Rated Output: \_\_\_\_\_ kW (DC)

### Energy Storage System Information:

Manufacturer: \_\_\_\_\_

Model No: \_\_\_\_\_

Total rating KW (AC): \_\_\_\_\_

Total Rating KWH : \_\_\_\_\_

### Inverter Information:

Manufacturer: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Model No: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Inverter Rating kW (AC): \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Quantity of Inverters \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Total Rating of All Inverters kW (AC): \_\_\_\_\_

System Total Output \_\_\_\_\_ kW AC (System Total Output should be Total Rating of All Inverters)

Type: ☐ Forced Commutated ☐ Line Commutated

☐ Utility Interactive ☐ Stand Alone

System Type Tested (Total System): ☐ Yes ☐ No; attach product literature

Ramp Rate: \_\_\_\_\_

Method of Grounding: ☐ Grounded ☐ Ungrounded

Interconnection Voltage: \_\_\_\_\_ Volts

### Applicable Attachments:

Detailed One Line Diagram attached ☐ Yes

If applicable, NRTL/UL 1741 Certification attached: ☐ Yes

## APPENDIX B

If applicable:

Step Up Transformer Winding Configuration::

( ☐ ) Delta ( ☐ ) Wye ( ☐ ) Wye Grounded

Other existing DG such as emergency generators, other renewable technologies, microturbines, hydro, fuel cells, battery storage, etc:

( ☐ ) Yes ( ☐ ) No

(If yes, provide information about existing generation on separate sheet and include detail on one-line diagram.)

_____	_____	_____	CUSTOMER/AGENT
SIGNATURE	TITLE	DATE	

## APPENDIX C

### Appendix C - Standardized Application For Non-Inverter Based Systems

**LONG ISLAND LIGHTING COMPANY D/B/A LIPA  
STANDARIZED APPLICATION  
FOR INTERCONNECTION OF NON-INVERTER BASED DISTRIBUTED GENERATION  
EQUIPMENT  
IN PARALLEL WITH THE LIPA DISTRIBUTION SYSTEM**

**CHECK IF: Standard SGIP Project \_\_\_\_\_ or Feed in Tariff Project \_\_\_\_\_**

**Customer:**

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

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

LIPA Account Number: \_\_\_\_\_ **Installation Address** (Street, City,

State, ZIP): \_\_\_\_\_ **Applicant Organization:** \_\_\_\_\_

Applicant Contact: \_\_\_\_\_ Title: \_\_\_\_\_

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

**Agent (if any):**

**Agent Organization:** \_\_\_\_\_

**Agent Contact:** \_\_\_\_\_ Title: \_\_\_\_\_

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

**Consulting Engineer or Contractor:**

**Organization:** \_\_\_\_\_

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

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

**Estimated In-Service Date:** \_\_\_\_\_

**Electric Service: Indicate if Existing \_\_\_\_\_ or New Service \_\_\_\_\_**

Capacity: \_\_\_\_\_ Amperes \_\_\_\_\_ Voltage: \_\_\_\_\_ Volts Service Character: ( ) Single Phase ( ) Three Phase Secondary 3 Phase Transformer Connection ( ) Wye ( ) Delta

**Location of Protective Interface Equipment on Property:** (include address if different from customer address) \_\_\_\_\_

## APPENDIX C

### Energy Producing Equipment Information:

Manufacturer:

Model No.:

Version No.:

( ) Synchronous ( ) Induction ( ) Other (Define) \_\_\_\_\_

Rating: \_\_\_\_\_ kW Rating: \_\_\_\_\_ kVA

Rated Output: \_\_\_\_\_ VA Rated Voltage: \_\_\_\_\_ Volts

Rated Frequency: \_\_\_\_\_ Hz Rated Speed: \_\_\_\_\_ RPM

Efficiency: \_\_\_\_\_ % Power Factor: \_\_\_\_\_ %

Rated Current: \_\_\_\_\_ Amps Locked Rotor Current: \_\_\_\_\_ Amps

Synchronous Speed: \_\_\_\_\_ RPM Winding Connection: \_\_\_\_\_

Min. Operating Freq. /Time: \_\_\_\_\_

Generator Connection: ( ) Delta ( ) Wye ( ) Wye Grounded

System Tested to UL 1741 (most current version) (Total System):

( ) Yes ( ) No If no, attach product literature.

Equipment Tested to UL 1741 (most current version) (i.e., Protection System):

( ) Yes ( ) No

If no, attach product literature.

Three Line Diagram attached: ( ) Yes

Verification Test Plan attached: ( ) Yes

If applicable, Certification to UL 1741 attached: ( ) Yes

System total size \_\_\_\_\_kW AC

### For Synchronous Machines

Submit copies of the Saturation Curve and the Vee Curve

( ) Salient ( ) Non-Salient

Torque: \_\_\_\_\_ lb-ft Rated RPM:

Field Amperes: \_\_\_\_\_ at rated generator voltage and current and \_\_\_\_\_ % PF over-excited

Type of Exciter: \_\_\_\_\_

Output Power of Exciter: \_\_\_\_\_

Type of Voltage Regulator: \_\_\_\_\_

Direct-axis Synchronous Reactance ( $X_d$ ): \_\_\_\_\_ ohms

Direct-axis Transient Reactance ( $X'_d$ ) : \_\_\_\_\_ ohms

Direct-axis Sub-transient Reactance ( $X''_d$ ): \_\_\_\_\_ ohms

### For Induction Machines:

## APPENDIX C

Rotor Resistance (Rr): \_\_\_\_\_ ohms      Exciting Current : \_\_\_\_\_ Amps

Rotor Reactance (Xr): \_\_\_\_\_ ohms      Reactive Power Required: \_\_\_\_\_

Magnetizing Reactance (Xm): \_\_\_\_\_ ohms , \_\_\_\_\_ VARs (No Load)

Stator Resistance (Rs): \_\_\_\_\_ ohms , \_\_\_\_\_ VARs (Full Load)

Stator Reactance (Xs): \_\_\_\_\_ ohms

Short Circuit Reactance (X''d) : \_\_\_\_\_ ohms,

Phases: ( ) Single Phase ( ) Three Phase

Frame Size: \_\_\_\_\_ Design Letter: \_\_\_\_\_

Temp. Rise: \_\_\_\_\_ °C

Step Up Transformer Winding Configuration:

( ) Wye-Wye      ( ) Wye-Delta      ( ) Delta-Wye

Other existing DG such as emergency generators, other renewable technologies, microturbines, hydro, fuel cells, battery storage, etc:

( ) Yes      ( ) No

(If yes, provide information about existing generation on separate sheet and include detail on one-line diagram.)

Signature:

\_\_\_\_\_  
CUSTOMER/AGENT SIGNATURE

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
DATE



## APPENDIX D

### Appendix D -Pre-Application Report

#### **PRE-APPLICATION REPORT FOR THE CONNECTION OF PARALLEL GENERATION EQUIPMENT TO LIPA's DISTRIBUTION SYSTEM**

<b>DG Project Information: (Provided to Utility by Applicant)</b>
Customer name
Location of Project: (Address and/or GPS Coordinates)
DG technology type
DG fuel source / configuration
Proposed project size in kW (AC)
Date of Pre-Application Request
<b>Pre-Application Report: (Provided to Applicant by Utility – 10 Business Days)</b>
Operating voltage of closest distribution line
Phasing at site
Approximate distance to 3-Phase (if only 1 or 2 phases nearby)
Circuit capacity (MW)
Fault current availability, if readily obtained
Circuit peak load for the previous calendar year
Circuit minimum load for the previous calendar year
Approximate distance (miles) between serving substation and project site
Number of substation banks
Total substation bank capacity (MW)
Total substation peak load (MW)
Aggregate existing distributed generation on the circuit (kW)
Aggregate queued distributed generation on the circuit (kW)

## APPENDIX E

### Appendix E -Costs

#### **COST RESPONSIBILITY FOR DEDICATED TRANSFORMER(S) AND OTHER SAFETY EQUIPMENT FOR NET METERED CUSTOMERS**

Customer Cost Responsibility will be per LIPA Tariff for Electric Service. Such costs can include the total costs for upgrades to ensure the adequacy of the transmission and/or distribution system which would not have been necessary but for the interconnection of the ~~net-metered~~ DG resource.

## APPENDIX F

### Appendix F -Application Checklist

Completed standard application form	✓
Signed copy of the standard contract	✓
Letter of authorization, signed by the Customer, to provide for the contractor to act as the customer's agent, if necessary	✓
If requesting a new service, a site plan with the proposed interconnection point identified by a Google Earth, Bing Maps or similar satellite image. For those projects on existing services, account and meter numbers shall be provided	✓
Description / Narrative of the project and site proposed. If multiple DG systems are being proposed at the same site/location, this information needs to be identified and explained in detail	✓
DG technology type	✓
DG fuel source / configuration	✓
Proposed project size in AC kW	✓
Project is net metered, remote, or community net metered	✓
Metering configuration	✓
Copy of the certificate of compliance referencing UL 1741	✓
Copy of the manufacturer's data sheet for the interface equipment	✓
Copy of the manufacturer's verification test procedures, if required	✓
System Diagram - A three line diagram for designs proposed on three phase systems, including detailed information on the wiring configuration at the PCC and an exact representation of existing utility service. One line diagrams shall be acceptable for single phase installations	✓

## **APPENDIX G**

### **Appendix G – Screening Analysis**

Please refer to PSEG Long Island's Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA's Distribution System for Preliminary Screening Analysis. The document can be found at the following link:

<https://www.psegliny.com/aboutpseglongisland/ratesandtariffs/sgip>

### **SUPPLEMENTAL SCREENING ANALYSIS**

Please refer to PSEG Long Island's Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA's Distribution System for Supplemental Screening Analysis. The document can be found at the following link:

<https://www.psegliny.com/aboutpseglongisland/ratesandtariffs/sgip>

## APPENDIX H

### Appendix H – Property Owner Consent Form

#### New York State Standardized Acknowledgment of Property Owner Consent Form

**Project Name:**

**Location (Installation address):**

**Project/PAM Number (if available):**

(Note: This Acknowledgment is to be signed by the owner of the property where the proposed distributed generation facility and interconnection will be placed, when the owner or operator of the proposed distributed generation facility is not also the owner of the property, and the property owner's electric facilities will not be involved in the interconnection of the distributed generation facility. Property Owner shall attached a copy of Tax Bill/Deed/Lease/Agreement/Other as evidence with this form)

This Acknowledgment is executed by \_\_\_\_\_, (the "Property Owner"; as used herein the term shall include the Property Owner's successors in interest to the Property), as owner of the real property situated in the City/Town of \_\_\_\_\_, \_\_\_\_\_ County, New York, known as \_\_\_\_\_ [street address] (the "Property"), at the request of \_\_\_\_\_ [name of Developer] (the "Developer"; as used herein the term shall include the Developer's successors and assigns).

This Acknowledgment does not grant or convey any interest in the Property to the Developer.

1. The Property Owner certifies as of the date indicated below that the Property Owner is working exclusively with the Developer on a proposal to install a distributed generation facility (the "Facility") on the Property.

OR

2. The Property Owner certifies as of the date indicated below that the Developer has executed with the Property Owner one of the following: a signed option agreement to lease or purchase the Property, an executed Property lease, or an executed purchase agreement for the Property granting the Developer a right to use the Property for purposes of installing the Facility.

Property Owner:

Developer/Applicant:

By: \_\_\_\_\_

By: \_\_\_\_\_ Name: \_\_\_\_\_

\_\_\_\_\_

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

\_\_\_\_\_

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

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

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

## APPENDIX I

### Appendix I – Moratorium Attestation Form

#### New York State Standard Moratorium Attestation Form

PSEG Long Island  
Manager of Power Asset Management  
175 E Old Country Road  
Hicksville, New York 11801

<b>Re:</b>	DEVELOPER	[name]
		[contact information]
	PROJECT	[Project/PAM number]
	PROPERTY	[street address]
		[municipality/county]
		[city/town and zip code]

\_\_\_\_\_ [DEVELOPER NAME] hereby attests that it will notify the  
interconnecting utility identified above of the date that the moratorium on solar development in  
\_\_\_\_\_ [MUNICIPALITY NAME] is lifted.

By signing below, Developer confirms that this attestation is true and correct.

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

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

### **Appendix J – Energy Storage System (ESSs) Application Requirements**

#### **Energy Storage System (ESS) Application Requirements / System Operating Characteristics / Market Participation**

##### **Application Requirements:**

- a. Provide a general overview / description and associated scope of work for the proposed project. Is the new ESS project associated with a new or existing DG facility?
- b. Identify whether this is a Stand-Alone or Hybrid ESS proposal; or a change to the operating characteristics of an existing system.
- c. Indicate the type of Energy Storage (ES) technology to be used. For example, NaS, Dry Cell, PB-acid, Li-ion, vanadium flow, etc.
- d. Indicate how the ESS will be charged and/or act as a load: (1) Electrical Grid Only, (2) Unrestricted charging from Electrical Grid and/or DG system, (3) Restricted charging from Electrical Grid and/or DG Systems, or (4) charging from DG only.
- e. If the intended use case for the ES includes behind-the-meter backup services, please provide a description and documentation illustrating how the entire system disconnects from utility during an outage (e.g. mechanical or electronic, coordination, etc.).
- f. Provide the data sheet for the battery portion of the energy storage equipment. including the model, capacity (kWh), and manufacturer
- g. Provide specification data/rating sheets including the manufacturer, model, and nameplate ratings (kW) of the inverter(s)/converters(s) for the energy storage and/or DG system.
- h. Indicate any impacts of ambient temperatures on charging and discharging capabilities, specifically noting any restrictions on available capacity as a function of temperature and listed on the system facility's nameplate.
- i. Provide details on cycling (anticipated maximum cycles before replacement), depth of discharge restrictions, and overall expected lifetime regarding the energy storage components.
- j. Provide proposed inverter(s) power factor operating range and whether inverter(s) are single quadrant, two-quadrant, or four-quadrant operation.
- ~~k. Provide specification data/rating sheets including the manufacturer, model, and nameplate ratings (kW) of the inverter(s)/converters(s) for the energy storage and/or DG system.~~
- l.k. Provide details on whether the inverter(s)/converter(s) have any intrinsic grid support functions, such as autonomous or interactive voltage and frequency support. If they do, please describe these functions and default settings.
- ~~m.l.~~ l. Indicate whether the ES and DG system inverter(s)/converter(s) are DC-coupled or AC-coupled.
- ~~m.m.~~ m. Indicate whether the system inverter(s)/converter(s) is/are listed on the NY DPS "Certified Interconnection Equipment List"
  - a. If the interconnected inverter(s)/converter(s) are not listed on the "Certified

## APPENDIX J

Interconnection Equipment List” but are certified, provide a copy of the certificate of compliance.

- b. If the interconnected inverter(s)/converter(s) are not listed on the “Certified Interconnection Equipment List, or the storage and paired DG are AC coupled, please detail the use of control systems such as utility grade relays including AC and DC control schematics and relay logic.
  - c. If the interconnected inverter(s)/converter(s) are not listed on the “Certified Interconnection Equipment List”, please detail the verification of protection operation in equivalent deployments of the equipment configuration. For example, if this exact configuration has been previously deployed, please describe the project and reference the commissioning/test report.
  - d. Identify if inverter analytical models are available for use in the utility’s power flow analysis program, and if there are any restrictions on their use.
- ~~g-n~~. Indicate whether the interconnected inverters inverter(s)/converter(s) is/are compliant to the latest versions of the following additional standards. If partially compliant to subsections of the latest standards, please list those subsections:
- 1. IEEE 1547a
  - 2. UL 1741 and its supplement SA
- ~~p-o~~. If the interconnected inverter(s)/converters are not compliant with the previously listed additional standards, please describe show utility grade protection, relay and controls are implemented between your hardware and the utility.
- ~~q-p~~. Detail any integrated protection that is included in the interconnected inverter(s)/converters. For example, describing over/under-voltage/current frequency behavior and reconnection behavior would comply, such as solid state transfer switching or other.

### System Operating Characteristics:

- a. Identify the maximum nameplate rating in kW ac for each source (storage, any paired inverter-based distributed generation).
- b. Identify the maximum net export and import of the Hybrid or Stand-Alone system in kW ac
- c. Indicate the maximum ramp rates during charging and discharging.
- d. Indicate the maximum frequency of change of operating modes (i.e. charging to discharging and vice-versa) that will be allowed based upon control system configurations
- e. Indicate any specific and/or additional operational limitations that will be imposed (e.g. will not charge between 2-7pm on weekdays).
- f. Provide a summary of protection and control scheme functionality and provide details of any integrated protection of control schematics and default settings within controllers.
- g. Provide descriptions of any software functionality that enables intelligent charging and discharging of the ESS using interconnected DG, such as PV. For example, if the ESS can be charged only through the DG input, or if the ESS can be switched to be charged from the line input, provide those details in a sequence of operations. Provide details on grounding of the interconnected energy storage and/or DG system to meet utility effective grounding requirements.
- h. Provide short circuit current capabilities and harmonic output from the Hybrid Project or



## APPENDIX J

- stand-alone storage system
- i. Provide details on standard communication hardware interfaces that are available, e.g., TCP/IP, serial, etc.
  - j. Provide details on standard communication protocols that are available, e.g., MODBUS, DNP-3, 2030.5, etc.
  - k. Provide details on standard communication data models that are available, e.g., 61850-90- 7, SunSpec, MESA, etc.

### Market Participation:

- a. Will the system operate in the NYISO markets? If yes, please specify.
- b. Will the system be compensated under a utility tariff(s)? If yes, please specify.

The market participation information is non-binding; however, the operating characteristics as defined above will be used for technical study.

Date:

## APPENDIX K

### Appendix K – Project Construction Schedule

Applicant Name:

Project/PAM Number:

Developer:

\*This Interconnection schedule depends upon receipt of funds along with notification to proceed, executed Interconnection Agreement, weather, equipment delivery, public opposition to right-of-way and timely Customer design submittals. Close coordination is required to sequence construction and planned interruption events. As a result, any final schedule requires mutual agreement and would be subject to change.

Milestone	Estimated Time Duration to Completion (Weeks)	Responsible Party
30 % Payment		Interconnection Customer
Administrative Setup		PSEG Long Island
Customer Submittals One Line and Three Line Diagrams Stamped Site Plans		Interconnection Customer
Review of drawings, shop drawings and Relay Setting		PSEG Long Island
Design Queue		PSEG Long Island
Permitting/Easements		PSEG Long Island
Upgrade Design – Line/POI/Substation Design		PSEG Long Island: Complete design to the point of material ordering
Progress Payment**		Interconnection Customer
Scheduling/Procurement		PSEG Long Island
Construction – Line/POI/Substation		PSEG Long Island / <u>Interconnection customer</u>
Verification Test Coordination Customer Witness Testing Energization/Permission to Operate		PSEG Long Island / <u>Interconnection customer</u> <i>Customer submittals required to be <u>approved to schedule test</u></i>
Total Project Duration		PSEG Long Island /Interconnection Customer

- a. \*\*The sequence of Milestone schedule might change for Non-CESIR projects.

## APPENDIX L

### **Appendix L – Small Generator Certificate Of Completion**

Is the Small Generator unit owner-installed? Yes \_\_\_\_\_ No \_\_\_\_\_

Installed System Total Output: \_\_\_\_\_ kW DC and \_\_\_\_\_ kW AC

Installed Energy Storage Total Output: \_\_\_\_\_ kW AC and \_\_\_\_\_ kWh

Interconnection Customer: \_\_\_\_\_

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

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

Location of the Small Generator (if different from above):  
\_\_\_\_\_

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

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

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

Electrician:

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

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

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

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

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

License number: \_\_\_\_\_

Date Approval to Install Facility granted by LIPA: \_\_\_\_\_

Application PAM ID number: \_\_\_\_\_

Inspection:

The Small Generator has been installed and inspected in compliance with the local

building/electrical code of \_\_\_\_\_

Signed (Local electrical wiring inspector, or attach signed electrical inspection):  
\_\_\_\_\_

Print Name: \_\_\_\_\_

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

**APPENDIX M  
INTERCONNECTION AGREEMENT  
FOR A SYSTEM  
GREATER THAN 5 MW AND LESS THAN 10 MW**

**Appendix M - Interconnection Agreement For A System  
Greater Than 5 MW And Less Than 10 MW**

**INTERCONNECTION AGREEMENT  
FOR A SYSTEM  
GREATER THAN 5 MW AND LESS THAN 10 MW  
AT [ADDRESS]**

**BETWEEN**

**LONG ISLAND LIGHTING COMPANY D/B/A LIPA**

**AND**

**[PARTY NAME]**

**APPENDIX M**  
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**FOR A SYSTEM**  
**GREATER THAN 5 MW AND LESS THAN 10 MW**

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**APPENDIX M**  
**INTERCONNECTION AGREEMENT**  
**FOR A SYSTEM**  
**GREATER THAN 5 MW AND LESS THAN 10 MW**

THIS INTERCONNECTION AGREEMENT (this “Agreement”) is made and entered into this \_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ by and between Long Island Lighting Company doing business as LIPA (“LIPA”), a corporation organized under the laws of the State of New York and a wholly-owned subsidiary of Long Island Power Authority (“Authority”) which is a corporate municipal instrumentality and political subdivision of the State of New York, each with its headquarters at 333 Earle Ovington Boulevard, Uniondale, New York 11553 and [PARTY NAME] organized under the laws of the State of [\_\_\_\_\_] (“Generator”), with its offices at [PARTY ADDRESS]. LIPA and Generator may be jointly referred to in this Agreement as the “Parties,” or individually as a “Party.” T&D Manager is not a party to this Agreement and is executing this Agreement solely on behalf of and as agent for LIPA.

WHEREAS, LIPA owns electric facilities and is engaged in the generation, transmission, distribution, and sale of electric energy in the State of New York; and

WHEREAS, T&D Manager is LIPA’s agent, will administer this Agreement and shall be LIPA’s representative in all matters related to this Agreement, including all attached exhibits as applicable; and

WHEREAS, Generator intends to construct, own, operate, and maintain (or cause to be constructed, operated, and maintained) an electric power generation facility (the “Plant”) to be located at [ADDRESS]; and

WHEREAS, Generator desires to interconnect the Plant with LIPA’s System; and

WHEREAS, LIPA desires to interconnect LIPA’s System with the Plant;

NOW THEREFORE, in consideration of the mutual covenants and promises set forth below, and for other good and valuable consideration, the receipt, sufficiency, and adequacy of which are hereby acknowledged, the Parties, intending to be legally bound, hereby covenant, promise, and agree as follows:

**ARTICLE 1**  
**CONSTRUCTION AND DEFINITIONS**

1.1 Construction. Any references herein to this Agreement, or to any other agreement, shall include any exhibits, attachments, and addenda hereto and amendments thereto, as the same may be amended from time to time.

1.2 Definitions. Any term used in this Agreement and not defined herein shall have the meaning customarily attributed to such term by the electric utility industry in the State of New York. When used with initial capitalization, unless otherwise defined herein, whether singular or plural, the following terms, as used in this Agreement, shall have the meanings as set forth below:

“**Affiliate**” means any other entity directly or indirectly controlling or controlled by or under direct or indirect common control of a specified party. For purposes of this definition, “control” means the power to direct the management and policies of such entity or specified party, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise. A voting interest of ten percent (10%) or more shall create a rebuttable presumption of control. The Parties acknowledge that the T&D Manager shall not be construed to be an Affiliate of LIPA as such term is defined and used herein.

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**“Agreement”** shall have the meaning identified in the Preamble and shall include all exhibits, schedules, appendices, and other attachments hereto and amendments thereto that may be made from time to time pursuant to the terms of this Agreement.

**“Arbitrators”** shall have the meaning set forth in Section 10.4 of this Agreement.

**“Authority”** shall have the meaning set forth in the Preamble, including its successors and assigns as permitted hereunder.

**“Business Day”** means any day on which the Federal Reserve Member Banks in New York City are open for business, and shall extend from 8:00 a.m. until 5:00 p.m. local time for each Party’s principal place of business.

**“Commercial Operation Date”** means the date on which the Plant has successfully completed its Performance Test and all tests required in accordance with NYISO procedures to provide Output in the corresponding NYISO markets in accordance with the applicable rules promulgated by the NYISO, and is available and capable of delivering Output pursuant to the terms of this Agreement.

**“Confidential Information”** shall have the meaning set forth in Section 15.1 of this Agreement.

**“Cure Plan”** shall have the meaning set forth in Section 9.2(b)(ii) of this Agreement.

**“Date of Initial Interconnection”** means the date on which the Plant is first electrically interconnected to LIPA’s System, which is intended to occur on or before [DATE].

**“Demarcation Point”** means the point of electrical interconnection between Generator’s Interconnection Facilities and LIPA’s Interconnection Facilities, located at [ADDRESS], as set forth in Exhibit A hereto.

**“Disclosing Party”** shall have the meaning set forth in Section 15.1 of this Agreement.

**“Energy Storage System”** means a commercially-available mechanical, electrical or electro-chemical means to store and release electrical energy, and its associated electrical inversion device and control functions that may stand-alone or be paired with a distributed generator at a point of common coupling.

**“Environmental Law”** means all former and current federal, state, local, and foreign laws (including common law), treaties, regulations, rules, ordinances, codes, decrees, judgments, directives or orders (including consent orders) and Environmental Permits, in each case, relating to pollution or protection of the environment or natural resources, including laws relating to Releases or threatened Releases, or otherwise relating to the generation, manufacture, processing, distribution, use, treatment, storage, arrangement for disposal, transport, recycling or handling of Hazardous Substances.

**“Environmental Permits”** means the permits, licenses, consents, approvals and other governmental authorizations, with respect to Environmental Laws relating primarily to the operation of the Plant.



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**“Event of Default”** shall have the meaning set forth in Section 9.1 of this Agreement.

**“FERC”** means the Federal Energy Regulatory Commission or any successor agency thereto.

**“FOIL”** shall have the meaning set forth in Section 15.3 of this Agreement.

**“Force Majeure Event”** shall have the meaning set forth in Article 12 of this Agreement.

**“Generator”** shall have the meaning set forth in the Preamble, including its successors and assigns as permitted hereunder. Generator means the distributed generation facilities and Energy Storage System approved by the T&D Manager with a nameplate capacity of 10 MW or less located on the Interconnection Customer’s premises at the time T&D Manager approves such generator for operation in parallel with LIPA’s system. This Agreement relates only to such generator. The nameplate generating and energy storage capacity shall not exceed 10 MW in aggregate.

**“Generator’s Interconnection Facilities”** means all facilities and equipment identified on Exhibit A, that are located between the Plant and the Demarcation Point, including any modification, addition, upgrades or replacement of such facilities and equipment, necessary to Interconnect the Plant with LIPA’s System. Generator’s Interconnection Facilities are sole use facilities.

**“Good Utility Practice”** means any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry in the State of New York during the term of this Agreement, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time a decision is made, could have been expected to accomplish the desired results at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practices is not intended to be limited to the optimum practice, method or act to the exclusion of all others, but rather to delineate acceptable practices, methods or acts generally accepted by a significant portion of the electric utility industry operating in the State of New York.

**“Hazardous Substance”** means (i) any petrochemical or petroleum products, crude oil or any fraction thereof, ash, radioactive materials, radon gas, asbestos in any form, urea formaldehyde foam insulation or polychlorinated biphenyls, (ii) any chemicals, materials, substances or wastes defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “contaminants” or “pollutants” or words of similar meaning and regulatory affect contained in any Environmental Law or (iii) any other chemical, material, substance or waste which is prohibited, limited or regulated by any Environmental Law.

**“Indemnified Party”** shall have the meaning set forth in Section 11.1 of this Agreement.

**“Indemnifying Party”** shall have the meaning set forth in Section 11.1 of this Agreement.

**“Interconnection”** means the electrical interconnection of the Plant with LIPA’s System.

**“Interconnection Customer”** means the owner of the Generator or any entity that proposes to interconnect with LIPA’s Distribution System.

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**“Interconnection Facilities”** means Generator’s Interconnection Facilities, if any, and LIPA’s Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Plant and the Point of Attachment, including any modifications, additions, upgrades or replacements that are necessary to physically and electrically interconnect the Plant to LIPA’s System. Interconnection Facilities are sole use facilities and shall not include additions, modifications or upgrades to LIPA’s System.

**“Interest Rate”** shall have the meaning set forth in Section 3.4 of this Agreement.

**“Lenders”** means any Person, or agent or trustee of such Person, who provides financing for the Plant.

**“LIPA”** shall have the meaning set forth in the Preamble, including its successors and assigns as permitted hereunder.

**“LIPA’s System”** means the electric transmission and distribution system owned by LIPA and consisting of all real and personal property, equipment, machinery, tools and materials, and other similar items relating to the transmission and distribution of electricity to LIPA’s customers.

**“LIPA’s Interconnection Facilities”** means all facilities and equipment identified on Exhibit A, that are located between the Demarcation Point and the Point of Attachment, including any modifications, additions, upgrades or replacements of such facilities and equipment. LIPA’s Interconnection Facilities are sole use facilities and shall not include additions, modifications or upgrades to LIPA’s System.

**“Metering Devices”** means all meters, metering equipment, data processing equipment, and associated equipment used to measure, record or transmit data relating to the provision and transmission of Output from LIPA’s System to customers pursuant to the terms of this Agreement.

**“NYCA”** means the New York Control Area.

**“NYISO”** means the New York Independent System Operator or any successor thereto that administers the wholesale electricity markets in the State of New York substantially as a whole, including without limitation, any regional transmission organization so authorized by the FERC.

**“Other Party Group”** shall have the meaning set forth in Section 11.10. (e) of this Agreement.

**“Output”** means collectively, the capacity, energy, and ancillary services produced by the Plant.

**“Party”** or **“Parties”** shall have the meaning set forth in the Preamble, together with any successor or assign, as permitted hereunder, of either.

**“Plant”** shall have the meaning set forth in the Recitals, including the balance of plant equipment, fuel handling facilities, step-up transformer(s), output breakers, and necessary generation and transmission lines to connect to the Demarcation Point, and associated protective equipment.

**“Performance Test”** means the performance tests as more fully described in Exhibit J (D) hereto.

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**“Point of Attachment”** means the point, as set forth in Exhibit J (A), where the Interconnection Facilities connect to LIPA’s System.

**“Project Site”** means that parcel of land where the Plant is located and described in the attached Appendix A; and located in [ADDRESS].

**“Receiving Party”** shall have the meaning set forth in Section 15.1(a) of this Agreement.

**“Records”** shall have the meaning set forth in Section 16.3 of this Agreement.

**“Release”** means any actual or threatened release, spill, emission, emptying, escape, leaking, dumping, injection, pouring, deposit, disposal, discharge, dispersal, leaching or migration into the environment or within any building, structure, facility or fixture.

**“RTO”** means any regional transmission organization/independent transmission operator or organization, which is approved by the FERC pursuant to FERC Order No. 2000.

**“Statute”** shall have the meaning set forth in Section 16.3 of this Agreement.

**“Summer Season”** means, after the Commercial Operation Date, each of the periods from June 1 through September 30 of any year during the term of this Agreement.

**“System Emergency”** means the existence of a physical or operational condition or the occurrence of an event which, at the time of such occurrence or event that: (i) in the judgment of the Party making the claim, is imminently likely to endanger life or property, or (ii) in the case of LIPA, impairs or will imminently impair the safety and/or reliability of LIPA’s System or LIPA’s Interconnection Facilities, or (iii) in the case of Generator, impairs or will imminently impair the safety and/or reliability of the Plant or Generator’s Interconnection Facilities. System restoration and black start are part of a System Emergency, provided that Generator is not obligated to possess black start capability.

**“System Pre-Emergency”** means the existence of a physical or operational condition or the occurrence of an event which, at the time of such occurrence or event, could reasonably be expected, if permitted to continue, to lead to a System Emergency.

**“T&D Manager”** means PSEG Long Island LLC through its operating subsidiary Long Island Electric Utility Servco LLC, which has managerial responsibility for the day-to-day operation and maintenance of, and capital investment to, the electric transmission and distribution system owned by LIPA, pursuant to that Amended and Restated Operations Services Agreement, dated as of December 31, 2013, as amended from time to time (the “OSA”) or any other similar agreement or arrangement or any successor or assignee thereof providing certain operational, maintenance and other services to LIPA.

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**ARTICLE 2**  
**TERM**

This Agreement shall become effective (the “Effective Date”) upon execution by both Parties, and shall remain in full force and effect, subject to termination as provided herein, for a period of ten (10) years from the Effective Date or such other longer period as the Generator may request and shall be automatically renewed for each successive one-year period thereafter. Generator shall have the right to cease operation of the Plant and terminate this agreement upon thirty (30) days’ notice to LIPA. Either Party may terminate this Agreement in accordance with Article 9.

**ARTICLE 3**  
**BILLING AND PAYMENT**

3.1. Billing Procedures. Within twenty (20) Business Days after the first (1st) day of each month, each Party shall prepare an invoice for any outstanding and due costs, fees or other payments owed it by the other Party pursuant to this Agreement or otherwise subject to reimbursement by Generator. Each invoice shall delineate the month in which such costs or services were incurred or provided, shall fully describe the costs or services incurred or rendered, and shall be itemized to reflect the incurrence of such costs and the provision of such services. Each Party shall pay the undisputed invoiced amount, if any, to the other Party on or before the thirtieth (30) day following receipt of the other Party’s invoice. Payment of invoices by either Party shall not relieve the paying Party from any responsibilities or obligations it has under this Agreement, nor shall it constitute a waiver of any claims arising hereunder nor shall it prejudice either Party’s right to question the correctness of such billing.

3.2 Billing Payment Addresses

- i. T&D Manager:  
PSEG Long Island  
Power Asset Management (PAM)  
175 East Old Country Road  
Hicksville, New York 11801  
Attention: Manager, PSEG Long Island Power Asset Management

With a copy to LIPA:  
Long Island Power Authority  
333 Earle Ovington Boulevard, Suite 403  
Uniondale, New York 11553  
Attention: Vice President of Power Markets

- ii. Generator:  
[NAME]  
[ADDRESS]  
Attention:  
Fax: \_\_\_\_\_

or such other and different addresses as may be designated in writing by the Parties.

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3.3 Billing Disputes.

- (a) Notice. A Party receiving any invoice from the other Party shall examine same to ensure that it has been calculated correctly, and shall promptly notify the billing Party of any errors therein which the receiving Party in good faith believes have been made, along with the facts providing the basis for such belief. The billing Party will promptly review such complaint and reply to the specific claims made by the receiving Party.
- (b) Dispute Resolution. If the Parties are unable to settle the contested portion of any invoice, such dispute shall be settled in accordance with Article 10.
- (c) Obligation to Pay Uncontested Amounts. The existence of a dispute with regard to any payment due shall not relieve the indebted Party of any obligation to timely pay any uncontested amounts due under this Agreement or from fulfilling any other obligation under this Agreement.
- (d) Payment of Disputed Amounts. Upon resolution of a dispute in respect to any disputed amount, a party shall pay interest on any unpaid amount determined to be owed to the other party from the date due under the original invoice until date of payment. Such interest shall be computed at the effective interest rate as established by Section 2880 of the Public Authorities Law of the State of New York, and any successor thereto (the "Interest Rate").
- (e) Deadline for Disputing Amounts. Except in instances where it is demonstrated that fraud hindered the discovery of billing errors, any claims for adjustments must be made within two (2) years of when the invoice was issued.

3.4 Interest. If either Party fails to make any payment required by this Agreement when due, including contested portions of invoices, or if due to an incorrect invoice issued by a Party, the other Party may request an overpayment requiring a refund by the billing Party, such amount due shall bear interest at the Interest Rate for each day from the due date of the payment or the date on which the overpayment was made until the date of payment. Payments mailed on or before the due date shall not be charged interest for the period of mailing. If the due date of any payment falls on a Sunday or legal holiday, the next Business Day shall be the last day on which payment can be made without interest charges being assessed.

3.5 Survival. The provisions of this Article 3 shall survive termination, expiration, cancellation, suspension, or completion of this Agreement to the extent necessary to allow for final billing and payment.

**ARTICLE 4**  
**REGULATORY APPROVALS**

4.1 Generator shall be responsible for obtaining and maintaining the effectiveness of all necessary governmental permits required for Generator to construct, operate maintain and replace Generator's Interconnection Facilities. LIPA shall be responsible for obtaining and maintaining the

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effectiveness of all necessary governmental permits required for LIPA to construct, operate, maintain, and replace LIPA's Interconnection Facilities.

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**ARTICLE 5**  
**SALE OF ELECTRICITY**

There shall be no sale of electricity to LIPA under this Agreement.

**ARTICLE 6**  
**INSTALLATION, OPERATION, AND MAINTENANCE**  
**OF THE INTERCONNECTION FACILITIES**

6.1 LIPA shall interconnect the Plant with LIPA's System at the Point of Attachment, permit the Plant to operate in parallel with LIPA's System, and shall provide all services reasonably necessary to achieve these purposes.

6.2 Generator shall be responsible, for (a) all costs of designing, engineering, procuring, constructing, installing, commissioning, testing, operating, maintaining, and replacing the Generator's Interconnection Facilities and for providing data acquisition and control interfaces to permit the safe and reliable operation of the Interconnection Facilities in accordance with Good Utility Practice and the NYISO Tariff and Rules, and (b) all costs of designing, engineering, procuring, constructing, installing, commissioning, testing, operating, maintaining, and replacing LIPA's Interconnection Facilities. An estimate of the initial cost of LIPA's Interconnection Facilities is set forth in Exhibit E. Generator shall reimburse LIPA for all costs of designing, engineering, procuring, constructing, installing, commissioning, testing, and replacing LIPA's Interconnection Facilities. Generator shall reimburse LIPA on a monthly basis for maintenance costs of the Interconnection Facilities in accordance with the applicable Service Classification tariff in LIPA's retail electric tariff (presently Service Classification No.11). LIPA, through its T&D Manager, will invoice Generator for the foregoing costs.

6.3 Generator shall design, engineer, procure, construct, install, commission, test, operate, maintain, and replace Generator's Interconnection Facilities in conformance with: (a) the design specifications, construction standards, performance requirements, and operating standards specified in Appendices B, C, and D to this Agreement; (b) the testing procedures for the Generator's Interconnection Facilities, specified in Exhibit D to this Agreement; (c) all applicable laws, rules and regulations of federal, state and local governmental authorities that have jurisdiction over Generator with respect to the Generator's Interconnection Facilities; (d) Good Utility Practice.

6.4 Generator shall design, engineer, procure, construct, install, commission, test, operate, and maintain the Plant in accordance with: (a) the design specifications, construction standards, performance requirements, and operating standards specified in Appendices B, C, and D to this Agreement; (b) the testing procedures for the Plant, specified in Exhibit D to this Agreement; (c) all applicable laws, rules and regulations of federal, state, and local governmental authorities that have jurisdiction over Generator with respect to the Plant; and (d) Good Utility Practice.

6.5 Prior to the Date of Initial Interconnection, the Parties shall jointly develop detailed testing procedures for the Interconnection Facilities, to the extent any such procedures are not adequately specified as part of the applicable NYISO Tariff and Rules or within Exhibit D.

6.6 Prior to the date of Initial Interconnection, the Parties shall also jointly develop a detailed set of coordinated operating instructions. The operating instructions shall be developed in accordance

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with this Agreement and any other binding agreement between the Parties in effect during operation of the Plant.

6.7 If applicable, LIPA shall undertake design of and performance of verification studies for the Plant.

6.8 In order for LIPA to make a timely assessment of Generator's compliance with the requirements of Section 6.4 of this Agreement, prior to the Date of Initial Interconnection, Generator will submit to LIPA for LIPA's review, engineering drawings of the Plant, including detailed one-line functional relaying drawings, three-line alternate current ("AC") schematics, and all AC and direct current control schematics associated with the Plant. Such engineering drawings shall be of sufficient scope and detail to permit LIPA to reasonably assess Generator's compliance with the design requirements of Section 6.4 of this Agreement. Generator will send final engineering drawings to LIPA at least one (1) month prior to the Date of Initial Interconnection. LIPA shall provide written approval of the final engineering drawings promptly after Generator's submission to LIPA and prior to the Date of Initial Interconnection, which written approval shall not be unreasonably withheld or delayed. The Plant shall not be interconnected with LIPA's System until the Generator's Interconnection Facilities and the Plant have been approved by the New York Board of Fire Underwriters (or other similar body having jurisdiction).

6.9 Generator shall have the right to install its own meters at the Plant and shall maintain them according to Good Utility Practice. Prior to the Commercial Operation Date, Generator shall install, to specifications provided by LIPA and at Generator's expense, adequate metering and communications equipment as described in Appendices A and B. Generator shall pay the monthly charges associated with such communication channel(s).

6.10 Except as otherwise provided herein, each Party shall maintain its equipment and facilities and perform its maintenance obligations that could reasonably be expected to affect the operations of the other Party, according to Good Utility Practice. Unless the Parties mutually agree to a different arrangement, neither Party shall be responsible for performing the maintenance of the other Party's equipment, regardless of the location of said equipment.

6.11 Each Party may request, pursuant to Good Utility Practice, that the other Party test, calibrate, verify or validate its telemetering, data acquisition, protective relay equipment, control equipment or systems, or any other equipment or software pursuant to Good Utility Practice or for the purpose of troubleshooting problems on interconnected facilities, consistent with the other Party's obligation to maintain its electric generation equipment and facilities.. In the event that such testing reveals that no problems exist with the equipment or systems in question, the Party requesting such testing shall be responsible for all costs and expenses related to the requested test(s). Each Party shall be responsible for all costs to test, calibrate, verify or validate its own equipment or software at intervals required by NYISO or any successor RTO. Each Party shall supply the Party requesting the test, at no cost to such Party, with copies of the resulting inspection reports, installation and maintenance documents, test and calibration records, verification and validations of the telemetering, data acquisition, protective relay, or other equipment or software.

6.12 From time to time, modifications may be required of the Interconnection Facilities due to, but not limited to, general usage, unforeseen damage, operating requirements of the Plant, or operating requirements of LIPA's System. When such modifications are required, the Parties will jointly determine



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the reason for the modification. Generator shall be responsible for all costs associated with modifications to the Interconnection Facilities that are required to accommodate the interconnection of Generator's Plant. Any modifications to the Interconnection Facilities during the term of this Agreement must conform to the requirements of Exhibit B to this Agreement.

**ARTICLE 7**  
**ISOLATION RIGHTS**

7.1 LIPA shall be responsible for installing such equipment or control system as determined by LIPA to allow for the disconnection of the Plant from LIPA's System. LIPA shall at all times during the term of this Agreement have access to the disconnect switch as indicated in Exhibit A to this Agreement, to electrically isolate the Plant from LIPA's System pursuant to Section 7.4.

7.2 LIPA shall design, operate, and maintain LIPA's Interconnection Facilities so such equipment or control system automatically disconnects the Plant from LIPA's System in the event of: (a) the occurrence of a fault on that portion of LIPA's System serving the Plant, in accordance with the requirements specified in this Agreement; (b) de-energization of the portion of LIPA's System that interconnects with the Plant; (c) an equipment failure or other condition occurring in the Interconnection Facilities or the Plant which creates or contributes to a System Emergency or System Pre-Emergency.

7.3 LIPA shall design, operate and maintain LIPA's Interconnection Facilities to fail in an open position, so that the Plant and LIPA's System will disconnect if there is any failure of a disconnect device on the Interconnection Facilities.

7.4 LIPA shall give advance notice to Generator of the need for disconnection of the Plant from LIPA's System, and coordinate with Generator on any such disconnection of the Plant, provided however, that LIPA may, in accordance with Good Utility Practice, disconnect the Plant without prior notice to Generator and maintain such disconnection if:

- (a) failing to disconnect the Plant from LIPA's System would create or contribute to a System Emergency or System Pre-Emergency;
- (b) immediate maintenance operations are required on LIPA's System to prevent a System Emergency or System Pre-Emergency; or
- (c) isolation is required to facilitate restoration of system outages or for safety considerations.

7.5 Whenever LIPA disconnects the Plant without prior notice to Generator, LIPA shall provide immediate oral notice, to be followed by written notice to Generator within one (1) day of such disconnection, which oral and written notice shall provide the reason, and, if possible, the expected duration of such disconnection.

7.6 LIPA may also request Generator to disconnect the Plant to perform non- immediate maintenance operations on LIPA's System that (a) are consistent with Good Utility Practice, including disconnecting the Plant in order to interconnect another generator to LIPA's System, and (b) require the Plant to be disconnected in order for LIPA to perform such maintenance on LIPA's System, provided that a minimum of twenty-four (24) hours of advance notice and an estimate of the duration of such

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disconnection are provided to Generator by LIPA. To the extent possible, LIPA will schedule all such maintenance operations of LIPA's System and LIPA's Interconnection Facilities at times that are mutually convenient for LIPA and Generator and in accordance with Good Utility Practice and taking into consideration Generator's schedule of planned outages.

7.7 Following any LIPA disconnection of the Plant, reconnection shall occur when:

- (a) all existing System Emergency or System Pre-Emergency conditions have been corrected; or
- (b) in the case of maintenance required on LIPA's System, such maintenance has been completed; and
- (c) it is safe to do so in accordance with Good Utility Practice.

7.8 Generator shall give advance notice to LIPA of the need for disconnection of the Plant from LIPA's System (other than regularly planned disconnections as required under LIPA Tariff SC-13), and coordinate with LIPA on any such disconnection of the Plant, provided however, that Generator may disconnect the Plant without prior notice to LIPA and maintain such disconnection if:

- (a) failing to disconnect the Plant from LIPA's System would create or contribute to a System Emergency or System Pre-Emergency;
- (b) immediate maintenance operations are required to prevent a System Emergency or System Pre-Emergency; or
- (c) isolation is required for safety considerations.

7.9 Whenever Generator disconnects the Plant without prior notice to LIPA, Generator shall inform LIPA as quickly as possible of the time, reason, and, if possible, the expected duration of such disconnection.

7.10 Following any Generator disconnection of the Plant, reconnection shall occur when:

- (a) all existing System Emergency or System Pre-Emergency conditions have been corrected; or
- (b) in the case of maintenance, such maintenance has been completed; and
- (c) it is safe to do so in accordance with Good Utility Practice.

**ARTICLE 8**  
**INSPECTION AND ACCESS RIGHTS**

8.1 Generator shall provide LIPA with access to the Interconnection Facilities located on the Project Site at reasonable times, including weekends, and upon reasonable prior notice. The notice condition does not apply in the case of a System Emergency, and LIPA shall at all times during the term

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of this Agreement have access to the disconnect switch, as indicated in Exhibit A to this Agreement, to electrically isolate the Plant from LIPA's System pursuant to Article 7.

8.2. While at the Project Site, all representatives of LIPA shall observe such safety precautions as may be required by law or by Generator, and shall conduct themselves in a manner that is consistent with Good Utility Practice and that will not interfere with the operation of the Plant or the Generator's Interconnection Facilities.

8.3 Neither Party shall construct any facilities or structures or engage in any activities that will interfere with the rights granted to the other Party under this Agreement or rights-of-way, licenses, or easements secured by and/or for the other Party.

8.4 The access rights granted hereunder shall be effective for the term of this Agreement and shall neither be revoked, nor shall either Party take any action that would impede, restrict, diminish, or terminate the rights of access or use granted by such access rights.

8.5 Each Party shall have the right to inspect or observe, at its own expense, the maintenance activities, equipment tests, installation, construction, or other modifications to the other Party's Interconnection Facilities and associated telecommunication facilities, as the case may be, which may reasonably be expected to adversely affect the observing Party's operations or liability. The Party desiring to inspect or observe shall notify the other Party in accordance with the notification procedures set forth in Article 13 of this Agreement. If the Party inspecting the equipment, systems, or facilities observes any deficiency or defects that may be reasonably be expected to adversely affect the operations of the observing Party's system or facilities, the observing Party shall notify the other Party, and the other Party shall make any corrections necessitated by Good Utility Practice.

8.6 Subject to the provisions of Section 11.1, each Party shall be solely responsible for and shall assume all liability for the safety and supervision of its own employees, agents, representatives, and subcontractors. All work performed by either Party that reasonably could be expected to affect the operations of the other Party shall be performed in accordance with all applicable laws, rules, and regulations pertaining to the safety of persons or property, including, without limitation, compliance with the safety regulations and standards adopted under the Occupational Safety and Health Act of 1970, as amended from time to time, the National Electrical Safety Code, as amended from time to time, and Good Utility Practice.

**ARTICLE 9**  
**EVENTS OF DEFAULT; TERMINATION**

9.1 Event of Default. The occurrence of one or more of the following events so long as the same is continuing shall constitute an "Event of Default" under this Agreement:

- (a) Failure by either Party to substantially perform any material obligation under this Agreement, and which failure continues for a period of forty-five (45) days after notice thereof has been received by such Party from the non-defaulting Party; or

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- (b) Failure by either Party to pay any undisputed amount due under this Agreement which continues for a period of thirty (30) days after notice of such non-payment is delivered to the defaulting Party; or
- (c) The dissolution or liquidation of a Party or the issuance of any order, judgment or decree by a court of competent jurisdiction under the bankruptcy, reorganization, compromise, arrangement, insolvency, readjustment of debt, dissolution or liquidation or similar law of any jurisdiction whether now or hereafter in effect adjudicating a Party bankrupt or insolvent or otherwise granting relief under any such law; or
- (d) A Party petitions or applies to any tribunal for, or consents to the appointment of or taking possession by, a receiver, liquidator, custodian, trustee or similar official of such Party or of a substantial part of the assets of such Party; or any such petition or application is filed or any such proceedings are commenced against a Party and such Party by any act indicates its approval thereof, consent thereto or acquiescence therein or such petition or application remains undismissed for sixty (60) days; or
- (e) A Party makes a general assignment for the benefit of its creditors or makes an admission in writing that it is unable to pay its debts generally as they become due; or
- (f) The revocation or loss of any license, permit, or other governmental approval (i) materially affecting Generator's ability to operate the Plant or Generator's Interconnection Facilities, or (ii) materially affecting LIPA's ability to operate LIPA's Interconnection Facilities, provided that but for Generator's or LIPA's negligence, as the case may be, no such revocation or loss of such license, permit or other governmental approval would have ensued.

9.2 Notice and Opportunity to Cure Event of Default. Upon actual discovery of an Event of Default, a Party claiming the occurrence of such Event of Default must promptly provide the alleged defaulting Party with a Notice of Default and the defaulting Party shall have, in the case of failure to pay any undisputed amount, thirty (30) days and, in other defaults, forty-five (45) days to complete one of the following:

- (a) cure the Event of Default; or
- (b) if such default reasonably requires additional time to cure then such defaulting Party will, from the date such Party receives the Notice of Default, have (i) such longer time as is reasonable under the circumstances, not to exceed the greater of one hundred and eighty (180) days or to the mid-point of the next Summer Season to complete such cure or (ii) if the defaulting Party provides a commercially reasonable cure plan acceptable to the other Party that requires more time than provided in Section 9.2 above ("Cure Plan"), then the defaulting Party shall be extended such additional time provided for in the Cure Plan to cure the Event of Default and the other Party shall have no right to terminate this Agreement, provided that the defaulting Party diligently pursues such Cure Plan; or
- (c) undertake dispute resolution pursuant to Article 10.

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9.3 Dispute of Claim of Event of Default. If, within thirty (30) days of the service of a Notice of Default pursuant to Section 9.2, the Party alleged to be in default disputes in writing that an Event of Default has occurred, either Party may seek resolution of such dispute pursuant to the terms of Article 10, and this Agreement shall not be terminated by the Party claiming the occurrence of the Event of Default prior to such resolution of such dispute pursuant to the procedures of Article 10.

9.4 Remedies. This Agreement may be terminated by the non-defaulting Party effective immediately upon the non-defaulting Party providing written notice to the defaulting Party of termination if: (a) the defaulting Party or its Lenders fail to cure the Event of Default within the cure periods provided under Section 9.2 and any action for dispute resolution under Article 10 with respect to the alleged Event of Default has been completed and not determined favorably to the allegedly defaulting party; or (b) through the dispute resolution process under Article 10, it is determined that an Event of Default has occurred and the defaulting Party, pursuant to terms of this Agreement has not cured or diligently endeavored to cure, the default, as the case may be. Upon termination, the non-defaulting Party shall be entitled to such damages as are available at law and equity, subject to Article 11 hereof. The termination of this Agreement under this Section 9.4 shall not discharge either Party from any obligations, which may have accrued under this Agreement prior to such termination.

**ARTICLE 10**  
**DISPUTE RESOLUTION**

10.1 Any dispute arising out of, or relating to, this Agreement, with the exception of termination pursuant to Section 9.4 or a breach of a Party's indemnity obligations under Article 11 or a Party's obligations under Article 15 of this Agreement, shall be subject to the dispute resolution procedures specified in this Article 10 which shall constitute the sole and exclusive procedures for the resolution of such disputes.

10.2 The Parties agree to use commercially reasonable efforts to settle promptly any disputes or claims arising out of or relating to this Agreement through negotiation conducted in good faith between executives of the Parties having authority to reach such a settlement. Either Party may by written notice to the other Party, refer any such dispute or claim for advice or resolution to mediation by a suitable mediator. The mediator shall be chosen by the mutual agreement of the Parties. If the Parties are unable to agree on a mediator, each Party shall designate a qualified mediator who, together with the mediator designated by the other, shall choose a single mediator for the particular dispute or claim. If the mediator chosen is unable, within thirty (30) days of such referral to reach a determination that is acceptable to the Parties, the matter shall be referred to arbitration as set forth below. All negotiation and mediation discussions pursuant to this Section 10.2 shall be confidential, subject to applicable law, and shall be treated as compromise and settlement negotiations for purposes of Federal Rule of Evidence 408 and applicable state rules of evidence.

10.3 Except for claims for temporary injunctive relief under Section 10.5, neither Party shall bring any action at law or in equity to enforce, interpret, or remedy any breach or default of this Agreement without first complying with the provisions of this Article 10; provided however, that if the Arbitrators (as defined below) fail to issue a decision within one hundred eighty (180) days after the commencement of arbitration under Section 10.4, then either Party may bring any action at law or in equity to seek enforcement, interpretation or remedy of any breach of this Agreement.

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10.4 Any dispute subject to resolution under this Article 10, which has not been resolved by discussion or mediation within thirty (30) days from the date that either negotiations or mediation shall have commenced and which is not subject to the FERC's jurisdiction shall be settled by arbitration before three (3) independent and impartial arbitrators (the "Arbitrators") in accordance with the then current commercial arbitration rules of the American Arbitration Association, except to the extent that such rules are inconsistent with any provision of this Agreement, in which case the provisions of this Agreement shall be followed, and except that the arbitration under this Agreement shall not be administered by the American Arbitration Association without the express agreement of the Parties. The Arbitrators shall be (i) independent of the Parties and disinterested in the outcome of the dispute, (ii) persons otherwise experts in the electric utility industry, including bulk power markets and transmission systems, and (iii) qualified in the subject area of the issue in dispute. The Parties shall choose the Arbitrators within thirty (30) days, with each Party choosing one Arbitrator and those two Arbitrators choosing the third Arbitrator. Judgment on the award rendered by the Arbitrators may be entered in any court in the State of New York having jurisdiction thereof. If either Party refuses to participate in good faith in the negotiations or mediation proceedings described in Section 10.2, the other Party may initiate arbitration at any time after such refusal without waiting for the expiration of the applicable time period. Except as provided in Section 10.5 relating to provisional remedies, the Arbitrators shall decide all aspects of any dispute brought to them including attorney disqualification and the timeliness of the making of any claim.

10.5 Either Party may, without prejudice to any negotiation, mediation or arbitration procedures, proceed in the courts of the State of New York to obtain provisional judicial relief if, in such Party's sole discretion, such action is necessary to protect public safety, avoid imminent irreparable harm, provide uninterrupted electrical and other services, or preserve the status quo pending the conclusion of any dispute resolution procedures employed by the Parties or pendency of any action at law or in equity. Except for temporary injunctive relief under this Section, neither Party shall bring any action at law or in equity to enforce, interpret, or remedy any breach or default of this Agreement without first complying with the provisions of this Article; provided, however, that if the Arbitrators fail to issue a decision within one hundred eighty (180) days after the commencement of arbitration under Section 10.3, then either Party may bring any action at law or in equity to seek enforcement, interpretation or remedy of any breach of this Agreement.

10.6 The Arbitrators shall have no authority to award damages excluded under Article 11 or any other damages aside from the prevailing Party's actual, direct damages plus interest at the Interest Rate for each day commencing on the date such damages were incurred through date of payment. The Arbitrators shall not have the authority to make any ruling, finding, or award that does not conform to the terms and conditions of this Agreement. The Arbitrators' award shall be in writing and shall set forth the factual and legal bases for the award. The Parties to the arbitration shall each bear their own litigation expenses for the arbitration and shall evenly divide the common costs of the arbitration.

10.7 Unless otherwise agreed to in writing or prohibited by applicable law, the Parties shall continue to provide service, honor all commitments under this Agreement, and continue to make payments in accordance with this Agreement during the course of any dispute resolution under this Article and during the pendency of any action at law or in equity or any arbitration proceeding relating hereto.

10.8 All applicable statutes of limitation and defenses based upon the passage of time and similar contractual limitations shall be tolled while the procedures specified in this Article 10 are pending.



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The Parties will take such action, if any, required to effectuate such tolling. Without prejudice to the procedures specified in this Article 10, a Party may file a complaint for statute of limitations purposes, if in its sole judgment such action may be necessary to preserve its claims or defenses. Despite such action, the Parties will continue to participate in good faith in the procedures specified in this Article 10.

10.9 The Arbitrators shall have the discretion to order a pre-hearing exchange of information by the Parties, including, without limitation, the production of requested documents, the exchange of summaries of testimony of proposed witnesses, and the examination of the Parties by deposition. The Parties hereby agree to produce all such information as ordered by the Arbitrators and shall certify that they have provided all applicable information and that such information was true, accurate and complete

10.10 The site of any arbitration brought pursuant to this Agreement shall be in a location in Nassau County, New York County or Suffolk County as is mutually agreed to by the Parties.

**ARTICLE 11**  
**INDEMNITY, LIMITATION OF LIABILITY; INSURANCE**

11.1 Indemnity. Each Party (the “Indemnifying Party”) shall at all times indemnify, defend, and hold the other Party and T&D Manager (the “Indemnified Party”) 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, the alleged violation of any Environmental Law, or the release or threatened release of any Hazardous Substance, demands, suits, recoveries, costs and expenses, court costs, attorneys’ fees, and all other obligations by or to third parties, arising out of or resulting from (a) the Indemnifying Party’s performance of its obligations, or its actions or inactions, under this Agreement, except as expressly provided otherwise herein, (b) the Indemnified Party’s actions or inactions in performing obligations on behalf of the Indemnifying Party in accordance with this Agreement, except in cases of gross negligence or intentional wrongdoing by the Indemnified Party or (c) the violation by the Indemnifying Party of any Environmental Law or the release by the Indemnifying Party of any Hazardous Substance.

11.2 Indemnified Party. If an Indemnified Party is entitled to indemnification under this Article 11 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 11, to assume the defense of such claim, such Indemnified Person 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.

11.3 Indemnifying Party. If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 11, 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, except that any insurance carrier shall be subrogated to the Indemnified Party’s interest to the extent of any insurance recovery paid to the Indemnified Party.

11.4 Indemnity Procedures. 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 11 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 and to the extent that such failure or delay is materially prejudicial to the Indemnifying Party.

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11.5 Except as stated below, the Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

11.6 The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in which event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be unreasonably withheld, conditioned or delayed.

11.7 LIPA Equipment Design and Review. Notwithstanding any other provisions of this Agreement, neither LIPA or T&D Manager, or their officers, trustees, employees, and agents nor those of their parents shall be liable to Generator, or its contractors or subcontractors, for any claims, costs, expenses, losses, lawsuits, judgments, attorney's fees or damages arising out of LIPA's or T&D Manager's equipment design and review, except for instances arising out of LIPA's failure to act in accordance with Good Utility Practice, gross negligence or willful misconduct. Generator shall indemnify and hold LIPA and T&D Manager, and their officers, trustees, employees, and agents, harmless from any claims, costs, expenses, losses, damages or judgments made against LIPA and/or T&D Manager or incurred by any of Generator's contractors or subcontractors except for instances arising out of LIPA's failure to act in accordance with Good Utility Practice, gross negligence or willful misconduct. This indemnification and hold harmless obligation shall be separate from and independent of any other obligations of Generator to indemnify and hold harmless LIPA and its officers, directors, employees, and agents.

11.8 Consequential Damages. Except for indemnity and defense of action obligations set forth in this Article 11, in no event shall either Party or T&D Manager 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 attorney's fees or litigation costs), including but not limited to loss of profit, revenue or opportunity, loss of the use of equipment or facilities, cost of capital, cost of temporary or substitute equipment, facilities, services or replacement power, down time costs; and claims of customers of either Party, connected with, or resulting from, performance or non-performance of this Agreement or any action undertaken in connection with, or related to this Agreement, including, without limitation, any such damages which are based upon causes of action for breach of contract, tort (including negligence and misrepresentation), breach of warranty or strict liability.



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11.9 Survival. Each Party's indemnification and defense of action obligations under this Article for acts or occurrences prior to the expiration, termination, completion, suspension or cancellation of this Agreement shall continue in full force and effect regardless of whether this Agreement expires, terminates, or is suspended, completed or canceled. Except as noted above, such obligations shall not be limited in any way by any limitation on insurance, by the amount or types of damages, or by any compensation or benefits payable by the Parties under workers' compensation acts, disability benefits acts or other employee acts, or otherwise.

11.10 Insurance. Prior to the commencement of this Agreement, Certificates of Insurance from Generator and LIPA and / or all of Generator's and LIPA's contractors / subcontractors that perform activities on the Project Site relative to this Agreement, shall be furnished to Generator and LIPA, as the case may be. Each Party shall, at its own expense, maintain in force throughout the term of this Agreement, and until released by the other Party, the following minimum insurance coverage, with insurers authorized to do business in the State of New York. The generator must have added T&D Manager, LIPA, and the Authority as additional insureds under the following coverages:

- (a) Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Attachment is located.
- (b) Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of one million dollars (\$1,000,000.00) per occurrence/one million dollars (\$1,000,000.00) aggregate combined single limit for personal injury, bodily injury, including death and property damage.
- (c) Comprehensive Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of one million dollars (\$1,000,000.00) per occurrence for bodily injury, including death, and property damage.
- (d) Excess Public Liability Insurance over and above the Employers' Liability Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of twenty million dollars (\$20,000,000.00) per occurrence/twenty million dollars (\$20,000,000.00) aggregate.
- (e) The Commercial General Liability Insurance, Comprehensive Automobile Insurance, and Excess Public Liability Insurance policies shall name the other Party, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. For LIPA, Other Party Group shall include the Authority and T&D Manager and its affiliates. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this Agreement against the Other Party Group and provide thirty (30) days advance written notice to the Other Party

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Group prior to anniversary date of cancellation or any material change in coverage or condition. Insurance as specified herein must be maintained at all times during the life of this Agreement. Each Party shall provide the other Party with renewal certificates if said insurance policies are to expire prior to the expiration or termination of this Agreement. Said certificates must be provided within ten (10) days after the renewal date. Insurance as specified herein must be maintained at all times throughout the term of this Agreement.

- (f) The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one (1) insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- (g) The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance, and Excess Public Liability Insurance policies shall be on an occurrence basis.
- (h) The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this Agreement.
- (i) Within ten (10) days following execution of this Agreement, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) days thereafter, each Party shall provide certification of all insurance required in this Agreement, executed by each insurer or by an authorized representative of each insurer.
- (j) Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of this Article 11 to the extent it maintains a self-insurance program; provided that, such Party's senior secured debt is rated at investment grade or better by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of this Article 11. For any period of time that a Party's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under this Article 11. In the event that a Party is permitted to self-insure pursuant to this Article, it shall notify the other Party that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in this Article 11.
- (k) The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this Agreement.

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**ARTICLE 12**  
**FORCE MAJEURE**

12.1 The term “Force Majeure Event” as used herein means those acts, omissions or circumstances which are outside of the affected Party’s control and which could not be reasonably anticipated or avoided in accordance with Good Utility Practice, including without limitation any act of God, strikes or other labor disputes, acts of the public enemy, accidents, war (declared or otherwise), invasion, civil disturbance, riots, fires, storms, flood, ice, earthquakes, explosions, or action or inaction of a Governmental Authority (other than LIPA) that precludes the construction, interconnection or operation of the Plant. A Force Majeure Event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

12.2 If a Force Majeure Event causes either Party to be rendered wholly or partly unable to perform its obligations under this Agreement, except for the obligation to make payments under this Agreement when due, that Party shall be excused from performance or liability for damages to the other Party solely to the extent and during such period such Party’s performance is affected.

12.3 Any Party claiming Force Majeure shall: (i) provide prompt oral notice followed by written notice to the other Party within three (3) Business Days of such Force Majeure Event giving a detailed written explanation of the event and estimate of its expected duration and probable effect on the performance of that Party’s obligations hereunder, and (ii) use due diligence in accordance with Good Utility Practice to continue to perform its obligations under this Agreement to the extent unaffected by the Force Majeure Event and to remove promptly the condition that prevents performance and to mitigate the effects of the same, except that settlement of any strike or labor dispute shall be in the sole judgment of the affected Party.

12.4 No obligations of either Party which arose before the occurrence of the Force Majeure Event causing the suspension of performance are excused as a result of the occurrence.

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**ARTICLE 13**  
**NOTICES**

All notices shall be in writing and shall be deemed sufficiently given when mailed by United States registered or certified mail, postage prepaid, return receipt requested, hand-delivered, sent by facsimile transmission (confirmed in writing) or sent by recognized overnight courier service, addressed as follows:

**To LIPA:**

PSEG Long Island  
333 Earle Ovington Boulevard, Suite 403  
Uniondale, New York 11553  
Attention: Vice President of T&D Operations

**With a copy to:**

Long Island Power Authority  
333 Earle Ovington Boulevard, Suite 403  
Uniondale, New York 11553  
Attention: General Counsel  
Fax: (516) 222-9137

**To T&D Manager:**

PSEG Long Island  
Power Asset Management (PAM)  
175 East Old Country Road  
Hicksville, New York 11801  
Attention: Manager, Power Asset Management

**To Generator:**

**[NAME]**  
**[ADDRESS]**  
Attention: **[NAME AND TITLE]**  
Fax: \_\_\_\_\_

or such other and different addresses as may be designated in writing by the Parties.

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**ARTICLE 14**  
**ASSIGNMENT OR TRANSFER**

Neither this Agreement nor any rights or obligations hereunder may be assigned or transferred, by either Party without the prior written consent of the other Party (such consent not to be unreasonably withheld or delayed; provided that this Agreement may be assigned to an Affiliate with the understanding that no such assignment shall relieve the assigning Party from its obligations hereunder; and further provided that the restrictions on assignment contained in this Article shall not in any way prevent either Party from pledging, mortgaging or assigning its rights hereunder as security for its indebtedness.) Except as otherwise provided in this Article, a Party shall only consent to an assignment by the assigning Party if, in the non-assigning Party's reasonable judgment, the assignee is fully capable of performing all of the assigning Party's obligations under this Agreement and possesses the technical capability, experience, and financial capability to perform in the manner required. At least thirty (30) days prior to the effective date of the proposed assignment, the assigning Party shall deliver to the non-assigning Party an assignment and assumption agreement, duly executed, in which the assignee unconditionally assumes all of its assignor's obligations to the non-assigning Party and agrees to be bound by all of the terms and conditions of this Agreement, and whereby the assignee makes certain additional representations and warranties as appropriate for assignee as contained in this Section. Any purported assignment of this Agreement not in accordance with this Article shall be of no force and effect. Provided however, that a proposed assignment, notice of which is provided less than thirty (30) days prior to its proposed effective date shall be effective thirty (30) days following such notice.

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**ARTICLE 15**  
**CONFIDENTIALITY**

15.1 Claim of Confidentiality.

- (a) In connection with this Agreement, the Parties and T&D Manager may exchange information that is deemed to be confidential whether such information is provided in written, oral, electronic or other format ("Confidential Information"). The Party disclosing such Confidential Information is referred to herein as the "Disclosing Party" and the Party receiving such Confidential Information is referred to herein as the "Receiving Party." The Disclosing Party shall mark all written Confidential Information as "Confidential," "Proprietary" or the like and in the case of Confidential Information that is communicated orally, the Disclosing Party shall within thirty (30) days' follow up such communication with a writing addressed to the Receiving Party generally describing the information and identifying it as Confidential Information. The Parties acknowledge that all information disclosed by Generator in connection with costs, pricing or operation of the Plant shall be treated as Confidential Information whether or not such information is marked or identified as Confidential Information. LIPA shall not disclose such Confidential Information without Generator's written consent, which may be withheld in Generator's sole discretion, unless LIPA is otherwise required by law to make such disclosure.
- (b) The Receiving Party shall protect the Confidential Information from disclosure to third parties consistent with the provisions of this Article 15 and subject to applicable law, provided however, a Receiving Party may disclose Confidential Information to its Affiliates, Lenders, employees, agents or representatives of such Receiving Party, where such Affiliate, Lender, employee, agent or representative expressly agrees to be bound by the terms of this Article 15 and provided further that the Receiving Party shall be liable for any breach by its Affiliates, Lenders, employees, agents or representatives.
- (c) It is further understood and agreed that money damages would not be sufficient remedy for any breach of this Article 15, and that if a Party breaches this Article 15, the Party disclosing Confidential Information to such breaching Party shall be entitled to specific performance and injunctive and other equitable relief as a remedy for any such breach. The breaching Party agrees to waive any requirement for the posting of a bond in connection with any such remedy. Such remedy shall not be deemed to be the exclusive remedy for breach of this Article 15 but shall be in addition to all other remedies available at law or equity. In the event of any legal action based upon or arising out of this Article 15, the prevailing Party in such action shall be entitled to recover reasonable attorney's fees and costs from the other Party.

15.2 Compliance with Law. If either Party is required by law to disclose Confidential Information of the other Party (by oral questions, interrogatories, requests for information or documents, subpoena, civil investigative demands, regulation, statute or otherwise), the Party required to make such disclosure will (i) notify the other Party and provide the other Party the opportunity to review the Confidential Information, and (ii) provide the other Party the opportunity to seek a protective order or other appropriate remedy. In the event that a protective order or other remedy is not obtained or is not

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pursued within a reasonable period of time, the Party required to make disclosure or such Party's representatives will furnish only that portion of the Confidential Information that it is legally required to disclose and the Party required to make disclosure will request that confidential treatment be accorded the Confidential Information by relevant third parties.

15.3 Compliance with the Freedom of Information Law. If LIPA is requested by a third party to disclose Confidential Information pursuant to the Freedom of Information Law ("FOIL"), LIPA will (i) notify Generator of the request and provide Generator the opportunity to review the Confidential Information; (ii) provide Generator the opportunity to provide information regarding the need for confidential treatment; (iii) evaluate the third party's request for disclosure and Generator's request for confidential treatment; and (iv) determine if the Confidential Information is subject to disclosure under FOIL. If LIPA determines that the Confidential Information is subject to disclosure, it will provide prompt written notice of such determination to Generator so that Generator may seek a protective order or other appropriate remedy. If Generator does not obtain a protective order or no formal proceeding has been initiated by Generator within a reasonable period of time after LIPA provides notice to Generator of its intent to make public the Confidential Information, then LIPA may disclose such information with no liability or further obligation to Generator.

15.4 Treatment of Otherwise Publicly Available Documents. Notwithstanding anything to the contrary in this Article, neither Party shall be required to hold confidential any information that (i) becomes publicly available other than through disclosure by the Receiving Party; (ii) is independently developed by the Receiving Party; or (iii) becomes available to the Receiving Party without restriction from a third party, provided that such third party is not bound by a confidentiality agreement with the Disclosing Party or its representatives. Should any person or entity seek to legally compel a Receiving Party (by oral questions, interrogatories, requests for information or documents, subpoena, civil investigative demands, regulation, statute or otherwise) to disclose any Confidential Information, the Receiving Party will provide the Disclosing Party prompt written notice so that the Disclosing Party may seek a protective order or other appropriate remedy. In the event that a protective order or other remedy is not obtained, the Receiving Party or the Receiving Party's representative will furnish only that portion of the Confidential Information that it is legally required to disclose and the Receiving Party will request that confidential treatment be accorded the Confidential Information by relevant third parties.

15.5 Term of Confidentiality. The obligations set forth in this Article shall survive expiration or termination of this Agreement for a period of two years after expiration or termination of this Agreement.

**ARTICLE 16**  
**MISCELLANEOUS**

16.1 Binding Effect. This Agreement shall inure to the benefit of and shall be binding upon the Parties and their respective successors and assigns.

16.2 Counterparts. This Agreement may be executed in several counterparts, each of which shall be an original and which together shall constitute one and the same instrument.

16.3 Records. Each Party shall establish and maintain complete and accurate books, records, documents, accounts, and other evidence directly pertinent to performance under this Agreement



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(hereinafter, collectively, the “Records”). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter. The New York State Comptroller, the New York State Attorney General, and any other person or entity authorized to conduct an examination, as well as the New York State agency or agencies involved in this Agreement, shall have access to the Records during normal business hours at Generator’s or LIPA’s offices, as the case may be, within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the state, for the term specified above for the purposes of inspection, auditing, and copying. LIPA shall take reasonable steps to protect from public disclosure any of the Records that are exempt from disclosure under Section 87 of the Public Officers Law (the “Statute”), provided that: (i) Generator shall timely inform LIPA, in writing, that said Records should not be disclosed; (ii) said Records shall be sufficiently identified; and (iii) designation of said Records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, Generator’s or LIPA’s right to discovery in any pending or future litigation.

16.4 Amendments. This Agreement may not be amended, changed, modified or altered except in writing and signed by the Parties.

16.5 Severability. If any article, phrase, provision, or portion of this Agreement is, for any reason, held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction, such article, phrase, provision or portion so adjudged shall be deemed separate, distinct, and independent, and only deemed invalid in that particular instance, and the remainder of this Agreement shall be and remain in full force and effect and shall not be invalidated, rendered illegal, unenforceable, or otherwise affected by such adjudication.

16.6 Prior Agreements Superseded. This Agreement shall completely and fully supersede all other prior understandings or agreements, both written and oral, between the Parties relating to the subject matter hereof.

16.7 Survival. Provisions of this Agreement which by their nature would survive termination or expiration of the Agreement shall survive. Without limitation of the preceding sentence, applicable provisions of this Agreement shall continue in effect after expiration or termination of this Agreement as specifically provided herein and to the extent necessary to provide for final billings, billing adjustments, and payments pertaining to liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect.

16.8 Dispute Resolution. Any disputes arising under this Agreement shall be resolved in accordance with the procedures established in Article 10 of this Agreement.

16.9 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York notwithstanding its conflict of laws provisions.

16.10 Waiver. No delay or omission in the exercise of any right under this Agreement shall impair any such right or shall be taken, construed or considered as a waiver or relinquishment thereof, but any such right may be exercised from time to time and as often as may be deemed expedient. If any agreement or covenant herein shall be breached and thereafter waived, such waiver shall be limited to the particular breach so waived and shall not be deemed to waive any other breach hereunder.



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16.11 Taxes. The Parties shall use reasonable efforts to administer this Agreement and implement the provisions thereof in accordance with their intent to minimize taxes.

16.12 Non-interference. Each Party agrees that it will not construct any facilities or structures at the Project Site or engage in any activity at the Project Site that will materially interfere with the rights granted to the other Party under this Agreement.

16.13 Further Assurances. Each of the Parties hereto shall execute and deliver any and all additional documents or instruments (including easements and other rights in land), in recordable form, and provide other assurances, obtain any additional permits, licenses, and approvals required, and shall do any and all acts and things reasonably necessary, to carry out the intent of the Parties hereto and to confirm the continued effectiveness of this Agreement.

16.14 Headings. The headings used for the articles herein are for convenience and reference purposes only and shall in no way affect the meaning or interpretation of the provisions of this Agreement.

16.15 Entire Agreement. This Agreement constitutes the entire agreement and understanding between the parties with respect to the subject matter hereof, and supersedes and replaces any prior or contemporaneous undertakings, commitments, or agreements, oral or written, as to its subject matter. This Agreement may be modified or amended only by an instrument in writing signed by authorized representatives of the Parties on or after the date hereof.

*[Signature pages to follow on next page]*

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IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the date first set forth above.

**LONG ISLAND ELECTRIC UTILITY SERVICE LLC**  
**Acting as agent for and behalf of**  
**LONG ISLAND LIGHTING COMPANY d/b/a LIPA**

By: \_\_\_\_\_  
(Signature)

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

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

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

**[PARTY NAME]**

By: \_\_\_\_\_  
(Signature)

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

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

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

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**EXHIBIT A**  
**SYSTEM ONE-LINE / POINT OF ATTACHMENT**  
**AND INTERCONNECTION AND INTERCONNECTION**  
**FACILITIES / DEMARCATION POINTS**

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**EXHIBIT B  
INTERCONNECTION AND METERING ~~STANDARDS~~ REQUIREMENTS**

**Interconnection ~~Guide~~ Procedures and Requirements**

The Interconnection Facilities shall be subject to the interconnection standards provided in the- “Smart Grid Small Generator Interconnection Procedures

For Distributed Generators and Energy Storage Systems Less than 10 MW Connected in Parallel with LIPA’s Radial Distribution Systems”, “PSEG Long Island’s Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA’s Distribution System” and “Specification & Requirements for Electric Installation (Red Book)”

**Metering ~~Standards~~ Requirements**

Metering pursuant to the terms of this Agreement shall be subject to the PSEG Long Island’s Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA’s Distribution System”, “Specification & Requirements for Electric Installation (Red Book)” and “Revenue Metering Requirements for Generating Facilities interconnection to the LIPA Transmission System”

Add other procedures and requirements as applicable.

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**EXHIBIT C**  
**FACILITY DESIGN AND VERIFICATION STUDIES**

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**EXHIBIT D  
COMMISSIONING, STARTUP, AND MAINTENANCE  
PROCEDURES FOR INTERCONNECTION FACILITIES**

**Introduction**

Testing of all protective devices shall be performed on the Generator's Interconnection Facilities prior to the final functional testing of the interconnection scheme. The testing shall be performed by Generator. Relay and operational tests shall be performed with maintenance intervals consistent with the latest version of NERC PRC-005 or any applicable reliability requirements. A certified relay test report shall be furnished to LIPA/T&D Manager within two weeks after completion of all testing. Generator shall notify LIPA/T&D Manager at least seven (7) business days in advance of the protective device testing to provide an opportunity for LIPA/T&D Manager to be present during the testing.

Submitted documentation of the operational relay testing shall include graphic or digital recordings of actual current and voltage levels obtained during the test(s). Each relay test shall include a calibration check and an actual trip of the circuit breaker from the relay being tested.

A log of all relay target indications resulting from automatic circuit breaker operations shall be maintained. The relay target information is utilized to verify cause of the failure and to determine if relays operated as expected to isolate the Generator's Interconnection Facilities from LIPA's transmission system. This data shall be reviewed periodically, and upon request, shall be made available for Generator's inspection.

**Operational Testing**

Detailed and coordinated operational test procedures shall be developed jointly by LIPA/T&D Manager and Generator. These test procedures must include relay settings, continuity of relay circuits, breaker trip and close coils (AC and DC circuits), insulation impedances of protective circuits and current and voltage transformers.

To the maximum degree practicable, the components used in protection systems shall be of proven quality, as demonstrated either by actual experience or by stringent tests under simulated operating conditions, to ensure that the reliability of the protection system shall not be degraded or reduced.

The test procedures must demonstrate that:

- (a) All relays operate from all possible sources of trip signals or voltage.
- (b) All relays trip the desired breaker(s).
- (c) The Generator's Interconnection Facilities will be isolated from the LIPA system for complete loss of the Facility.
- (d) The ratio and polarity of relay and instrument transformers are correct.
- (e) The phase angle characteristics of directional and other relays are correct.
- (f) Relays have been tested at pick-up and three multiples of minimum pick-ups (e.g., three, five, and eight times).

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All relays must be field verified and bench tested to meet the following tolerance criteria:

Test Parameter	Tolerance of Specified Settings
Current	+/- 5%
Voltage	+/- 5%
Time	+/- 5%
Frequency	+0.05 hertz
Phase Angle	+/- 3 degrees

The actual operational tests shall be performed after all equipment is installed and repeated every two years thereafter. Certified test results shall be submitted to LIPA/T&D Manager. Periodic inspections of AC and DC control power for all circuit breaker, reference single-line diagrams, relay protection diagrams, and coordination test data must accompany test reports.

LIPA/T&D Manager shall be notified by Generator at least seven (7) business days prior to the operational tests.

**Maintenance**

All equipment associated with the Generator's Interconnection Facilities shall be maintained by the Generator in accordance with the latest maintenance intervals in NERC PRC-005 or any applicable reliability requirements.

Add other procedures and requirements as applicable.

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### EXHIBIT E INTERCONNECTION COST ESTIMATE

The current interconnection estimate is [INSERT DOLLAR AMOUNT]

The illustration above represents an estimate of reimbursable cost. Upon execution of this Agreement, generator will provide the T&D Manager with an advance payment of 30% of the T&D Manager's estimated costs. Progress payments will be required during construction and any excess will be reconciled and invoiced upon completion of all work and final accounting of all costs.



## APPENDIX N

### **Appendix N - Metering Requirements**

Refer to the document entitled “Revenue Metering Requirements for Generator Facilities Interconnecting to the LIPA Transmission System” for PSEG Long Island’s interconnection technical requirements for Small Generators up to 10 MW.

Add other procedures and requirements as applicable.

## APPENDIX O

### **Appendix O -Left Blank Intentionally**

## APPENDIX P1

### **Appendix P1 -Feasibility Study Agreement**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_ 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer,") and Long Island Lighting Company d/b/a LIPA ("LIPA"). Interconnection Customer and LIPA each may be referred to as a "Party," or collectively as the "Parties."

### **RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Small Generator or generating capacity addition to an existing Small Generator consistent with the Interconnection Request completed by Interconnection Customer on \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Small Generator with LIPA's Distribution System; and

**WHEREAS**, Interconnection Customer has requested LIPA to perform a feasibility study to assess the feasibility of interconnecting the proposed Small Generator with LIPA's Distribution System, and of any Affected Systems;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the PSEG Long Island Small Generator Interconnection Procedures for Distributed Resources less than 10 MW Connected in parallel with LIPA Distribution Systems (PSEG Long Island Small Generator Interconnection Procedures).

2.0 The Interconnection Customer elects and LIPA shall cause to be performed an interconnection feasibility study consistent with the PSEG Long Island Small Generator Interconnection Procedures.

3.0 The scope of the feasibility study shall be subject to the assumptions set forth in Attachment A to this Agreement.

4.0 The feasibility study shall be based on the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the scoping meeting. LIPA reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the feasibility study and as designated in accordance with the PSEG Long Island Small Generator Interconnection Procedures. If the Interconnection Customer modifies its Interconnection Request, the time to complete the feasibility study may be extended by agreement of the Parties.

5.0 In performing the study, LIPA shall rely, to the extent reasonably practicable, on existing studies of recent vintage. The Interconnection Customer shall not be charged for such existing studies; however, the Interconnection Customer shall be responsible for charges associated with any new study or modifications to existing studies that are reasonably necessary to perform the feasibility study.

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6.0 The feasibility study report shall provide the following analyses for the purpose of identifying any potential adverse system impacts that would result from the interconnection of the Small Generator as proposed:

- 6.1 Initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
- 6.2 Initial identification of any thermal overload or voltage limit violations resulting from the interconnection;
- 6.3 Initial review of grounding requirements and electric system protection; and
- 6.4 Description and non-binding estimated cost of facilities required to interconnect the proposed Small Generator and to address the identified short circuit and power flow issues.

7.0 The feasibility study shall model the impact of the Small Generator regardless of purpose in order to avoid the further expense and interruption of operation for reexamination of feasibility and impacts if the Interconnection Customer later changes the purpose for which the Small Generator is being installed.

8.0 The study shall include 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 and at the Interconnection Customer's cost.

9.0 A deposit of the lesser of 50 percent of good faith estimated feasibility study costs or earnest money of \$10,000 may be required from the Interconnection Customer.

10.0 Once the feasibility study is completed, a feasibility study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the feasibility study must be completed and the feasibility study report transmitted within thirty (30) Business Days of the Interconnection Customer's agreement to conduct a feasibility study.

11.0 Any study fees shall be based on the actual costs associated with the study and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.

12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within thirty (30) calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, LIPA shall refund such excess within thirty (30) calendar days of the invoice without interest. LIPA 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 Miscellaneous.

- 13.1 Accuracy of Information. Except as Interconnection Customer may otherwise specify in writing when it provides information to LIPA under this Agreement, Interconnection Customer represents and warrants that the information it provides to LIPA shall be accurate and complete as of the date the information is provided. Interconnection Customer shall promptly provide LIPA with any additional information needed to update information previously provided.

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- 13.2 Disclaimer of Warranty. In preparing the system impact study, LIPA and any subcontractor or consultant to LIPA shall have to rely on information provided by Interconnection Customer, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, neither LIPA nor any subcontractor or consultant to LIPA 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 or merchantability and fitness for a particular purpose, with regard to the accuracy, content or system impact conclusions of the system impact study. Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representation or warranties have formed the basis of its bargain hereunder.
- 13.3 Force Majeure. For purposes of this Agreement, "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will 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 will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement.
- 13.4 Limitations of Liability. In no event shall any Party or its subcontractor consultant be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with this Agreement or the system impact study or any reliance on the system impact study by Developer or third parties, even if one or more of the Parties or its subcontractor consultants have been advised of the possibility of such damages. Nor shall LIPA be liable for any delay in delivery or for the non-performance or delay in performance of LIPA's obligations under this Agreement.
- 13.5 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless LIPA, and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by LIPA under this Agreement, any bankruptcy filings made by Interconnection Customer, or the actions or omissions of Interconnection Customer in connection with this Agreement, except to the extent such Losses arise from the gross negligence or willful misconduct by LIPA or their respective directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify LIPA shall be several, and not joint or joint and several.
- 13.6 Third-Party Beneficiaries. Without limitation of Sections 13.2, 13.3 and 13.5 of this Agreement, Interconnection Customer further agrees that a subcontractor or consultant hired

## APPENDIX P1

by LIPA to conduct or review, or to assist in the conducting or reviewing, an Interconnection Feasibility Study shall be deemed third party beneficiaries with respect to Sections 13.2, 13.3, 13.4 and 13.5.

- 13.7 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 13.7, shall continue in effect for a term of one year or until the system impact study for Interconnection Customer's Small Generator is completed, whichever event occurs first. Interconnection Customer or LIPA may terminate this Agreement upon the withdrawal of the Interconnection Customer's Application under Section II.A.4 of PSEG Long Island's Small Generator Interconnection Procedures.
- 13.8 Governing Law. This Agreement 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.
- 13.9 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null or void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 13.10 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 13.11 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing signed by the Parties hereto.
- 13.12 Survival. All warranties, limitations of liability, indemnification and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 13.13 Independent Contractor. LIPA shall at all times be deemed to be an independent contractor and none of their employees or the employees of its subcontractors shall be considered to be employees of Interconnection Customer as a result of this Agreement.
- 13.14 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement 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.
- 13.15 Successors and Assigns. 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. No assignment shall be permitted where the assignee is currently in litigation with one of the Parties to this Agreement, except with the consent of the affected Party.
- 13.16 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.
- 14.0 All disputes shall be resolved in accordance with the procedures set forth in Section II.A.9 of the PSEG Long Island Small Generator Interconnection Procedures.

## APPENDIX P1

**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.

**Long Island Electric Utility Servco LLC  
acting as agent of and on behalf of  
Long Island Lighting Company d/b/a LIPA**

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Print)

Name: \_\_\_\_\_  
(Print)

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

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

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

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

## **APPENDIX P2**

### **Appendix P2 – Assumptions Used-In Conducting System Impact Study**

#### **Attachment A to Feasibility Study Agreement**

##### **Assumptions Used in Conducting the Feasibility Study**

The feasibility study will be based upon the information set forth in the Interconnection Request and agreed upon in the scoping meeting held on \_\_\_\_\_:

- 1) Designation of Point of Interconnection and configuration to be studied.
  
- 2) Designation of alternative Points of Interconnection and configuration.

1) and 2) are to be completed by the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer and LIPA.



## APPENDIX Q1

### Appendix Q1 – System Impact Study

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_ 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, (“Interconnection Customer,”) and Long Island Lighting Company d/b/a LIPA (“LIPA”). Interconnection Customer and LIPA each may be referred to as a “Party,” or collectively as the “Parties.”

#### **RECITALS**

**WHEREAS**, the Interconnection Customer is proposing to develop a Small Generator or generating capacity addition to an existing Small Generator consistent with the Interconnection Request completed by the Interconnection Customer on \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Small Generator with LIPA’s Distribution System;

**WHEREAS**, LIPA has completed a feasibility study and provided the results of said study to the Interconnection Customer (This recital to be omitted if the Parties have agreed to forego the feasibility study.); and

**WHEREAS**, the Interconnection Customer has requested LIPA to perform a system impact study(s) to assess the impact of interconnecting the Small Generator with LIPA’s Distribution System, and of any Affected Systems;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the PSEG Long Island Small Generator Interconnection Procedures for Distributed Resources less than 10 MW Connected in parallel with LIPA Distribution Systems (PSEG Long Island Small Generator Interconnection Procedures).

2.0 The Interconnection Customer elects and LIPA shall cause to be performed a system impact study(s) consistent with the PSEG Long Island Small Generator Interconnection Procedures.

3.0 The scope of a system impact study shall be subject to the assumptions set forth in Attachment A to this Agreement.

4.0 A system impact study will be based upon the results of the feasibility study and the technical information provided by Interconnection Customer in the Interconnection Request. LIPA reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the system impact study. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the system impact study may be extended.

## APPENDIX Q1

5.0 A system impact study 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. A 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. A system impact study 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.

6.0 A distribution system impact study shall incorporate a distribution load flow study, an analysis of equipment interrupting ratings, protection coordination study, voltage drop and flicker studies, protection and set point coordination studies, grounding reviews, and the impact on electric system operation, as necessary.

7.0 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 upon a system impact study that covers potential adverse system impacts on their electric systems, and LIPA has twenty (20) additional Business Days to complete a system impact study requiring review by Affected Systems.

8.0 If LIPA uses a queuing procedure for sorting or prioritizing projects and their associated cost responsibilities for any required Network Upgrades, the system impact study shall consider all generating facilities (and with respect to paragraph 8.3 below, any identified Upgrades associated with such higher queued interconnection) that, on the date the system impact study is commenced -

8.1 Are directly interconnected with LIPA's System; or

8.2 Are interconnected with Affected Systems and may have an impact on the proposed interconnection; and

8.3 Have a pending higher queued Interconnection Request to interconnect with LIPA's System.

9.0 A distribution system impact study, if required, shall be completed and the results transmitted to the Interconnection Customer within thirty (30) Business Days after this Agreement is signed by the Parties. A transmission system impact study, if required, shall be completed and the results transmitted to the Interconnection Customer within forty-five (45) Business Days after this Agreement is signed by the Parties, or in accordance with LIPA's queuing procedures.

10.0 The Interconnection Customer shall provide to LIPA a deposit of \$10,000 or other commercially reasonable security in an amount equivalent to the good faith estimated cost of a Distribution System impact study and the good faith estimated cost of a transmission system impact study

11.0 Any study fees shall be based on the actual costs of the study and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.

12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within thirty (30) calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, LIPA shall refund such excess within thirty (30) calendar days of the invoice without interest. LIPA shall not be obligated to perform or continue to perform any Interconnection Study

## APPENDIX Q1

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

### 13.0 Miscellaneous.

- 13.1 Accuracy of Information. Except as Interconnection Customer may otherwise specify in writing when it provides information to LIPA under this Agreement, Interconnection Customer represents and warrants that the information it provides to LIPA shall be accurate and complete as of the date the information is provided. Interconnection Customer shall promptly provide LIPA with any additional information needed to update information previously provided.
- 13.2 Disclaimer of Warranty. In preparing the system impact study, LIPA and any subcontractor or consultants to LIPA shall have to rely on information provided by Interconnection Customer, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, neither LIPA nor any subcontractor or consultant to LIPA 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 or merchantability and fitness for a particular purpose, with regard to the accuracy, content or system impact conclusions of the system impact study. Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representation or warranties have formed the basis of its bargain hereunder.
- 13.3 Force Majeure. For purposes of this Agreement, "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will 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 will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement.
- 13.4 Limitations of Liability. In no event shall any Party or its subcontractor consultant be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with this Agreement or the system impact study or any reliance on the system impact study by Developer or third parties, even if one or more of the Parties or its subcontractor consultants have been advised of the possibility of such damages. Nor shall LIPA be liable for any delay in delivery or for the non-performance or delay in performance of LIPA's obligations under this Agreement.
- 13.5 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless LIPA, and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out

## APPENDIX Q1

of or resulting from the performance by LIPA under this Agreement, any bankruptcy filings made by Interconnection Customer, or the actions or omissions of Interconnection Customer in connection with this Agreement, except to the extent such Losses arise from the gross negligence or willful misconduct by LIPA or their respective directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify LIPA shall be several, and not joint or joint and several.

- 13.6 Third-Party Beneficiaries. Without limitation of Sections 13.2, 13.3 and 13.5 of this Agreement, Interconnection Customer further agrees that subcontractor consultant hired by LIPA to conduct or review, or to assist in the conducting or reviewing, an Interconnection Feasibility Study shall be deemed third party beneficiaries with respect to Sections 13.2, 13.3, 13.4 and 13.5.
- 13.7 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 13.7, shall continue in effect for a term of one year or until the system impact study for Interconnection Customer's Small Generator is completed, whichever event occurs first. Interconnection Customer or LIPA may terminate this Agreement upon the withdrawal of Interconnection Customer's application pursuant to Section II.A.4 of LIPA's Small Generator Interconnection Procedures.
- 13.8 Governing Law. This Agreement 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.
- 13.9 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null or void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 13.10 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 13.11 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing signed by the Parties hereto.
- 13.12 Survival. All warranties, limitations of liability, indemnification and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 13.13 Independent Contractor. LIPA shall at all times be deemed to be an independent contractor and none of their employees or the employees of its subcontractors shall be considered to be employees of Interconnection Customer as a result of this Agreement.
- 13.14 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement 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.
- 13.15 Successors and Assigns. 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

## APPENDIX Q1

successors and assigns. No assignment shall be permitted where the assignee is currently in litigation with one of the Parties to this Agreement, except with the consent of the affected Party.

13.16 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

14.0 All disputes shall be resolved in accordance with the procedures set forth in Section II.A.9 of the PSEG Long Island Small Generator Interconnection Procedures for Distributed Generation Less than 10 MW Connected in Parallel with LIPA Distribution Systems.

**IN WITNESS THEREOF**, 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.

**Long Island Electric Utility Service LLC  
acting as agent of and on behalf of  
Long Island Lighting Company d/b/a LIPA**

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Print)

Name: \_\_\_\_\_  
(Print)

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

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

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

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

## **APPENDIX Q2**

### **Q2 – Assumptions Used In Conducting The System Impact Study**

#### **Attachment A to System Impact Study Agreement**

##### **Assumptions Used in Conducting the System Impact Study**

The system impact study shall be based upon the results of the feasibility study, subject to any modifications in accordance with the standard Small Generator Interconnection Procedures, and the following assumptions:

- 1) Designation of Point of Interconnection and configuration to be studied.
  
- 2) Designation of alternative Points of Interconnection and configuration.

1) and 2) are to be completed by the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer and LIPA.

## APPENDIX R1

### **Appendix R1 – Facilities Study Agreement**

#### **Facilities Study Agreement**

**THIS AGREEMENT** is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer,") and Long Island Lighting Company d/b/a LIPA ("LIPA"). Interconnection Customer and LIPA each may be referred to as a "Party," or collectively as the "Parties."

#### **RECITALS**

**WHEREAS**, the Interconnection Customer is proposing to develop a Small Generator or generating capacity addition to an existing Small Generator consistent with the Interconnection Request completed by the Interconnection Customer on \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Small Generator with LIPA's Distribution System;

**WHEREAS**, LIPA has completed a system impact study and provided the results of said study to the Interconnection Customer; and

**WHEREAS**, the Interconnection Customer has requested LIPA to perform a facilities study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the system impact study in accordance with Good Utility Practice to physically and electrically connect the Small Generator with LIPA's Distribution System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the Long Island Power Authority Small Generator Interconnection Procedures for Distributer Generation less than 10 MW Connected in parallel with LIPA Distribution Systems (PSEG Long Island Small Generator Interconnection Procedures).

2.0 The Interconnection Customer elects and LIPA shall cause a facilities study consistent with the PSEG Long Island Small Generator Interconnection Procedures.

3.0 The scope of the facilities study shall be subject to data provided in Attachment A to this Agreement.

4.0 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). 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 LIPA'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.

## APPENDIX R1

5.0 LIPA 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 Generator if it is willing to pay the costs of those facilities.

6.0 The Interconnection Customer shall provide to LIPA a deposit of \$10,000 or other commercially reasonable security in an amount equal to the good faith estimated facilities study costs.

7.0 In cases where Upgrades are required, the facilities study must be completed within forty-five (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 thirty (30) Business Days. Projects that are subject to the NYISO OATT Attachment S cost allocation process shall be processed in accordance with the NYISO's Attachment S procedures

8.0 Once the facilities study is completed, a facilities study report shall be prepared and promptly transmitted to the Interconnection Customer.

9.0 Any study fees shall be based on the actual costs of the study and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.

10.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within thirty (30) calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, LIPA shall refund such excess within thirty (30) calendar days of the invoice without interest. LIPA 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.

11.0 Miscellaneous.

11.1 Accuracy of Information. Except as Interconnection Customer may otherwise specify in writing when it provides information to LIPA under this Agreement, Interconnection Customer represents and warrants that the information it provides to LIPA shall be accurate and complete as of the date the information is provided. Interconnection Customer shall promptly provide LIPA with any additional information needed to update information previously provided.

11.2 Disclaimer of Warranty. In preparing the system impact study, LIPA and any subcontractors or consultants employed by LIPA shall have to rely on information provided by Interconnection Customer, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, neither LIPA nor any subcontractor consultant employed by LIPA 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 or merchantability and fitness for a particular purpose, with regard to the accuracy, content or system impact conclusions of the system impact study. Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representation or warranties have formed the basis of its bargain hereunder.



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- 11.3 Force Majeure. For purposes of this Agreement, "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will 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 will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement.
- 11.4 Limitations of Liability. In no event shall any Party or its subcontractor consultant be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with this Agreement or the system impact study or any reliance on the system impact study by Developer or third parties, even if one or more of the Parties or its subcontractor consultants have been advised of the possibility of such damages. Nor shall LIPA be liable for any delay in delivery or for the non-performance or delay in performance of LIPA's obligations under this Agreement.
- 11.5 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless LIPA, and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by LIPA under this Agreement, any bankruptcy filings made by Interconnection Customer, or the actions or omissions of Interconnection Customer in connection with this Agreement, except to the extent such Losses arise from the gross negligence or willful misconduct by LIPA or their respective directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify LIPA shall be several, and not joint or joint and several.
- 11.6 Third-Party Beneficiaries. Without limitation of Sections 11.2, 11.3 and 11.5 of this Agreement, Interconnection Customer further agrees that subcontractor or consultant to LIPA to conduct or review, or to assist in the conducting or reviewing, an Interconnection Feasibility Study shall be deemed third party beneficiaries with respect to Sections 11.2, 11.3, 11.4 and 11.5.
- 11.7 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 11.7, shall continue in effect for a term of one year or until the system impact study for Interconnection Customer's Small Gene rating Facility is completed, whichever event occurs first. Interconnection Customer or LIPA may terminate this Agreement upon the withdrawal of the Interconnection Customer's application pursuant to Section II.A.4 of PSEG Long Island's Small Generator Interconnection Procedures.

## APPENDIX R1

- 11.8 Governing Law. This Agreement 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.
- 11.9 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null or void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 11.10 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 11.11 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing signed by the Parties hereto.
- 11.12 Survival. All warranties, limitations of liability, indemnification and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 11.13 Independent Contractor. LIPA shall at all times be deemed to be an independent contractor and none of their employees or the employees of its subcontractors shall be considered to be employees of Interconnection Customer as a result of this Agreement.
- 11.14 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement 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.
- 11.15 Successors and Assigns. 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. No assignment shall be permitted where the assignee is currently in litigation with one of the Parties to this Agreement, except with the consent of the affected Party.
- 11.16 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.
- 12.0 All disputes shall be resolved in accordance with the procedures set forth in Section II.A.9 of the PSEG Long Island Small Generator Interconnection Procedures.

## APPENDIX R1

**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.

**Long Island Electric Utility Service LLC**  
**acting as agent of and on behalf of**  
**Long Island Lighting Company d/b/a LIPA**

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Print)

Name: \_\_\_\_\_  
(Print)

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

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

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

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

## APPENDIX R2

### **Appendix R2 – Facilities Study Agreement Input Data Requirements**

#### **Attachment A to the Facilities Study Agreement**

##### **Data to Be Provided by the Interconnection Customer**

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

One set of metering is required for each generation connection to the new ring bus or existing LIPA 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 \_\_\_\_\_  
(Please indicate on the one-line diagram).

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

---

---

What protocol does the control system or PLC use?

---

---

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

Physical dimensions of the proposed interconnection station:

---

Bus length from generation to interconnection station:

---

## APPENDIX R2

Line length from interconnection station to LIPA's System.

---

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

---

Number of third party easements required for transmission lines\*:

---

\* To be completed in coordination with LIPA.

Is the Small Generator located outside of LIPA's service area?

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

---

Please provide the following proposed schedule dates:

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

Generator step-up transformers  
receive back feed power Date: \_\_\_\_\_

Generation Testing Date: \_\_\_\_\_

Commercial Operation Date: \_\_\_\_\_

**Proposal Concerning Modifications to LIPA's Tariff for Electric Service**

**Requested Action:**

The Long Island Power Authority (the "Authority") staff proposes to modify the Authority's Tariff for Electric Service (the "Tariff") effective January 1, 2020, to set a standard rate for pole attachments of wireless communication equipment in public rights of way in accordance with the New York State Public Service Commission Order Commission (the "Commission")'s *Order Approving Petition in Part and Continuing Proceeding*<sup>1</sup> issued and effective March 14, 2019 (the "March Order").

**Background:**

Over the last 20 years, the Commission has taken several actions to remove barriers to entry in the telecommunications market, including promoting standard rates and processes for wireline attachments to utility poles. In June 1997, the Commission ordered New York's investor-owned utilities to establish a specific rate methodology for wireline attachments by adopting the Federal Communications Commission (FCC) calculation of rates applicable to "horizontal cable" and wireline attachments. At that time, the Commission determined that the price and terms for wireless attachments should be determined through negotiations.

In April 2004, the Commission adopted an order<sup>2</sup> that introduced a standard rate methodology for wireless attachments to the Niagara Mohawk Power Corporation d/b/a National Grid's distribution poles. At that time, the Commission did not extend this methodology to other utility pole owners.

In 2011, the FCC opined that "wireless providers are entitled to the same rate [] as other telecommunication carriers."<sup>3</sup> In 2015, the FCC further attempted to harmonize regulatory treatment for pole attachments<sup>4</sup>. The FCC construct uses two calculations to determine the rate, one which is based on fully allocated telecommunications formula, and the other which is based on "cost causation".

In 2016, The Wireless Association ("CTIA") filed a petition (the "Petition") with the Commission seeking a proceeding to update and clarify wireless pole attachment policies. The Petition sought an order declaring, *inter alia*, that the Commission's regulation of pole attachments applies, in a non-discriminatory manner, to wireless facilities attached to the utility poles and the Commission's rate principles for wireless attachments should reflect the FCC's telecommunications rate methodology.

After an extended period of deliberation, the Commission issued the March Order. In the March Order, the Commission established an interim rental rate to be charged for new wireless pole attachments in public rights-of-way. The Commission's interim wireless pole attachment rate is a cost-of-service-based rate per foot of space occupied by the pole attachment, using a cost allocation methodology consistent with the FCC's formula. In the March Order, the Commission also announced a new phase of the pole

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<sup>1</sup> Case 16-M-0330, *Petition of CTIA The Wireless Association to Initiate a Proceeding to Update and Clarify Wireless Pole Attachment Protections*, Order Approving Petition in Part and Continuing Proceeding (issued and effective March 14, 2019).

<sup>2</sup> Case 03-E-1578, *Joint Petition of Niagara Mohawk Power Corp. and National Grid Comm. Inc.*, Order Approving Petition with Modifications (issued April 7, 2004).

<sup>3</sup> FCC Numbers WC 07-245 and GN 09-51, *In the Matter of Implementation of Section 224 of the Act, A National Broadband Plan for Our Future*, Report and Order and Order on Reconsideration (adopted April 7, 2011) (FCC 2011 Order).

<sup>4</sup> FCC WC Docket No. 07-245, GN Docket No. 09-51, *Order on Reconsideration* (adopted November 24, 2015) (FCC 2015 Order).

attachment proceeding that include a more comprehensive review of pole attachment policy, including both wireless and wireline, and will explore innovative approaches to the rates, terms and conditions for attachment in the various areas of a pole.

On July 16, 2019, the Commission issued the July Order, suspending implementation of the interim wireless attachment rates set forth in the March Order until November 28, 2019, and ordering the investor-owned utilities to review wireline attachment rates and update them if needed.

### **Proposal:**

The Authority Staff proposes to update the Tariff for Electric Service to set a standard rate for new wireless pole attachments located in public rights-of-way. Previously, the rate was set at a negotiated rate on a case-by-case basis in a written agreement between the customer and the Authority. Pursuant to the March Order, LIPA Staff proposes to establish a standard annual rate per foot of space occupied by the wireless pole attachment, using the methodology adopted in Case 16-M-0330, of \$17.12 per foot.<sup>5</sup>

The Authority will provide rental space to CATV and telecommunications companies for the purpose of installing cables, wires, amplifiers and wireless equipment to specific Company-owned poles within an agreed area. An agreement may be required between the Authority and each CATV or telecommunications company outlined in the “Definitions of Space Allocation on LIPA Distribution Poles” document which describes the requirements for attaching cables, wires, amplifiers and wireless equipment. The “Definitions of Space Allocation on LIPA Distribution Poles” document provides the provisions needed to ensure the safety of our line workers when making electrical repairs.

Pursuant to the July Order, the Authority Staff reviewed the wireline pole attachment rate. Consistent with the other State’s investor-owned utilities, LIPA Staff recommends no modifications to the current wireline rate.

This proposal also requests ministerial tariff language changes to clarify the requirements for other types of pole attachments but does not request a change in the rate of those attachments.

### **Financial Impacts:**

Annual wireless pole attachment revenue for 2019 is \$118,668.29. There are currently 29 wireless pole attachments with rates which were negotiated at a market-based rate. Assuming the wireless pole attachment customers will relocate their wireless pole attachments and terminate their current contract, all current wireless communication attachments will be priced \$17.12 per foot per attachment. Assuming most wireless pole attachments occupy two feet, the proposed annual miscellaneous revenue from the current wireless pole attachments is estimated to be between \$993<sup>6</sup>.

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<sup>5</sup> Because the FCC formula includes inputs that—while commonly reviewed in investor-owned utility rate cases—are not reviewed in a public power or municipal utility rate case, the Department of Public Service accepted PSEG Long Island’s proposal in its 2015 rate case (Matter No. 15- E-00262) that the Authority should adopt the wireline pole attachment fee of the New York investor owned utility with the lowest such fee, which was Rochester Gas and Electric. For consistency, the Authority now proposes to adopt the wireless pole attachment fee of Rochester Gas and Electric and to continue to charge RG&E’s wireline pole attachment fee.

<sup>6</sup> The estimation of \$993 is based on a \$17.12 per foot pole attachment rate multiplied by 29 attachments multiplied by two feet respectively.

This proposal dramatically changes the cost of wireless attachments, which will likely increase the number of wireless attachments in the service territory to more than 29. This is a new market for wireless carriers and the number of attachments is expected to increase, which will partially offset the loss of miscellaneous revenue. However, no known forecast of new attachments exists for the Long Island's service territory.

**Affected Tariff Leaf:** 106

**Summary of Proposed Change:**

The Authority is proposing to update the wireless communication pole attachments fee to a standard annual rate per foot of pole space occupied by the attachment.



**IV. Billing Process and Payment of Bills (continued):****C. Charges for Miscellaneous Services:****1. Pole Attachment**

The Authority will provide rental space to CATV and telecommunications companies for the purpose of installing cables, wires, amplifiers and wireless equipment to specific Authority-owned poles, within an agreed area on the pole. A contract may be made between the Authority and each CATV or telecommunications company outlined in the "Definitions of Space Allocation on LIPA Distribution Poles" for attaching cables, wires, amplifiers and wireless equipment.

The annual charge for pole attachments to utility poles by cable television systems and other wire line communications system that occupy the same space on the pole is \$11.98 per pole per year, plus the applicable amounts for payments in lieu of revenue taxes.

The annual charges for attachments of wireless communications facilities to utility poles and towers prior to January 1, 2020 are subject to negotiation on a case-by-case basis of a written agreement between the party seeking the attachment(s) and the Authority. The charge for attachments of wireless communication facilities to utility poles and towers located in public rights-of-way, authorized on or after January 1, 2020, is \$17.12 per foot times the number of feet on the pole occupied by the wireless equipment, per year, plus the applicable amounts for payments in lieu of revenue taxes. For each piece of wireless equipment attached, the occupied space measurement shall reflect the overall length of the equipment and mounting hardware plus six inches, rounded up to the next whole foot. The number of feet occupied for wireless communication facilities shall exclude conduits, risers, and electrical meters.

The annual charge for decorative, festival, or holiday attachments that are seasonal or temporary- attachments ~~other than wire line communications system attachments or wireless communications facilities~~ is \$6.19 per pole per year, plus the applicable amounts for payments in lieu of revenue taxes, which may be prorated on a daily basis for attachments that are seasonal or temporary in place for less than a year. The Authority may require that attachments be made pursuant to the terms of a written agreement with the Authority which permits attachment to utility poles and towers. Consistent with the Authority's written policy, the Authority may waive the pole attachment fee for temporary or seasonal attachments that support a patriotic, civic, or ceremonial purpose, or where the tangible value of the attachment is nominal to both parties.

**2. Interest on Customer Deposits**

The Authority will pay interest on Customer Deposits at the applicable annual rate specified on a Statement of Interest on Customer Deposits to be prepared and maintained on file by the Authority. The rate will be derived by subtracting a 1.75% administrative cost allowance from the current yield on "A" rated intermediate term municipal debt. The rate will be updated on January 1 of each year to reflect current market conditions.

**3. No-Access Charge**

The Authority's charge when it cannot gain access to the Customer's meter after attempts to do so will be:

- (a) \$25 per month for Residential accounts
- (b) \$100 per month for Nonresidential accounts

**4. Uncollectible Payment Handling Charge**

The Authority will charge the Customer a twenty dollar (\$20.00) handling charge plus applicable taxes and assessments. This handling charge includes any amount the Authority

paid to its bank for handling the instrument if it receives a check or other negotiable financial instrument in payment for any bill, charge, or deposit that is not collectible, for any reason.

5. Late Payment Charge

The Authority's charge for late payment of bills for the accounts of all customers as specified in Section IV. D. 4 will be one and one-half percent (1.5%) for each monthly billing period to all amounts billed, but for which the Authority has not received payment by the "Pay by" date on the bill, which will be not less than twenty (20) days after the date payment is due.

Residential customers are not responsible for late payment charges on amounts billed, if the bill is subject to a pending complaint with the Department of Public Service or the Manager pursuant to Section VI. of the Tariff, except that any such late payment charge may be imposed retroactively if the complaint is finally resolved in favor of the Authority.

**Proposal Concerning Modifications to LIPA's Tariff for Electric Service**

**Requested Action:**

PSEG Long Island's Smart Grid Small Generator Interconnection Procedures (the "SGIP") is an addendum to the Long Island Power Authority (the "Authority")'s Tariff for Electric Service (the "Tariff"). The Authority's staff proposes to modify the SGIP, effective January 1, 2020, to reflect additional updates and clarifications of the New York Public Service Commission (the "Commission") to the *New York State Standardized Interconnection Requirements ("SIR") for Small Distributed Generators* as a result of the July 13, 2018 *Order Granting Clarification*<sup>1</sup> and the October 18, 2018 *Order Modifying Standardized Interconnection Requirements*<sup>2</sup>.

**Background:**

On April 19, 2018, the Commission issued an *Order Modifying Standardized Interconnection Requirements* in Case 18-E-0018 (the "April Order"), which was subsequently implemented by the Authority on December 19, 2018.

On June 8, 2018, members of the statewide Interconnection Policy Working Group and Interconnection Technical Working Group filed a petition for clarification of the April Order (the "Petition").<sup>3</sup>

On July 13, 2018, the Commission issued an order granting clarification of the SIR (the "July Order"), which addressed some issues raised by the Petition and deferred others for additional working group consideration and public comment. Subsequently, on October 18, 2018, following additional working group consideration and public comment, the Commission issued an order addressing the previously deferred issues from the Petition (the "October Order"). The issues addressed by the Commission in the July Order and the October Order are summarized in the next section of this proposal memorandum.

**Proposal:**

Staff proposes six modifications to the SGIP to implement the July Order and the October Order. Additionally, Staff proposes two other modifications to the SGIP that are essential to continue to allow applicants in unique situations safely interconnect to LIPA's grid, and several ministerial edits. The proposed changes are as follows:

***NYS SIR Modifications***

- 1. Increased time for applicants to make initial payments (systems above 50 KW up to 5 MW):** To be consistent with the NYS SIR, Staff proposes to update the SGIP to increase the number of days for applicants to make advanced payments from 60 days to 90 days under Section 1.C, Step 7. This proposal will increase the amount of time applicants have to make initial payments.
- 2. Clarification of when the applicant will receive a signed Interconnection Agreement:** Staff proposes to modify Section D, "Payments & Construction Milestones" of the SGIP to state that,

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<sup>1</sup> Case 18-E-0018, *In the Matter of Proposed Amendments to the New York State Standardized Interconnection Requirements (SIR) for Small Distributed Generators, Order Granting Clarification*; Issued and Effective July 13, 2018.

<sup>2</sup> Case 18-E-0018, *In the Matter of Proposed Amendments to the New York State Standardized Interconnection Requirements (SIR) for Small Distributed Generators, Order Modifying Standardized Interconnection Requirements*; Issued and Effective October 18, 2018.

<sup>3</sup> Case 18-E-0018, *In the Matter of Proposed Amendments to the New York State Standardized Interconnection Requirements (SIR) for Small Distributed Generators, Order Modifying Standardized Interconnection Requirements*; Issued and Effective April 19, 2018.).

for projects 5 MW and under, a signed Standardized Interconnection Agreement will be returned to the applicant within 15 business days of receipt of initial payment. This proposal is consistent with the updates to the NYS SIR.<sup>4</sup>

3. **Clarification on commencement of design work:** Staff proposes to modify Section D “Payments & Construction Milestones” to clarify that design work would commence in accordance with the in-service timeline. This proposal is consistent with the updates to the NYS SIR.
4. **Clarification of when an application is deemed complete:** Staff proposes to modify Section E, “Application Process for Energy Storage Systems (ESS)” Step 2, by removing the language “Once an application has been deemed complete” and replacing it with “Following the completion of Step 3 in Section I.B, or upon passing the Preliminary or Supplemental Screening Analysis in Step 4 in Section I.C” to prompt the next step in the process. This proposal is consistent with the updates to the NYS SIR.
5. **Addition of Construction Payment Task List:** Staff proposes to add a Construction Payment Task List to Appendix K to identify what tasks PSEG Long Island would perform with the developer’s initial Construction Payment. This proposal is consistent with the updates to the NYS SIR.
6. **Changes in the Energy Storage System Application Requirements (Appendix J):** Staff proposes to add in language for applicants to identify whether the application is for a new Stand-Alone or Hybrid ESS project or a change to the operating characteristics of an existing renewable system, allowing for modifications on existing interconnected systems. This proposal is consistent with the updates to the NYS SIR.

#### ***Additional Requested Updates to SGIP***

1. **Definitions of Business Day and Force Majeure Event:** LIPA Staff proposes to modify in Section III, the term Business Day. This proposed change will better align with LIPA’s service provider’s (PSEG Long Island) definition of a Business Day. Additionally, it is proposed to add Force Majeure Event to the Glossary of Terms, with the understanding that any deadlines in the SGIP will be extended to the extent they are affected by a Force Majeure Event.
2. **Providing timing flexibility for interconnection of emerging technologies:** LIPA’s Staff is proposing to modify the SGIP for the evaluation of emerging technologies. With the possibility for new untested technologies (e.g. regenerative braking for electrified trains) to interconnect to LIPA’s grid, it recognizes that these new emerging technologies may require special studies and testing to determine their impact on the grid. This proposal would allow for additional study time to interconnect technologies that have not previously interconnected to LIPA’s system. However, PSEG Long Island will commit to using its best efforts to meet the standard SGIP timelines. In addition, once an emerging technology is successfully interconnected to the grid, any future applications for that technology would follow the standard timelines outlined in the SGIP. This

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<sup>4</sup> The NYS SIR is limited to interconnections 5 megawatts and under. While the PSEG Long Island SGIP also governs interconnections between 5 megawatts and 10 megawatts, the recent PSC orders do not apply to projects of such larger size. Larger projects require additional analysis to ensure proper interconnection to the grid prior to the Standard Interconnection Agreement being returned.

will set expectations for these new technologies and allow the time necessary to ensure the connections do not interfere with safe and reliable electricity for all customers.

3. **Miscellaneous edits:** Ministerial changes to terms that do not affect the content of the document. Changes include:

- “Interconnection and Metering Standards” to “Interconnection and Metering Requirements”
- “Interconnection Guide” to “Interconnection Procedures and Requirements”
- “Metering Standards” to “Metering Requirements”
- Removal of duplicate language under Appendix J.

**Financial Impacts:** There are no financial impacts.

**Affected Tariff Leaves:** There are no Electric Service Tariff leaves affected. The proposed updates would be to the PSEG Long Island Smart Grid Small Generator Interconnection Procedures (SGIP), an addendum to the Electric Service Tariff.

**Reason for Proposed Changes:**

The proposed changes are to conform to recent NY PSC policy and Orders Modifying Standardized Interconnection Requirements issued July 13, 2018 and October 18, 2018 where appropriate, as well as modify the SGIP as necessary for unique situations within the LIPA territory. These updates provide the applicants with more details and clarifications so they may better understand the process and procedures and allow for modification for larger projects and new and emerging technologies.

**Summary of Proposed Changes:**

The proposed changes to the SGIP include:

- Increasing the amount of time applicants have to make the 30% down payment for projects.
- Clarifying that an applications for projects 5 MW and under will receive a signed Interconnection Agreement within 15 days of the receipt of the initial payment.
- Stating that design work will commence in accordance with the in-service timeline.
- Adding the “30 Percent Construction Payment Task List” to Appendix K.
- Clarifying the steps required for an application to be deemed complete.
- Adding form language to identify the purpose of the application (adding a battery, changes to the operating characteristics of an existing system, or a new system).
- Defining the term Business Day to be Monday through Friday, excluding PSEG Long Island holidays, and adding a definition of Force Majeure Event to be consistent with other parts of the SGIP.
- Clarifying that the SGIP applies to new and emerging technologies. PSEG Long Island will make its best efforts to follow the timelines set forth in the SGIP but recognizes that new technologies may require additional time for analysis and testing before interconnection.



**Smart Grid Small Generator Interconnection Procedures  
For Distributed Generators and Energy Storage Systems Less than 10 MW Connected in Parallel  
with LIPA's Radial Distribution Systems**

Revised January 1, ~~2019~~2020

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## Section I. Application Process

### Section I.A. Introduction

The Smart Grid Small Generator Standardized Interconnection Procedures (“SGIP”) administered by PSEG Long Island, as the service provider and agent for LIPA, provides a framework for processing applications for interconnection to LIPA’s Distribution System for:

- i. Interconnection of new distributed generation facilities with an AC nameplate rating of less than 10 MW (aggregated on the customer side of the point of common coupling (PCC))
- ii. Interconnection of new energy storage system (ESS) facilities with an AC inverter/converter nameplate rating of 10 MW or less aggregated on the customer side of the PCC that may be stand-alone systems or combined with existing or new DG (Hybrid Projects); however, maximum export capacity onto the utility distribution system is capped at an AC nameplate rating or AC inverter/converter nameplate rating of 10 MW or less;
- iii. Modifications to existing distributed generation facilities and/or ESS facilities with an nameplate rating of less than 10 MW (aggregated on the customer side of the PCC) that have been interconnected to the LIPA Distribution System and where an existing contract between the applicant and LIPA is in place.
- iv. For new distributed generation facilities less than 10 MW, interconnection to specific voltage level of the LIPA System will be determined during the study phase of the application process.
- v. New distributed generation facilities 10 MW and above must connect to LIPA’s transmission system and make application to the NYISO under its Small Generator Interconnection Procedures (SGIP) or Large Generator Interconnection Procedures (LGIP), as applicable.
- vi. The timelines set forth in the SGIP are generally applicable; provided, however, that PSEG Long Island may need additional time (a) during storm events when PSEG Long Island employees are reassigned from interconnection to storm duties and (b) to conduct research, studies, and other tasks necessary for connection of new technologies that previously have not interconnected to LIPA’s distribution system. For projects affected by storm events or involving such new technology, PSEG Long Island will nonetheless use best efforts to adhere to the timelines set forth herein.

If a Distributed Generation or Energy Storage System is neither designed to operate nor operating in parallel with LIPA’s System, such equipment is not subject to these requirements.

The application procedures set forth in Section I are organized to facilitate efficient review of potential interconnections to LIPA’s Distribution System. This document will help ensure that applicants are aware of the technical interconnection requirements and LIPA’s interconnection policies and practices. This SGIP and related procedures will also provide applicants with an understanding of the process and information required to allow PSEG Long Island to review and accept the applicants’ equipment for interconnection in a reasonable and expeditious manner.

The application procedures for up to 10 MW distributed generator interconnections to LIPA’s Distribution System are detailed in Section I and organized for three categories of generator interconnections. Section I.B addresses application procedures for systems of less than 50 kW as well as

inverter-based systems above 50 kW up to 300 KW that have been certified and tested in accordance with UL 1741. Section I.C addresses application procedures for systems above 50 kW up to 5 MW. Section I.D addresses application procedures above 5 MW up to 10 MW. All systems 0-5 MW are eligible to use web- based application procedures, which are detailed in Section I.E.

For systems sized between 0-5 MW, the time required to complete the process will reflect the complexity of the proposed project. Projects using previously submitted designs certified per the requirements of Section II.H will move through the process more quickly, and several steps may be satisfied with an initial application depending on the detail and completeness of the application and supporting documentation submitted by the applicant. Applicants submitting systems utilizing certified equipment however, are not exempt from providing PSEG Long Island with complete design packages necessary for PSEG Long Island to verify the electrical characteristics of the generator systems, the interconnecting facilities, and the impacts of the applicants' equipment on LIPA's Distribution System.

The application process and the attendant services are offered on a non-discriminatory basis. PSEG Long Island will clearly identify its costs related to the applicants' interconnections, specifically those costs PSEG Long Island would not have incurred but for the applicants' interconnections. PSEG Long Island will keep a log of all applications, milestones met, and justifications for application-specific requirements. The applicants are to be responsible for payment of all costs, as provided for herein.

All interconnections to LIPA's Distribution System are subject to the Smart Grid SGIP set forth in Section II. These requirements detail the technical interconnection requirements and PSEG Long Island interconnection policies and practices. Where specific standards or requirements are applicable to a specific type of system or to a system of a particular kW or MW value, such limitations are noted in the applicable standards.

Currently, LIPA does not allow any interconnection of Distributed Generation in Underground secondary Network Areas of the LIPA distribution system.

All application timelines shall commence the next Business Day following receipt of information from the applicant.

Additional technical references and requirements are included in "PSEG Long Island's Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA's Distribution System" document which addresses such matters as the following:

- Voltage Response
- Frequency Response
- Reconnection to LIPA's Distribution System
- Induction Generators
- Inverters
- Minimum Protective Functions
- Metering
- Islanding
- Operating Requirements
- Disconnect Switch
- Power Quality
- Power Factor
- Equipment Certification (new section)
- Verification Testing (new section)

- Preliminary Screening Analysis
- Other technical requirements

All Interconnection Customers must comply with “PSEG Long Island’s Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA’s Distribution System” document, as it may be modified by LIPA from time to time.

All SGIP applicants that are subject to the Business Practices for Distributed Energy Resource Suppliers (BP-DERS) that are in non-compliance of the BP-DERS may be subject to the suspension of their application for interconnection to LIPA’s Distribution System.

A glossary of terms used herein is provided in Section III.

### **Section I.B. Application Process Steps for Systems 50 kW or Less (Expedited/Fast Track Process)**

**Exception 1:** For inverter based systems above 50 kW up to 300 kW, applicants may follow the expedited application process outlined in this section provided that the inverter based system has been certified and tested in accordance with the most recent revision of UL 1741 and its supplement A (SA), and PSEG Long Island has approved the project accordingly. PSEG Long Island has ten (10) Business Days upon receipt of the original application submittal to determine if the application is complete, project is eligible for the expedited process, and whether it is approved for interconnection if eligible for expedited process. PSEG Long Island shall notify the applicant in writing of its findings upon review of the application. If PSEG Long Island determines that the inverter based system is not eligible for the expedited application process, the applicant can:

- 1) Proceed with the remaining steps of Section I.C of the SGIP (Systems above 50 kW up to 5 MW);

**Exception 2:** For non-inverter based system 50 kW or less, the applicant should be aware that additional information and review time may be required by PSEG Long Island (refer to Step 3). The applicant must include the items required in Step 5 of the Application Process Steps for Systems above 50 kW up to 5 MW in its original application. This exception should not be considered the rule, but used by PSEG Long Island only in justified situations. PSEG Long Island has ten (10) Business Days upon receipt of the original application submittal to determine if the application is complete, project is eligible for expedited process, and whether it is approved for interconnection if eligible for expedited process. PSEG Long Island shall notify the applicant in writing of its findings upon review of the application. If PSEG Long Island determines that the non-inverter based system is not eligible for the expedited application process, the applicant can:

- 1) Proceed with the remaining steps of Section I.C of the SGIP (Systems above 50 kW up to 5 MW);

#### **STEP 1: Initial Communication from the Potential Applicant**

Communication could range from a general inquiry to a completed application.

#### **STEP 2: The Inquiry is reviewed by PSEG Long Island to Determine the Nature of the Project**

Technical staff from PSEG Long Island discusses the scope of the interconnection with the potential applicant (either by phone or in person) and provide a copy of the SGIP document and any LIPA specific

technical specifications that may apply. A PSEG Long Island representative will be designated to serve as the single point of contact for the applicant (unless PSEG Long Island informs the applicant otherwise) in coordinating the potential applicant's project with PSEG Long Island.

### **STEP 3: Potential Applicant Files an Application**

The potential applicant submits an application package to PSEG Long Island. No application fee is required for systems 50 kW or less.

A complete application package will consist of all items detailed in Appendix F. PSEG Long Island strongly prefers electronic submission of all documents, including electronic signatures, whenever possible. PSEG Long Island has ten (10) Business Days upon receipt of the original application submittal to determine if the application is complete, meets the SGIP technical requirements in Section II, and approved for interconnection if all other requirements are met. PSEG Long Island shall notify the applicant by email, fax, or other form of written communication. If the application is deemed not complete by PSEG Long Island, PSEG Long Island shall provide an explanation of the deficiencies identified and a list of the additional information required from the applicant. Once it has received the required information, PSEG Long Island shall notify the applicant of the acceptance or rejection of the application within ten (10) Business days. If the applicant fails to submit the additional information requested by PSEG Long Island to address the deficiencies, PSEG Long Island within thirty (30) Business Days following the date of PSEG Long Island's written notification, the application shall be removed from the queue and no further action on the part of PSEG Long Island is required.

If PSEG Long Island accepts the application, the notification of acceptance to the applicant shall include an executed LIPA Standardized Interconnection Contract and the applicant may proceed with the proposed installation. PSEG Long Island shall also indicate in its response to the applicant whether or not it plans to witness the testing and verification process in person.

An application will be placed in PSEG Long Island's interconnection inventory once it is accepted as complete. If the final acceptance as set out in Step 6 below is not completed within twelve (12) months of receipt of such executed copy of the Standardized Interconnection Contract as a result of applicant inactivity or other failure to pursue diligently the timely completion of the interconnection, PSEG Long Island has the right to notify the applicant by email and U.S. first class mail with delivery receipt confirmation that the applicant's project will be removed from PSEG Long Island's interconnection inventory if the applicant does not respond within thirty (30) Business Days of the issue of such notification and provide a project status update and justification as to why the project should remain in PSEG Long Island's interconnection inventory for an additional period of time.

With respect to an applicant proposing to install a system rated 25 kW or less, that is to be net-metered, if PSEG Long Island determines that it is necessary to install a dedicated transformer(s) or other equipment to protect the safety and adequacy of electric service provided to other customers, the applicant shall be informed of its responsibility for the actual costs for installing the dedicated transformer(s) and other safety equipment. LIPA's Tariff for Electric Service (the "Tariff") specifies the maximum responsibility each applicant shall have with respect to the actual cost of the dedicated transformer(s) and other safety equipment. The applicant will pay the cost estimate as provided in Section D.

### **STEP 4: System Installation**

The applicant will install the system according to PSEG Long Island accepted design and the equipment manufacturer's requirements. If there are substantive design variations from the originally accepted system diagram, a revised system diagram (and other drawings for non-inverter based systems) shall be

submitted by the applicant for PSEG Long Island review and acceptance. All inverter based systems will be allowed to interconnect to the LIPA system for a period not to exceed two hours, for the sole purpose of ensuring proper operation of the installed equipment.

For net metered systems as defined in Section II.B.6, any modifications related to existing metering configurations to allow for net metering shall be completed by PSEG Long Island prior to Step 5. PSEG Long Island shall complete the necessary metering changes within ten (10) Business Days of receiving a request from the applicant.

#### **STEP 5: The Applicant's Facility is tested in Accordance with the Smart Grid SGIP**

Verification testing will be performed by the applicant in accordance with the written verification test procedure provided by the equipment manufacturer. If PSEG Long Island requested to witness the testing and verification process in person as required in Step 3, the applicant shall provide a written letter of notification to PSEG Long Island that the system installation is completed, including any applicable inspections and authorization. After receipt of notification, the verification testing will be conducted within ten (10) Business Days of system installation at a mutually agreeable time, and PSEG Long Island shall be given the opportunity to witness the tests. If PSEG Long Island opts not to witness the test, the applicant will send PSEG Long Island within five (5) days of the test a written notification, certifying that the system has been installed and tested in compliance with the Smart Grid SGIP; PSEG Long Island - accepted design and the equipment manufacturer's instructions. The applicant's facility will be allowed to commence parallel operation upon satisfactory completion of the tests in Step 5. The applicant must have complied with and must continue to comply with all contractual and technical requirements.

#### **STEP 6: Final Acceptance**

Within five (5) Business Days of receiving the written notification of successful test completion from Step 5, PSEG Long Island will issue to the applicant a formal letter of acceptance for interconnection. If the test was not completed successfully, the project must be modified to pass the test, or the project shall be withdrawn from the PSEG Long Island queue. Within five (5) Business Days of the completion of the on-site verification, PSEG Long Island will issue to the applicant either a formal letter of acceptance for interconnection or a detailed explanation of the deficiencies in the system.

### **Section I.C. Application Process Steps for Systems above 50 KW up to 5 MW**

For inverter based systems above 50 kW up to 300 kW, certified and tested in accordance with the most recent revision of UL 1741, and its supplement SA, applicants are encouraged, but not required, to use the expedited application process (Section I.B).

PSEG Long Island has ten (10) Business Days upon receipt of the original application submittal to determine if the application is complete and whether it is eligible for interconnection. PSEG Long Island shall notify the applicant in writing of its findings upon review of the application. If PSEG Long Island determines that the DG system cannot be interconnected or requires additional information be submitted and/or additional review time is needed, the applicant can work with PSEG Long Island on an appropriate timeframe and approval schedule agreeable to both parties.

Currently, LIPA does not allow interconnection of Distributed Generation in Underground secondary Network Areas of the LIPA distribution system.

#### **STEP 1: Initial Communication from the Potential Applicant.**

Communication could range from a general inquiry to a completed application.

#### **STEP 2: The Inquiry is reviewed by PSEG Long Island to Determine the Nature of the Project.**

Technical staff from PSEG Long Island may discuss the scope of the interconnection with the potential applicant (either by phone or in person) and shall provide a copy of the SGIP and any PSEG Long Island specific technical specifications that may apply. A PSEG Long Island representative shall be designated to serve as the single point of contact for the applicant in coordinating the potential applicant's project with PSEG Long Island. At this time the applicant may also request that a Pre-Application Report (see Appendix D herein) be provided by PSEG Long Island. The applicant shall provide a non-refundable fee of \$750 with its request for completion of the Pre-Application Report. The Pre-Application Report shall be provided to the applicant within ten (10) Business Days of receipt of the form and payment of the fee. The Pre-Application Report will be non-binding and shall only provide the electrical system data and information requested that is readily available to PSEG Long Island. Should the applicant formally apply to interconnect their proposed DG project within fifteen (15) Business Days of receipt of PSEG Long Island's Pre-Application Report, the \$750 will be applied towards the application fee in Step 3.

#### **STEP 3: Potential Applicant Files an Application.**

The potential applicant submits an application to PSEG Long Island in the name of the customer. A complete application package will consist of all items detailed in Appendix F. Electronic submission of all documents is acceptable, inclusive of electronic signature whenever possible. If a Pre-Application Report has been provided to the customer, and an application is received by PSEG Long Island within fifteen (15) Business Days of the date of issue of the Pre-Application Report, a \$750 credit will be applied towards the application fee. Otherwise, payment of a non-refundable \$750 application fee is required. PSEG Long Island shall review the application to determine whether it is complete in accordance with Appendix F, and whether any additional information is required from the applicant. PSEG Long Island shall notify the applicant in writing within ten (10) Business Days following receipt of the application. If the application is not complete, PSEG Long Island's notification shall specify what is missing from the application and provide a list of additional information needed. PSEG Long Island shall notify the applicant by email, fax, or other form of written communication.

The applicant shall submit to PSEG Long Island all items required by Appendix F, and provide additional information identified by PSEG Long Island. If the applicant has failed to do so within thirty (30) Business Days following the date of PSEG Long Island's notification, the application shall be deemed withdrawn and no further action on the part of PSEG Long Island is required.

If the required documentation is presented in this step, PSEG Long Island may move to Step 4 and perform the required reviews and allow the process to proceed as expeditiously as possible.

A completed application shall be placed in the interconnection queue maintained by PSEG Long Island.

If the required documentation is presented in this step, it will allow PSEG Long Island to move to Step 4 and perform the required reviews and allow the process to proceed as expeditiously as possible.

PSEG Long Island will refund any advance payments for services or construction not yet completed should the applicant be removed from PSEG Long Island's interconnection inventory. If the costs incurred by PSEG Long Island exceed the advance payments made by the applicant prior to removal from the interconnection inventory, the applicant will receive a bill for any balance due to PSEG Long Island.

#### **STEP 4: PSEG Long Island Conducts a Preliminary Review and Develops a Cost Estimate for the Coordinated Electric System Interconnection Review (CESIR).**

PSEG Long Island shall perform a Preliminary Screening Analysis of the proposed system interconnection utilizing the technical screens A through F detailed in Appendix G. The Preliminary Analysis shall be completed and a written response detailing the results of each screen and the overall outcome of the Preliminary Analysis shall be sent to the applicant within fifteen (15) Business Days of the completion of Step 3. Depending on the results of the Preliminary Analysis and the subsequent choices of the applicant, the following process or processes will apply:

If the Preliminary Screening Analysis finds that the applicant's proposed system passes all of the relevant technical screens (*i.e.*, screens P1 through P8) and is in compliance with the Interconnection Requirements outlined in Section II, there are no requirements for Interconnection Facilities or Distribution Upgrades. As such PSEG Long Island will return an executed Standardized Interconnection Contract to the applicant and the applicant may proceed with the interconnection process.

If the Preliminary Screening Analysis finds that the applicant's proposed system cannot pass all of the relevant technical screens (*i.e.*, screens P1 through P8), PSEG Long Island shall provide the technical reasons, data and analysis supporting the Preliminary Analysis results in writing. The applicant shall notify PSEG Long Island within ten (10) Business Days following such notification whether to (i) proceed to a Preliminary Screening Analysis results meeting, (ii) proceed to Supplemental Screening Review, (iii) proceed to a full CESIR, or (iv) withdraw the Interconnection Request. If the applicant fails to notify PSEG Long Island of their decision within thirty (30) Business Days of notification of the Preliminary Analysis results, the Interconnection Request shall be removed from the queue and no further action on the part of PSEG Long Island is required.

- i. If the applicant chooses to proceed to a Preliminary Screening Analysis results meeting and modifications that obviate the need for Supplemental Screening Analysis are identified, and the applicant and PSEG Long Island agree to such modifications, PSEG Long Island shall return a signed and executed Standardized Interconnection Contract within fifteen (15) Business Days of the Preliminary Analysis results meeting if no Interconnection Facilities or Distribution Upgrades are required. The applicant shall notify PSEG Long Island within fifteen (15)

Business Days following such notification indicating the intention of the applicant to revise its application as requested and proceed with the interconnection process.

If Interconnection Facilities or Distribution Upgrades are required and agreed to, PSEG Long Island shall provide the applicant with a non-binding cost estimate of any Interconnection Facilities or Distribution Upgrades within fifteen (15) Business Days of the Preliminary Screening Analysis results meeting. The applicant will pay the cost estimate as provided in Section D.

If the applicant chooses to proceed to a Preliminary Screening Analysis results meeting and modifications that obviate the need for Supplemental Analysis are not identified and agreed to, the applicant shall notify PSEG Long Island within ten (10) business days of the meeting of their intention to (i) proceed to Supplemental Screening Analysis, (ii) proceed to a full CESIR, or (iii) withdraw the Interconnection Request. If the applicant fails to notify PSEG Long Island of their decision within thirty (30) business days, the Interconnection Request shall be removed from the queue and no further action on the part of PSEG Long Island is required.

- ii. Applicants that elect to proceed to Supplemental Screening Analysis shall provide a nonrefundable fee of \$2,500 with their response; however, actual costs up to a maximum of \$5,000 will be billable to the applicant upon reconciliation of utility costs as defined in Step 11 or exit from the interconnection queue. PSEG Long Island shall complete the Supplemental Analysis within twenty (20) Business Days, absent extraordinary circumstances, following authorization and receipt of the fee. If the Supplemental Analysis finds that the applicant's proposed system passes all of the relevant technical screens (i.e. screens S1 through S13) and is in compliance with the Interconnection Requirements outlined in Section II, then there are no requirements for Interconnection Facilities or Distribution Upgrades. Thus, PSEG Long Island will return a signed and executed Standardized Interconnection Contract to the applicant within fifteen (15) Business Days of providing the applicant the results of the Supplemental Review and the applicant may proceed with the interconnection process. The applicant will sign and return the contract within fifteen (15) Business Days after receipt from PSEG Long Island and proceed with the interconnection process.

If the Supplemental Screening Analysis finds that the applicant's proposed system cannot pass all of the relevant technical screens (i.e., screens S1 through S13), PSEG Long Island shall provide the technical reasons, data, and analysis supporting the Supplemental Analysis results in writing. The applicant shall notify PSEG Long Island within ten (10) Business Days following such notification whether to (i) proceed to a Supplemental Screening Analysis results meeting, (ii) proceed to a full CESIR, or (iii) withdraw the Interconnection Request. If the applicant fails to notify PSEG Long Island of their decision within thirty (30) Business Days of notification of the Preliminary Analysis results, the Interconnection Request shall be removed from the queue and no further action on the part of PSEG Long Island is required.

- i. If the applicant chooses to proceed to a Supplemental Screening Analysis results meeting, and modifications that obviate the need for a CESIR are identified, and the applicant and PSEG Long Island agree to such modifications, PSEG Long Island shall return a signed and executed Standardized Interconnection Contract within fifteen (15) Business Days of the Preliminary Analysis results meeting if no Interconnection Facilities or Distribution Upgrades are required. The applicant will sign and return the contract within 15 Business Days after receipt from PSEG Long Island and proceed with the interconnection process.

If Interconnection Facilities or Distribution Upgrades are required and agreed to, PSEG Long



Island shall provide the applicant with a non-binding cost estimate of any Interconnection Facilities or Distribution Upgrades within fifteen (15) Business Days of the Supplemental Screening Analysis results. The applicant will pay the cost estimate as provided in Section D.

- ii. If the applicant chooses to proceed to a Supplemental Review results meeting and modifications that obviate the need for CESIR are not identified and agreed to, the applicant shall notify PSEG Long Island, within ten (10) business days of the meeting, of the applicant's intention to proceed to a full CESIR or withdraw the application. If the applicant fails to notify PSEG Long Island of applicant's decision within thirty (30) Business Days of notification of the Supplemental Analysis results, the application shall be removed from the queue and no further action on the part of PSEG Long Island is required.
- iii. If the applicant and PSEG Long Island are unable to identify or agree to modifications that enable the applicant to pass either the Initial or Supplemental Analysis or if the applicant chooses at any time in the above process to proceed directly to a CESIR, PSEG Long Island shall provide the applicant with an estimate of costs associated with the completion of the CESIR within five (5) Business Days of the final notification to/from the applicant. The applicant shall notify PSEG Long Island within ten (10) business days of receiving this cost estimate of their intention to proceed to a full CESIR and move on to Step 5 or to withdraw their application.

An accepted application will be placed in PSEG Long Island's interconnection inventory upon PSEG Long Island's receipt of the Standardized Interconnection Contract executed by the applicant. If the final acceptance as set out in Step 11 below is not completed within twelve (12) months of receipt of such executed copy of the Standardized Interconnection Contract as a result of applicant inactivity, PSEG Long Island has the right to notify the applicant by email and U.S. first class mail with delivery receipt confirmation that the applicant's project will be removed from PSEG Long Island's interconnection inventory if the applicant does not respond within thirty (30) Business Days of the issue of such notification and provide a project status update and justification as to why the project should remain in PSEG Long Island's interconnection inventory for an additional period of time.

#### **STEP 5: Applicant Commits to the Completion of the CESIR**

The applicant will indicate his commitment to the CESIR cost estimate by confirming agreement within ten (10) business days of receipt. If the customer declines the agreement, the application will be closed. Prior to commencement of the CESIR, the applicant shall provide the following information to PSEG Long Island:

- i. A complete detailed interconnection design package
- ii. Proof of site control and by executing the New York State Standard Site Control Certification Form, Appendix H
- iii. The name and phone number and agent letter of authorization (if appropriate) of the individual(s) responsible for addressing technical and contractual questions regarding the proposed system, and•,
- iv. If applicable, advanced payment of the costs associated with the completion of the CESIR

The complete detailed interconnection design package shall include:

- (1) Electrical schematic drawings reflecting the complete proposed system design which are easily interpreted and of a quality necessary for a full interconnection. The drawings shall show all electrical components proposed for the installation and their connections to the existing on-site electrical system from that point to the PCC and shall be clearly marked to distinguish between

new and existing equipment. For those systems proposed to be interconnected at a system voltage of 1000 volts or greater, the drawings shall be sealed by a NYS licensed Professional Engineer.

- (2) A complete listing of all interconnection devices proposed for use at the PCC. A set of specifications for this equipment shall be provided by the applicant upon request from PSEG Long Island.
- (3) The written verification test procedure provided by the equipment manufacturer, if such procedure is required by this document. For non-inverter based systems, testing equipment must be capable of measuring that protection settings operate within the appropriate times and thresholds set forth in Section II.
- (4) Three (3) copies of the following information:
  - a. Proposed three line diagram of the generation system showing the interconnection of major electrical components within the system. Proposed equipment ratings clearly needs to indicate:
    - i. Number, individual ratings, and type of units comprising the above rating;
    - ii. General high voltage bus configuration and relay functions; and
    - iii. Proposed generator step-up transformer MVA ratings, impedances, tap settings and winding voltage ratings.
  - b. Electrical studies as requested by PSEG Long Island to demonstrate that the design is within acceptable limits, inclusive and limited to the following: system fault, relay coordination, flicker, voltage drop, and harmonics. This shall include all relay, communication, and controller set points.

If PSEG Long Island determines that the detailed interconnection design package provided by the applicant is incomplete or otherwise deficient, PSEG Long Island shall notify the applicant within ten (10) Business Days and provide an explanation of the deficiencies identified and a list of what is required by the applicant. Unless otherwise notified by PSEG Long Island, the CESIR review period begins upon confirmed receipt and acceptance of the applicants interconnection design package and associated fees.

If the applicant fails to provide PSEG Long Island authorization to proceed, CESIR fee, and information requested within thirty (30) Business Days of the request, the application shall be removed from the queue and no further action on the part of PSEG Long Island is required.

#### **STEP 6: PSEG Long Island Completes the CESIR**

The CESIR will consist of two parts:

- (1) A detailed review and explanation of the impacts to the utility system associated with the interconnection of the proposed system, and
- (2) A detailed review and explanation of the proposed system's compliance with the applicable criteria set forth below.

A CESIR will be performed by PSEG Long Island to determine if the proposed generation on the circuit results in any protective coordination, fault current, thermal, voltage, power quality, or equipment stress concerns.

The CESIR shall be completed within sixty (60) Business Days of receipt of the information set forth in Step 5. For systems utilizing type-tested equipment, the time required to complete the CESIR may be reduced. PSEG Long Island shall complete the CESIR within sixty (60) Business Days, absent extraordinary circumstances, following authorization, receipt of the CESIR fee, and complete information set forth in Step 5. If the applicant fails to provide PSEG Long Island authorization to proceed, CESIR fee and information requested within thirty (30) Business Days, the interconnection request shall be removed from the queue and no further action on the part of PSEG Long Island is required.

The applicant and PSEG Long Island may agree to allow up to an additional forty (40) Business Days beyond the time specified above for completion of the CESIR, provided that no other application is adversely impacted

Upon completion of the CESIR, PSEG Long Island will provide the following, in writing, to the applicant:

- (1) LIPA system impacts, if any;
- (2) notification of whether the proposed system meets the applicable criteria considered in the CESIR process;
- (3) if applicable, a description of where the proposed system is not in compliance with these requirements;
- (4) Subject to subsections (a) through (d) below, a good faith, detailed estimate of the total cost of completion of the interconnection of the proposed system and/or a statement of cost responsibility for a dedicated transformer(s) or other required interconnection equipment which is valid for sixty (60) Business Days. This estimate must meet the following requirements:
  - (a) with respect to an applicant that is not to be net-metered, an estimate shall be provided and shall include the costs associated with any required modifications to the LIPA System, administration, metering, and on-site verification testing;
  - (b) with respect to an applicant that is to be net-metered, the costs associated with any required modifications to the LIPA System, administration, metering, and on-site verification testing;
  - (c) the applicant shall be informed that it is responsible for one-half of such costs; and
  - (d) LIPA's Tariff for Electric Service section I(C) sets forth the responsibility each applicant shall have with respect to the actual cost of the dedicated transformer(s) and other safety equipment.

PSEG Long Island cost estimates provided in the CESIR shall be detailed and broken down by specific equipment requirements, material needs, labor, overhead, and any other categories or efforts incorporated in the estimate. Contingencies associated with the cost estimates shall not exceed +/- 25%.

#### **STEP 7: Applicant Commits to PSEG Long Island Construction of LIPA's System Modifications.**

The applicant and PSEG Long Island will execute a standardized contract for interconnection as set forth in Appendix A and the applicant will provide PSEG Long Island with an advance payment of 30% of PSEG Long Island's estimated costs as identified in Step 6 within ~~sixty (60)~~ninety (90) Business Days of the execution of the contract.

PSEG Long Island is not required to procure any equipment or materials, ~~or perform design and engineering work~~ associated with the project, or begin construction until 30% deposit payment has been received. Progress payments will be required during construction and any excess will be reconciled and

invoiced to the Applicant after Step 10. Invoice payments are due within thirty (30) Business Days of receipt.

#### **STEP 8: Project Construction.**

The applicant will build the facility in accordance with PSEG Long Island -accepted design. PSEG Long Island will commence construction/installation of system modifications and metering requirements as identified through the CESIR in Step 6. LIPA system modifications will vary in construction time depending on the extent of work and equipment required. The schedule for this work is to be discussed and agreed upon with the applicant in Step 6.

#### **STEP 9: The Applicant's Facility is tested in Accordance with the Standardized Interconnection Requirements.**

The verification testing will be performed in accordance with the written test procedures provided in Step 5 and any site-specific requirements identified by PSEG Long Island in Step 6. The final testing will be conducted within ten (10) Business Days of complete installation at a mutually agreeable time, and PSEG Long Island shall be given the opportunity to witness the tests. If PSEG Long Island opts not to witness the test, the applicant will send PSEG Long Island within five (5) days of the test a written notification, certifying that the system has been installed and tested in compliance with the Smart Grid SGIP, PSEG Long Island -accepted design, and the equipment manufacturer's instructions.

#### **STEP 10: Interconnection.**

The applicant's facility will be allowed to commence parallel operation upon satisfactory completion of the tests in Step 9. In addition, the applicant must have complied with and must continue to comply with the contractual and technical requirements.

#### **STEP 11: Final Acceptance and PSEG Long Island Cost Reconciliation.**

If PSEG Long Island witnessed the verification testing, then, within ten (10) Business Days of the completion of such testing, PSEG Long Island will issue to the applicant either a formal letter of acceptance for interconnection or a detailed explanation of the deficiencies in the system. If PSEG Long Island did not witness the verification testing, then, within ten (10) Business Days of receiving the written test notification from Step 9, PSEG Long Island will either issue to the applicant a formal letter of acceptance for interconnection, or will request that the applicant and PSEG Long Island set a date and time to witness operation of the DG system. This witnessed verification testing must be completed within twenty (20) Business Days after being requested. Within ten (10) Business Days of the completion of any such witnessed testing, PSEG Long Island will issue to the applicant either a formal letter of acceptance for interconnection or a detailed explanation of the deficiencies in the DG system.

At this time, PSEG Long Island shall prepare and submit to the applicant a final reconciliation statement of its actual costs minus the application fee and advance payments made by the applicant. Within twenty (20) Business Days after delivery of the reconciliation statement, the applicant will receive either a bill for any balance due or a reimbursement for overpayment as determined by the utility's reconciliation. The applicant may contest the reconciliation with the utility. If the utility's final reconciliation invoice states a balance due from the applicant, unless it is challenged by a formal complaint interposed by the applicant, it shall be paid to the utility within thirty (30) business days or the utility reserves the right to lock the generating system offline. If the utility's final reconciliation invoice states a reimbursement for overpayment to be paid by the utility, unless the reimbursement amount is challenged by a formal complaint interposed by the applicant, it shall be paid to the applicant ~~within thirty (30) business days..~~

## Section I. D. Payment and Construction Milestones

Applicants are responsible for payment of utility system modification cost estimates in accordance with the following rules and deadlines. All project costs will be subject to Appendix E, where applicable.

The applicant and PSEG Long Island will execute a standardized contract for interconnection ~~as set forth in Appendix A~~ and the applicant will provide PSEG Long Island with an advance payment of 30% of PSEG Long Island's estimated costs as identified in Step 6 within ninety (90) Business Days. ~~Within fifteen (15) Business Days of~~ After receiving the payment, PSEG Long Island will provide the applicant, a signed ~~New York State Standardized Interconnection Contract in the form of Appendix A~~ Agreement. ~~This will be provided within fifteen (15) Business Days for all projects sized five (5) megawatts and under.~~

PSEG Long Island is not required to procure any equipment or materials, ~~or perform design and engineering work~~ associated with the project or begin construction until 30% deposit payment has been received. Progress payments will be required during construction and any excess will be reconciled and invoiced to the Applicant after ~~Step 10: interconnection~~. Invoice payments are due within thirty (30) Business Days of receipt.

If the applicant does not return the signed contract within the time allowed, the application shall be removed from PSEG Long Island's interconnection queue, and no further action on the part of PSEG Long Island is required.

Within thirty (30) Business Days of receiving the 30% payment, the PSEG Long Island shall provide an initial ~~construction schedule~~ in-service timeline to the applicant (consistent with Appendix K). ~~The utility~~ PSEG Long Island shall commence design work in accordance with its guidance and consider the ~~developer's input on scheduling~~. If the applicant does not make a payment due under this section in the time required, the application shall be removed from the PSEG Long Island's interconnection queue with no further action required of PSEG Long Island.

If the applicant withdraws or is removed from the interconnection queue at any point after making a payment required under this section, any unspent portions of these payments will be refunded to the applicant consistent with the timelines described in Section C, Step 11.

If a local permitting moratorium prevents an applicant from meeting the above timelines, PSEG Long Island may grant affected project applicants an extension. To be granted an extension of the required timelines, the applicant must submit the New York State Standard Moratorium Attestation Form, Appendix I. Upon the applicant's payment of 30% expected upgrade costs, if applicant has received its CESIR, returned the executed Interconnection Contract, and submitted the Attestation Form to PSEG Long Island. If applicable, any unused portion of the 30% payment shall be refunded if the project does not move forward after receiving an extension.

If the final acceptance as set out in Section C, Step 11 is not completed within twelve (12) months of the date the applicant returns the executed New York State Standardized Contract as a result of applicant inactivity, PSEG Long Island has the right to notify the applicant by email or U.S. first class mail with delivery receipt confirmation that the applicant's project will be removed from the PSEG Long Island's interconnection queue if the applicant does not respond within thirty (30) Business Days of the issue of such notification and provide a project status update and/or justification as to why the project should remain in the PSEG Long Island's interconnection inventory for an additional period of time.

## Section I.E. Application Process for Energy Storage Systems

Except as provided in this Section, the rules in Sections B and C shall apply to applications to: construct new Hybrid Projects; construct new stand-alone storage; add an ESS to an existing DG facility; and change the operating mode of an existing Hybrid Project or stand-alone storage facility. Whether an application will be handled under Section B or C will be determined by the sum of the AC nameplate ratings of all DG facilities and ESS facilities comprising the proposed Hybrid Project

### **Step 1. The Application**

An applicant proposing a Hybrid Project or stand-alone ESS shall complete and submit Appendix J with Appendix F.

The owner of an existing DG facility may apply to add an ESS by submitting completed Appendix J to PSEG Long Island at any time.

For all projects involving ESS, PSEG Long Island shall review the application and respond within the time frames provided in Section B or C, as applicable.

Following interconnection of a Hybrid Project or a stand-alone ESS, the owner may apply to PSEG Long Island to change the operating characteristics of the storage component. To initiate review, the owner shall submit completed Appendix J specifying the proposed new operating characteristics to PSEG Long Island.

### **Step 2. Protection and Control Review**

When performing screening analysis and system impact studies associated with ESS, operating characteristics including maximum export and import capacity shall be utilized, except that fault current contribution shall be evaluated based on aggregate AC nameplate rating. PSEG Long Island's technical review shall determine whether the proposed facility, operating per the characteristics identified in the application (Appendix J), can be safely and reliably interconnected to the LIPA's distribution system. The applicant shall pay the costs for the utility's review in advance.

Following the completion of Step 3 in Section I.B., or upon passing the Preliminary or Supplemental Screening Analysis in Step 4 in Section I.C., ~~Once an application has been deemed complete~~, based on the application and proposed operating parameters, PSEG Long Island will determine if a Protection and Control Review is required. PSEG Long Island will notify the applicant of this determination. The applicant will have thirty (30) Business Days from the notification to pay the nonrefundable fee for the review, which shall be calculated as \$500 plus \$4/kW capped at \$3000. PSEG Long Island shall have twenty (20) Business Days to perform the review and provide the results to the applicant, including a description of any modifications to the control systems that PSEG Long Island determines are necessary.

Within ten (10) Business Days of an applicant's request, PSEG Long Island shall discuss the results of the Protection and Control Review. Following the discussion, the applicant will have twenty (20) Business Days to determine whether or not to accept any required modifications to the control system and take the next step in the process as defined in Section B or C, as applicable, or to withdraw the application.

For all applications relating to ESS, PSEG Long Island's written report of its technical review shall include a completed Attachment I, as defined below, specifying the operating parameters studied for the proposed facility. PSEG Long Island and the applicant shall discuss the listed operating parameters promptly after delivery of the study results to the applicant.

For ESS applications requiring a CESIR, PSEG Long Island will provide the applicant with any additional testing procedures required in connection with the ESS, using the applicant's load management control systems to limit reverse power. PSEG Long Island will provide this information with the CESIR results.

### **Step 3. Contract and Payment for Utility Construction Costs**

An applicant proposing a Hybrid Project, stand-alone storage, or the addition of ESS to an existing DG facility shall execute the Standardized Interconnection Contract for Systems including Energy Storage, and make payment to PSEG Long Island for its estimated construction costs within the time required by Section D.

Each contract shall include a completed Attachment I, which shall specify the operating parameters for the interconnected ESS after consultation with the applicant.

An applicant proposing to change the operating characteristics listed in Appendix J for an existing ESS shall sign an amendment to its interconnection agreement.

### **Section I. F. Application Process (Study Process) Steps for Systems above 5 MW and less than 10 MW**

Applicability:

- i. The Study Process shall be used by an Interconnection Customer proposing to interconnect or modify its Small Generator with LIPA's Distribution System, if the Small Generator, upon interconnection or after modification, is above 5 MW and less than 10 MW.<sup>5</sup> 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 Generator to the LIPA Distribution System. These Interconnection Studies will be performed in accordance with Applicable Reliability Standards.
- ii. The study process shall determine the appropriate voltage level for the interconnection of the new distributed generation facilities.

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<sup>5</sup> New distributed generation facilities 10 MW and above must connect to LIPA's transmission system and comply with the NYISO Small Generator Interconnection Procedures (SGIP) or Large Generator Interconnection Procedures (LGIP), as applicable. This would include the following requirements:

- a. An Interconnection Customer who requests an interconnection to the LIPA Transmission System must submit this Interconnection Request by hand delivery, mail, e-mail, or fax to the NYISO. The NYISO will send a copy to the Connecting Transmission Owner.
- b. NYISO will determine whether they will direct the study process or allow the Connecting Transmission Owner to conduct the process.
- c. If NYISO allows the Connecting Transmission Owner to conduct the process the following requirements shall apply.

### **STEP 1: Initial Communication from the Potential Applicant.**

Communication could range from a general inquiry to a completed application.

### **STEP 2: The Inquiry is reviewed by PSEG Long Island to Determine the Nature of the Project.**

Technical staff from PSEG Long Island discusses the scope of the interconnection with the potential applicant (either by phone or in person) to determine what specific information and documents (such as an application, contract, technical requirements, specifications, listing of qualified type- tested equipment/systems, application fee information, applicable rate schedules, and metering requirements) will be provided to the potential applicant. The preliminary technical feasibility of the project at the proposed location may also be discussed at this time. All such information and a copy of the standardized interconnection requirements must be sent to the applicant within three (3) Business Days following the initial communication from the potential applicant, unless the potential applicant indicates otherwise. A PSEG Long Island representative will be designated to serve as the single point of contact for the applicant (unless PSEG Long Island informs the applicant otherwise) in coordinating the potential applicant's project with PSEG Long Island.

### **STEP 3: Potential Applicant Files an Application.**

The potential applicant submits an application to PSEG Long Island. The submittal must include the completed standard Interconnection Request application form, including a copy of equipment certification to UL 1741 as applicable, a three line diagram specific to the proposed system, a letter of authorization (if applicant is agent for the customer), and payment of a non-refundable \$750 application fee. Within five (5) Business Days of receiving the application, PSEG Long Island will notify the applicant of receipt and whether the application has been completed adequately. It is in the best interest of the applicant to provide PSEG Long Island with all pertinent technical information as early as possible in the process. If the required documentation is presented in this step, it will allow PSEG Long Island to perform the required reviews and allow the process to proceed as expeditiously as possible.

### **STEP 4: Scoping Meeting**

4.1 A scoping meeting will be held within ten (10) Business Days after the Interconnection Request is deemed complete, or as otherwise mutually agreed to by the Parties. PSEG Long Island 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.

4.2 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 PSEG Long Island should perform a feasibility study or proceed directly to a system impact study, or a facilities study, or an interconnection agreement. If the Parties agree that a feasibility study should be performed, PSEG Long Island shall provide the Interconnection Customer, as soon as possible, but not later than five (5) Business Days after the scoping meeting, a feasibility study agreement (Appendix F1) including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.

4.3 The scoping meeting may be omitted by mutual agreement. In order to remain in consideration for interconnection, an Interconnection Customer who has requested a feasibility study must return the executed feasibility study agreement within fifteen (15) Business Days. If



the Parties agree not to perform a feasibility study, PSEG Long Island shall provide the Interconnection Customer, no later than five (5) Business Days after the scoping meeting, a system impact study agreement (Appendix G1) including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.

#### **STEP 5: Feasibility Study**

5.1 The feasibility study shall identify any potential adverse system impacts that would result from the interconnection of the Small Generator.

5.2 A deposit of the lesser of fifty (50%) percent of the good faith estimated feasibility study costs or earnest money of \$10,000 is required from the Interconnection Customer.

5.3 The scope of and cost responsibilities for the feasibility study are described in Appendix F.

5.4 If the feasibility study shows no potential for adverse system impacts, PSEG Long Island shall send the Interconnection Customer a facilities study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study. If no additional facilities are required, PSEG Long Island shall send the Interconnection Customer an executable interconnection agreement within five (5) Business Days.

5.5 If the feasibility study shows the potential for adverse system impacts, the review process shall proceed to the appropriate system impact study(s).

#### **STEP 6: System Impact Study**

6.1 A system impact study shall identify and detail the electric system impacts that would result if the proposed Small Generator were interconnected without project modifications or electric system modifications, focusing on the adverse system impacts identified in the 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.

6.2 If no transmission system impact study is required, but potential electric power distribution system adverse system impacts are identified in the scoping meeting or shown in the feasibility study, a distribution system impact study must be performed. PSEG Long Island shall send the Interconnection Customer a distribution system impact study agreement within fifteen (15) Business Days of transmittal of the feasibility study report, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or following the scoping meeting if no feasibility study is to be performed.

6.3 In instances where the feasibility study or the distribution system impact study shows potential for transmission system adverse system impacts, within five (5) Business Days following transmittal of the study report, PSEG Long Island shall send the Interconnection Customer a transmission system impact study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, if such a study is required.

6.4 If a transmission system impact study is not required, but electric power distribution system adverse system impacts are shown by the feasibility study to be possible and no

distribution system impact study has been conducted, PSEG Long Island shall send the Interconnection Customer a distribution system impact study agreement.

6.5 If the feasibility study shows no potential for transmission system or distribution system adverse system impacts, PSEG Long Island shall send the Interconnection Customer either a facilities study agreement (Appendix H1), including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or an executable interconnection agreement, as applicable.

6.6 In order to remain under consideration for interconnection, the Interconnection Customer must return executed system impact study agreements, if applicable, within thirty (30) Business Days.

6.7 A deposit of the good faith estimated costs for each system impact study will be required from the Interconnection Customer.

6.8 The scope of and cost responsibilities for a system impact study are described in the attached system impact study agreement.

#### **STEP 7: Facilities Study**

7.1 Once the required system impact study(s) is completed, a system impact study report shall be prepared and transmitted to the Interconnection Customer along with a facilities study agreement within five (5) Business Days, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the facilities study. In the case where one or both impact studies are determined to be unnecessary, a notice of the fact shall be transmitted to the Interconnection Customer within the same timeframe.

7.2 In order to remain under consideration for interconnection, or, as appropriate, in PSEG Long Island's interconnection queue, the Interconnection Customer must return the executed facilities study agreement or a request for an extension of time within thirty (30) Business Days.

7.3 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).

7.3.1 PSEG Long Island shall determine whether the interconnection impacts the New York Transmission System and requires System Upgrade Facilities.

7.3.2 The Interconnection Customer shall be responsible for the cost of any System Upgrade Facilities only if PSEG Long Island, based on an Interconnection Study, determines (i) that System Upgrade Facilities are necessary to accommodate the Interconnection Request, and (ii) that the electrical contribution of the project to the need for those System Upgrade Facilities is greater than the *de minimis* impacts defined in Section IV.G.6.f of Attachment S to the NYISO OATT. Such Interconnection Study shall be of sufficient detail and scope to assure that these determinations can be made. If both determinations are made, then the Small Generator shall be evaluated as a member of the next NYISO Class Year, and the Interconnection Customer's cost responsibility shall be determined in accordance with the NYISO's Attachment S procedures.

If the Interconnection Customer elects Capacity Resource Interconnection Service, and its Small Generator is larger than 2 MW, it will be evaluated, by the NYISO, as a member of the next Class

Year to determine the Interconnection Customer's responsibility for System Deliverability Upgrades in accordance with Attachment S to the NYISO OATT.

7.3.3 If the determination is made that an Interconnection Customer's project must be included in the NYISO Class Year, that interconnection customer shall be entitled to expedite its interconnection process in accordance with sections 3.5.3.3 and 3.5.3.4 of the NYISO Small Generator Interconnection Procedures.

7.3.4 If PSEG Long Island determines that the interconnection impacts the New York Transmission System, PSEG Long Island shall notify the NYISO within five (5) Business Days of such determination.

7.4 Design for any required Interconnection Facilities and/or Upgrades shall be performed under the facilities study agreement. PSEG Long Island may contract with consultants to perform activities required under the facilities study agreement. The Interconnection Customer and PSEG Long Island 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 PSEG Long Island, 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, PSEG Long Island 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.

7.5 A deposit of the good faith estimated costs for the facilities study will be required from the Interconnection Customer.

7.6 The scope of and cost responsibilities for the facilities study are described in the attached facilities study agreement.

7.7 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, PSEG Long Island shall provide the Interconnection Customer an executable interconnection agreement within five (5) Business Days.

#### **STEP 8: Applicant Commits to PSEG Long Island Construction of LIPA's System Modifications.**

The applicant and PSEG Long Island will execute an interconnection agreement as set forth in Appendix M and the applicant will provide PSEG Long Island with an advance payment for PSEG Long Island's estimated costs as identified in Step 6 (estimated costs will be reconciled with actual costs in Step 11).

#### **STEP 9: Project Construction.**

The applicant will build the facility in accordance with PSEG Long Island -accepted design. PSEG Long Island will commence construction/installation of system modifications and metering requirements as identified in Step 6. LIPA system modifications will vary in construction time depending on the extent of work and equipment required. The schedule for this work is to be discussed and agreed upon with the applicant in Step 6.

#### **STEP 10: The Applicant's Facility is tested in Accordance with the Standardized Interconnection Requirements.**

The verification testing will be performed in accordance with the written test procedure provided in Step 5 and any site-specific requirements identified by PSEG Long Island in Step 6. The final testing will be conducted within ten (10) Business Days of complete installation at a mutually agreeable time, and PSEG Long Island shall be given the opportunity to witness the tests. If PSEG Long Island opts not to witness the test, the applicant will send PSEG Long Island within five (5) days of the test a written notification, certifying that the system has been installed and tested in compliance with the Smart Grid SGIP, PSEG Long Island -accepted design, and the equipment manufacturer's instructions.

#### **STEP 11: Interconnection.**

The applicant's facility will be allowed to commence parallel operation upon satisfactory completion of the tests in Step 10. In addition, the applicant must have complied with and must continue to comply with the contractual and technical requirements.

#### **STEP 12: Final Acceptance and PSEG Long Island Cost Reconciliation.**

If PSEG Long Island witnessed the verification testing, then, within ten (10) Business Days of the test, PSEG Long Island will issue to the applicant either a formal letter of acceptance for interconnection or a detailed explanation of the deficiencies in the system. If PSEG Long Island did not witness the verification testing, then, within ten (10) Business Days of receiving the written test notification from Step 9, PSEG Long Island will either issue to the applicant a formal letter of acceptance for interconnection, or will request that the applicant and PSEG Long Island set a date and time for an on-site verification and witness operation of the system. This joint on-site verification must be completed within twenty (20) Business Days after being requested. Within ten (10) Business Days of the completion of the on-site verification, PSEG Long Island will issue to the applicant either a formal letter of acceptance for interconnection or a detailed explanation of the deficiencies in the system. ~~At this time,~~ PSEG Long Island will ~~also~~ reconcile its actual costs related to the applicant's project against the application fee and advance payments made by the applicant. The applicant will receive either a bill for any balance due or a reimbursement for overpayment as determined by PSEG Long Island's reconciliation- ~~after PSEG LI finishes the final reconciliation process.~~

#### **Section I. G. Web-Based Standard Interconnection Application and Information (If available)**

PSEG Long Island shall implement and maintain a web-based system to provide customers and contractors current information regarding the status of their Smart Grid SGIP application process. The system shall be customer specific and post the current status of the Smart Grid SGIP process. At a minimum the following content shall be provided:

- (1) The applicant's name and project/application identification number.  
Description of the project, including at a minimum, the project's type (energy source), size, metering, and location.
- (2) SGIP project application status, including all the steps completed and to be completed, along with corresponding completion/deadline dates associated with each step.
  - a. If the next action is to be taken by PSEG Long Island, the expected date that action will be completed.
  - b. If the next action is to be taken by the applicant, what exactly is required and a contact for more information,

- (3) Information regarding any outstanding information request made by PSEG Long Island of the applicant, and
- (4) The status of all amounts paid and/or due to PSEG Long Island by the applicant.

Access shall be available for the customer and their contractor, such that both can access the information. The web site must be, however, secure and private from unauthorized access.

The PSEG Long Island web site shall also provide the ability for applicants to submit their application for interconnection via the web. The web based application process will be consistent with Appendix B of this Smart Grid Small Generator Interconnection Procedures for Distributed Resources less than 10 MW Connected in Parallel with LIPA Distribution Systems (“Smart Grid SGIP”) and include the ability to attach associated documentation or drawings associated with each project. Electronic signatures will be accepted by PSEG Long Island on associated documentation for this process. Section II. Interconnection Requirements

## Section II. Interconnection Requirements

### Section II.A. Provisions that Apply to All Interconnection Requests

**All interconnection requests made pursuant to these Procedures shall be subject to the following terms:**

1. **Compliance with Deadlines.** PSEG Long Island shall make reasonable efforts to meet all time frames provided in these procedures unless PSEG Long Island and the Interconnection Customer agree to a different schedule. If PSEG Long Island 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.
2. **Meter Installation** Any metering necessitated by the use of the Small Generator shall be installed at the Interconnection Customer's expense in accordance with PSEG Long Island's specifications.
3. **Queue Position.** PSEG Long Island shall maintain a single queue for requests to interconnect to LIPA's Distribution System by a Small Generator. PSEG Long Island 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 cost responsibility for the Upgrades necessary to accommodate the interconnection. At PSEG Long Island's option, Interconnection Requests may be studied serially or in clusters for the purpose of the system impact study.
4. **Withdrawal of Application.** The applicant may withdraw its application at any time by written notice of such withdrawal to PSEG Long Island. Such withdrawal will not relieve the applicant from any costs incurred by PSEG Long Island to process the application up to the time of withdrawal.
5. **Effect of Modification to Machine Data or Equipment Configuration.** Any modification to machine data or equipment configuration or to the interconnection site of the Small Generator not agreed to in writing by PSEG Long Island and the Interconnection Customer may be deemed a withdrawal of the Interconnection Request and may require submission of a new Interconnection Request, unless proper notification of each Party by the other and a reasonable time to cure the problems created by the changes are undertaken.
6. **Infrastructure Security.** Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. PSEG Long Island complies with the recommendations offered by the President's Critical Infrastructure Protection Board (established by Executive Order 13231 of October 16, 2001) and best practice recommendations from the electric reliability authority. All small generators interconnecting to LIPA's facilities shall meet applicable standards for electric system infrastructure and operational security, including physical, operational and security practices.

In addition to any other requirements set forth in the SGIP regarding confidential information, Interconnection Customer shall comply with PSEG Long Island's requirements, as they may change from time to time, for protecting and maintaining the

confidentiality of Critical Energy Infrastructure Information, as defined in 18 CFR Section 388.113, as it may be amended from time to time, and execute such Non-Disclosure Agreements as may be required by PSEG Long Island.

7. **NYISO Matters.**

- a. PSEG Long Island shall notify the NYISO of all interconnection requests over 2 MW that are determined to have an impact on the New York Transmission System and require System Upgrade Facilities as determined pursuant to Section II of these procedures.
- b. A new Small Generator whose output may be sold into the wholesale energy, capacity and ancillary services markets operated by the New York Independent System Operator must make an election as to whether it will interconnect on a minimum interconnection basis pursuant to Energy Resource Interconnection Service or whether it will elect Capacity Resource Interconnection Service and satisfy the NYISO Deliverability Interconnection Standard.
- c. PSEG Long Island shall notify the NYISO of all interconnection requests electing Capacity Resource Interconnection Service and coordinate with the NYISO regarding necessary studies, procedures and standards applicable to such request.

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

- a. Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Small Generator;
- b. An option to purchase or acquire a leasehold site for such purpose; or
- c. 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.

9. **Disputes.** The Parties agree to use their commercially reasonable efforts to settle promptly any disputes or claims arising out of or relating to this Smart Grid SGIP through negotiation conducted in good faith between executives having authority to reach such a settlement. Either Party, may, by written notice to the other Party, refer any such dispute or claim for advice or resolution to mediation by a suitable mediator. The mediator shall be chosen by the mutual agreement of the Parties. If the Parties are unable to agree on a mediator each Party shall designate a qualified mediator who, together with the mediator designated by the other, shall choose a single mediator for the particular dispute or claim. If the mediator chosen is unable, within thirty (30) days of such referral to reach a determination, then either party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of these procedures.

- a. Unless otherwise agreed to in writing or prohibited by applicable law, the Parties shall continue to provide service, honor all commitments under these procedures, and continue to make payments in accordance with these procedures during the course of any dispute resolution under this Article and during the pendency of any action at law or in equity relating hereto.

- b. Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

Upon execution of a contract for interconnection between the Interconnection Customer and PSEG Long Island as set forth in Appendices A and J (as applicable), the dispute resolution terms of such contract shall govern all disputes between the parties to the interconnection contract.

## 10. Confidentiality

### a. Claim of Confidentiality

- i. In connection with the application procedures and interconnection review requirements under Sections I and II, the Parties may exchange information that is deemed to be confidential whether such information is provided in written, oral, electronic or other format (“Confidential Information”). The Party disclosing such Confidential Information is referred to herein as the “Disclosing Party” and the Party receiving such Confidential Information is referred to herein as the “Receiving Party.” The Disclosing Party shall mark all written Confidential Information as “Confidential,” “Proprietary” or the like and in the case of Confidential Information that is communicated orally, the Disclosing Party shall within thirty (30) days follow up such communication with a writing addressed to the Receiving Party generally describing such information and identifying it as Confidential Information. The Parties acknowledge that all information disclosed by the Interconnection Customer in connection with costs, pricing or operation of the Small Generator shall be treated as Confidential Information whether or not such information is marked or identified as Confidential Information. PSEG Long Island shall not disclose such Confidential Information without Interconnection Customer’s written consent, which may be withheld in Interconnection Customer’s sole discretion, unless PSEG Long Island is otherwise required by law to make such disclosure.
- ii. The Receiving Party shall protect the Confidential Information from disclosure to third parties consistent with the provisions of this Section II.A.10 and subject to applicable law, provided however, a Receiving Party may disclose Confidential Information to its Affiliates, Lenders, employees, agents or representatives of such Receiving Party, where such Affiliate, Lender, employee, agent or representative expressly agrees to be bound by the terms of this Section II.A.10 and provided further that the Receiving Party shall be liable for any breach by its Affiliates, Lenders, employees, agents or representatives.
- iii. It is further understood and agreed that money damages would not be sufficient remedy for any breach of this Section II.A.10, and that if a Party breaches this Section II.A.10, the Party disclosing Confidential Information to such breaching Party shall be entitled to specific performance and injunctive and other equitable relief as a remedy for any such breach. The breaching Party agrees to waive any requirement for the posting of a bond in connection with any such remedy. Such remedy shall not be deemed to be the exclusive remedy for breach of this Section II.A.10 but shall be in addition to all other remedies available at law or equity. In the event of any legal action based upon or arising out of this Section II.A.10, the



prevailing Party in such action shall be entitled to recover reasonable attorney's fees and costs from the other Party.

- b. Compliance with Law. If either Party is required by law to disclose Confidential Information of the other Party (by oral questions, interrogatories, requests for information or documents, subpoena, civil investigative demands, regulation, statute or otherwise), the Party required to make such disclosure will (i) notify the other Party and provide the other Party the opportunity to review the Confidential Information, and (ii) provide the other Party the opportunity to seek a protective order or other appropriate remedy. In the event that a protective order or other remedy is not obtained or is not pursued within a reasonable period of time, the Party required to make disclosure or such Party's representatives will furnish only that portion of the Confidential Information that it is legally required to disclose and the Party required to make disclosure will request that confidential treatment be accorded the Confidential Information by relevant third parties.
  - c. Compliance with the Freedom of Information Law. If PSEG Long Island is requested by a third party to disclose Confidential Information pursuant to the Freedom of Information Law ("FOIL"), PSEG Long Island will (i) notify Generator of the request and provide Generator the opportunity to review the Confidential Information; (ii) provide Generator the opportunity to provide information regarding the need for confidential treatment; (iii) evaluate the third party's request for disclosure and Generator's request for confidential treatment; and (iv) determine if the Confidential Information is subject to disclosure under FOIL. If PSEG Long Island determines that the Confidential Information is subject to disclosure, it will provide prompt written notice of such determination to Generator so that Generator may seek a protective order or other appropriate remedy. If Generator does not obtain a protective order or no formal proceeding has been initiated by Generator within a reasonable period of time after PSEG Long Island provides notice to Generator of its intent to make public the Confidential Information, then PSEG Long Island may disclose such information with no liability or further obligation to Generator.
  - d. Treatment of Otherwise Publicly Available Documents. Notwithstanding anything to the contrary in this Article, neither Party shall be required to hold confidential any information that (i) becomes publicly available other than through disclosure by the Receiving Party; (ii) is independently developed by the Receiving Party; or (iii) becomes available to the Receiving Party without restriction from a third party, provided that such third party is not bound by a confidentiality agreement with the Disclosing Party or its representatives. Should any person or entity seek to legally compel a Receiving Party (by oral questions, interrogatories, requests for information or documents, subpoena, civil investigative demands, regulation, statute or otherwise) to disclose any Confidential Information, the Receiving Party will provide the Disclosing Party prompt written notice so that the Disclosing Party may seek a protective order or other appropriate remedy. In the event that a protective order or other remedy is not obtained, the Receiving Party or the Receiving Party's representative will furnish only that portion of the Confidential Information that it is legally required to disclose and the Receiving Party will request that confidential treatment be accorded the Confidential Information by relevant third parties.
  - e. Term of Confidentiality. The obligations set forth in this Article shall survive expiration or termination of this Agreement.
11. **Application of Industry Electrical Standards.** Where the interconnection requirements set forth in Sections I and II refer to an industry electrical standard, including standards

adopted or promulgated by Underwriters Laboratories (UL), the Institute of Electrical and Electronics Engineers (IEEE) and American National Standards Institute (ANSI) the applicable standard will be the version of that designated standard that is in effect on the date upon which the Interconnection Customer submits, and PSEG Long Island receives, a completed application for interconnection with PSEG Long Island's Distribution System.

12. **Standard Contract Terms.** Standard contract terms have been established for the contract for interconnection of a Small Generator between 0 kW and 5 MW set forth in Appendix A and the interconnection agreement for a Small Generators sized more than 5 MW and less 10 MW set forth in Appendix M. The contract for interconnection is a standard form that will be executed by PSEG Long Island and the Interconnection Customer in the form set forth in Appendix A and only supplemented as noted within such form with information specific to the Small Generator and Interconnection Customer.

With respect to the execution of an interconnection agreement for a Small Generator more than 5 MW and less than 10 MW as set forth in Appendix M, any technical standards and requirements set forth in such agreement shall not be modified to be inconsistent with requirements of Sections I and II herein. With respect to all other terms of the interconnection agreement, modifications of such non-technical terms shall be limited to those necessary to reflect any specific circumstances of the proposed Small Generator (such as the status of the Interconnection Customer as a governmental entity). PSEG Long Island reserves all rights and is under no obligation to accept requests for modification of the standard contract terms set forth in Appendix A or M.

The obligations under the Appendix A (Long Island Lighting Company D/B/A LIPA Standardized Contract for Interconnection of Distributed Generation and/or Energy Storage Equipment with Capacity of 5 MW or Less Connected in Parallel with the LIPA Distribution Systems), shall be binding on any successor owner of the Unit. If the Unit is sold LIPA may require the new Unit owner to sign an amended agreement.

## **Section II.B. Design Requirements**

### **Common**

The generator-owner shall provide appropriate protection and control equipment, including a protective device that utilizes an automatic disconnect device that will disconnect the generation in the event that the portion of the LIPA System that serves the generator is de-energized for any reason or for a fault in the generator-owner's system. The generator-owner's protection and control equipment shall be capable of automatically disconnecting the generation upon detection of an islanding condition and upon detection of a LIPA system fault.

The type and size of the generation facility is based on electrical generator nameplate data (AC output).

The generator-owner's protection and control scheme shall be designed to ensure that the generation remains in operation when the frequency and voltage of the LIPA System is within the limits specified by the required operating ranges. Upon request from PSEG Long Island, the generator- owner shall provide documentation detailing compliance with the requirements set forth in this document.

The specific design of the protection, control and grounding schemes will depend on the size and characteristics of the generator-owner's generation, as well the generator-owner's load level, in addition to the characteristics of the particular portion of LIPA's system where the generator- owner is interconnecting.

The generator-owner shall have, as a minimum, an automatic disconnect device(s) sized to meet all applicable local, state, and federal codes and operated by over and under voltage and over and under frequency protection. For three-phase installations, the over and under voltage function should be included for each phase and the over and under frequency protection on at least one phase. All phases of a generator or inverter interface shall disconnect for voltage or frequency trip conditions sensed by the protective devices. Voltage protection shall be wired phase to ground for single phase installations and for applications using wye grounded-wye grounded service transformers.

The settings below are listed for single-phase and three-phase applications using wye grounded- wye grounded service transformers or wye grounded-wye grounded isolation transformers. For applications using other transformer connections, a site-specific review will be conducted by PSEG Long Island and the revised settings identified in Step 6 of the Application Process.

The requirements set forth in this document are intended to be consistent with those contained in IEEE STD 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems. The requirements in IEEE STD 1547 above and beyond those contained in this document shall be followed.

Please refer to PSEG Long Island's Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA's Distribution System for technical requirements for interconnection of DG in parallel with LIPA's Distribution System. Applicant shall comply with PSEG Long Island's Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA's Distribution System document, as it may be modified by LIPA from time to time. The document can be found at the following link:

<https://www.psegliny.com/aboutpseglongisland/ratesandtariffs/sgip>

### **Interconnection Inventory**

PSEG Long Island periodically provides information to the NYS Department of Public Service regarding PSEG Long Island's SGIP inventory.

### **Section III. Glossary of Terms**

**Affected System:** An electric system, other than LIPA's Transmission System, that may be affected by the proposed interconnection.

**Applicable Reliability Standards:** The applicable 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 as well as the reliability criteria, requirements and guidelines adopted by PSEG Long Island and/or LIPA.

**Automatic Disconnect Device:** An electronic or mechanical switch used to isolate a circuit or piece of equipment from a source of power without the need for human intervention.

~~**Business Day:** Any day on which the Federal Reserve Member Banks in New York City are open for business, and shall extend from 8:00 a.m. until 5:00 p.m. local time for each Party's principal place of business.~~

**Business Day:** Monday through Friday, excluding PSEG Long Island holidays and any day PSEG Long Island is activated for storms related restoration activities or Force Majeure Events.

**Capacity Resource Interconnection Service:** The service provided to interconnect generating facilities in accordance with the NYISO Deliverability Interconnection Standard; as such term is defined and set forth in Attachment S of the NYISO OATT, in order to qualify such generator to be an installed capacity supplier to the NYISO wholesale capacity markets.

**Cease to Energize:** Cessation of energy flow capability

**Coordinated Electric System Interconnection Review:** Any studies performed by PSEG Long Island to ensure that the safety and reliability of the electric grid with respect to the interconnection of distributed generation as discussed in this document.

**Customer-Generator:** A LIPA customer who owns or operates electric generating equipment located and used at the customer's premises, and/or the customer's agent.

**Dedicated Transformer:** A transformer with a secondary winding that serves only one customer.

**Direct Transfer Trip:** Remote operation of a circuit breaker by means of a communication channel.

**Disconnect (verb):** To isolate a circuit or equipment from a source of power. If isolation is accomplished with a solid-state device, "Disconnect" shall mean to cease the transfer of power.

**Disconnect Switch:** A mechanical device used for isolating a circuit or equipment from a source of power.

**Distributed Energy Resources (DER):** Energy sources that consist of distributed generation facilities or energy storage systems or any combination thereof.

**Distributed Generation (DG):** Generation facilities and Energy Storage Systems supplementing on-site load or non-centralized electric power production facilities interconnected at the distribution side of an electric power system.

**Distribution System:** LIPA's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. Voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades:** The additions, modifications, and upgrades to LIPA's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generator 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.

**Draw-out Type Circuit Breaker:** Circuit breakers that are disconnected by physically separating, or racking, the breaker assembly away from the switchgear bus.

**Electric Power System (EPS):** Refers to LIPA's electric power system used to provide transmission and/or distribution services to its customers.

**Energy Storage System (ESS):** A commercially-available mechanical, electrical or electro-chemical means to store and release electrical energy, and its associated electrical inversion device and control functions that may stand-alone or be paired with a distributed generator at a point of common coupling.

**Energy Resource Interconnection Service:** The service provided to interconnect generating facilities on a minimum interconnection standard basis which enables the delivery of energy and ancillary services from the Small Generator into the NYISO wholesale markets.

**Farm Waste, Net Meter, Farm Applicant:** A farm applicant who is proposing to install a farm waste anaerobic digester generating system, not to exceed 1 MW, at a farm, per the requirements of LIPA Tariff for Electric Service.

**Force Majeure Event:** "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: terrorism, acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this procedure, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will 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 will be entitled to suspend or modify its performance of obligations under this procedure, other than the obligation to make payments then due or becoming due under this procedure, but 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.

**Fuel Cell, Net Meter, Residential Applicant:** A residential applicant who is proposing to install a fuel cell electric generating system located and used at the applicant's premises, not to exceed a combined rated capacity of not more than 10 kW, per the requirements of LIPA Tariff for Electric Service.

**Fuel Cell, Net Meter, Non-Residential Applicant:** A non-residential applicant who is proposing to install a fuel cell electric generating system located and used at the applicant's premises, not to exceed a combined rated capacity of not more than 2 MW, per the requirements of LIPA Tariff for Electric Service.

**Generator-Owner:** An applicant to operate on-site power generation equipment in parallel with the LIPA grid per the requirements of this document.

**Good Utility Practice:** Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry in the State of New York during the term of this Agreement, or any of the practices, methods or acts which, in the exercise of reasonable judgment in light of the facts known at the time a decision is made, could have been expected to accomplish the desired results at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practices is

not intended to be limited to the optimum practice, method or act to the exclusion of all others, but rather to delineate acceptable practices, methods or acts generally accepted by a significant portion of the electric utility industry operating in the State of New York.

**Hybrid Project:** A facility that operates, or is planned to operate, as a distributed generator paired with an energy storage system at a point of common coupling.

**Interconnection Customer:** The owner of the Unit or any entity that proposes to interconnect with LIPA's Distribution System.

**Interconnection Facilities:** The equipment and facilities on LIPA's system necessary to permit operation of the Unit in parallel with LIPA's system.

**Interconnection Request:** The Interconnection Customer's request, in accordance with the Smart Grid SGIP, to interconnect a new Small Generator, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generator that is interconnected with LIPA's Transmission System.

**Islanding:** A condition in which a portion of the LIPA System that contains both load and distributed generation is isolated from the remainder of the LIPA System. (Adopted from IEEE 929.)

**LIPA System:** The electric transmission and distribution system owned by LIPA and operated by PSEG Long Island Electric Utility SERVCO and consisting of all real and personal property, equipment, machinery, tools and materials, and other similar items relating to the transmission and distribution of electricity to PSEG Long Island's customers.

**LIPA Transmission System:** The facilities and equipment owned by LIPA, and operated by PSEG Long Island Electric Utility SERVCO that are used to provide transmission service.

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

**Micro-Combined Heat and Power, Net Meter, Residential Applicant:** A residential applicant who is proposing to install a micro-combined heat and power (Micro-CHP) generating system located and used at the applicant's premises, not to exceed 10 kW, per the requirements of LIPA Tariff for Electric Service.

**Micro-Hydroelectric, Net Meter, Residential Applicant:** A residential applicant who is proposing to install a micro-hydroelectric generating equipment located and used at the applicant's premises, not to exceed 25 kW, per the requirement of LIPA Tariff for Electric Service.

**Micro-Hydroelectric, Net Meter, Non-Residential Applicant:** A non-residential applicant who is proposing to install a micro-hydroelectric generating equipment located and used at the applicant's premises, not to exceed 2 MW, per the requirement of LIPA Tariff for Electric Service.

**PSEG Long Island:** PSEG Long Island LLC, acting through its subsidiary, Long Island Electric Utility Servco LLC.

**PSEG Long Network Upgrades:** Additions, modifications, and upgrades to LIPA's Transmission System required at or beyond the point at which the Small Generator interconnects with LIPA's Distribution System. Network Upgrades do not include Distribution Upgrades.

**New York State Transmission System:** New York State Transmission System shall mean 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.

**Party or Parties** means LIPA and Customer individually or jointly. T&D Manager is not a party to the agreements referenced in this SGIP, and is executing and administering such agreements on behalf of LIPA as LIPA's agent.

**Maximum Export:** The maximum export capacity of an Energy Storage System to the distribution grid at the Point of Common Coupling communicated by the Applicant and studied as such by PSEG Long Island per their review of the impacts on LIPA's system based on the operating characteristic of the Energy Storage System.

**Maximum Import:** The maximum import capacity of an Energy Storage System from the distribution grid at the Point of Common Coupling communicated by the Applicant and studied as such by PSEG Long Island per their review of the impacts on LIPA's system based on the operating characteristic of the Energy Storage System.

**Point of Common Coupling:** The point at which the interconnection between the electric utility and the customer interface occurs. Typically, this is the customer side of PSEG Long Island revenue meter.

**Point of Interconnection:** The point where the Interconnection Facilities connect with LIPA's Distribution System, which shall include the Point of Common Coupling.

**Preliminary Review:** A review of the generator-owner's proposed system capacity, location on the LIPA System, system characteristics, and general system regulation to determine if the interconnection is viable.

**Protective Device:** A device that continuously monitors a designated parameter related to the operation of the generation system that operates if preset limits are exceeded

**PSEG Long Island Net Metering Rules:** LIPA's Tariff for Electric Service in Tariff leaves 34A through 34H, and all other provisions of the LIPA Tariff for Electric Service also apply.

**Queue Position:** The order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, which is established based upon the date and time of receipt of the valid Interconnection Request by PSEG Long Island.

**Remote Net Metering:** Remote Net Metering allows certain types of customers and/or distributed generation technology (see tables in Section II) the option to apply excess generation credits from the customer's generator to certain other meters on property that is owned or leased by the same customer and located within the service territory of the same utility to which the customer-generator's net energy meters are interconnected and within the same load zone.

**Required Operating Range:** The range of magnitudes of LIPA system voltage or frequency where the generator-owner's equipment, if operating, is required to remain in operation for the purposes of compliance with UL 1741. Excursions outside these ranges must result in the automatic disconnection of the generation within the prescribed time limits.

**Safety Equipment:** Includes dedicated transformers or equipment and facilities to protect the safety and adequacy of electric service provided to other customers.

**Solar, Net Meter, Residential Applicant:** A residential applicant who is proposing to install a photovoltaic generating system, not to exceed 25 kW, in an owner occupied residence per the requirements of LIPA Tariff for Electric Service.

**Solar, Net Meter, Non-Residential Applicant:** A non-residential applicant who is proposing to install a solar generating system located and used at the applicant's premises, not to exceed 2 MW, pursuant to LIPA Tariff for Electric Service

**Small Generator:** Interconnection Customer's device for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities. Small Generator means the distributed generation facilities and Energy Storage System approved by the T&D Manager with a nameplate capacity of 5 MW or less located on the Interconnection Customer's premises at the time T&D Manager approves such generator for operation in parallel with LIPA's system.

**Stand-Alone Storage:** An energy storage system that is solely connected to a point of common coupling and not paired with a distributed generator.

**Study Process:** The procedure for evaluating an Interconnection Request that includes the Scoping Meeting, Feasibility Study, System Impact Study, and Facilities Study.

**System Upgrade Facilities:** In the case of proposed interconnection projects, System Upgrade Facilities are the modifications or additions to the existing New York State Transmission System that are required for the proposed project to connect reliably to the system in a manner that meets the NYISO interconnection standards.

**Unit:** The distributed generation facilities and Energy Storage System approved by the T&D Manager with a nameplate capacity of 10 MW or less located on the Interconnection Customer's premises at the time T&D Manager approves such Unit for operation in parallel with LIPA's system. This Agreement relates only to such Unit, but a new agreement shall not be required if the Interconnection Customer makes physical alterations to the Unit that do not result in an increase in its nameplate capacity. The nameplate generating and energy storage capacity of the Unit shall not exceed 10 MW in aggregate.

**Upgrades:** The required additions and modifications to LIPA's Distribution System or Transmission System at or beyond the Point of Interconnection. Upgrades may be System Upgrade Facilities, Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Utility Grade Relay:** A relay that is constructed to comply with, as a minimum, the most current version of the following standards for non-nuclear facilities:

<u>Standard</u>	<u>Conditions Covered</u>
<u>ANSI/IEEE C37.90</u>	Usual Service Condition Ratings Current and Voltage Maximum design for all relay AC and DC auxiliary relays Make and carry ratings for tripping contacts Tripping contacts duty cycle Dielectric tests by manufacturer



	Dielectric tests by user
<u>ANSI/IEEE C37.90.1</u>	Surge Withstand Capability (SWC) Fast Transient Test
<u>IEEE C37.90.2</u>	Radio Frequency Interference
<u>IEEE C37.98</u>	Seismic Testing (fragility) of Protective and Auxiliary Relays
<u>Standard</u>	<u>Conditions Covered</u>
<u>ANSI C37.2</u>	Electric Power System Device Function Numbers
<u>IEC 255-21-1</u>	Vibration
<u>IEC 2555-22-2</u>	Electrostatic Discharge
<u>IEC 25 5-5</u>	Insulation (Impulse Voltage Withstand)

**Verification Test:** A test performed upon initial installation and repeated periodically to determine that there is continued acceptable performance.

**Wind, Net Meter, Residential Applicant:** A residential applicant who is proposing to install a wind electric generating system, not to exceed a combined rated capacity of 25 kW, located and used at the applicant's primary residence, per the requirements of LIPA Tariff for Electric Service.

**Wind, Net Meter, Non-Residential Applicant:** A non-residential applicant who is proposing to install a wind electric generating system located and used at the applicant's premises, not to exceed 2 MW, pursuant to LIPA Tariff for Electric Service.

**Wind, Net Meter, Farm Applicant:** A farm applicant who is proposing to install a wind electric generating system, not to exceed a combined rated capacity of 500 kW, located and used at the applicant's primary residence, per the requirements of LIPA Tariff for Electric Service.

## APPENDIX A

### Appendix A- Standardized Contract For Systems 5MW Or Less

**LONG ISLAND LIGHTING COMPANY D/B/A LIPA  
STANDARDIZED CONTRACT  
FOR INTERCONNECTION OF DISTRIBUTED GENERATION AND/OR ENERGY STORAGE  
EQUIPMENT  
WITH CAPACITY OF 5 MW OR LESS  
CONNECTED IN PARALLEL WITH THE LIPA DISTRIBUTION SYSTEMS**

**Customer Information:**

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

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

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

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Installation Address (if different):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Unit Application/PAM No.

\_\_\_\_\_

**Utility Information:**

Name: Long Island Electric Utility Service LLC  
("T&D Manager") as acting agent and on  
behalf of **LONG ISLAND LIGHTING  
COMPANY d/b/a LIPA ("LIPA")**

Address: 175 E. Old Country Road, E.O.B  
Hicksville, NY 11801

Telephone: (516) 949-8295

Email: \_\_\_\_\_

Account Number: \_\_\_\_\_

## APPENDIX A

### DEFINITIONS

**“Dedicated Facilities”** means the equipment and facilities on LIPA’s system necessary to permit operation of the Unit in parallel with LIPA’s system.

**“Delivery Service”** means the services LIPA may provide to deliver capacity or energy generated by Customer to a buyer to a delivery point(s), including related ancillary services.

**“Energy Storage System”** means a commercially-available mechanical, electrical or electro-chemical means to store and release electrical energy, and its associated electrical inversion device and control functions that may stand-alone or be paired with a distributed generator at a point of common coupling.

**“Interconnection Customer”** means the owner of the Unit or any entity that proposes to interconnect with LIPA’s Distribution System.

**“Interconnection Facilities”** means the equipment and facilities on LIPA’s system necessary to permit operation of the Unit in parallel with LIPA’s system.

**“Net energy metering”** means the use of a net energy meter to measure, during the billing period applicable to a customer-generator, the net amount of electricity supplied by an electric corporation and provided to the corporation by a customer-generator.

**“Premises”** means the real property where the Unit is located.

**“Smart Meter”** means advanced metering infrastructure (AMI). For additional information refer to <https://www.psegliny.com/page.cfm/SMART>

**“Party” or “Parties”** means LIPA and Interconnection Customer individually or jointly.

**“Smart Grid SGIP”** means the PSEG Long Island Smart Grid Small Generator Interconnection Procedures For Distributed Generators and Energy Storage Systems Less than 10 MW Connected in Parallel with LIPA’s Radical Distribution System which are applicable to new and modifications to existing distributed generation units with a nameplate capacity less than 10 MW connected in parallel with the LIPA distribution system, posted at <https://www.psegliny.com/files.cfm/SGIP.pdf>.

**“T&D Manager,”** also referred to herein as **“PSEG Long Island,”** means PSEG Long Island LLC through its operating subsidiary, Long Island Electric Utility Servco LLC, which has managerial responsibility for the day-to-day the operational maintenance of, and capital investment to, the electric transmission and distribution system owned by LIPA as of January 1, 2014, pursuant to that Amended Restated Operations Services Agreement, dated as of December 31, 2013, as amended from time to time (the “OSA”) or any other similar agreement or arrangement, or any successor or assignee thereof providing certain operation, maintenance and other services to LIPA.

**“Unit”** means the distributed generation facilities and Energy Storage System approved by the T&D Manager with a nameplate capacity of 5 MW or less located on the Interconnection Customer’s premises at the time T&D Manager approves such Unit for operation in parallel with LIPA’s system. This Agreement relates only to such Unit, but a new agreement shall not be required if the Interconnection Customer makes physical alterations to the Unit that do not result in an increase in its nameplate capacity. The nameplate generating and energy storage capacity of the Unit shall not exceed 5 MW in aggregate.

## APPENDIX A

### I. TERM AND TERMINATION

**1.1 Term:** This Agreement shall become effective when executed by both Parties and shall continue in effect until terminated.

**1.2 Termination:** This Agreement may be terminated as follows:

- a. The Interconnection Customer may terminate this Agreement at any time, by giving T&D Manager and LIPA sixty (60) days' written notice.
- b. Failure by the Interconnection Customer to seek final acceptance by T&D Manager within twelve (12) months after completion of T&D Manager's construction process described in the Smart Grid SGIP shall automatically terminate this Agreement.
- c. Either Party may, by giving the other Party at least sixty (60) days' prior written notice, terminate this Agreement in the event that the other Party is in default of any of the material terms and conditions of this Agreement. The terminating Party shall specify in the notice the basis for the termination and shall provide a reasonable opportunity to cure the default.
- d. LIPA may, by giving the Interconnection Customer at least sixty (60) days' prior written notice, terminate this Agreement for cause. The Interconnection Customer's non-compliance with any modification to the Smart Grid SGIP, unless the Interconnection Customer's installation is "grandfathered," shall constitute good cause.

**1.3 Disconnection and Survival of Obligations:** Upon termination of this Agreement the Unit will be disconnected from LIPA's system. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

**1.4 Suspension:** This Agreement will be suspended during any period in which the Interconnection Customer is not eligible for delivery service from LIPA.

## APPENDIX A

### II. SCOPE OF AGREEMENT

**2.1 Scope of Agreement:** This Agreement relates solely to the conditions under which LIPA and the Interconnection Customer agree that the Unit may be interconnected to and operated in parallel with LIPA's system.

**2.2 Electricity Not Covered:** Neither LIPA nor T&D Manager shall have any duty under this Agreement to account for, pay for, deliver, or return in kind any electricity produced by the Facility and delivered into LIPA's system unless the system is net metered pursuant to LIPA's Net Metering Rules.

### III. INSTALLATION, OPERATION AND MAINTENANCE OF UNIT

**3.1 Compliance with Smart Grid SGIP:** Subject to the provisions of this Agreement, T&D Manager shall be required to interconnect the Unit to LIPA's system, for purposes of parallel operation, if T&D Manager accepts the Unit as in compliance with the Smart Grid SGIP. The Interconnection Customer shall have a continuing obligation to maintain and operate the Unit in compliance with the Smart Grid SGIP.

**3.2 Observation of the Unit - Construction Phase:** T&D Manager may, in its discretion and upon reasonable notice, conduct reasonable on-site verifications during the construction of the Unit. Whenever the T&D Manager chooses to exercise its right to perform observations herein it shall specify to the Interconnection Customer its reasons for its decision to perform the observation. For purposes of this paragraph and paragraphs 3.3 through 3.5, the term "on-site verification" shall not include testing of the Unit, and verification tests shall not be required except as provided in paragraphs 3.3 and 3.4.

**3.3 Observation of the Unit - Ten-day Period:** T&D Manager may conduct on-site verifications of the Unit and observe the execution of verification testing within a reasonable period of time, not exceeding ten (10) Business Days after system installation. The Interconnection Customer's facility will be allowed to commence parallel operation upon satisfactory completion of the verification test. The Interconnection must have complied with and must continue to comply with all contractual and technical requirements.

**3.4 Observation of the Unit - Post-Ten-day Period:** If T&D Manager does not perform an on-site verification of the Unit and observe the execution of verification testing within the ten-day period, the Interconnection Customer will send T&D Manager within five (5) days of the verification testing a written notification certifying that the Unit has been installed and tested in compliance with the SGIP, T&D Manager -accepted design and the equipment manufacturer's instructions. The Interconnection Customer may begin to produce energy upon satisfactory completion of the verification test. After receiving the verification test notification, T&D Manager, on behalf of LIPA will either issue to the Interconnection Customer a formal letter of acceptance for interconnection, or may request that the Interconnection Customer and T&D Manager set a date and time to conduct an on-site verification of the Unit and make reasonable inquiries of the Interconnection Customer, but only for purposes of determining whether the verification tests were properly performed. The Interconnection Customer shall not be required to perform the verification tests a second time, unless irregularities appear in the verification test report or there are other objective indications that the tests were not properly performed in the first instance.

**3.5 Observation of the Unit - Operations:** T&D Manager may conduct on-site verification of the operations of the Unit after it commences operations if T&D Manager has a reasonable basis for doing so based on its responsibility to provide continuous and reliable utility service or as authorized by the provisions of LIPA's Retail Electric Tariff relating to the verification of such installations generally.

## APPENDIX A

**3.6 Costs of Dedicated Facilities:** During the term of this Agreement, T&D Manager shall design, construct and install the Dedicated Facilities. The Interconnection Customer shall be responsible for paying the incremental capital cost of such Dedicated Facilities attributable to the Interconnection Customer's Unit. Except as set forth in the "Operating Instructions" for the Unit, all costs associated with the operation and maintenance of the Dedicated Facilities after the Unit first produces energy shall be the responsibility of LIPA.

### IV. DISCONNECTION OF THE UNIT

**4.1 Emergency Disconnection:** T&D Manager may disconnect the Unit, without prior notice to the Interconnection Customer (a) to eliminate conditions that constitute a potential hazard to Company personnel or the general public; (b) if pre-emergency or emergency conditions exist on the LIPA System; (c) if T&D Manager observes a hazardous condition relating to the Unit in an inspection; or (d) if the Interconnection Customer has tampered with any protective device. T&D Manager shall notify the Interconnection Customer of the emergency if circumstances permit.

**4.2 Non-Emergency Disconnection:** T&D Manager may disconnect the Unit, after notice to the responsible party has been provided and a reasonable time to correct, consistent with the conditions, has elapsed, if (a) the Interconnection Customer has failed to make available records of verification tests and maintenance of his protective devices; (b) the Unit system interferes with Company equipment or equipment belonging to other customers of LIPA; (c) the Unit adversely affects the quality of service of adjoining customers or (d) the Energy Storage System does not operate in compliance with the operating parameters and limits described in Appendix J.

**4.3 Disconnection by Interconnection Customer:** The Interconnection Customer may disconnect the Unit at any time.

**4.4 LIPA Obligation to Cure Adverse Effect:** If, after the Interconnection Customer meets all interconnection requirements, the operations of LIPA are adversely affecting the performance of the Unit or the Interconnection Customer's premises, T&D Manager shall immediately take appropriate action to eliminate the adverse effect. If T&D Manager determines that LIPA needs to upgrade or reconfigure its system the Interconnection Customer will not be responsible for the cost of new or additional equipment beyond the point of common coupling between the Interconnection Customer and LIPA.

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### V. ACCESS

**5.1 Access to Premises:** T&D Manager shall have access to the disconnect switch of the Unit at all times. At reasonable hours and upon reasonable notice consistent with Section III of this Agreement, or at any time without notice in the event of an emergency (as defined in paragraph 4.1), T&D Manager and LIPA shall have access to the Premises.

**5.2 Company and Interconnection Customer Representatives:** T&D Manager shall designate, and shall provide to the Interconnection Customer, the name and telephone number of a representative or representatives who can be reached at all times to allow the Interconnection Customer to report an emergency and obtain the assistance of T&D Manager. For the purpose of allowing access to the premises, the Interconnection Customer shall provide T&D Manager with the name and telephone number of a person who is responsible for providing access to the Premises.

**5.3 Company Right to Access Company-Owned Facilities and Equipment:** If necessary for the purposes of this Agreement, the Interconnection Customer shall allow LIPA or T&D Manager access to LIPA's equipment and facilities located on the Premises. To the extent that the Interconnection Customer does not own all or any part of the property on which LIPA is required to locate its equipment or facilities to serve the Interconnection Customer under this Agreement, the Interconnection Customer shall secure and provide in favor of LIPA or T&D Manager the necessary rights to obtain access to such equipment or facilities, including easements if the circumstances so require.

### VI. DISPUTE RESOLUTION

**6.1 Good Faith Resolution of Disputes:** Each Party agrees to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner.

**6.2 Mediation:** If a dispute arises under this Agreement, and if it cannot be resolved by the Parties within ten (10) Business Days after written notice of the dispute, the parties agree to submit the dispute to mediation by a mutually acceptable mediator, in a mutually convenient location in New York State, in accordance with the then current CPR Institute for Dispute Resolution Mediation Procedure. The Parties agree to participate in good faith in the mediation for a period of up to ninety (90) days.

**6.3 Escrow:** If there are amounts in dispute of more than two thousand dollars (\$2,000), the Customer shall either place such disputed amounts into an independent escrow account pending final resolution of the dispute in question, or provide to LIPA an appropriate irrevocable standby letter of credit in lieu thereof; provided however, that an Interconnection Customer that is an agency or instrumentality of the Federal government, or an agency or instrumentality of the New York State government, shall not be required to place such disputed amounts into escrow if the establishment of such an escrow would be inconsistent with applicable Federal or State law or regulations.

### VII. INSURANCE

**7.1 Recommendation for Insurance:** The Interconnection Customer is not required to provide general liability insurance coverage as part of this Agreement, the Smart Grid SGIP, or any other LIPA requirement. Due to the risk of incurring damages however, LIPA recommends that every distributed generation customer protect itself with insurance.

## APPENDIX A

**7.2 Effect:** The inability of LIPA to require the Interconnection Customer to provide general liability insurance coverage for operation of the Unit is not a waiver of any rights LIPA may have to pursue remedies at law against the Interconnection Customer to recover damages.

**7.3** With respect to an Interconnection Customer who owns and/or operates solar, Farm Waste, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell, Wind, or Hybrid Electric Generating Equipment (as these terms are defined in the LIPA Tariff), T&D Manager may require the Interconnection Customer to:

- (i) Comply with additional safety or performance standards in addition to those specified in LIPA's "Smart Grid Small Generator Interconnection Procedures";
- (ii) Perform or pay for additional tests;
- (iii) Purchase additional liability insurance when the total rated generating capacity of the electric generating equipment that provides electricity to LIPA through the same local feeder line exceeds twenty (20%) of the rated capacity of the total feeder line.

## VIII. MISCELLANEOUS PROVISIONS

**8.1 Beneficiaries:** This Agreement is intended solely for the benefit of the parties hereto, and if a party is an agent, its principal. Nothing in this Agreement shall be construed to create any duty to, or standard of care with reference to, or any liability to, any other person. T&D Manager is not a party to this Agreement, and is executing and administering this agreement on behalf of LIPA as LIPA's agent. T&D Manager shall have all rights of a Party hereunder with respect to accuracy of information, Force Majeure, limitations of liability, indemnification, and disclaimers of warranty.

**8.2 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, such portion or provision shall be deemed separate and independent, and the remainder of this Agreement shall remain in full force and effect.

**8.3 Entire Agreement:** This Agreement constitutes the entire Agreement between the parties and supersedes all prior agreements or understandings, whether verbal or written.

**8.4 Waiver:** No delay or omission in the exercise of any right under this Agreement shall impair any such right or shall be taken, construed or considered as a waiver or relinquishment thereof, but any such right may be exercised from time to time and as often as may be deemed expedient. In the event that any agreement or covenant herein shall be breached and thereafter waived, such waiver shall be limited to the particular breach so waived and shall not be deemed to waive any other breach hereunder.

**8.5 Applicable Law:** This Agreement shall be governed by and construed in accordance with the law of the State of New York, without regard to any choice of law provisions. However, if the Interconnection Customer is an agency or instrumentality of the United States Government, this Agreement shall be governed by the applicable laws of the United States of America and, to the extent that there is no applicable or controlling federal law, the laws of the State of New York, without regard to conflicts of law principles.

**8.6 Amendments:** This Agreement shall not be amended unless the amendment is in writing and signed by T&D Manager on behalf of LIPA and the Interconnection Customer.

**8.7 Force Majeure: For purposes of this Agreement.** "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or



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circumstances, but only to the extent they satisfy the preceding requirements: terrorism, acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will 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 will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but 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.

**8.8 Assignment to Corporate Party:** At any time during the term, the Interconnection Customer may assign this Agreement to a corporation or other entity with limited liability, provided that the Interconnection Customer obtains the consent of T&D Manager on behalf of LIPA. Such consent will not be withheld unless T&D Manager on behalf of LIPA can demonstrate that the corporate entity is not reasonably capable of performing the obligations of the assigning Interconnection Customer under this Agreement.

**8.9 Assignment to Individuals:** At any time during the term, an Interconnection Customer may assign this Agreement to another person, other than a corporation or other entity with limited liability, provided that the assignee is the owner, lessee, or is otherwise responsible for the Unit. The obligations under the Appendix A (Long Island Lighting Company D/B/A LIPA Standardized Contract for Interconnection of Distributed Generation and/or Energy Storage Equipment with Capacity of 5 MW or Less Connected in Parallel with the LIPA Distribution Systems), shall be binding on any successor owner of the Unit. If the Unit is sold LIPA may require the new Unit owner to sign an amended agreement.

**8.10 Permits and Approvals:** Interconnection Customer shall obtain all environmental and other permits lawfully required by governmental authorities prior to the construction and for the operation of the Unit during the term of this Agreement.

## APPENDIX A

**8.11 Limitation of Liability:** Neither by inspection, if any, or non-rejection, nor in any other way, does LIPA or T&D Manager give any warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Interconnection Customer or leased by the Interconnection Customer from third parties, including without limitation the Unit and any structures, equipment, wires, appliances or devices appurtenant thereto.

### ACCEPTED AND AGREED:

**Long Island Electric Utility Service LLC  
acting as agent of and on behalf of  
Long Island Lighting Company d/b/a LIPA**

**[Customer]**

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Print)

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

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

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Print)

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

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

## APPENDIX B

### Appendix B - Standardized Application For Inverter Based Systems

**LONG ISLAND LIGHTING COMPANY D/B/A LIPA  
STANDARIZED APPLICATION  
FOR  
INTERCONNECTION OF INVERTER BASED DISTRIBUTED GENERATION AND ENERGY  
STORAGE EQUIPMENT  
IN PARALLEL WITH THE LIPA DISTRIBUTION SYSTEM**

**CHECK IF: Standard SGIP Project** \_\_\_\_\_ **or Feed in Tariff Project** \_\_\_\_\_

**Customer:**

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

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

LIPA Account Number: \_\_\_\_\_

**Installation Address** (Street, City, State, ZIP): \_\_\_\_\_

**Applicant Organization:** \_\_\_\_\_

Applicant Contact: \_\_\_\_\_ Title: \_\_\_\_\_

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

**Agent (if any):** \_\_\_\_\_

**Agent Organization:** \_\_\_\_\_

**Agent Contact:** \_\_\_\_\_ **Title:** \_\_\_\_\_

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

**Consulting Engineer or Contractor:**

**Organization:** \_\_\_\_\_

**Contact:** \_\_\_\_\_ **Title:** \_\_\_\_\_

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

**Estimated In-Service Date:** \_\_\_\_\_

**Electric Service: Indicate if Existing** \_\_\_\_\_ **or New Service** \_\_\_\_\_

Capacity: \_\_\_\_\_ Amperes \_\_\_\_\_ Voltage: \_\_\_\_\_ Volts Service Character: ( ) Single Phase ( )

Three Phase Secondary 3 Phase Transformer Connection ( ) Wye ( ) Delta

## APPENDIX B

**Location of Protective Interface Equipment on Property:** (include address if different from customer address) \_\_\_\_\_

### Solar Panel Information:

Panel Manufacturer: \_\_\_\_\_

Model No. \_\_\_\_\_ Version No. \_\_\_\_\_

Panel Power Rating: \_\_\_\_\_ kW (DC)

Quantity of Panels: \_\_\_\_\_

Total Rated Output: \_\_\_\_\_ kW (DC)

### Energy Storage System Information:

Manufacturer: \_\_\_\_\_

Model No: \_\_\_\_\_

Total rating KW (AC): \_\_\_\_\_

Total Rating KWH : \_\_\_\_\_

### Inverter Information:

Manufacturer: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Model No: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Inverter Rating kW (AC): \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Quantity of Inverters \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Total Rating of All Inverters kW (AC): \_\_\_\_\_

System Total Output \_\_\_\_\_ kW AC (System Total Output should be Total Rating of All Inverters)

Type: ☐ Forced Commutated ☐ Line Commutated

☐ Utility Interactive ☐ Stand Alone

System Type Tested (Total System): ☐ Yes ☐ No; attach product literature

Ramp Rate: \_\_\_\_\_

Method of Grounding: ☐ Grounded ☐ Ungrounded

Interconnection Voltage: \_\_\_\_\_ Volts

### Applicable Attachments:

Detailed One Line Diagram attached ☐ Yes

If applicable, NRTL/UL 1741 Certification attached: ☐ Yes

## APPENDIX B

If applicable:

Step Up Transformer Winding Configuration::

( ☐ ) Delta ( ☐ ) Wye ( ☐ ) Wye Grounded

Other existing DG such as emergency generators, other renewable technologies, microturbines, hydro, fuel cells, battery storage, etc:

( ☐ ) Yes ( ☐ ) No

(If yes, provide information about existing generation on separate sheet and include detail on one-line diagram.)

_____	_____	_____	CUSTOMER/AGENT
SIGNATURE	TITLE	DATE	

## APPENDIX C

### Appendix C - Standardized Application For Non-Inverter Based Systems

**LONG ISLAND LIGHTING COMPANY D/B/A LIPA  
STANDARIZED APPLICATION  
FOR INTERCONNECTION OF NON-INVERTER BASED DISTRIBUTED GENERATION  
EQUIPMENT  
IN PARALLEL WITH THE LIPA DISTRIBUTION SYSTEM**

**CHECK IF: Standard SGIP Project \_\_\_\_\_ or Feed in Tariff Project \_\_\_\_\_**

**Customer:**

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

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

LIPA Account Number: \_\_\_\_\_ **Installation Address** (Street, City,

State, ZIP): \_\_\_\_\_ **Applicant Organization:** \_\_\_\_\_

Applicant Contact: \_\_\_\_\_ Title: \_\_\_\_\_

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

**Agent (if any):**

**Agent Organization:** \_\_\_\_\_

**Agent Contact:** \_\_\_\_\_ Title: \_\_\_\_\_

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

**Consulting Engineer or Contractor:**

**Organization:** \_\_\_\_\_

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

Address (Street, City, State, ZIP): \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

**Estimated In-Service Date:** \_\_\_\_\_

**Electric Service: Indicate if Existing \_\_\_\_\_ or New Service \_\_\_\_\_**

Capacity: \_\_\_\_\_ Amperes \_\_\_\_\_ Voltage: \_\_\_\_\_ Volts Service Character: ( ) Single Phase ( ) Three Phase Secondary 3 Phase Transformer Connection ( ) Wye ( ) Delta

**Location of Protective Interface Equipment on Property:** (include address if different from customer address) \_\_\_\_\_

## APPENDIX C

### Energy Producing Equipment Information:

Manufacturer:

Model No.:

Version No.:

( ) Synchronous ( ) Induction ( ) Other (Define) \_\_\_\_\_

Rating: \_\_\_\_\_ kW Rating: \_\_\_\_\_ kVA

Rated Output: \_\_\_\_\_ VA Rated Voltage: \_\_\_\_\_ Volts

Rated Frequency: \_\_\_\_\_ Hz Rated Speed: \_\_\_\_\_ RPM

Efficiency: \_\_\_\_\_ % Power Factor: \_\_\_\_\_ %

Rated Current: \_\_\_\_\_ Amps Locked Rotor Current: \_\_\_\_\_ Amps

Synchronous Speed: \_\_\_\_\_ RPM Winding Connection: \_\_\_\_\_

Min. Operating Freq. /Time: \_\_\_\_\_

Generator Connection: ( ) Delta ( ) Wye ( ) Wye Grounded

System Tested to UL 1741 (most current version) (Total System):

( ) Yes ( ) No If no, attach product literature.

Equipment Tested to UL 1741 (most current version) (i.e., Protection System):

( ) Yes ( ) No

If no, attach product literature.

Three Line Diagram attached: ( ) Yes

Verification Test Plan attached: ( ) Yes

If applicable, Certification to UL 1741 attached: ( ) Yes

System total size \_\_\_\_\_kW AC

### For Synchronous Machines

Submit copies of the Saturation Curve and the Vee Curve

( ) Salient ( ) Non-Salient

Torque: \_\_\_\_\_ lb-ft Rated RPM: \_\_\_\_\_

Field Amperes: \_\_\_\_\_ at rated generator voltage and current and \_\_\_\_\_ % PF over-excited

Type of Exciter: \_\_\_\_\_

Output Power of Exciter: \_\_\_\_\_

Type of Voltage Regulator: \_\_\_\_\_

Direct-axis Synchronous Reactance ( $X_d$ ): \_\_\_\_\_ ohms

Direct-axis Transient Reactance ( $X'_d$ ) : \_\_\_\_\_ ohms

Direct-axis Sub-transient Reactance ( $X''_d$ ): \_\_\_\_\_ ohms

### For Induction Machines:

## APPENDIX C

Rotor Resistance ( $R_r$ ): \_\_\_\_\_ ohms      Exciting Current : \_\_\_\_\_ Amps

Rotor Reactance ( $X_r$ ): \_\_\_\_\_ ohms      Reactive Power Required: \_\_\_\_\_

Magnetizing Reactance ( $X_m$ ): \_\_\_\_\_ ohms , \_\_\_\_\_ VARs (No Load)

Stator Resistance ( $R_s$ ): \_\_\_\_\_ ohms , \_\_\_\_\_ VARs (Full Load)

Stator Reactance ( $X_s$ ): \_\_\_\_\_ ohms

Short Circuit Reactance ( $X''_d$ ) : \_\_\_\_\_ ohms,

Phases: ( ) Single Phase ( ) Three Phase

Frame Size: \_\_\_\_\_ Design Letter: \_\_\_\_\_

Temp. Rise: \_\_\_\_\_ °C

Step Up Transformer Winding Configuration:

( ) Wye-Wye      ( ) Wye-Delta      ( ) Delta-Wye

Other existing DG such as emergency generators, other renewable technologies, microturbines, hydro, fuel cells, battery storage, etc:

( ) Yes      ( ) No

(If yes, provide information about existing generation on separate sheet and include detail on one-line diagram.)

Signature:

\_\_\_\_\_  
CUSTOMER/AGENT SIGNATURE

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
DATE



## APPENDIX D

### Appendix D -Pre-Application Report

#### PRE-APPLICATION REPORT FOR THE CONNECTION OF PARALLEL GENERATION EQUIPMENT TO LIPA's DISTRIBUTION SYSTEM

<b>DG Project Information: (Provided to Utility by Applicant)</b>
Customer name
Location of Project: (Address and/or GPS Coordinates)
DG technology type
DG fuel source / configuration
Proposed project size in kW (AC)
Date of Pre-Application Request
<b>Pre-Application Report: (Provided to Applicant by Utility – 10 Business Days)</b>
Operating voltage of closest distribution line
Phasing at site
Approximate distance to 3-Phase (if only 1 or 2 phases nearby)
Circuit capacity (MW)
Fault current availability, if readily obtained
Circuit peak load for the previous calendar year
Circuit minimum load for the previous calendar year
Approximate distance (miles) between serving substation and project site
Number of substation banks
Total substation bank capacity (MW)
Total substation peak load (MW)
Aggregate existing distributed generation on the circuit (kW)
Aggregate queued distributed generation on the circuit (kW)

## APPENDIX E

### Appendix E -Costs

#### **COST RESPONSIBILITY FOR DEDICATED TRANSFORMER(S) AND OTHER SAFETY EQUIPMENT FOR NET METERED CUSTOMERS**

Customer Cost Responsibility will be per LIPA Tariff for Electric Service. Such costs can include the total costs for upgrades to ensure the adequacy of the transmission and/or distribution system which would not have been necessary but for the interconnection of the ~~net-metered~~ DG resource.

## APPENDIX F

### Appendix F -Application Checklist

Completed standard application form	✓
Signed copy of the standard contract	✓
Letter of authorization, signed by the Customer, to provide for the contractor to act as the customer's agent, if necessary	✓
If requesting a new service, a site plan with the proposed interconnection point identified by a Google Earth, Bing Maps or similar satellite image. For those projects on existing services, account and meter numbers shall be provided	✓
Description / Narrative of the project and site proposed. If multiple DG systems are being proposed at the same site/location, this information needs to be identified and explained in detail	✓
DG technology type	✓
DG fuel source / configuration	✓
Proposed project size in AC kW	✓
Project is net metered, remote, or community net metered	✓
Metering configuration	✓
Copy of the certificate of compliance referencing UL 1741	✓
Copy of the manufacturer ' s data sheet for the interface equipment	✓
Copy of the manufacturer ' s verification test procedures, if required	✓
System Diagram - A three line diagram for designs proposed on three phase systems, including detailed information on the wiring configuration at the PCC and an exact representation of existing utility service. One line diagrams shall be acceptable for single phase installations	✓

## **APPENDIX G**

### **Appendix G – Screening Analysis**

Please refer to PSEG Long Island's Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA's Distribution System for Preliminary Screening Analysis. The document can be found at the following link:

<https://www.psegliny.com/aboutpseglongisland/ratesandtariffs/sgip>

### **SUPPLEMENTAL SCREENING ANALYSIS**

Please refer to PSEG Long Island's Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA's Distribution System for Supplemental Screening Analysis. The document can be found at the following link:

<https://www.psegliny.com/aboutpseglongisland/ratesandtariffs/sgip>

## APPENDIX H

### Appendix H – Property Owner Consent Form

#### New York State Standardized Acknowledgment of Property Owner Consent Form

**Project Name:**

**Location (Installation address):**

**Project/PAM Number (if available):**

(Note: This Acknowledgment is to be signed by the owner of the property where the proposed distributed generation facility and interconnection will be placed, when the owner or operator of the proposed distributed generation facility is not also the owner of the property, and the property owner's electric facilities will not be involved in the interconnection of the distributed generation facility. Property Owner shall attached a copy of Tax Bill/Deed/Lease/Agreement/Other as evidence with this form)

This Acknowledgment is executed by \_\_\_\_\_, (the "Property Owner"; as used herein the term shall include the Property Owner's successors in interest to the Property), as owner of the real property situated in the City/Town of \_\_\_\_\_, \_\_\_\_\_ County, New York, known as \_\_\_\_\_ [street address] (the "Property"), at the request of \_\_\_\_\_ [name of Developer] (the "Developer"; as used herein the term shall include the Developer's successors and assigns).

This Acknowledgment does not grant or convey any interest in the Property to the Developer.

1. The Property Owner certifies as of the date indicated below that the Property Owner is working exclusively with the Developer on a proposal to install a distributed generation facility (the "Facility") on the Property.

OR

2. The Property Owner certifies as of the date indicated below that the Developer has executed with the Property Owner one of the following: a signed option agreement to lease or purchase the Property, an executed Property lease, or an executed purchase agreement for the Property granting the Developer a right to use the Property for purposes of installing the Facility.

Property Owner:

Developer/Applicant:

By: \_\_\_\_\_

By: \_\_\_\_\_ Name: \_\_\_\_\_

\_\_\_\_\_

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

\_\_\_\_\_

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

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

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

## APPENDIX I

### **Appendix I – Moratorium Attestation Form**

#### **New York State Standard Moratorium Attestation Form**

PSEG Long Island  
Manager of Power Asset Management  
175 E Old Country Road  
Hicksville, New York 11801

<b>Re:</b>	DEVELOPER	[name]
		[contact information]
	PROJECT	[Project/PAM number]
	PROPERTY	[street address]
		[municipality/county]
		[city/town and zip code]

\_\_\_\_\_ [DEVELOPER NAME] hereby attests that it will notify the  
interconnecting utility identified above of the date that the moratorium on solar development in  
\_\_\_\_\_ [MUNICIPALITY NAME] is lifted.

By signing below, Developer confirms that this attestation is true and correct.

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

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

**Appendix J – Energy Storage System (ESS) Application Requirements**

**Energy Storage System (ESS) Application Requirements / System Operating Characteristics / Market Participation**

**Application Requirements:**

- a. Provide a general overview / description and associated scope of work for the proposed project. Is the new ESS project associated with a new or existing DG facility?
- b. Identify whether this is a Stand-Alone or Hybrid ESS proposal: **or a change to the operating characteristics of an existing system.**
- c. Indicate the type of Energy Storage (ES) technology to be used. For example, NaS, Dry Cell, PB-acid, Li-ion, vanadium flow, etc.
- d. Indicate how the ESS will be charged and/or act as a load: (1) Electrical Grid Only, (2) Unrestricted charging from Electrical Grid and/or DG system, (3) Restricted charging from Electrical Grid and/or DG Systems, or (4) charging from DG only.
- e. If the intended use case for the ES includes behind-the-meter backup services, please provide a description and documentation illustrating how the entire system disconnects from utility during an outage (e.g. mechanical or electronic, coordination, etc.).
- f. Provide the data sheet for the battery portion of the energy storage equipment. including the model, capacity (kWh), and manufacturer
- g. Provide specification data/rating sheets including the manufacturer, model, and nameplate ratings (kW) of the inverter(s)/converters(s) for the energy storage and/or DG system.
- h. Indicate any impacts of ambient temperatures on charging and discharging capabilities, specifically noting any restrictions on available capacity as a function of temperature and listed on the system facility's nameplate.
- i. Provide details on cycling (anticipated maximum cycles before replacement), depth of discharge restrictions, and overall expected lifetime regarding the energy storage components.
- j. Provide proposed inverter(s) power factor operating range and whether inverter(s) are single quadrant, two-quadrant, or four-quadrant operation.
- ~~k. Provide specification data/rating sheets including the manufacturer, model, and nameplate ratings (kW) of the inverter(s)/converters(s) for the energy storage and/or DG system.~~
- ~~h.k.~~ Provide details on whether the inverter(s)/converter(s) have any intrinsic grid support functions, such as autonomous or interactive voltage and frequency support. If they do, please describe these functions and default settings.
- ~~m.l.~~ Indicate whether the ES and DG system inverter(s)/converter(s) are DC-coupled or AC-coupled.
- ~~m.m.~~ Indicate whether the system inverter(s)/converter(s) is/are listed on the NY DPS "Certified Interconnection Equipment List"
  - a. If the interconnected inverter(s)/converter(s) are not listed on the "Certified

## APPENDIX J

Interconnection Equipment List” but are certified, provide a copy of the certificate of compliance.

- b. If the interconnected inverter(s)/converter(s) are not listed on the “Certified Interconnection Equipment List, or the storage and paired DG are AC coupled, please detail the use of control systems such as utility grade relays including AC and DC control schematics and relay logic.
- c. If the interconnected inverter(s)/converter(s) are not listed on the “Certified Interconnection Equipment List”, please detail the verification of protection operation in equivalent deployments of the equipment configuration. For example, if this exact configuration has been previously deployed, please describe the project and reference the commissioning/test report.
- d. Identify if inverter analytical models are available for use in the utility’s power flow analysis program, and if there are any restrictions on their use.

~~o~~-n. Indicate whether the interconnected inverters inverter(s)/converter(s) is/are compliant to the latest versions of the following additional standards. If partially compliant to subsections of the latest standards, please list those subsections:

1. IEEE 1547a
2. UL 1741 and its supplement SA

~~p~~-o. If the interconnected inverter(s)/converters are not compliant with the previously listed additional standards, please describe show utility grade protection, relay and controls are implemented between your hardware and the utility.

~~p~~-p. Detail any integrated protection that is included in the interconnected inverter(s)/converters. For example, describing over/under-voltage/current frequency behavior and reconnection behavior would comply, such as solid state transfer switching or other.

### System Operating Characteristics:

- a. Identify the maximum nameplate rating in kW ac for each source (storage, any paired inverter-based distributed generation).
- b. Identify the maximum net export and import of the Hybrid or Stand-Alone system in kW ac
- c. Indicate the maximum ramp rates during charging and discharging.
- d. Indicate the maximum frequency of change of operating modes (i.e. charging to discharging and vice-versa) that will be allowed based upon control system configurations
- e. Indicate any specific and/or additional operational limitations that will be imposed (e.g. will not charge between 2-7pm on weekdays).
- f. Provide a summary of protection and control scheme functionality and provide details of any integrated protection of control schematics and default settings within controllers.
- g. Provide descriptions of any software functionality that enables intelligent charging and discharging of the ESS using interconnected DG, such as PV. For example, if the ESS can be charged only through the DG input, or if the ESS can be switched to be charged from the line input, provide those details in a sequence of operations. Provide details on grounding of the interconnected energy storage and/or DG system to meet utility effective grounding requirements.
- h. Provide short circuit current capabilities and harmonic output from the Hybrid Project or



## APPENDIX J

- stand-alone storage system
- i. Provide details on standard communication hardware interfaces that are available, e.g., TCP/IP, serial, etc.
- j. Provide details on standard communication protocols that are available, e.g., MODBUS, DNP-3, 2030.5, etc.
- k. Provide details on standard communication data models that are available, e.g., 61850-90- 7, SunSpec, MESA, etc.

### Market Participation:

- a. Will the system operate in the NYISO markets? If yes, please specify.
- b. Will the system be compensated under a utility tariff(s)? If yes, please specify.

The market participation information is non-binding; however, the operating characteristics as defined above will be used for technical study.

Date:

## APPENDIX K

### Appendix K – Project Construction Schedule

Applicant Name:

Project/PAM Number:

Developer:

\*This Interconnection schedule depends upon receipt of funds along with notification to proceed, executed Interconnection Agreement, weather, equipment delivery, public opposition to right-of-way and timely Customer design submittals. Close coordination is required to sequence construction and planned interruption events. As a result, any final schedule requires mutual agreement and would be subject to change.

Milestone	Estimated Time Duration to Completion (Weeks)	Responsible Party
30 % Payment		Interconnection Customer
Administrative Setup		PSEG Long Island
Customer Submittals One Line and Three Line Diagrams Stamped Site Plans		Interconnection Customer
Review of drawings, shop drawings and Relay Setting		PSEG Long Island
Design Queue		PSEG Long Island
Permitting/Easements		PSEG Long Island
Upgrade Design – Line/POI/Substation Design		PSEG Long Island: Complete design to the point of material ordering
Progress Payment**		Interconnection Customer
Scheduling/Procurement		PSEG Long Island
Construction – Line/POI/Substation		PSEG Long Island / <u>Interconnection customer</u>
Verification Test Coordination Customer Witness Testing Energization/Permission to Operate		PSEG Long Island / <u>Interconnection customer</u> <i>Customer submittals required to be <u>approved to schedule test</u></i>
Total Project Duration		PSEG Long Island /Interconnection Customer

\*\*The sequence of Milestone schedule might change for Non-CESIR projects.

## APPENDIX K

### 30 Percent Construction Payment Task List:

This list below provides applicants with a high-level summary of work tasks to be performed by the PSEG Long Island with the developer's 30 percent construction payment. These tasks will be initiated as the default course of action unless the applicant specifies an alternative request with its payment submission. For purposes of determining whether to move forward with an optional task, a task may not be subdivided beyond what is specified in the header, e.g., initiation of Task 4, "commence utility design work," will result in starting all required utility design work, and this task cannot be subdivided into specific aspects of design.

1. Within 15 Business Days of receiving the 30 percent construction payment, PSEG Long Island will:
  - a. Process the payment and send receipt of payment to the applicant,
  - b. Send a signed New York State Standardized Interconnection Contract electronically to the applicant, and
2. Within 30 Business Days of receipt of the 30 percent construction payment, PSEG Long Island and applicant would coordinate and develop an initial construction schedule (consistent with Appendix K).
3. After receipt of the signed contract from the applicant, to initiate the project PSEG Long Island will:
  - a. Establish an accounting framework for the project by, for example, assigning a funding number and/or a work order, and
4. Upon mutual agreement between the PSEG Long Island and applicant, the utility will commence design work and complete the following tasks:
  - a. Assign design resources and begin project design for
    - i. Distribution line(s), and
5. Substation(s).
  - a. Schedule an initial site visit,
  - b. Review and work with the applicant to finalize the applicant's design package, and
  - c. Identify the need for any permits/easements required for interconnecting the project

## APPENDIX L

### **Appendix L – Small Generator Certificate Of Completion**

Is the Small Generator unit owner-installed? Yes \_\_\_\_\_ No \_\_\_\_\_

Installed System Total Output: \_\_\_\_\_ kW DC and \_\_\_\_\_ kW AC

Installed Energy Storage Total Output: \_\_\_\_\_ kW AC and \_\_\_\_\_ kWh

Interconnection Customer: \_\_\_\_\_

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

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

Location of the Small Generator (if different from above):  
\_\_\_\_\_

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

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

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

Electrician:

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

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

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

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

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

License number: \_\_\_\_\_

Date Approval to Install Facility granted by LIPA: \_\_\_\_\_

Application PAM ID number: \_\_\_\_\_

Inspection:

The Small Generator has been installed and inspected in compliance with the local

building/electrical code of \_\_\_\_\_

Signed (Local electrical wiring inspector, or attach signed electrical inspection):  
\_\_\_\_\_

Print Name: \_\_\_\_\_

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

**APPENDIX M  
INTERCONNECTION AGREEMENT  
FOR A SYSTEM  
GREATER THAN 5 MW AND LESS THAN 10 MW**

**Appendix M - Interconnection Agreement For A System  
Greater Than 5 MW And Less Than 10 MW**

**INTERCONNECTION AGREEMENT  
FOR A SYSTEM  
GREATER THAN 5 MW AND LESS THAN 10 MW  
AT [ADDRESS]**

**BETWEEN**

**LONG ISLAND LIGHTING COMPANY D/B/A LIPA**

**AND**

**[PARTY NAME]**

**APPENDIX M**  
**INTERCONNECTION AGREEMENT**  
**FOR A SYSTEM**  
**GREATER THAN 5 MW AND LESS THAN 10 MW**

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**APPENDIX M**  
**INTERCONNECTION AGREEMENT**  
**FOR A SYSTEM**  
**GREATER THAN 5 MW AND LESS THAN 10 MW**

**EXHIBITS**

Exhibit A – System One-Line / Point of Attachment and Interconnection Facilities/  
Demarcation Points

| Exhibit B – Interconnection and Metering ~~Standards~~ Requirements

Exhibit C – Facility Design and Verification Studies

Exhibit D – Commissioning, Startup, and Maintenance Procedures for Interconnection  
Facilities

Exhibit E – Interconnection Cost Estimate

**APPENDIX M**  
**INTERCONNECTION AGREEMENT**  
**FOR A SYSTEM**  
**GREATER THAN 5 MW AND LESS THAN 10 MW**

THIS INTERCONNECTION AGREEMENT (this “Agreement”) is made and entered into this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ by and between Long Island Lighting Company doing business as LIPA (“LIPA”), a corporation organized under the laws of the State of New York and a wholly-owned subsidiary of Long Island Power Authority (“Authority”) which is a corporate municipal instrumentality and political subdivision of the State of New York, each with its headquarters at 333 Earle Ovington Boulevard, Uniondale, New York 11553 and [PARTY NAME] organized under the laws of the State of [\_\_\_\_\_] (“Generator”), with its offices at [PARTY ADDRESS]. LIPA and Generator may be jointly referred to in this Agreement as the “Parties,” or individually as a “Party.” T&D Manager is not a party to this Agreement and is executing this Agreement solely on behalf of and as agent for LIPA.

WHEREAS, LIPA owns electric facilities and is engaged in the generation, transmission, distribution, and sale of electric energy in the State of New York; and

WHEREAS, T&D Manager is LIPA’s agent, will administer this Agreement and shall be LIPA’s representative in all matters related to this Agreement, including all attached exhibits as applicable; and

WHEREAS, Generator intends to construct, own, operate, and maintain (or cause to be constructed, operated, and maintained) an electric power generation facility (the “Plant”) to be located at [ADDRESS]; and

WHEREAS, Generator desires to interconnect the Plant with LIPA’s System; and

WHEREAS, LIPA desires to interconnect LIPA’s System with the Plant;

NOW THEREFORE, in consideration of the mutual covenants and promises set forth below, and for other good and valuable consideration, the receipt, sufficiency, and adequacy of which are hereby acknowledged, the Parties, intending to be legally bound, hereby covenant, promise, and agree as follows:

**ARTICLE 1**  
**CONSTRUCTION AND DEFINITIONS**

1.1 Construction. Any references herein to this Agreement, or to any other agreement, shall include any exhibits, attachments, and addenda hereto and amendments thereto, as the same may be amended from time to time.

1.2 Definitions. Any term used in this Agreement and not defined herein shall have the meaning customarily attributed to such term by the electric utility industry in the State of New York. When used with initial capitalization, unless otherwise defined herein, whether singular or plural, the following terms, as used in this Agreement, shall have the meanings as set forth below:

“**Affiliate**” means any other entity directly or indirectly controlling or controlled by or under direct or indirect common control of a specified party. For purposes of this definition, “control” means the power to direct the management and policies of such entity or specified party, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise. A voting interest of ten percent (10%) or more shall create a rebuttable presumption of control. The Parties acknowledge that the T&D Manager shall not be construed to be an Affiliate of LIPA as such term is defined and used herein.



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**“Agreement”** shall have the meaning identified in the Preamble and shall include all exhibits, schedules, appendices, and other attachments hereto and amendments thereto that may be made from time to time pursuant to the terms of this Agreement.

**“Arbitrators”** shall have the meaning set forth in Section 10.4 of this Agreement.

**“Authority”** shall have the meaning set forth in the Preamble, including its successors and assigns as permitted hereunder.

**“Business Day”** means any day on which the Federal Reserve Member Banks in New York City are open for business, and shall extend from 8:00 a.m. until 5:00 p.m. local time for each Party’s principal place of business.

**“Commercial Operation Date”** means the date on which the Plant has successfully completed its Performance Test and all tests required in accordance with NYISO procedures to provide Output in the corresponding NYISO markets in accordance with the applicable rules promulgated by the NYISO, and is available and capable of delivering Output pursuant to the terms of this Agreement.

**“Confidential Information”** shall have the meaning set forth in Section 15.1 of this Agreement.

**“Cure Plan”** shall have the meaning set forth in Section 9.2(b)(ii) of this Agreement.

**“Date of Initial Interconnection”** means the date on which the Plant is first electrically interconnected to LIPA’s System, which is intended to occur on or before [DATE].

**“Demarcation Point”** means the point of electrical interconnection between Generator’s Interconnection Facilities and LIPA’s Interconnection Facilities, located at [ADDRESS], as set forth in Exhibit A hereto.

**“Disclosing Party”** shall have the meaning set forth in Section 15.1 of this Agreement.

**“Energy Storage System”** means a commercially-available mechanical, electrical or electro-chemical means to store and release electrical energy, and its associated electrical inversion device and control functions that may stand-alone or be paired with a distributed generator at a point of common coupling.

**“Environmental Law”** means all former and current federal, state, local, and foreign laws (including common law), treaties, regulations, rules, ordinances, codes, decrees, judgments, directives or orders (including consent orders) and Environmental Permits, in each case, relating to pollution or protection of the environment or natural resources, including laws relating to Releases or threatened Releases, or otherwise relating to the generation, manufacture, processing, distribution, use, treatment, storage, arrangement for disposal, transport, recycling or handling of Hazardous Substances.

**“Environmental Permits”** means the permits, licenses, consents, approvals and other governmental authorizations, with respect to Environmental Laws relating primarily to the operation of the Plant.

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**“Event of Default”** shall have the meaning set forth in Section 9.1 of this Agreement.

**“FERC”** means the Federal Energy Regulatory Commission or any successor agency thereto.

**“FOIL”** shall have the meaning set forth in Section 15.3 of this Agreement.

**“Force Majeure Event”** shall have the meaning set forth in Article 12 of this Agreement.

**“Generator”** shall have the meaning set forth in the Preamble, including its successors and assigns as permitted hereunder. Generator means the distributed generation facilities and Energy Storage System approved by the T&D Manager with a nameplate capacity of 10 MW or less located on the Interconnection Customer’s premises at the time T&D Manager approves such generator for operation in parallel with LIPA’s system. This Agreement relates only to such generator. The nameplate generating and energy storage capacity shall not exceed 10 MW in aggregate.

**“Generator’s Interconnection Facilities”** means all facilities and equipment identified on Exhibit A, that are located between the Plant and the Demarcation Point, including any modification, addition, upgrades or replacement of such facilities and equipment, necessary to Interconnect the Plant with LIPA’s System. Generator’s Interconnection Facilities are sole use facilities.

**“Good Utility Practice”** means any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry in the State of New York during the term of this Agreement, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time a decision is made, could have been expected to accomplish the desired results at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practices is not intended to be limited to the optimum practice, method or act to the exclusion of all others, but rather to delineate acceptable practices, methods or acts generally accepted by a significant portion of the electric utility industry operating in the State of New York.

**“Hazardous Substance”** means (i) any petrochemical or petroleum products, crude oil or any fraction thereof, ash, radioactive materials, radon gas, asbestos in any form, urea formaldehyde foam insulation or polychlorinated biphenyls, (ii) any chemicals, materials, substances or wastes defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “contaminants” or “pollutants” or words of similar meaning and regulatory affect contained in any Environmental Law or (iii) any other chemical, material, substance or waste which is prohibited, limited or regulated by any Environmental Law.

**“Indemnified Party”** shall have the meaning set forth in Section 11.1 of this Agreement.

**“Indemnifying Party”** shall have the meaning set forth in Section 11.1 of this Agreement.

**“Interconnection”** means the electrical interconnection of the Plant with LIPA’s System.

**“Interconnection Customer”** means the owner of the Generator or any entity that proposes to interconnect with LIPA’s Distribution System.

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**“Interconnection Facilities”** means Generator’s Interconnection Facilities, if any, and LIPA’s Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Plant and the Point of Attachment, including any modifications, additions, upgrades or replacements that are necessary to physically and electrically interconnect the Plant to LIPA’s System. Interconnection Facilities are sole use facilities and shall not include additions, modifications or upgrades to LIPA’s System.

**“Interest Rate”** shall have the meaning set forth in Section 3.4 of this Agreement.

**“Lenders”** means any Person, or agent or trustee of such Person, who provides financing for the Plant.

**“LIPA”** shall have the meaning set forth in the Preamble, including its successors and assigns as permitted hereunder.

**“LIPA’s System”** means the electric transmission and distribution system owned by LIPA and consisting of all real and personal property, equipment, machinery, tools and materials, and other similar items relating to the transmission and distribution of electricity to LIPA’s customers.

**“LIPA’s Interconnection Facilities”** means all facilities and equipment identified on Exhibit A, that are located between the Demarcation Point and the Point of Attachment, including any modifications, additions, upgrades or replacements of such facilities and equipment. LIPA’s Interconnection Facilities are sole use facilities and shall not include additions, modifications or upgrades to LIPA’s System.

**“Metering Devices”** means all meters, metering equipment, data processing equipment, and associated equipment used to measure, record or transmit data relating to the provision and transmission of Output from LIPA’s System to customers pursuant to the terms of this Agreement.

**“NYCA”** means the New York Control Area.

**“NYISO”** means the New York Independent System Operator or any successor thereto that administers the wholesale electricity markets in the State of New York substantially as a whole, including without limitation, any regional transmission organization so authorized by the FERC.

**“Other Party Group”** shall have the meaning set forth in Section 11.10. (e) of this Agreement.

**“Output”** means collectively, the capacity, energy, and ancillary services produced by the Plant.

**“Party”** or **“Parties”** shall have the meaning set forth in the Preamble, together with any successor or assign, as permitted hereunder, of either.

**“Plant”** shall have the meaning set forth in the Recitals, including the balance of plant equipment, fuel handling facilities, step-up transformer(s), output breakers, and necessary generation and transmission lines to connect to the Demarcation Point, and associated protective equipment.

**“Performance Test”** means the performance tests as more fully described in Exhibit J (D) hereto.

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**“Point of Attachment”** means the point, as set forth in Exhibit J (A), where the Interconnection Facilities connect to LIPA’s System.

**“Project Site”** means that parcel of land where the Plant is located and described in the attached Appendix A; and located in [ADDRESS].

**“Receiving Party”** shall have the meaning set forth in Section 15.1(a) of this Agreement.

**“Records”** shall have the meaning set forth in Section 16.3 of this Agreement.

**“Release”** means any actual or threatened release, spill, emission, emptying, escape, leaking, dumping, injection, pouring, deposit, disposal, discharge, dispersal, leaching or migration into the environment or within any building, structure, facility or fixture.

**“RTO”** means any regional transmission organization/independent transmission operator or organization, which is approved by the FERC pursuant to FERC Order No. 2000.

**“Statute”** shall have the meaning set forth in Section 16.3 of this Agreement.

**“Summer Season”** means, after the Commercial Operation Date, each of the periods from June 1 through September 30 of any year during the term of this Agreement.

**“System Emergency”** means the existence of a physical or operational condition or the occurrence of an event which, at the time of such occurrence or event that: (i) in the judgment of the Party making the claim, is imminently likely to endanger life or property, or (ii) in the case of LIPA, impairs or will imminently impair the safety and/or reliability of LIPA’s System or LIPA’s Interconnection Facilities, or (iii) in the case of Generator, impairs or will imminently impair the safety and/or reliability of the Plant or Generator’s Interconnection Facilities. System restoration and black start are part of a System Emergency, provided that Generator is not obligated to possess black start capability.

**“System Pre-Emergency”** means the existence of a physical or operational condition or the occurrence of an event which, at the time of such occurrence or event, could reasonably be expected, if permitted to continue, to lead to a System Emergency.

**“T&D Manager”** means PSEG Long Island LLC through its operating subsidiary Long Island Electric Utility Servco LLC, which has managerial responsibility for the day-to-day operation and maintenance of, and capital investment to, the electric transmission and distribution system owned by LIPA, pursuant to that Amended and Restated Operations Services Agreement, dated as of December 31, 2013, as amended from time to time (the “OSA”) or any other similar agreement or arrangement or any successor or assignee thereof providing certain operational, maintenance and other services to LIPA.

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**ARTICLE 2**  
**TERM**

This Agreement shall become effective (the “Effective Date”) upon execution by both Parties, and shall remain in full force and effect, subject to termination as provided herein, for a period of ten (10) years from the Effective Date or such other longer period as the Generator may request and shall be automatically renewed for each successive one-year period thereafter. Generator shall have the right to cease operation of the Plant and terminate this agreement upon thirty (30) days’ notice to LIPA. Either Party may terminate this Agreement in accordance with Article 9.

**ARTICLE 3**  
**BILLING AND PAYMENT**

3.1. Billing Procedures. Within twenty (20) Business Days after the first (1st) day of each month, each Party shall prepare an invoice for any outstanding and due costs, fees or other payments owed it by the other Party pursuant to this Agreement or otherwise subject to reimbursement by Generator. Each invoice shall delineate the month in which such costs or services were incurred or provided, shall fully describe the costs or services incurred or rendered, and shall be itemized to reflect the incurrence of such costs and the provision of such services. Each Party shall pay the undisputed invoiced amount, if any, to the other Party on or before the thirtieth (30) day following receipt of the other Party’s invoice. Payment of invoices by either Party shall not relieve the paying Party from any responsibilities or obligations it has under this Agreement, nor shall it constitute a waiver of any claims arising hereunder nor shall it prejudice either Party’s right to question the correctness of such billing.

3.2 Billing Payment Addresses

- i. T&D Manager:  
PSEG Long Island  
Power Asset Management (PAM)  
175 East Old Country Road  
Hicksville, New York 11801  
Attention: Manager, PSEG Long Island Power Asset Management

With a copy to LIPA:  
Long Island Power Authority  
333 Earle Ovington Boulevard, Suite 403  
Uniondale, New York 11553  
Attention: Vice President of Power Markets

- ii. Generator:  
[NAME]  
[ADDRESS]  
Attention:  
Fax: \_\_\_\_\_

or such other and different addresses as may be designated in writing by the Parties.

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3.3 Billing Disputes.

- (a) Notice. A Party receiving any invoice from the other Party shall examine same to ensure that it has been calculated correctly, and shall promptly notify the billing Party of any errors therein which the receiving Party in good faith believes have been made, along with the facts providing the basis for such belief. The billing Party will promptly review such complaint and reply to the specific claims made by the receiving Party.
- (b) Dispute Resolution. If the Parties are unable to settle the contested portion of any invoice, such dispute shall be settled in accordance with Article 10.
- (c) Obligation to Pay Uncontested Amounts. The existence of a dispute with regard to any payment due shall not relieve the indebted Party of any obligation to timely pay any uncontested amounts due under this Agreement or from fulfilling any other obligation under this Agreement.
- (d) Payment of Disputed Amounts. Upon resolution of a dispute in respect to any disputed amount, a party shall pay interest on any unpaid amount determined to be owed to the other party from the date due under the original invoice until date of payment. Such interest shall be computed at the effective interest rate as established by Section 2880 of the Public Authorities Law of the State of New York, and any successor thereto (the "Interest Rate").
- (e) Deadline for Disputing Amounts. Except in instances where it is demonstrated that fraud hindered the discovery of billing errors, any claims for adjustments must be made within two (2) years of when the invoice was issued.

3.4 Interest. If either Party fails to make any payment required by this Agreement when due, including contested portions of invoices, or if due to an incorrect invoice issued by a Party, the other Party may request an overpayment requiring a refund by the billing Party, such amount due shall bear interest at the Interest Rate for each day from the due date of the payment or the date on which the overpayment was made until the date of payment. Payments mailed on or before the due date shall not be charged interest for the period of mailing. If the due date of any payment falls on a Sunday or legal holiday, the next Business Day shall be the last day on which payment can be made without interest charges being assessed.

3.5 Survival. The provisions of this Article 3 shall survive termination, expiration, cancellation, suspension, or completion of this Agreement to the extent necessary to allow for final billing and payment.

**ARTICLE 4**  
**REGULATORY APPROVALS**

4.1 Generator shall be responsible for obtaining and maintaining the effectiveness of all necessary governmental permits required for Generator to construct, operate maintain and replace Generator's Interconnection Facilities. LIPA shall be responsible for obtaining and maintaining the

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effectiveness of all necessary governmental permits required for LIPA to construct, operate, maintain, and replace LIPA's Interconnection Facilities.

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**ARTICLE 5**  
**SALE OF ELECTRICITY**

There shall be no sale of electricity to LIPA under this Agreement.

**ARTICLE 6**  
**INSTALLATION, OPERATION, AND MAINTENANCE**  
**OF THE INTERCONNECTION FACILITIES**

6.1 LIPA shall interconnect the Plant with LIPA's System at the Point of Attachment, permit the Plant to operate in parallel with LIPA's System, and shall provide all services reasonably necessary to achieve these purposes.

6.2 Generator shall be responsible, for (a) all costs of designing, engineering, procuring, constructing, installing, commissioning, testing, operating, maintaining, and replacing the Generator's Interconnection Facilities and for providing data acquisition and control interfaces to permit the safe and reliable operation of the Interconnection Facilities in accordance with Good Utility Practice and the NYISO Tariff and Rules, and (b) all costs of designing, engineering, procuring, constructing, installing, commissioning, testing, operating, maintaining, and replacing LIPA's Interconnection Facilities. An estimate of the initial cost of LIPA's Interconnection Facilities is set forth in Exhibit E. Generator shall reimburse LIPA for all costs of designing, engineering, procuring, constructing, installing, commissioning, testing, and replacing LIPA's Interconnection Facilities. Generator shall reimburse LIPA on a monthly basis for maintenance costs of the Interconnection Facilities in accordance with the applicable Service Classification tariff in LIPA's retail electric tariff (presently Service Classification No.11). LIPA, through its T&D Manager, will invoice Generator for the foregoing costs.

6.3 Generator shall design, engineer, procure, construct, install, commission, test, operate, maintain, and replace Generator's Interconnection Facilities in conformance with: (a) the design specifications, construction standards, performance requirements, and operating standards specified in Appendices B, C, and D to this Agreement; (b) the testing procedures for the Generator's Interconnection Facilities, specified in Exhibit D to this Agreement; (c) all applicable laws, rules and regulations of federal, state and local governmental authorities that have jurisdiction over Generator with respect to the Generator's Interconnection Facilities; (d) Good Utility Practice.

6.4 Generator shall design, engineer, procure, construct, install, commission, test, operate, and maintain the Plant in accordance with: (a) the design specifications, construction standards, performance requirements, and operating standards specified in Appendices B, C, and D to this Agreement; (b) the testing procedures for the Plant, specified in Exhibit D to this Agreement; (c) all applicable laws, rules and regulations of federal, state, and local governmental authorities that have jurisdiction over Generator with respect to the Plant; and (d) Good Utility Practice.

6.5 Prior to the Date of Initial Interconnection, the Parties shall jointly develop detailed testing procedures for the Interconnection Facilities, to the extent any such procedures are not adequately specified as part of the applicable NYISO Tariff and Rules or within Exhibit D.

6.6 Prior to the date of Initial Interconnection, the Parties shall also jointly develop a detailed set of coordinated operating instructions. The operating instructions shall be developed in accordance



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with this Agreement and any other binding agreement between the Parties in effect during operation of the Plant.

6.7 If applicable, LIPA shall undertake design of and performance of verification studies for the Plant.

6.8 In order for LIPA to make a timely assessment of Generator's compliance with the requirements of Section 6.4 of this Agreement, prior to the Date of Initial Interconnection, Generator will submit to LIPA for LIPA's review, engineering drawings of the Plant, including detailed one-line functional relaying drawings, three-line alternate current ("AC") schematics, and all AC and direct current control schematics associated with the Plant. Such engineering drawings shall be of sufficient scope and detail to permit LIPA to reasonably assess Generator's compliance with the design requirements of Section 6.4 of this Agreement. Generator will send final engineering drawings to LIPA at least one (1) month prior to the Date of Initial Interconnection. LIPA shall provide written approval of the final engineering drawings promptly after Generator's submission to LIPA and prior to the Date of Initial Interconnection, which written approval shall not be unreasonably withheld or delayed. The Plant shall not be interconnected with LIPA's System until the Generator's Interconnection Facilities and the Plant have been approved by the New York Board of Fire Underwriters (or other similar body having jurisdiction).

6.9 Generator shall have the right to install its own meters at the Plant and shall maintain them according to Good Utility Practice. Prior to the Commercial Operation Date, Generator shall install, to specifications provided by LIPA and at Generator's expense, adequate metering and communications equipment as described in Appendices A and B. Generator shall pay the monthly charges associated with such communication channel(s).

6.10 Except as otherwise provided herein, each Party shall maintain its equipment and facilities and perform its maintenance obligations that could reasonably be expected to affect the operations of the other Party, according to Good Utility Practice. Unless the Parties mutually agree to a different arrangement, neither Party shall be responsible for performing the maintenance of the other Party's equipment, regardless of the location of said equipment.

6.11 Each Party may request, pursuant to Good Utility Practice, that the other Party test, calibrate, verify or validate its telemetering, data acquisition, protective relay equipment, control equipment or systems, or any other equipment or software pursuant to Good Utility Practice or for the purpose of troubleshooting problems on interconnected facilities, consistent with the other Party's obligation to maintain its electric generation equipment and facilities.. In the event that such testing reveals that no problems exist with the equipment or systems in question, the Party requesting such testing shall be responsible for all costs and expenses related to the requested test(s). Each Party shall be responsible for all costs to test, calibrate, verify or validate its own equipment or software at intervals required by NYISO or any successor RTO. Each Party shall supply the Party requesting the test, at no cost to such Party, with copies of the resulting inspection reports, installation and maintenance documents, test and calibration records, verification and validations of the telemetering, data acquisition, protective relay, or other equipment or software.

6.12 From time to time, modifications may be required of the Interconnection Facilities due to, but not limited to, general usage, unforeseen damage, operating requirements of the Plant, or operating requirements of LIPA's System. When such modifications are required, the Parties will jointly determine

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the reason for the modification. Generator shall be responsible for all costs associated with modifications to the Interconnection Facilities that are required to accommodate the interconnection of Generator's Plant. Any modifications to the Interconnection Facilities during the term of this Agreement must conform to the requirements of Exhibit B to this Agreement.

**ARTICLE 7**  
**ISOLATION RIGHTS**

7.1 LIPA shall be responsible for installing such equipment or control system as determined by LIPA to allow for the disconnection of the Plant from LIPA's System. LIPA shall at all times during the term of this Agreement have access to the disconnect switch as indicated in Exhibit A to this Agreement, to electrically isolate the Plant from LIPA's System pursuant to Section 7.4.

7.2 LIPA shall design, operate, and maintain LIPA's Interconnection Facilities so such equipment or control system automatically disconnects the Plant from LIPA's System in the event of: (a) the occurrence of a fault on that portion of LIPA's System serving the Plant, in accordance with the requirements specified in this Agreement; (b) de-energization of the portion of LIPA's System that interconnects with the Plant; (c) an equipment failure or other condition occurring in the Interconnection Facilities or the Plant which creates or contributes to a System Emergency or System Pre-Emergency.

7.3 LIPA shall design, operate and maintain LIPA's Interconnection Facilities to fail in an open position, so that the Plant and LIPA's System will disconnect if there is any failure of a disconnect device on the Interconnection Facilities.

7.4 LIPA shall give advance notice to Generator of the need for disconnection of the Plant from LIPA's System, and coordinate with Generator on any such disconnection of the Plant, provided however, that LIPA may, in accordance with Good Utility Practice, disconnect the Plant without prior notice to Generator and maintain such disconnection if:

- (a) failing to disconnect the Plant from LIPA's System would create or contribute to a System Emergency or System Pre-Emergency;
- (b) immediate maintenance operations are required on LIPA's System to prevent a System Emergency or System Pre-Emergency; or
- (c) isolation is required to facilitate restoration of system outages or for safety considerations.

7.5 Whenever LIPA disconnects the Plant without prior notice to Generator, LIPA shall provide immediate oral notice, to be followed by written notice to Generator within one (1) day of such disconnection, which oral and written notice shall provide the reason, and, if possible, the expected duration of such disconnection.

7.6 LIPA may also request Generator to disconnect the Plant to perform non- immediate maintenance operations on LIPA's System that (a) are consistent with Good Utility Practice, including disconnecting the Plant in order to interconnect another generator to LIPA's System, and (b) require the Plant to be disconnected in order for LIPA to perform such maintenance on LIPA's System, provided that a minimum of twenty-four (24) hours of advance notice and an estimate of the duration of such

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disconnection are provided to Generator by LIPA. To the extent possible, LIPA will schedule all such maintenance operations of LIPA's System and LIPA's Interconnection Facilities at times that are mutually convenient for LIPA and Generator and in accordance with Good Utility Practice and taking into consideration Generator's schedule of planned outages.

7.7 Following any LIPA disconnection of the Plant, reconnection shall occur when:

- (a) all existing System Emergency or System Pre-Emergency conditions have been corrected; or
- (b) in the case of maintenance required on LIPA's System, such maintenance has been completed; and
- (c) it is safe to do so in accordance with Good Utility Practice.

7.8 Generator shall give advance notice to LIPA of the need for disconnection of the Plant from LIPA's System (other than regularly planned disconnections as required under LIPA Tariff SC-13), and coordinate with LIPA on any such disconnection of the Plant, provided however, that Generator may disconnect the Plant without prior notice to LIPA and maintain such disconnection if:

- (a) failing to disconnect the Plant from LIPA's System would create or contribute to a System Emergency or System Pre-Emergency;
- (b) immediate maintenance operations are required to prevent a System Emergency or System Pre-Emergency; or
- (c) isolation is required for safety considerations.

7.9 Whenever Generator disconnects the Plant without prior notice to LIPA, Generator shall inform LIPA as quickly as possible of the time, reason, and, if possible, the expected duration of such disconnection.

7.10 Following any Generator disconnection of the Plant, reconnection shall occur when:

- (a) all existing System Emergency or System Pre-Emergency conditions have been corrected; or
- (b) in the case of maintenance, such maintenance has been completed; and
- (c) it is safe to do so in accordance with Good Utility Practice.

**ARTICLE 8**  
**INSPECTION AND ACCESS RIGHTS**

8.1 Generator shall provide LIPA with access to the Interconnection Facilities located on the Project Site at reasonable times, including weekends, and upon reasonable prior notice. The notice condition does not apply in the case of a System Emergency, and LIPA shall at all times during the term

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of this Agreement have access to the disconnect switch, as indicated in Exhibit A to this Agreement, to electrically isolate the Plant from LIPA's System pursuant to Article 7.

8.2. While at the Project Site, all representatives of LIPA shall observe such safety precautions as may be required by law or by Generator, and shall conduct themselves in a manner that is consistent with Good Utility Practice and that will not interfere with the operation of the Plant or the Generator's Interconnection Facilities.

8.3 Neither Party shall construct any facilities or structures or engage in any activities that will interfere with the rights granted to the other Party under this Agreement or rights-of-way, licenses, or easements secured by and/or for the other Party.

8.4 The access rights granted hereunder shall be effective for the term of this Agreement and shall neither be revoked, nor shall either Party take any action that would impede, restrict, diminish, or terminate the rights of access or use granted by such access rights.

8.5 Each Party shall have the right to inspect or observe, at its own expense, the maintenance activities, equipment tests, installation, construction, or other modifications to the other Party's Interconnection Facilities and associated telecommunication facilities, as the case may be, which may reasonably be expected to adversely affect the observing Party's operations or liability. The Party desiring to inspect or observe shall notify the other Party in accordance with the notification procedures set forth in Article 13 of this Agreement. If the Party inspecting the equipment, systems, or facilities observes any deficiency or defects that may be reasonably be expected to adversely affect the operations of the observing Party's system or facilities, the observing Party shall notify the other Party, and the other Party shall make any corrections necessitated by Good Utility Practice.

8.6 Subject to the provisions of Section 11.1, each Party shall be solely responsible for and shall assume all liability for the safety and supervision of its own employees, agents, representatives, and subcontractors. All work performed by either Party that reasonably could be expected to affect the operations of the other Party shall be performed in accordance with all applicable laws, rules, and regulations pertaining to the safety of persons or property, including, without limitation, compliance with the safety regulations and standards adopted under the Occupational Safety and Health Act of 1970, as amended from time to time, the National Electrical Safety Code, as amended from time to time, and Good Utility Practice.

**ARTICLE 9**  
**EVENTS OF DEFAULT; TERMINATION**

9.1 Event of Default. The occurrence of one or more of the following events so long as the same is continuing shall constitute an "Event of Default" under this Agreement:

- (a) Failure by either Party to substantially perform any material obligation under this Agreement, and which failure continues for a period of forty-five (45) days after notice thereof has been received by such Party from the non-defaulting Party; or

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- (b) Failure by either Party to pay any undisputed amount due under this Agreement which continues for a period of thirty (30) days after notice of such non-payment is delivered to the defaulting Party; or
- (c) The dissolution or liquidation of a Party or the issuance of any order, judgment or decree by a court of competent jurisdiction under the bankruptcy, reorganization, compromise, arrangement, insolvency, readjustment of debt, dissolution or liquidation or similar law of any jurisdiction whether now or hereafter in effect adjudicating a Party bankrupt or insolvent or otherwise granting relief under any such law; or
- (d) A Party petitions or applies to any tribunal for, or consents to the appointment of or taking possession by, a receiver, liquidator, custodian, trustee or similar official of such Party or of a substantial part of the assets of such Party; or any such petition or application is filed or any such proceedings are commenced against a Party and such Party by any act indicates its approval thereof, consent thereto or acquiescence therein or such petition or application remains undismissed for sixty (60) days; or
- (e) A Party makes a general assignment for the benefit of its creditors or makes an admission in writing that it is unable to pay its debts generally as they become due; or
- (f) The revocation or loss of any license, permit, or other governmental approval (i) materially affecting Generator's ability to operate the Plant or Generator's Interconnection Facilities, or (ii) materially affecting LIPA's ability to operate LIPA's Interconnection Facilities, provided that but for Generator's or LIPA's negligence, as the case may be, no such revocation or loss of such license, permit or other governmental approval would have ensued.

9.2 Notice and Opportunity to Cure Event of Default. Upon actual discovery of an Event of Default, a Party claiming the occurrence of such Event of Default must promptly provide the alleged defaulting Party with a Notice of Default and the defaulting Party shall have, in the case of failure to pay any undisputed amount, thirty (30) days and, in other defaults, forty-five (45) days to complete one of the following:

- (a) cure the Event of Default; or
- (b) if such default reasonably requires additional time to cure then such defaulting Party will, from the date such Party receives the Notice of Default, have (i) such longer time as is reasonable under the circumstances, not to exceed the greater of one hundred and eighty (180) days or to the mid-point of the next Summer Season to complete such cure or (ii) if the defaulting Party provides a commercially reasonable cure plan acceptable to the other Party that requires more time than provided in Section 9.2 above ("Cure Plan"), then the defaulting Party shall be extended such additional time provided for in the Cure Plan to cure the Event of Default and the other Party shall have no right to terminate this Agreement, provided that the defaulting Party diligently pursues such Cure Plan; or
- (c) undertake dispute resolution pursuant to Article 10.

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9.3 Dispute of Claim of Event of Default. If, within thirty (30) days of the service of a Notice of Default pursuant to Section 9.2, the Party alleged to be in default disputes in writing that an Event of Default has occurred, either Party may seek resolution of such dispute pursuant to the terms of Article 10, and this Agreement shall not be terminated by the Party claiming the occurrence of the Event of Default prior to such resolution of such dispute pursuant to the procedures of Article 10.

9.4 Remedies. This Agreement may be terminated by the non-defaulting Party effective immediately upon the non-defaulting Party providing written notice to the defaulting Party of termination if: (a) the defaulting Party or its Lenders fail to cure the Event of Default within the cure periods provided under Section 9.2 and any action for dispute resolution under Article 10 with respect to the alleged Event of Default has been completed and not determined favorably to the allegedly defaulting party; or (b) through the dispute resolution process under Article 10, it is determined that an Event of Default has occurred and the defaulting Party, pursuant to terms of this Agreement has not cured or diligently endeavored to cure, the default, as the case may be. Upon termination, the non-defaulting Party shall be entitled to such damages as are available at law and equity, subject to Article 11 hereof. The termination of this Agreement under this Section 9.4 shall not discharge either Party from any obligations, which may have accrued under this Agreement prior to such termination.

**ARTICLE 10**  
**DISPUTE RESOLUTION**

10.1 Any dispute arising out of, or relating to, this Agreement, with the exception of termination pursuant to Section 9.4 or a breach of a Party's indemnity obligations under Article 11 or a Party's obligations under Article 15 of this Agreement, shall be subject to the dispute resolution procedures specified in this Article 10 which shall constitute the sole and exclusive procedures for the resolution of such disputes.

10.2 The Parties agree to use commercially reasonable efforts to settle promptly any disputes or claims arising out of or relating to this Agreement through negotiation conducted in good faith between executives of the Parties having authority to reach such a settlement. Either Party may by written notice to the other Party, refer any such dispute or claim for advice or resolution to mediation by a suitable mediator. The mediator shall be chosen by the mutual agreement of the Parties. If the Parties are unable to agree on a mediator, each Party shall designate a qualified mediator who, together with the mediator designated by the other, shall choose a single mediator for the particular dispute or claim. If the mediator chosen is unable, within thirty (30) days of such referral to reach a determination that is acceptable to the Parties, the matter shall be referred to arbitration as set forth below. All negotiation and mediation discussions pursuant to this Section 10.2 shall be confidential, subject to applicable law, and shall be treated as compromise and settlement negotiations for purposes of Federal Rule of Evidence 408 and applicable state rules of evidence.

10.3 Except for claims for temporary injunctive relief under Section 10.5, neither Party shall bring any action at law or in equity to enforce, interpret, or remedy any breach or default of this Agreement without first complying with the provisions of this Article 10; provided however, that if the Arbitrators (as defined below) fail to issue a decision within one hundred eighty (180) days after the commencement of arbitration under Section 10.4, then either Party may bring any action at law or in equity to seek enforcement, interpretation or remedy of any breach of this Agreement.



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10.4 Any dispute subject to resolution under this Article 10, which has not been resolved by discussion or mediation within thirty (30) days from the date that either negotiations or mediation shall have commenced and which is not subject to the FERC's jurisdiction shall be settled by arbitration before three (3) independent and impartial arbitrators (the "Arbitrators") in accordance with the then current commercial arbitration rules of the American Arbitration Association, except to the extent that such rules are inconsistent with any provision of this Agreement, in which case the provisions of this Agreement shall be followed, and except that the arbitration under this Agreement shall not be administered by the American Arbitration Association without the express agreement of the Parties. The Arbitrators shall be (i) independent of the Parties and disinterested in the outcome of the dispute, (ii) persons otherwise experts in the electric utility industry, including bulk power markets and transmission systems, and (iii) qualified in the subject area of the issue in dispute. The Parties shall choose the Arbitrators within thirty (30) days, with each Party choosing one Arbitrator and those two Arbitrators choosing the third Arbitrator. Judgment on the award rendered by the Arbitrators may be entered in any court in the State of New York having jurisdiction thereof. If either Party refuses to participate in good faith in the negotiations or mediation proceedings described in Section 10.2, the other Party may initiate arbitration at any time after such refusal without waiting for the expiration of the applicable time period. Except as provided in Section 10.5 relating to provisional remedies, the Arbitrators shall decide all aspects of any dispute brought to them including attorney disqualification and the timeliness of the making of any claim.

10.5 Either Party may, without prejudice to any negotiation, mediation or arbitration procedures, proceed in the courts of the State of New York to obtain provisional judicial relief if, in such Party's sole discretion, such action is necessary to protect public safety, avoid imminent irreparable harm, provide uninterrupted electrical and other services, or preserve the status quo pending the conclusion of any dispute resolution procedures employed by the Parties or pendency of any action at law or in equity. Except for temporary injunctive relief under this Section, neither Party shall bring any action at law or in equity to enforce, interpret, or remedy any breach or default of this Agreement without first complying with the provisions of this Article; provided, however, that if the Arbitrators fail to issue a decision within one hundred eighty (180) days after the commencement of arbitration under Section 10.3, then either Party may bring any action at law or in equity to seek enforcement, interpretation or remedy of any breach of this Agreement.

10.6 The Arbitrators shall have no authority to award damages excluded under Article 11 or any other damages aside from the prevailing Party's actual, direct damages plus interest at the Interest Rate for each day commencing on the date such damages were incurred through date of payment. The Arbitrators shall not have the authority to make any ruling, finding, or award that does not conform to the terms and conditions of this Agreement. The Arbitrators' award shall be in writing and shall set forth the factual and legal bases for the award. The Parties to the arbitration shall each bear their own litigation expenses for the arbitration and shall evenly divide the common costs of the arbitration.

10.7 Unless otherwise agreed to in writing or prohibited by applicable law, the Parties shall continue to provide service, honor all commitments under this Agreement, and continue to make payments in accordance with this Agreement during the course of any dispute resolution under this Article and during the pendency of any action at law or in equity or any arbitration proceeding relating hereto.

10.8 All applicable statutes of limitation and defenses based upon the passage of time and similar contractual limitations shall be tolled while the procedures specified in this Article 10 are pending.

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The Parties will take such action, if any, required to effectuate such tolling. Without prejudice to the procedures specified in this Article 10, a Party may file a complaint for statute of limitations purposes, if in its sole judgment such action may be necessary to preserve its claims or defenses. Despite such action, the Parties will continue to participate in good faith in the procedures specified in this Article 10.

10.9 The Arbitrators shall have the discretion to order a pre-hearing exchange of information by the Parties, including, without limitation, the production of requested documents, the exchange of summaries of testimony of proposed witnesses, and the examination of the Parties by deposition. The Parties hereby agree to produce all such information as ordered by the Arbitrators and shall certify that they have provided all applicable information and that such information was true, accurate and complete

10.10 The site of any arbitration brought pursuant to this Agreement shall be in a location in Nassau County, New York County or Suffolk County as is mutually agreed to by the Parties.

**ARTICLE 11**  
**INDEMNITY, LIMITATION OF LIABILITY; INSURANCE**

11.1 Indemnity. Each Party (the “Indemnifying Party”) shall at all times indemnify, defend, and hold the other Party and T&D Manager (the “Indemnified Party”) 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, the alleged violation of any Environmental Law, or the release or threatened release of any Hazardous Substance, demands, suits, recoveries, costs and expenses, court costs, attorneys’ fees, and all other obligations by or to third parties, arising out of or resulting from (a) the Indemnifying Party’s performance of its obligations, or its actions or inactions, under this Agreement, except as expressly provided otherwise herein, (b) the Indemnified Party’s actions or inactions in performing obligations on behalf of the Indemnifying Party in accordance with this Agreement, except in cases of gross negligence or intentional wrongdoing by the Indemnified Party or (c) the violation by the Indemnifying Party of any Environmental Law or the release by the Indemnifying Party of any Hazardous Substance.

11.2 Indemnified Party. If an Indemnified Party is entitled to indemnification under this Article 11 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 11, to assume the defense of such claim, such Indemnified Person 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.

11.3 Indemnifying Party. If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 11, 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, except that any insurance carrier shall be subrogated to the Indemnified Party’s interest to the extent of any insurance recovery paid to the Indemnified Party.

11.4 Indemnity Procedures. 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 11 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 and to the extent that such failure or delay is materially prejudicial to the Indemnifying Party.



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11.5 Except as stated below, the Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

11.6 The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in which event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be unreasonably withheld, conditioned or delayed.

11.7 LIPA Equipment Design and Review. Notwithstanding any other provisions of this Agreement, neither LIPA or T&D Manager, or their officers, trustees, employees, and agents nor those of their parents shall be liable to Generator, or its contractors or subcontractors, for any claims, costs, expenses, losses, lawsuits, judgments, attorney's fees or damages arising out of LIPA's or T&D Manager's equipment design and review, except for instances arising out of LIPA's failure to act in accordance with Good Utility Practice, gross negligence or willful misconduct. Generator shall indemnify and hold LIPA and T&D Manager, and their officers, trustees, employees, and agents, harmless from any claims, costs, expenses, losses, damages or judgments made against LIPA and/or T&D Manager or incurred by any of Generator's contractors or subcontractors except for instances arising out of LIPA's failure to act in accordance with Good Utility Practice, gross negligence or willful misconduct. This indemnification and hold harmless obligation shall be separate from and independent of any other obligations of Generator to indemnify and hold harmless LIPA and its officers, directors, employees, and agents.

11.8 Consequential Damages. Except for indemnity and defense of action obligations set forth in this Article 11, in no event shall either Party or T&D Manager 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 attorney's fees or litigation costs), including but not limited to loss of profit, revenue or opportunity, loss of the use of equipment or facilities, cost of capital, cost of temporary or substitute equipment, facilities, services or replacement power, down time costs; and claims of customers of either Party, connected with, or resulting from, performance or non-performance of this Agreement or any action undertaken in connection with, or related to this Agreement, including, without limitation, any such damages which are based upon causes of action for breach of contract, tort (including negligence and misrepresentation), breach of warranty or strict liability.

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11.9 Survival. Each Party's indemnification and defense of action obligations under this Article for acts or occurrences prior to the expiration, termination, completion, suspension or cancellation of this Agreement shall continue in full force and effect regardless of whether this Agreement expires, terminates, or is suspended, completed or canceled. Except as noted above, such obligations shall not be limited in any way by any limitation on insurance, by the amount or types of damages, or by any compensation or benefits payable by the Parties under workers' compensation acts, disability benefits acts or other employee acts, or otherwise.

11.10 Insurance. Prior to the commencement of this Agreement, Certificates of Insurance from Generator and LIPA and / or all of Generator's and LIPA's contractors / subcontractors that perform activities on the Project Site relative to this Agreement, shall be furnished to Generator and LIPA, as the case may be. Each Party shall, at its own expense, maintain in force throughout the term of this Agreement, and until released by the other Party, the following minimum insurance coverage, with insurers authorized to do business in the State of New York. The generator must have added T&D Manager, LIPA, and the Authority as additional insureds under the following coverages:

- (a) Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Attachment is located.
- (b) Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of one million dollars (\$1,000,000.00) per occurrence/one million dollars (\$1,000,000.00) aggregate combined single limit for personal injury, bodily injury, including death and property damage.
- (c) Comprehensive Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of one million dollars (\$1,000,000.00) per occurrence for bodily injury, including death, and property damage.
- (d) Excess Public Liability Insurance over and above the Employers' Liability Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of twenty million dollars (\$20,000,000.00) per occurrence/twenty million dollars (\$20,000,000.00) aggregate.
- (e) The Commercial General Liability Insurance, Comprehensive Automobile Insurance, and Excess Public Liability Insurance policies shall name the other Party, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. For LIPA, Other Party Group shall include the Authority and T&D Manager and its affiliates. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this Agreement against the Other Party Group and provide thirty (30) days advance written notice to the Other Party

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Group prior to anniversary date of cancellation or any material change in coverage or condition. Insurance as specified herein must be maintained at all times during the life of this Agreement. Each Party shall provide the other Party with renewal certificates if said insurance policies are to expire prior to the expiration or termination of this Agreement. Said certificates must be provided within ten (10) days after the renewal date. Insurance as specified herein must be maintained at all times throughout the term of this Agreement.

- (f) The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one (1) insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- (g) The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance, and Excess Public Liability Insurance policies shall be on an occurrence basis.
- (h) The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this Agreement.
- (i) Within ten (10) days following execution of this Agreement, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) days thereafter, each Party shall provide certification of all insurance required in this Agreement, executed by each insurer or by an authorized representative of each insurer.
- (j) Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of this Article 11 to the extent it maintains a self-insurance program; provided that, such Party's senior secured debt is rated at investment grade or better by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of this Article 11. For any period of time that a Party's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under this Article 11. In the event that a Party is permitted to self-insure pursuant to this Article, it shall notify the other Party that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in this Article 11.
- (k) The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this Agreement.

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**ARTICLE 12**  
**FORCE MAJEURE**

12.1 The term “Force Majeure Event” as used herein means those acts, omissions or circumstances which are outside of the affected Party’s control and which could not be reasonably anticipated or avoided in accordance with Good Utility Practice, including without limitation any act of God, strikes or other labor disputes, acts of the public enemy, accidents, war (declared or otherwise), invasion, civil disturbance, riots, fires, storms, flood, ice, earthquakes, explosions, or action or inaction of a Governmental Authority (other than LIPA) that precludes the construction, interconnection or operation of the Plant. A Force Majeure Event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

12.2 If a Force Majeure Event causes either Party to be rendered wholly or partly unable to perform its obligations under this Agreement, except for the obligation to make payments under this Agreement when due, that Party shall be excused from performance or liability for damages to the other Party solely to the extent and during such period such Party’s performance is affected.

12.3 Any Party claiming Force Majeure shall: (i) provide prompt oral notice followed by written notice to the other Party within three (3) Business Days of such Force Majeure Event giving a detailed written explanation of the event and estimate of its expected duration and probable effect on the performance of that Party’s obligations hereunder, and (ii) use due diligence in accordance with Good Utility Practice to continue to perform its obligations under this Agreement to the extent unaffected by the Force Majeure Event and to remove promptly the condition that prevents performance and to mitigate the effects of the same, except that settlement of any strike or labor dispute shall be in the sole judgment of the affected Party.

12.4 No obligations of either Party which arose before the occurrence of the Force Majeure Event causing the suspension of performance are excused as a result of the occurrence.

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**ARTICLE 13**  
**NOTICES**

All notices shall be in writing and shall be deemed sufficiently given when mailed by United States registered or certified mail, postage prepaid, return receipt requested, hand-delivered, sent by facsimile transmission (confirmed in writing) or sent by recognized overnight courier service, addressed as follows:

To LIPA:

PSEG Long Island  
333 Earle Ovington Boulevard, Suite 403  
Uniondale, New York 11553  
Attention: Vice President of T&D Operations

With a copy to:

Long Island Power Authority  
333 Earle Ovington Boulevard, Suite 403  
Uniondale, New York 11553  
Attention: General Counsel  
Fax: (516) 222-9137

To T&D Manager:

PSEG Long Island  
Power Asset Management (PAM)  
175 East Old Country Road  
Hicksville, New York 11801  
Attention: Manager, Power Asset Management

To Generator:

[NAME]  
[ADDRESS]  
Attention: [NAME AND TITLE]  
Fax: \_\_\_\_\_

or such other and different addresses as may be designated in writing by the Parties.

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**ARTICLE 14**  
**ASSIGNMENT OR TRANSFER**

Neither this Agreement nor any rights or obligations hereunder may be assigned or transferred, by either Party without the prior written consent of the other Party (such consent not to be unreasonably withheld or delayed; provided that this Agreement may be assigned to an Affiliate with the understanding that no such assignment shall relieve the assigning Party from its obligations hereunder; and further provided that the restrictions on assignment contained in this Article shall not in any way prevent either Party from pledging, mortgaging or assigning its rights hereunder as security for its indebtedness.) Except as otherwise provided in this Article, a Party shall only consent to an assignment by the assigning Party if, in the non-assigning Party's reasonable judgment, the assignee is fully capable of performing all of the assigning Party's obligations under this Agreement and possesses the technical capability, experience, and financial capability to perform in the manner required. At least thirty (30) days prior to the effective date of the proposed assignment, the assigning Party shall deliver to the non-assigning Party an assignment and assumption agreement, duly executed, in which the assignee unconditionally assumes all of its assignor's obligations to the non-assigning Party and agrees to be bound by all of the terms and conditions of this Agreement, and whereby the assignee makes certain additional representations and warranties as appropriate for assignee as contained in this Section. Any purported assignment of this Agreement not in accordance with this Article shall be of no force and effect. Provided however, that a proposed assignment, notice of which is provided less than thirty (30) days prior to its proposed effective date shall be effective thirty (30) days following such notice.

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**ARTICLE 15**  
**CONFIDENTIALITY**

15.1 Claim of Confidentiality.

- (a) In connection with this Agreement, the Parties and T&D Manager may exchange information that is deemed to be confidential whether such information is provided in written, oral, electronic or other format ("Confidential Information"). The Party disclosing such Confidential Information is referred to herein as the "Disclosing Party" and the Party receiving such Confidential Information is referred to herein as the "Receiving Party." The Disclosing Party shall mark all written Confidential Information as "Confidential," "Proprietary" or the like and in the case of Confidential Information that is communicated orally, the Disclosing Party shall within thirty (30) days' follow up such communication with a writing addressed to the Receiving Party generally describing the information and identifying it as Confidential Information. The Parties acknowledge that all information disclosed by Generator in connection with costs, pricing or operation of the Plant shall be treated as Confidential Information whether or not such information is marked or identified as Confidential Information. LIPA shall not disclose such Confidential Information without Generator's written consent, which may be withheld in Generator's sole discretion, unless LIPA is otherwise required by law to make such disclosure.
- (b) The Receiving Party shall protect the Confidential Information from disclosure to third parties consistent with the provisions of this Article 15 and subject to applicable law, provided however, a Receiving Party may disclose Confidential Information to its Affiliates, Lenders, employees, agents or representatives of such Receiving Party, where such Affiliate, Lender, employee, agent or representative expressly agrees to be bound by the terms of this Article 15 and provided further that the Receiving Party shall be liable for any breach by its Affiliates, Lenders, employees, agents or representatives.
- (c) It is further understood and agreed that money damages would not be sufficient remedy for any breach of this Article 15, and that if a Party breaches this Article 15, the Party disclosing Confidential Information to such breaching Party shall be entitled to specific performance and injunctive and other equitable relief as a remedy for any such breach. The breaching Party agrees to waive any requirement for the posting of a bond in connection with any such remedy. Such remedy shall not be deemed to be the exclusive remedy for breach of this Article 15 but shall be in addition to all other remedies available at law or equity. In the event of any legal action based upon or arising out of this Article 15, the prevailing Party in such action shall be entitled to recover reasonable attorney's fees and costs from the other Party.

15.2 Compliance with Law. If either Party is required by law to disclose Confidential Information of the other Party (by oral questions, interrogatories, requests for information or documents, subpoena, civil investigative demands, regulation, statute or otherwise), the Party required to make such disclosure will (i) notify the other Party and provide the other Party the opportunity to review the Confidential Information, and (ii) provide the other Party the opportunity to seek a protective order or other appropriate remedy. In the event that a protective order or other remedy is not obtained or is not



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pursued within a reasonable period of time, the Party required to make disclosure or such Party's representatives will furnish only that portion of the Confidential Information that it is legally required to disclose and the Party required to make disclosure will request that confidential treatment be accorded the Confidential Information by relevant third parties.

15.3 Compliance with the Freedom of Information Law. If LIPA is requested by a third party to disclose Confidential Information pursuant to the Freedom of Information Law ("FOIL"), LIPA will (i) notify Generator of the request and provide Generator the opportunity to review the Confidential Information; (ii) provide Generator the opportunity to provide information regarding the need for confidential treatment; (iii) evaluate the third party's request for disclosure and Generator's request for confidential treatment; and (iv) determine if the Confidential Information is subject to disclosure under FOIL. If LIPA determines that the Confidential Information is subject to disclosure, it will provide prompt written notice of such determination to Generator so that Generator may seek a protective order or other appropriate remedy. If Generator does not obtain a protective order or no formal proceeding has been initiated by Generator within a reasonable period of time after LIPA provides notice to Generator of its intent to make public the Confidential Information, then LIPA may disclose such information with no liability or further obligation to Generator.

15.4 Treatment of Otherwise Publicly Available Documents. Notwithstanding anything to the contrary in this Article, neither Party shall be required to hold confidential any information that (i) becomes publicly available other than through disclosure by the Receiving Party; (ii) is independently developed by the Receiving Party; or (iii) becomes available to the Receiving Party without restriction from a third party, provided that such third party is not bound by a confidentiality agreement with the Disclosing Party or its representatives. Should any person or entity seek to legally compel a Receiving Party (by oral questions, interrogatories, requests for information or documents, subpoena, civil investigative demands, regulation, statute or otherwise) to disclose any Confidential Information, the Receiving Party will provide the Disclosing Party prompt written notice so that the Disclosing Party may seek a protective order or other appropriate remedy. In the event that a protective order or other remedy is not obtained, the Receiving Party or the Receiving Party's representative will furnish only that portion of the Confidential Information that it is legally required to disclose and the Receiving Party will request that confidential treatment be accorded the Confidential Information by relevant third parties.

15.5 Term of Confidentiality. The obligations set forth in this Article shall survive expiration or termination of this Agreement for a period of two years after expiration or termination of this Agreement.

**ARTICLE 16**  
**MISCELLANEOUS**

16.1 Binding Effect. This Agreement shall inure to the benefit of and shall be binding upon the Parties and their respective successors and assigns.

16.2 Counterparts. This Agreement may be executed in several counterparts, each of which shall be an original and which together shall constitute one and the same instrument.

16.3 Records. Each Party shall establish and maintain complete and accurate books, records, documents, accounts, and other evidence directly pertinent to performance under this Agreement



**APPENDIX M**  
**INTERCONNECTION AGREEMENT**  
**FOR A SYSTEM**  
**GREATER THAN 5 MW AND LESS THAN 10 MW**

(hereinafter, collectively, the “Records”). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter. The New York State Comptroller, the New York State Attorney General, and any other person or entity authorized to conduct an examination, as well as the New York State agency or agencies involved in this Agreement, shall have access to the Records during normal business hours at Generator’s or LIPA’s offices, as the case may be, within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the state, for the term specified above for the purposes of inspection, auditing, and copying. LIPA shall take reasonable steps to protect from public disclosure any of the Records that are exempt from disclosure under Section 87 of the Public Officers Law (the “Statute”), provided that: (i) Generator shall timely inform LIPA, in writing, that said Records should not be disclosed; (ii) said Records shall be sufficiently identified; and (iii) designation of said Records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, Generator’s or LIPA’s right to discovery in any pending or future litigation.

16.4 Amendments. This Agreement may not be amended, changed, modified or altered except in writing and signed by the Parties.

16.5 Severability. If any article, phrase, provision, or portion of this Agreement is, for any reason, held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction, such article, phrase, provision or portion so adjudged shall be deemed separate, distinct, and independent, and only deemed invalid in that particular instance, and the remainder of this Agreement shall be and remain in full force and effect and shall not be invalidated, rendered illegal, unenforceable, or otherwise affected by such adjudication.

16.6 Prior Agreements Superseded. This Agreement shall completely and fully supersede all other prior understandings or agreements, both written and oral, between the Parties relating to the subject matter hereof.

16.7 Survival. Provisions of this Agreement which by their nature would survive termination or expiration of the Agreement shall survive. Without limitation of the preceding sentence, applicable provisions of this Agreement shall continue in effect after expiration or termination of this Agreement as specifically provided herein and to the extent necessary to provide for final billings, billing adjustments, and payments pertaining to liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect.

16.8 Dispute Resolution. Any disputes arising under this Agreement shall be resolved in accordance with the procedures established in Article 10 of this Agreement.

16.9 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York notwithstanding its conflict of laws provisions.

16.10 Waiver. No delay or omission in the exercise of any right under this Agreement shall impair any such right or shall be taken, construed or considered as a waiver or relinquishment thereof, but any such right may be exercised from time to time and as often as may be deemed expedient. If any agreement or covenant herein shall be breached and thereafter waived, such waiver shall be limited to the particular breach so waived and shall not be deemed to waive any other breach hereunder.

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16.11 Taxes. The Parties shall use reasonable efforts to administer this Agreement and implement the provisions thereof in accordance with their intent to minimize taxes.

16.12 Non-interference. Each Party agrees that it will not construct any facilities or structures at the Project Site or engage in any activity at the Project Site that will materially interfere with the rights granted to the other Party under this Agreement.

16.13 Further Assurances. Each of the Parties hereto shall execute and deliver any and all additional documents or instruments (including easements and other rights in land), in recordable form, and provide other assurances, obtain any additional permits, licenses, and approvals required, and shall do any and all acts and things reasonably necessary, to carry out the intent of the Parties hereto and to confirm the continued effectiveness of this Agreement.

16.14 Headings. The headings used for the articles herein are for convenience and reference purposes only and shall in no way affect the meaning or interpretation of the provisions of this Agreement.

16.15 Entire Agreement. This Agreement constitutes the entire agreement and understanding between the parties with respect to the subject matter hereof, and supersedes and replaces any prior or contemporaneous undertakings, commitments, or agreements, oral or written, as to its subject matter. This Agreement may be modified or amended only by an instrument in writing signed by authorized representatives of the Parties on or after the date hereof.

*[Signature pages to follow on next page]*

**APPENDIX M**  
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IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the date first set forth above.

**LONG ISLAND ELECTRIC UTILITY SERVICE LLC**  
**Acting as agent for and behalf of**  
**LONG ISLAND LIGHTING COMPANY d/b/a LIPA**

By: \_\_\_\_\_  
(Signature)

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

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

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

**[PARTY NAME]**

By: \_\_\_\_\_  
(Signature)

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

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

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

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**INTERCONNECTION AGREEMENT**  
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**EXHIBIT A**  
**SYSTEM ONE-LINE / POINT OF ATTACHMENT**  
**AND INTERCONNECTION AND INTERCONNECTION**  
**FACILITIES / DEMARCATION POINTS**

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INTERCONNECTION AGREEMENT  
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**EXHIBIT B  
INTERCONNECTION AND METERING ~~STANDARDS~~ REQUIREMENTS**

**Interconnection ~~Guide~~ Procedures and Requirements**

The Interconnection Facilities shall be subject to the interconnection standards provided in the- “Smart Grid Small Generator Interconnection Procedures

For Distributed Generators and Energy Storage Systems Less than 10 MW Connected in Parallel with LIPA’s Radial Distribution Systems”, “PSEG Long Island’s Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA’s Distribution System” and “Specification & Requirements for Electric Installation (Red Book)”

**Metering ~~Standards~~ Requirements**

Metering pursuant to the terms of this Agreement shall be subject to the PSEG Long Island’s Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA’s Distribution System”, “Specification & Requirements for Electric Installation (Red Book)” and “Revenue Metering Requirements for Generating Facilities interconnection to the LIPA Transmission System”

Add other procedures ~~and requirements~~ as applicable.

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**EXHIBIT C**  
**FACILITY DESIGN AND VERIFICATION STUDIES**

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**EXHIBIT D**  
**COMMISSIONING, STARTUP, AND MAINTENANCE**  
**PROCEDURES FOR INTERCONNECTION FACILITIES**

**Introduction**

Testing of all protective devices shall be performed on the Generator's Interconnection Facilities prior to the final functional testing of the interconnection scheme. The testing shall be performed by Generator. Relay and operational tests shall be performed with maintenance intervals consistent with the latest version of NERC PRC-005 or any applicable reliability requirements. A certified relay test report shall be furnished to LIPA/T&D Manager within two weeks after completion of all testing. Generator shall notify LIPA/T&D Manager at least seven (7) business days in advance of the protective device testing to provide an opportunity for LIPA/T&D Manager to be present during the testing.

Submitted documentation of the operational relay testing shall include graphic or digital recordings of actual current and voltage levels obtained during the test(s). Each relay test shall include a calibration check and an actual trip of the circuit breaker from the relay being tested.

A log of all relay target indications resulting from automatic circuit breaker operations shall be maintained. The relay target information is utilized to verify cause of the failure and to determine if relays operated as expected to isolate the Generator's Interconnection Facilities from LIPA's transmission system. This data shall be reviewed periodically, and upon request, shall be made available for Generator's inspection.

**Operational Testing**

Detailed and coordinated operational test procedures shall be developed jointly by LIPA/T&D Manager and Generator. These test procedures must include relay settings, continuity of relay circuits, breaker trip and close coils (AC and DC circuits), insulation impedances of protective circuits and current and voltage transformers.

To the maximum degree practicable, the components used in protection systems shall be of proven quality, as demonstrated either by actual experience or by stringent tests under simulated operating conditions, to ensure that the reliability of the protection system shall not be degraded or reduced.

The test procedures must demonstrate that:

- (a) All relays operate from all possible sources of trip signals or voltage.
- (b) All relays trip the desired breaker(s).
- (c) The Generator's Interconnection Facilities will be isolated from the LIPA system for complete loss of the Facility.
- (d) The ratio and polarity of relay and instrument transformers are correct.
- (e) The phase angle characteristics of directional and other relays are correct.
- (f) Relays have been tested at pick-up and three multiples of minimum pick-ups (e.g., three, five, and eight times).

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All relays must be field verified and bench tested to meet the following tolerance criteria:

Test Parameter	Tolerance of Specified Settings
Current	+/- 5%
Voltage	+/- 5%
Time	+/- 5%
Frequency	+0.05 hertz
Phase Angle	+/- 3 degrees

The actual operational tests shall be performed after all equipment is installed and repeated every two years thereafter. Certified test results shall be submitted to LIPA/T&D Manager. Periodic inspections of AC and DC control power for all circuit breaker, reference single-line diagrams, relay protection diagrams, and coordination test data must accompany test reports.

LIPA/T&D Manager shall be notified by Generator at least seven (7) business days prior to the operational tests.

**Maintenance**

All equipment associated with the Generator's Interconnection Facilities shall be maintained by the Generator in accordance with the latest maintenance intervals in NERC PRC-005 or any applicable reliability requirements.

| Add other procedures **and requirements** as applicable.



## **APPENDIX M**

### **EXHIBIT E INTERCONNECTION COST ESTIMATE**

**The current interconnection estimate is [INSERT DOLLAR AMOUNT]**

The illustration above represents an estimate of reimbursable cost. Upon execution of this Agreement, generator will provide the T&D Manager with an advance payment of 30% of the T&D Manager's estimated costs. Progress payments will be required during construction and any excess will be reconciled and invoiced upon completion of all work and final accounting of all costs.

## APPENDIX N

### **Appendix N - Metering Requirements**

Refer to the document entitled “Revenue Metering Requirements for Generator Facilities Interconnecting to the LIPA Transmission System” for PSEG Long Island’s interconnection technical requirements for Small Generators up to 10 MW.

| Add other procedures **and requirements** as applicable.

## APPENDIX O

### **Appendix O -Left Blank Intentionally**

## APPENDIX P1

### Appendix P1 -Feasibility Study Agreement

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer,") and Long Island Lighting Company d/b/a LIPA ("LIPA"). Interconnection Customer and LIPA each may be referred to as a "Party," or collectively as the "Parties."

#### RECITALS

**WHEREAS**, Interconnection Customer is proposing to develop a Small Generator or generating capacity addition to an existing Small Generator consistent with the Interconnection Request completed by Interconnection Customer on \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Small Generator with LIPA's Distribution System; and

**WHEREAS**, Interconnection Customer has requested LIPA to perform a feasibility study to assess the feasibility of interconnecting the proposed Small Generator with LIPA's Distribution System, and of any Affected Systems;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the PSEG Long Island Small Generator Interconnection Procedures for Distributed Resources less than 10 MW Connected in parallel with LIPA Distribution Systems (PSEG Long Island Small Generator Interconnection Procedures).

2.0 The Interconnection Customer elects and LIPA shall cause to be performed an interconnection feasibility study consistent with the PSEG Long Island Small Generator Interconnection Procedures.

3.0 The scope of the feasibility study shall be subject to the assumptions set forth in Attachment A to this Agreement.

4.0 The feasibility study shall be based on the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the scoping meeting. LIPA reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the feasibility study and as designated in accordance with the PSEG Long Island Small Generator Interconnection Procedures. If the Interconnection Customer modifies its Interconnection Request, the time to complete the feasibility study may be extended by agreement of the Parties.

5.0 In performing the study, LIPA shall rely, to the extent reasonably practicable, on existing studies of recent vintage. The Interconnection Customer shall not be charged for such existing studies; however, the Interconnection Customer shall be responsible for charges associated with any new study or modifications to existing studies that are reasonably necessary to perform the feasibility study.

## APPENDIX P1

6.0 The feasibility study report shall provide the following analyses for the purpose of identifying any potential adverse system impacts that would result from the interconnection of the Small Generator as proposed:

- 6.1 Initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
- 6.2 Initial identification of any thermal overload or voltage limit violations resulting from the interconnection;
- 6.3 Initial review of grounding requirements and electric system protection; and
- 6.4 Description and non-binding estimated cost of facilities required to interconnect the proposed Small Generator and to address the identified short circuit and power flow issues.

7.0 The feasibility study shall model the impact of the Small Generator regardless of purpose in order to avoid the further expense and interruption of operation for reexamination of feasibility and impacts if the Interconnection Customer later changes the purpose for which the Small Generator is being installed.

8.0 The study shall include 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 and at the Interconnection Customer's cost.

9.0 A deposit of the lesser of 50 percent of good faith estimated feasibility study costs or earnest money of \$10,000 may be required from the Interconnection Customer.

10.0 Once the feasibility study is completed, a feasibility study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the feasibility study must be completed and the feasibility study report transmitted within thirty (30) Business Days of the Interconnection Customer's agreement to conduct a feasibility study.

11.0 Any study fees shall be based on the actual costs associated with the study and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.

12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within thirty (30) calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, LIPA shall refund such excess within thirty (30) calendar days of the invoice without interest. LIPA 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 Miscellaneous.

- 13.1 Accuracy of Information. Except as Interconnection Customer may otherwise specify in writing when it provides information to LIPA under this Agreement, Interconnection Customer represents and warrants that the information it provides to LIPA shall be accurate and complete as of the date the information is provided. Interconnection Customer shall promptly provide LIPA with any additional information needed to update information previously provided.

## APPENDIX P1

- 13.2 Disclaimer of Warranty. In preparing the system impact study, LIPA and any subcontractor or consultant to LIPA shall have to rely on information provided by Interconnection Customer, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, neither LIPA nor any subcontractor or consultant to LIPA 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 or merchantability and fitness for a particular purpose, with regard to the accuracy, content or system impact conclusions of the system impact study. Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representation or warranties have formed the basis of its bargain hereunder.
- 13.3 Force Majeure. For purposes of this Agreement, "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will 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 will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement.
- 13.4 Limitations of Liability. In no event shall any Party or its subcontractor consultant be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with this Agreement or the system impact study or any reliance on the system impact study by Developer or third parties, even if one or more of the Parties or its subcontractor consultants have been advised of the possibility of such damages. Nor shall LIPA be liable for any delay in delivery or for the non-performance or delay in performance of LIPA's obligations under this Agreement.
- 13.5 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless LIPA, and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by LIPA under this Agreement, any bankruptcy filings made by Interconnection Customer, or the actions or omissions of Interconnection Customer in connection with this Agreement, except to the extent such Losses arise from the gross negligence or willful misconduct by LIPA or their respective directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify LIPA shall be several, and not joint or joint and several.
- 13.6 Third-Party Beneficiaries. Without limitation of Sections 13.2, 13.3 and 13.5 of this Agreement, Interconnection Customer further agrees that a subcontractor or consultant hired

## APPENDIX P1

by LIPA to conduct or review, or to assist in the conducting or reviewing, an Interconnection Feasibility Study shall be deemed third party beneficiaries with respect to Sections 13.2, 13.3, 13.4 and 13.5.

- 13.7 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 13.7, shall continue in effect for a term of one year or until the system impact study for Interconnection Customer's Small Generator is completed, whichever event occurs first. Interconnection Customer or LIPA may terminate this Agreement upon the withdrawal of the Interconnection Customer's Application under Section II.A.4 of PSEG Long Island's Small Generator Interconnection Procedures.
- 13.8 Governing Law. This Agreement 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.
- 13.9 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null or void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 13.10 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 13.11 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing signed by the Parties hereto.
- 13.12 Survival. All warranties, limitations of liability, indemnification and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 13.13 Independent Contractor. LIPA shall at all times be deemed to be an independent contractor and none of their employees or the employees of its subcontractors shall be considered to be employees of Interconnection Customer as a result of this Agreement.
- 13.14 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement 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.
- 13.15 Successors and Assigns. 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. No assignment shall be permitted where the assignee is currently in litigation with one of the Parties to this Agreement, except with the consent of the affected Party.
- 13.16 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.
- 14.0 All disputes shall be resolved in accordance with the procedures set forth in Section II.A.9 of the PSEG Long Island Small Generator Interconnection Procedures.

## APPENDIX P1

**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.

**Long Island Electric Utility Service LLC  
acting as agent of and on behalf of  
Long Island Lighting Company d/b/a LIPA**

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Print)

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

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

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Print)

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

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



## **APPENDIX P2**

### **Appendix P2 – Assumptions Used-In Conducting System Impact Study**

#### **Attachment A to Feasibility Study Agreement**

##### **Assumptions Used in Conducting the Feasibility Study**

The feasibility study will be based upon the information set forth in the Interconnection Request and agreed upon in the scoping meeting held on \_\_\_\_\_:

- 1) Designation of Point of Interconnection and configuration to be studied.
  
- 2) Designation of alternative Points of Interconnection and configuration.

1) and 2) are to be completed by the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer and LIPA.

## APPENDIX Q1

### Appendix Q1 – System Impact Study

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_ 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, (“Interconnection Customer,”) and Long Island Lighting Company d/b/a LIPA (“LIPA”). Interconnection Customer and LIPA each may be referred to as a “Party,” or collectively as the “Parties.”

#### RECITALS

**WHEREAS**, the Interconnection Customer is proposing to develop a Small Generator or generating capacity addition to an existing Small Generator consistent with the Interconnection Request completed by the Interconnection Customer on \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Small Generator with LIPA’s Distribution System;

**WHEREAS**, LIPA has completed a feasibility study and provided the results of said study to the Interconnection Customer (This recital to be omitted if the Parties have agreed to forego the feasibility study.); and

**WHEREAS**, the Interconnection Customer has requested LIPA to perform a system impact study(s) to assess the impact of interconnecting the Small Generator with LIPA’s Distribution System, and of any Affected Systems;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the PSEG Long Island Small Generator Interconnection Procedures for Distributed Resources less than 10 MW Connected in parallel with LIPA Distribution Systems (PSEG Long Island Small Generator Interconnection Procedures).

2.0 The Interconnection Customer elects and LIPA shall cause to be performed a system impact study(s) consistent with the PSEG Long Island Small Generator Interconnection Procedures.

3.0 The scope of a system impact study shall be subject to the assumptions set forth in Attachment A to this Agreement.

4.0 A system impact study will be based upon the results of the feasibility study and the technical information provided by Interconnection Customer in the Interconnection Request. LIPA reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the system impact study. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the system impact study may be extended.

## APPENDIX Q1

5.0 A system impact study 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. A 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. A system impact study 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.

6.0 A distribution system impact study shall incorporate a distribution load flow study, an analysis of equipment interrupting ratings, protection coordination study, voltage drop and flicker studies, protection and set point coordination studies, grounding reviews, and the impact on electric system operation, as necessary.

7.0 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 upon a system impact study that covers potential adverse system impacts on their electric systems, and LIPA has twenty (20) additional Business Days to complete a system impact study requiring review by Affected Systems.

8.0 If LIPA uses a queuing procedure for sorting or prioritizing projects and their associated cost responsibilities for any required Network Upgrades, the system impact study shall consider all generating facilities (and with respect to paragraph 8.3 below, any identified Upgrades associated with such higher queued interconnection) that, on the date the system impact study is commenced -

8.1 Are directly interconnected with LIPA's System; or

8.2 Are interconnected with Affected Systems and may have an impact on the proposed interconnection; and

8.3 Have a pending higher queued Interconnection Request to interconnect with LIPA's System.

9.0 A distribution system impact study, if required, shall be completed and the results transmitted to the Interconnection Customer within thirty (30) Business Days after this Agreement is signed by the Parties. A transmission system impact study, if required, shall be completed and the results transmitted to the Interconnection Customer within forty-five (45) Business Days after this Agreement is signed by the Parties, or in accordance with LIPA's queuing procedures.

10.0 The Interconnection Customer shall provide to LIPA a deposit of \$10,000 or other commercially reasonable security in an amount equivalent to the good faith estimated cost of a Distribution System impact study and the good faith estimated cost of a transmission system impact study

11.0 Any study fees shall be based on the actual costs of the study and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.

12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within thirty (30) calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, LIPA shall refund such excess within thirty (30) calendar days of the invoice without interest. LIPA shall not be obligated to perform or continue to perform any Interconnection Study

## APPENDIX Q1

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

### 13.0 Miscellaneous.

- 13.1 Accuracy of Information. Except as Interconnection Customer may otherwise specify in writing when it provides information to LIPA under this Agreement, Interconnection Customer represents and warrants that the information it provides to LIPA shall be accurate and complete as of the date the information is provided. Interconnection Customer shall promptly provide LIPA with any additional information needed to update information previously provided.
- 13.2 Disclaimer of Warranty. In preparing the system impact study, LIPA and any subcontractor or consultants to LIPA shall have to rely on information provided by Interconnection Customer, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, neither LIPA nor any subcontractor or consultant to LIPA 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 or merchantability and fitness for a particular purpose, with regard to the accuracy, content or system impact conclusions of the system impact study. Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representation or warranties have formed the basis of its bargain hereunder.
- 13.3 Force Majeure. For purposes of this Agreement, "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will 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 will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement.
- 13.4 Limitations of Liability. In no event shall any Party or its subcontractor consultant be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with this Agreement or the system impact study or any reliance on the system impact study by Developer or third parties, even if one or more of the Parties or its subcontractor consultants have been advised of the possibility of such damages. Nor shall LIPA be liable for any delay in delivery or for the non-performance or delay in performance of LIPA's obligations under this Agreement.
- 13.5 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless LIPA, and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out

## APPENDIX Q1

- of or resulting from the performance by LIPA under this Agreement, any bankruptcy filings made by Interconnection Customer, or the actions or omissions of Interconnection Customer in connection with this Agreement, except to the extent such Losses arise from the gross negligence or willful misconduct by LIPA or their respective directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify LIPA shall be several, and not joint or joint and several.
- 13.6 Third-Party Beneficiaries. Without limitation of Sections 13.2, 13.3 and 13.5 of this Agreement, Interconnection Customer further agrees that subcontractor consultant hired by LIPA to conduct or review, or to assist in the conducting or reviewing, an Interconnection Feasibility Study shall be deemed third party beneficiaries with respect to Sections 13.2, 13.3, 13.4 and 13.5.
- 13.7 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 13.7, shall continue in effect for a term of one year or until the system impact study for Interconnection Customer's Small Generator is completed, whichever event occurs first. Interconnection Customer or LIPA may terminate this Agreement upon the withdrawal of Interconnection Customer's application pursuant to Section II.A.4 of LIPA's Small Generator Interconnection Procedures.
- 13.8 Governing Law. This Agreement 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.
- 13.9 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null or void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 13.10 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 13.11 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing signed by the Parties hereto.
- 13.12 Survival. All warranties, limitations of liability, indemnification and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 13.13 Independent Contractor. LIPA shall at all times be deemed to be an independent contractor and none of their employees or the employees of its subcontractors shall be considered to be employees of Interconnection Customer as a result of this Agreement.
- 13.14 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement 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.
- 13.15 Successors and Assigns. 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

## APPENDIX Q1

successors and assigns. No assignment shall be permitted where the assignee is currently in litigation with one of the Parties to this Agreement, except with the consent of the affected Party.

13.16 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

14.0 All disputes shall be resolved in accordance with the procedures set forth in Section II.A.9 of the PSEG Long Island Small Generator Interconnection Procedures for Distributed Generation Less than 10 MW Connected in Parallel with LIPA Distribution Systems.

**IN WITNESS THEREOF**, 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.

**Long Island Electric Utility Service LLC  
acting as agent of and on behalf of  
Long Island Lighting Company d/b/a LIPA**

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Print)

Name: \_\_\_\_\_  
(Print)

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

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

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

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

## **APPENDIX Q2**

### **Q2 – Assumptions Used In Conducting The System Impact Study**

#### **Attachment A to System Impact Study Agreement**

##### **Assumptions Used in Conducting the System Impact Study**

The system impact study shall be based upon the results of the feasibility study, subject to any modifications in accordance with the standard Small Generator Interconnection Procedures, and the following assumptions:

- 1) Designation of Point of Interconnection and configuration to be studied.
  
- 2) Designation of alternative Points of Interconnection and configuration.

1) and 2) are to be completed by the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer and LIPA.

## APPENDIX R1

### **Appendix R1 – Facilities Study Agreement**

#### **Facilities Study Agreement**

**THIS AGREEMENT** is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer,") and Long Island Lighting Company d/b/a LIPA ("LIPA"). Interconnection Customer and LIPA each may be referred to as a "Party," or collectively as the "Parties."

#### **RECITALS**

**WHEREAS**, the Interconnection Customer is proposing to develop a Small Generator or generating capacity addition to an existing Small Generator consistent with the Interconnection Request completed by the Interconnection Customer on \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Small Generator with LIPA's Distribution System;

**WHEREAS**, LIPA has completed a system impact study and provided the results of said study to the Interconnection Customer; and

**WHEREAS**, the Interconnection Customer has requested LIPA to perform a facilities study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the system impact study in accordance with Good Utility Practice to physically and electrically connect the Small Generator with LIPA's Distribution System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the Long Island Power Authority Small Generator Interconnection Procedures for Distributer Generation less than 10 MW Connected in parallel with LIPA Distribution Systems (PSEG Long Island Small Generator Interconnection Procedures).

2.0 The Interconnection Customer elects and LIPA shall cause a facilities study consistent with the PSEG Long Island Small Generator Interconnection Procedures.

3.0 The scope of the facilities study shall be subject to data provided in Attachment A to this Agreement.

4.0 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). 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 LIPA'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.



## APPENDIX R1

5.0 LIPA 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 Generator if it is willing to pay the costs of those facilities.

6.0 The Interconnection Customer shall provide to LIPA a deposit of \$10,000 or other commercially reasonable security in an amount equal to the good faith estimated facilities study costs.

7.0 In cases where Upgrades are required, the facilities study must be completed within forty-five (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 thirty (30) Business Days. Projects that are subject to the NYISO OATT Attachment S cost allocation process shall be processed in accordance with the NYISO's Attachment S procedures

8.0 Once the facilities study is completed, a facilities study report shall be prepared and promptly transmitted to the Interconnection Customer.

9.0 Any study fees shall be based on the actual costs of the study and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.

10.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within thirty (30) calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, LIPA shall refund such excess within thirty (30) calendar days of the invoice without interest. LIPA 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.

11.0 Miscellaneous.

11.1 Accuracy of Information. Except as Interconnection Customer may otherwise specify in writing when it provides information to LIPA under this Agreement, Interconnection Customer represents and warrants that the information it provides to LIPA shall be accurate and complete as of the date the information is provided. Interconnection Customer shall promptly provide LIPA with any additional information needed to update information previously provided.

11.2 Disclaimer of Warranty. In preparing the system impact study, LIPA and any subcontractors or consultants employed by LIPA shall have to rely on information provided by Interconnection Customer, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, neither LIPA nor any subcontractor consultant employed by LIPA 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 or merchantability and fitness for a particular purpose, with regard to the accuracy, content or system impact conclusions of the system impact study. Developer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representation or warranties have formed the basis of its bargain hereunder.

## APPENDIX R1

- 11.3 Force Majeure. For purposes of this Agreement, "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will 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 will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement.
- 11.4 Limitations of Liability. In no event shall any Party or its subcontractor consultant be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with this Agreement or the system impact study or any reliance on the system impact study by Developer or third parties, even if one or more of the Parties or its subcontractor consultants have been advised of the possibility of such damages. Nor shall LIPA be liable for any delay in delivery or for the non-performance or delay in performance of LIPA's obligations under this Agreement.
- 11.5 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless LIPA, and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by LIPA under this Agreement, any bankruptcy filings made by Interconnection Customer, or the actions or omissions of Interconnection Customer in connection with this Agreement, except to the extent such Losses arise from the gross negligence or willful misconduct by LIPA or their respective directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify LIPA shall be several, and not joint or joint and several.
- 11.6 Third-Party Beneficiaries. Without limitation of Sections 11.2, 11.3 and 11.5 of this Agreement, Interconnection Customer further agrees that subcontractor or consultant to LIPA to conduct or review, or to assist in the conducting or reviewing, an Interconnection Feasibility Study shall be deemed third party beneficiaries with respect to Sections 11.2, 11.3, 11.4 and 11.5.
- 11.7 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 11.7, shall continue in effect for a term of one year or until the system impact study for Interconnection Customer's Small Gene rating Facility is completed, whichever event occurs first. Interconnection Customer or LIPA may terminate this Agreement upon the withdrawal of the Interconnection Customer's application pursuant to Section II.A.4 of PSEG Long Island's Small Generator Interconnection Procedures.

## APPENDIX R1

- 11.8 Governing Law. This Agreement 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.
- 11.9 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null or void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 11.10 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 11.11 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing signed by the Parties hereto.
- 11.12 Survival. All warranties, limitations of liability, indemnification and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 11.13 Independent Contractor. LIPA shall at all times be deemed to be an independent contractor and none of their employees or the employees of its subcontractors shall be considered to be employees of Interconnection Customer as a result of this Agreement.
- 11.14 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement 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.
- 11.15 Successors and Assigns. 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. No assignment shall be permitted where the assignee is currently in litigation with one of the Parties to this Agreement, except with the consent of the affected Party.
- 11.16 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.
- 12.0 All disputes shall be resolved in accordance with the procedures set forth in Section II.A.9 of the PSEG Long Island Small Generator Interconnection Procedures.

## APPENDIX R1

**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.

**Long Island Electric Utility Service LLC**  
**acting as agent of and on behalf of**  
**Long Island Lighting Company d/b/a LIPA**

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Print)

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

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

By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Print)

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

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

## APPENDIX R2

### **Appendix R2 – Facilities Study Agreement Input Data Requirements**

#### **Attachment A to the Facilities Study Agreement**

##### **Data to Be Provided by the Interconnection Customer**

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

One set of metering is required for each generation connection to the new ring bus or existing LIPA 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 \_\_\_\_\_  
(Please indicate on the one-line diagram).

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

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What protocol does the control system or PLC use?

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

Physical dimensions of the proposed interconnection station:

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Bus length from generation to interconnection station:

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## APPENDIX R2

Line length from interconnection station to LIPA's System.

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

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Number of third party easements required for transmission lines\*:

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\* To be completed in coordination with LIPA.

Is the Small Generator located outside of LIPA's service area?

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

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Please provide the following proposed schedule dates:

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

Generator step-up transformers  
receive back feed power Date: \_\_\_\_\_

Generation Testing Date: \_\_\_\_\_

Commercial Operation Date: \_\_\_\_\_



## Department of Public Service

125 East Bethpage Road, Plainview, NY 11803  
[www.dps.ny.gov/longisland](http://www.dps.ny.gov/longisland)

### Exhibit "F"

**John B. Rhodes**  
Chair and  
Chief Executive Officer

**Thomas Congdon**  
Deputy Chair and  
Executive Deputy

**Robert Rosenthal**  
General Counsel

**Michelle L. Phillips**  
Secretary

December 13, 2019

Via Email and U.S. Mail

Honorable Ralph V. Suozzi, Chairman  
Board of Trustees  
Long Island Power Authority  
333 Earle Ovington Blvd.  
Uniondale, New York 11553  
[boardoftrustees@lipower.org](mailto:boardoftrustees@lipower.org)

Re: Matter No. 19-01145 - Recommendations Regarding Long Island Power  
Authority's Proposed Modifications to its Tariff for Electric Service.

Dear Chairman Suozzi:

Enclosed please find the recommendations of the New York State Department of Public Service (DPS or the Department) regarding the Long Island Power Authority's (LIPA or the Authority) proposed modifications to its Tariff for Electric Service (tariff), effective January 1, 2020. The LIPA Reform Act (LRA) authorizes the Department to make recommendations regarding the operations and terms and conditions of service provided by the Authority and its Service Provider PSEG Long Island (PSEG LI).<sup>1</sup> The Department recommends that the proposals be adopted in accordance with the discussion set forth herein.

The Authority submitted to the DPS two proposals for modifying LIPA's tariff consistent with recent New York State Public Service Commission (PSC or Commission) Orders. These proposals modify the Authority's tariff: 1) to modify the Smart Grid Small Generator Interconnection Procedures (SGIP) to reflect updates and clarifications of the Commission, and 2) to modify the tariff to set a standard rate for pole attachments of the wireless communication equipment in accordance with the Commission's Order Approving Petition in Part and Continuing Proceeding.

### Smart Grid Small Generator Interconnection Procedures

LIPA proposes to modify its tariff to enhance its Small Generation Interconnection Procedures (SGIP) and Standardized Contract for Interconnection, effective January 1, 2020, to

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<sup>1</sup> Public Service Law §3-b(3)(a).

reflect additional updates and clarifications to the New York State Standardized Interconnection Requirements (“SIR”) for Small Distributed Generators as a result of the Commission’s July 13, 2018 Order and the October 18, 2018 Order.<sup>2,3</sup>

On April 19, 2018, the Commission issued an Order Modifying Standardized Interconnection Requirements in Case 18-E-0018, of which the requirements were adopted by the LIPA Board on December 19, 2018, consistent with the Department’s recommendations.<sup>4,5</sup> While LIPA considered implementation of the April Order, members of the Statewide Interconnection Policy Working Group and Interconnection Technical Working Group, established as part of the State’s SIR proceeding, sought clarification from the Commission, regarding the April Order.<sup>6</sup> On July 13, 2018, the Commission issued its July Order which clarified the State’s SIR to address the concerns raised in the petition. Subsequently, on October 18, 2018, following additional consideration by the Technical Working group and further consideration of public comments, the Commission issued its October Order addressing remaining issues from the Petition and additional considerations to further improve the process of interconnecting Distributed Generation and Energy Storage Systems.

LIPA’s proposed changes, consistent with the July and October Orders, include 1) increasing time for applicants to make initial payments for systems of greater than 50 KW up to 5 MW from 60 days to 90 days; 2) providing for an applicant to receive a signed Interconnection Agreement within 15 business days of receipt of initial payment; 3) clarifying the time for commencement of design work; 4) clarifying that an application is deemed complete upon passing the preliminary or supplemental screening analysis; and 5) amending the Energy Storage System (ESS) Application Requirements in Appendix J to require applicants to identify whether the application is for a new Stand-Alone or Hybrid ESS project or a change to the operating characteristics of an existing renewable system, allowing for modifications on existing interconnected systems.

In addition to the tariff modifications proposed to align with the Commission’s July and October SIR Orders, LIPA also proposes two updates to the SGIP to further clarify language and timing for certain aspects of the SGIP. LIPA also proposes several ministerial updates. The first additional update amends the definition of the term “Business Day” to be consistent with LIPA’s and PSEG Long Island’s definition of a Business Day. Further, the term Force Majeure Event was added to the Glossary of Terms, with the understanding that any deadlines in the SGIP will be extended to the extent they are affected by a Force Majeure Event.

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<sup>2</sup> Case 18-E-0018, In the Matter of Proposed Amendments to the New York State Standardized Interconnection Requirements (SIR) for Small Distributed Generators, Order Granting Clarification (issued July 13, 2018) (July SIR Order).

<sup>3</sup> Case 18-E-0018, supra, Order Modifying Standardized Interconnection Requirements (issued October 18, 2018) (October SIR Order).

<sup>4</sup> Case 18-E-0018, supra, Order Modifying Standardized Interconnection Requirements (issued April 19, 2018) (April SIR Order).

<sup>5</sup> Matter 18-02999, Tariff Filing of Long Island Power Authority to Modify its Tariff for Electric Service, Recommendation Regarding LIPA’s Proposed Modifications (issued December 21, 2019), pp. 3-4.

<sup>6</sup> Case 18-E-0018, supra, SIR Petition for Clarification (filed June 8, 2018).



LIPA also proposes to modify the SGIP for the evaluation of emerging technologies, with the possibility for new technologies such as regenerative braking for electrified trains, to interconnect to LIPA's electric grid. These modifications recognize that new emerging technologies may require special studies and/or additional testing to determine their impact on the grid. The proposed modifications provide for additional study time to interconnect technologies that have not previously interconnected to LIPA's system. The additional review will set baseline expectations for the interconnection of these technologies going forward. As such, LIPA and PSEG LI will utilize their first experience interconnecting these new systems to pattern the timing and process for future interconnection of similar technologies.

The Department has reviewed LIPA's proposal and believes that the proposed modifications will enhance the efficiency and effectiveness of the SGIP and further align LIPA's Tariff with the New York State SIR. The Department recommends that the Board of Trustees adopt the modifications as proposed and continue to develop the Authority's interconnection procedures consistent with future Commission Orders.

#### Pole Attachment Rates for Wireless Communication Equipment

LIPA proposes to update its Tariff to set a standard rate for new wireless pole attachments. Previously, the wireless pole attachment rate was set at a negotiated price on a case-by-case basis by contract between customers and LIPA. LIPA proposes to establish a standard annual rate per foot of space occupied by the wireless pole attachment, using the methodology adopted by the Commission in Case 16-M-0330.<sup>7</sup> Further, in accordance with the Commission's July 2019 Order Suspending Wireless Pole Attachment Rate Tariff Filings and Granting A Filing Extension to The New York Municipal Power Agency, the Department recommends that LIPA consider adopting a rate for both wireline and wireless attachments in parity with one another.<sup>8</sup>

As stated in the Commission's March Order,

“[o]ver the past twenty years, the Commission has taken several actions to remove barriers to entry in the telecommunications market, including actions to promote standard rates and processes for wireline attachments to utility poles.”<sup>9</sup>

In the March Order, the PSC established an interim rental rate to be charged for new wireless pole attachments. The interim wireless pole attachment rate was based on a cost-of-service-based rate per foot of space occupied by the pole attachment, using a cost allocation methodology consistent with the formula established by the Federal Communication Commission's (FCC).

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<sup>7</sup> Case 16-M-0330, Petition of CTIA – The Wireless Association to Initiate a Proceeding to Update and Clarify Wireless Pole Attachment Protections, Order Approving Petition and Continuing Proceeding (issued March 14, 2019) (the March Order)

<sup>8</sup> Case 16-M-0330, supra, Order Suspending Wireless Pole Attachment Rate Tariff Filings and Granting A Filing Extension to The New York Municipal Power Agency, (issued July 16, 2019) (the July Order).

<sup>9</sup> Case 16-M-0330, supra, Order Approving Petition and Continuing Proceeding (issued March 14, 2019) pp. 2-3.

Subsequent to the March Order, on July 16, 2019 the PSC suspended until November 28, 2019 implementation of the interim wireless attachment rates set forth in the March Order and ordered the New York's Investor-Owned Utilities to review and update wireline attachment rates concurrently with their updates of wireless attachment rates. In accordance with the Commission's July Order in Case 16-M-0330, LIPA proposed updates to its wireless pole attachment rate to adopt the methodology used by the State's investor-owned utilities.

On November 18, 2019 the Commission issued an Order Establishing Updated Pole Attachment Rates with Modifications.<sup>10</sup> In the November Order, the Commission approved wireless pole attachment rates contemporaneously with updates to utility wireline pole attachment rates, as required by the March Order. Specifically, the November Order required the State's electric utilities to "file revised tariff amendments to update their wireline pole attachment rates to be in parity with the wireless pole attachment rates that are in effect on a temporary basis."<sup>11</sup>

In the most recent LIPA and PSEG LI rate proceeding, the Department recommended an increase in LIPA and PSEG LI's wired and wireless (non-wired) pole attachment rates.<sup>12</sup> The proposed rates were based on adopting the lowest attachment rate established among New York State's IOUs. Accordingly, the Department recommends that LIPA and PSEG LI adopt the lowest rate established by the November Order. The lowest wireless attachment rate approved by the Commission for an IOU, was National Grid's rate at \$13.62 per foot.

LIPA's proposed wireless attachment rate properly reflects the Commissions' directives of the March 2019 Order. The Department recommends that LIPA consider further amendments to its Tariff to establish a non-discriminatory approach to wireline and wireless pole attachment rates, consistent with the subsequent Order. Consistent with the discussion herein, the Department recommends adoption of a wireless attachment rate of \$13.62 per foot.

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<sup>10</sup> Case 16-M-0330, supra, Order Establishing Updated Pole Attachment Rates with Modifications (issued November 18, 2019) (the November Order).

<sup>11</sup> Id., p. 5.

<sup>12</sup> Matter 15-00262, In the Matter of a Three-Year Rate Proposal for Electric Rates and Charges Submitted by the Long Island Power Authority and Service Provider, PSEG Long Island LLC, Department's Rate Recommendation (issued September 28, 2015) p. 141.

Conclusion

LIPA's proposed modifications appropriately update and streamline the Authority's Tariff while also implementing practices and provisions consistent with those established by the Commission and implemented by New York State's IOUs. LIPA's proposed modifications comport with the spirit and intent of the LRA to ensure that the Authority and the Service Provider provide safe and adequate service at the lowest level consistent with sound fiscal operating practices. In accordance with the discussion herein, DPS recommends approval of the proposed tariff modifications.

Sincerely,

A handwritten signature in black ink, appearing to read "John B. Rhodes". The signature is stylized with a large, sweeping "J" and "B".

John B. Rhodes,  
Chief Executive Officer

CC: Thomas Falcone, LIPA Chief Executive Officer  
Anna Chacko, LIPA General Counsel  
Bobbi O'Connor, LIPA Secretary to the Board of Trustees  
Dan Eichhorn, PSEG LI President and Chief Operating Officer  
Guy Mazza, DPS LI Director