

## **FOR CONSIDERATION**

December 19, 2018

**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 is requested to recommend approval of changes to the Authority’s Tariff for Electric Service (“Tariff”), effective January 1, 2019:

<b>Energy Efficient Lighting</b>	to update the eligible lighting technologies under Service Classification No. 7A, Outdoor Area Lighting, to add efficient Light-Emitting Diode (“LED”) lighting fixtures;
<b>Storage Interconnection</b>	to modify the Authority’s Smart Grid Small Generator Interconnection Procedures to accommodate interconnection of energy storage systems and to make other changes consistent with recent action by the New York Public Service Commission (the “PSC”);
<b>Value Stack Compensation Eligibility</b>	to expand the eligibility for compensation under the Authority’s Value of Distributed Resources tariff to projects with a capacity between (2,000) kilowatts and five thousand (5,000) kilowatts, consistent with recent PSC action;
<b>Smart Meter Opt-Out</b>	to provide notice of customers’ rights and responsibilities when opting out or requesting removal of an Advanced Metering Infrastructure (“AMI”) equipped smart meter;
<b>Solar Business Practices</b>	to adopt Business Practices for Distributed Energy Resource Suppliers consistent with business practices ordered by the PSC governing the relationship between distributed energy resource companies and their customers;
<b>Wireless Phone Contacts</b>	to provide clarity regarding customer consent to be contacted on a wireless telephone number consistent with recent guidance by the Federal Communications Commission.

## **Energy Efficient Lighting**

### **Background – Energy Efficient Lighting**

The Authority currently offers outdoor area dusk-to-dawn lighting that is owned, operated, and maintained by the Authority on behalf of eligible customers. Two lighting technologies are currently offered: high-pressure sodium and metal halide. Low-Emitting Diode (“LED”) lighting is not currently offered for this purpose. However, LED lighting has undergone recent improvements in technology, declines in cost, and more widespread adoption for outdoor lighting use. Many utilities across the nation have been replacing existing outdoor area lighting fixtures with those utilizing LED lighting technology. LED lighting has the potential for significant measurable customer savings due to the efficiency of LED lighting technology while also benefitting the environment.

### **Proposed Action – Energy Efficient Lighting**

Effective January 1, 2019, the Authority Staff proposes to provide two LED lighting options in its Tariff for Electric Service under Service Classification SC No. 7A (outdoor area lighting) and phase out less efficient lighting technologies over a three-year period. By replacing these lights, the Authority will provide energy savings to customers and reduce greenhouse gas emissions.

The customer will benefit from an approximate 50% reduction in energy costs, will not be charged installation costs for the LED fixtures, and will experience no change in the customer’s existing monthly base charges for an equivalent LED fixture.

Additionally, though not part of this Tariff proposal, the Authority will carry out a three-year replacement program that will allow for existing, Authority-owned lighting fixtures within the service territory to be replaced with LED fixtures. Customers will be informed of the impending change to their fixture and be given the option to keep their existing fixture.

The Service Provider will consider customer requests for LED replacement ahead of the planned implementation schedule. Any failed fixture or those that have met the end of their useful life and require replacement will be converted to LED fixtures, with one exception: the High Pressure Sodium 100 watt fixture will still be available for replacement since there is no equivalent LED currently available.

Authority Staff also proposes to update the Tariff to indicate that, effective January 1, 2019 existing Metal Halide and High Pressure Sodium fixtures (with the exception of the 100 watt High Pressure Sodium option) will no longer be available for replacement. Customers will be required to select from the other available fixture options (either one of the two LED fixtures or the High Pressure Sodium 100 watt fixture). Additionally, effective January 1, 2022, existing Metal Halide and High Pressure Sodium (with the exception of the 100 watt High Pressure Sodium option) bulbs and photocells will also no longer be replaced. The affected fixtures will be replaced from one of our currently available fixture options.

As noted above, all customers will be given the option to keep their existing light fixture. Customers with operating flood lights will be encouraged to accept early replacement of the existing flood lights with LED fixtures. The Authority has not installed new flood lights since 2003 and the existing flood lights on the system are aging. Customers with existing flood lights may choose to keep the functioning flood light, but the Authority will only replace bulbs in such lights for a maximum of three years (until December 31, 2022). After such time, upon failure, the flood light will be replaced with an LED fixture or the account will be closed.

### Financial Impact – Energy Efficient Lighting

The three-year project plan will entail the use of approximately \$16 million in capital to replace approximately 11,700 existing fixtures with their LED equivalent. As a result of the reduction in energy from the LED technology, savings will be passed along to customers in the Power Supply Charge. This project will provide an approximate Power Supply Charge savings to customers of \$57 per year for those who switch from an HPS 250 watt to the LED equivalent and \$84 per year for switching from a HPS 400 watt to the LED equivalent<sup>1</sup>. The approximate energy savings, assuming existing inventory gets fully replaced with LED technology would be 9,660 MWh equating to approximately \$483,000 in Power Supply Charge savings<sup>2</sup>. This project will also have an estimated annual operating and maintenance savings of \$300,000<sup>3</sup> due to the extended ten-year life of the LED bulb technology.

## **Storage Interconnection**

### Background – Storage Interconnection

In the *Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters* (the “VDER Order”)<sup>4</sup>, the PSC directed Department of Public Service (“DPS”) Staff to meet with stakeholders regarding integrating energy storage systems into the interconnection process. To accomplish this objective, the DPS formed the Interconnection Technical Working Group (“ITWG”). PSEG Long Island participated in the ITWG working group meetings along with the other utilities. Following consultation with stakeholders in the working group, the DPS Staff issued recommendations on storage interconnection and other improvements to the interconnection process—such as the addition of construction and payment milestones—that were adopted by the PSC.<sup>5</sup> Authority Staff proposes to update the Tariff consistent with these proceedings.

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<sup>1</sup> The Power Supply Charge savings were based on a \$.10 cent per kWh charge.

<sup>2</sup> Ibid, assuming half of the power supply charge is based on variable costs.

<sup>3</sup> Current lighting repair budget is approximately \$500,000, however due to LED bulb life extension from four to ten years this would result in O&M savings per year. The actual savings could be higher in the first five years since all of the LED bulbs will be new.

<sup>4</sup> Case 15-E-0751 et al., *In the Matter of the Value of Distributed Energy Resources* (“VDER Proceeding”), Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters (issued March 9, 2017).

<sup>5</sup> Case 18-E-0018 et al. *In the Matter of Proposed Amendments to the New York State Standardized Interconnection Requirements (SIR) for Small Distributed Generators*, Order on Modifying Standardized Interconnection Requirements (issued April 19, 2018).

### Proposed Action – Storage Interconnection

Staff proposes to modify the Smart Grid Small Generator Interconnection Procedures (“SGIP”) and Standardized Contract for Interconnection (“SIR”) in order to provide interconnection procedures for energy storage systems and to make other modifications consistent with recent PSC action.<sup>6</sup> The interconnection procedures for energy storage systems, which include application requirements, system operating characteristics and market participation rules, have been added as Appendix J of the SGIP.

The revised SGIP will also include a new section on Payment and Construction Milestones. This section outlines what each party will be responsible for and when payments and commitments must be submitted.

A number of technical references and requirements from the SGIP are being moved to “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 will address 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

The Technical Requirements and Screening Criteria document may be modified by the Authority as needed and updated versions will be posted on the PSEG Long Island website.

### Financial Impact – Storage Interconnection

This Tariff proposal will not have a material financial impact on the Authority or customers.

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

## Value Stack Compensation Eligibility

### Background – Value Stack Compensation Eligibility

On March 9, 2017, the PSC issued its *Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters* (the “VDER Phase One Order”), which established the first phase of a plan to establish a new system for compensation of distributed energy resources based on the component values those resources provide to the electric grid (the “Value Stack”). On December 19, 2017, the Authority adopted Tariff changes implementing the VDER Phase One Order.

Eligibility for Value Stack compensation was initially limited in the VDER Phase One Order and the Authority’s Tariff to projects sized up to 2,000 kilowatts. In an effort to continuously refine and improve VDER, the Department of Public Service (“DPS”) Staff has held working group meetings with stakeholders on a number of different topics, including expanding the eligibility of VDER projects to those sized above 2,000 kilowatts and below 5,000 kilowatts. PSEG Long Island participated the working group meetings on behalf of the Authority. The PSC ultimately issued an order expanding the eligibility for Value Stack compensation under VDER to include non-residential customers with solar, wind, farm waste, fuel cell, or micro-hydroelectric generating equipment with a rated capacity of greater than 2,000 kilowatts and not more than 5,000 kilowatts.<sup>7</sup>

### Proposed Action – Value Stack Compensation Eligibility

Consistent with the VDER Project Size Order, the Authority Staff proposes to expand eligibility for Value Stack compensation under the Value of Distributed Energy Resources tariff to include new and existing projects with a rated capacity between 2,000 and 5,000 kilowatts.

### Financial Impacts – Value Stack Compensation Eligibility

The proposal will not have a material financial impact on the Authority because revenues lost from VDER are recovered through the Authority’s Revenue Decoupling Mechanism. Depending on participation, the proposal could have an impact on non-participating customers. In 2017, the Authority has only received one Distributed Energy Project that was sized at the 2,000 kilowatt cap. The maximum potential annual impact on non-participating customers – assuming that five projects applying for VDER compensation at the 2,000-kilowatt cap instead applied at the newly proposed 5,000-kilowatt cap – would be \$1.6 million per year, which equates to an average customer bill impact of 0.04% per year.

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<sup>7</sup> Case 15-E-0751 et al., *In the Matter of the Value of Distributed Energy Resources* (“VDER Proceeding”), Order on Phase One Value of Distributed Energy Resources Project Size CAP and Related Matters (issued February 22, 2018).

## **Smart Meter Opt-Out**

### **Background – Smart Meter Opt-Out**

PSEG Long Island began deploying AMI equipped smart meters as part of PSEG Long Island's 2017 Utility 2.0 plan and filed a 2018 Utility 2.0 plan<sup>8</sup> featuring a proposal for full service-territory-wide smart meter deployment to all customer classes by 2023.

One of the primary goals of the smart meter deployment project is to provide the foundation for New York State's comprehensive energy strategy, Reforming the Energy Vision ("REV"). Consistent with REV, full deployment of smart meters will empower PSEG Long Island customers to make more informed energy choices, enable the development of new energy products and services, and advance the Authority's mission to provide clean, reliable, and affordable electric service.

### **Proposed Action – Smart Meter Opt-Out**

In order to successfully deploy smart meters throughout the service territory, the Authority is requesting to update the Tariff for Electric Service to include a meter removal fee for Residential customers billed under Service Classification I who initially accept installation of a smart meter and subsequently request post-installation removal.

With the following exceptions, residential customers billed on Service Classification I will have the ability to opt-out of receiving a smart meter during the full-scale deployment period, at no charge, by notifying PSEG Long Island. The exceptions are that residential customers who participate in net metering, time-of-use rates, or a retail choice program (Long Island Choice and Green Choice) are ineligible to opt-out from smart meter installation. All commercial customers are ineligible to opt-out.

Customers will receive general media coverage and announcements throughout the implementation of AMI and will be able to opt-out at any time prior to meter installation at no cost. Specifically each customer will be notified:

- At least 45 days before meter installation, customers will receive a welcome letter informing them that PSEG Long Island will be changing their meter.
  - They also will receive information on how to opt-out should they choose not to receive a smart meter.
  - The letter will also identify PSEG Long Island's intention to implement a monthly meter reading fee of approximately \$10 for non-AMI ("non-communicating") meters post 2023.
- At least 14 days before meter installation, customers will receive a reminder call.
- At least 7 days before meter installation, customers will receive a welcome kit.

If no response is received and no objection is raised by the customer at the time of installation, the smart meter will be installed. If a residential customer does not object to installation of a smart meter and later requests removal of the meter, Staff proposes that a one-time meter

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<sup>8</sup> Matter: 14-01299 In the Matter of PSEG-LI Utility 2.0 Long Range Plan. *Utility 2.0 Long Range Plan 2018 Annual Update* (filed June 29, 2018).

removal fee of \$65 be charged for removal of the smart meter and replacement with a non-communicating meter.

The proposed meter removal fee is consistent with the fees charged by other utilities in New York State and throughout the country in their smart meter deployment plans. Currently, Consolidated Edison, Orange & Rockland, Central Hudson and Niagara Mohawk all include meter removal fees in their tariffs.

The meter removal fee alleviates unnecessary expense to all customers for the additional cost associated with installing and then removing a smart meter and then re-installing a non-communicating meter for those customers who do not object to initial installation of a smart meter and subsequently request removal.

#### Financial Impacts – Smart Meter Opt-Out

No financial impacts are expected to result from this proposal. The meter removal fee is designed to recover the costs associated with replacing a customer's smart meter with a non-communicating meter.

### **Solar Business Practices**

#### Background – Solar Business Practices

As recognized by the PSC, the increased deployment and integration of Distributed Energy Resources (“DERs”), and the prevalence of customers participating in DER markets and associated programs, has heightened the importance of ensuring that customers understand the costs and benefits of their investments in DERs and protecting customers from confusion, fraud, and abusive marketing. Clear guidance on appropriate marketing and contracting practices will create a fair market for DER suppliers and support reasonable competition between suppliers and between various DER options.

The PSC concluded that a manual of Uniform Business Practices (“UBP”) can effectively create a robust set of protections for New Yorkers participating in the evolving DER programs and markets, while ensuring that small and innovative businesses will not be overburdened. To accomplish this, the PSC ordered, New York utilities were directed to include a Uniform Business Practices for Distributed Energy Resource Suppliers Manual as an addendum to their gas and electric tariffs.<sup>9</sup> The manual includes:

- General Marketing Standards for DER suppliers to prevent misleading and deceptive conduct.
- Responsibility of contractors and other third party agents of DER suppliers.
- Customer inquiries and complaints/oversight requirements and consequences for violations.

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<sup>9</sup> Order Establishing Oversight Framework and Uniform Business Practices for Distributed Energy Resource Suppliers, Case 15-M-0180, October 19, 2017.

- Provisions specific to Community Distributed Generation (CDG) and On-Site Mass Market providers, which include the following.
  - Registration Requirements - sets forth the process that CDG Providers and On-Site Mass Market DG Providers are required to follow in order to register with the Department of Public Service.
  - Enhanced Marketing and Advertising Standards – enhanced standards that CDG Providers, On-Site Mass Market DG Providers and their marketing representatives must follow when marketing and advertising products and services to potential mass market customers in New York.
  - Minimum Standards For Sales Agreements – establishes minimum standards for sales agreements between CDG and On-Site Mass Market DG Providers (Providers) and mass market customers.
  - Standard Customer Disclosure Statements – shall be provided to all customers of CDG or On-Site Mass Market DG Providers as part of the sales agreement.
  - Customer Inquiries And Complaints – establishes requirements for responses by a CDG or On-Site Mass Market DG Provider to customer inquiries concerning CDG products or services.
  - Reporting Requirements – each CDG or On-Site Market DG Provider shall file an annual report containing information for the previous calendar year including aggregate number of customers served, a summary of services provided, and information on the number and classification of complaints received.

#### Proposed Action – Solar Business Practices

The Authority is proposing to effectuate the oversight envisioned in the New York Uniform Business Practices for Distributed Energy Resource Suppliers Manual in the Authority’s service territory. Staff proposes to insert a modified version of the New York business practices as an addendum to the Authority’s Tariff for Electric Service in order to be consistent with the rest of the utilities in State which have already adopted Distributed Energy Resource Suppliers business practices.

The Authority proposes to create a manual of Business Practices for Distributed Energy Resource Suppliers (“BP-DER”) with the following modifications:

- Complaints will be brought to either to the Department of Public Service Staff (“the Department”) or the Authority for consideration.
- If either the Department or the Authority find a provider in violation of the BP-DER they can take corrective actions, including requiring the modification of marketing and advertising materials, sales agreements and customer disclosure statements.



- If these corrective actions are not taken by the DER provider, the DER provider may be subject to the suspension from enrolling new customers in the Authority's Service territory and suspension of the ability to acquire customer data from the Authority.

### Financial Impacts – Solar Business Practices

This proposal is not expected to have any financial impact on the Authority. This proposal only addresses procedural rules and changes for DER providers.

## **Wireless Phone Contacts**

### Background – Wireless Phone Contacts

The Federal Communications Commission (“FCC”) issued a Declaratory Ruling on August 4, 2016<sup>10</sup> establishing guidelines for utilities’ use of wireless telephone numbers to communicate with customers.<sup>11</sup>

Calls closely related to utility service are defined as including “those that warn about planned or unplanned service outages; provide updates about service outages or service restoration; ask for confirmation of service restoration or information about lack of service; provide notification of meter work, tree trimming, or other field work that directly affects the customer’s utility service; notify consumers they may be eligible for subsidized or low-cost services due to certain qualifiers such as, e.g., age, low income or disability; and calls that provide information about potential brown-outs due to heavy energy usage.”<sup>12</sup>

### Proposed Action – Wireless Phone Contacts

The Authority Staff proposes to update the Tariff for Electric Service to include language notifying customers of their rights consistent with the FCC Declaratory Ruling. Specifically, Staff proposes to indicate to customers that by providing their wireless telephone number, they consent to being contacted at the provided telephone number for matters closely related to utility service (as defined in the FCC Declaratory Ruling and described above).

Related to this proposed Tariff change, the Authority’s Service Provider also intends to update company forms that request a contact telephone number to include a disclosure notifying customers who provide a wireless telephone number that by doing so they are consenting to be

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<sup>10</sup> *In the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991 Blackboard, Inc. Petition for Expedited Declaratory Ruling Edison Electric Institute and American Gas Association Petition for Expedited Declaratory Ruling*, CG Docket No. 02-278 (“In the absence of facts supporting a contrary finding, prior to the termination of a customer’s utility service, a customer who provided a wireless telephone number when he or she initially signed up to receive utility service, subsequently supplied the wireless telephone number, or later updated his or her contact information, is deemed to have given prior express consent to be contacted by their utility company for calls that are closely related to the service, and calls to warn about the likelihood that failure to make payment will result in service curtailment.”)

<sup>11</sup> *Ibid.*, FCC Declaratory Ruling at paragraph 32.

<sup>12</sup> *Ibid.*, FCC Declaratory Ruling at paragraph 30.

contacted on that number for matters closely related to utility service. Communications with customers is essential to providing safe, efficient and reliable electric service.

#### Financial Impacts – Wireless Phone Contacts

There are no financial impacts associated with this proposal.

#### 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:

##### **Changes to the smart meter opt-out proposal:**

- On LIPA Statement No. 1 – AMI, lowered the smart meter removal fee from \$110 to \$65.
- On LIPA Statement No. 1 – AMI, removed estimate of opt-out fee since it will not be implemented until 2023.

In addition, the Authority Staff introduced a proposal to create a separate Local Property Tax Charge for Transmission and Delivery Service, which would consolidate and separately identify all of the property tax Payments in Lieu of Taxes (“PILOTs”) on LIPA’s transmission and distribution system that are assessed on our customers. The Department of Public Service has recommended that this proposal be postponed pending further consideration. Accordingly, the Authority Staff is not requesting any action by the Board of Trustees on the Local Property Tax Charge proposal at this time.

#### Public Input

Public hearings were held on all both Tariff proposals on November 16, 2018 in Nassau and Suffolk Counties. No members of the public attended the public hearings.

Written comments were received from one stakeholder and are summarized here.

- Borrego Solar commented on the proposal to increase value stack compensation eligibility from 2,000 kilowatts to 5,000 kilowatts. Borrego pointed out that the PSC issued a related order on September 12, 2018, directing the investor-owned utilities to expand eligibility for value stack compensation to other technologies including standalone energy storage systems.

- Staff response: Staff is committed to integrating standalone energy storage systems into the electric grid and ensuring that they are duly compensated. PSEG Long Island is in the process of conducting a technical review of the expansion of value stack compensation eligibility to standalone energy storage systems and other technologies discussed in the September 12 PSC Order. As the technical review is still underway at the time of this writing, a recommendation to the Board at this time would be premature. We have set a target of bringing a formal recommendation on this proposal to the Board in March 2019 for an April 1 effective date.

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

<b><u>Exhibit A-1</u></b>	Resolution – Energy Efficient Lighting
<b><u>Exhibit A-2</u></b>	Tariff Redline – Energy Efficient Lighting
<b><u>Exhibit A-3</u></b>	Original Tariff Proposal – Energy Efficient Lighting
<b><u>Exhibit B-1</u></b>	Resolution – Storage Interconnection
<b><u>Exhibit B-2</u></b>	Tariff Redline – Storage Interconnection
<b><u>Exhibit B-3</u></b>	Original Tariff Proposal – Storage Interconnection
<b><u>Exhibit C-1</u></b>	Resolution – Value Stack Compensation Eligibility
<b><u>Exhibit C-2</u></b>	Tariff Redline – Value Stack Compensation Eligibility
<b><u>Exhibit C-3</u></b>	Original Tariff Proposal – Value Stack Compensation Eligibility
<b><u>Exhibit D-1</u></b>	Resolution – Smart Meter Opt-Out
<b><u>Exhibit D-2</u></b>	Tariff Redline – Smart Meter Opt-Out
<b><u>Exhibit D-3</u></b>	Original Tariff Proposal – Smart Meter Opt-Out
<b><u>Exhibit E-1</u></b>	Resolution – Solar Business Practices
<b><u>Exhibit E-2</u></b>	Tariff Redline – Solar Business Practices
<b><u>Exhibit E-3</u></b>	Original Tariff Proposal – Solar Business Practices
<b><u>Exhibit F-1</u></b>	Resolution – Wireless Phone Contacts
<b><u>Exhibit F-2</u></b>	Tariff Redline – Wireless Phone Contacts
<b><u>Exhibit F-3</u></b>	Original Tariff Proposal – Wireless Phone Contacts
<b><u>Exhibit G</u></b>	DPS Letter of Recommendation

**RECOMMENDATION FOR APPROVAL OF MODIFICATIONS TO LIPA'S TARIFF  
FOR ELECTRIC SERVICE RELATED TO ENERGY EFFICIENT LIGHTING**

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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 procuring cost-effective clean and renewable resources, including energy efficiency (the "Board Policy on Resource Planning"); and

**WHEREAS**, the proposal is consistent with the Board Policy on Resource Planning and would promote energy efficiency, decrease power supply costs for the Authority and its customers, and lower carbon emissions; 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 12, 2018, two public hearings were held in Nassau and Suffolk counties on November 16, 2018, 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 of the Board of Trustees hereby recommends approval of the proposed modifications to the Authority's Tariff to be effective January 1, 2019; and be it further

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

Dated: December 19, 2018

**VIII. SERVICE CLASSIFICATIONS (continued):****J. SERVICE CLASSIFICATION NO. 7****Outdoor Area Lighting:**  
**(Rate Code: 780)**1. Who Is Eligible

Customers who used this service for outdoor lighting before December 5, 1986, provided:

- a) Suitable overhead distribution facilities exist, except,
- b) When only one (1) span of overhead secondary cable per lighting fixture is needed. In such cases, the Authority will provide the cable on existing poles.

2. Character of Service

- a) Unmetered, single-phase, 60 hertz, alternating current supplied to Authority-owned, operated, and maintained lighting facilities, and
- b) Provided for approximately 4,210 hours per year (4,222 for a leap year), at suitable voltages chosen by the Authority, and
- c) Provided to mercury vapor and incandescent lighting facilities.

3. Rates and Chargesa) Rates per Mercury Vapor Facility per Month

<u>Type Luminaire</u>	<u>Approximate Lumens</u>	<u>Total Watts</u>	<u>Monthly Rates</u>
Area Light*	7,000	200	\$12.86
Area Light*	21,000	455	\$18.24
Flood Light*	21,000	455	\$19.90
Flood Light*	52,000	1,100	\$41.76

b) Rates per Incandescent Facility per Month

<u>Type Luminaire</u>	<u>Approximate Lumens</u>	<u>Total Watts</u>	<u>Monthly Rates</u>
Flood Light*	100 c.p.	92	\$5.26
Flood Light *	250 c.p.	189	\$8.97

\* These luminaires are no longer available for new installations or unit replacements.

c) Adjustments to Rates and Charges

Each Customer's bill will be adjusted for the Power Supply Charge, Increases in Rates and Charges to Recover PILOT Payments, the Shoreham Property Tax Settlement Rider, the Distributed Energy Resources Cost Recovery Rate, the New York State Assessment Factor, the Securitization Offset Charge, and the Delivery Service Adjustment.

## VIII. SERVICE CLASSIFICATIONS (continued):

## M. SERVICE CLASSIFICATION NO. 7A

**Outdoor Area Lighting - HPS (High Pressure Sodium) and MH (Metal Halide) and LED (Light Emitting Diode):**  
**(Rate Codes: 781, 782)**

1. Who Is Eligible

Customers who will use this service for outdoor lighting, provided:

- a) Suitable overhead distribution facilities exist, except
- b) When only one (1) span of overhead secondary cable per lighting fixture is needed. In such cases, the Authority will provide the cable on existing poles. Charges for additional cable and poles are given below.

2. Character of Service

- d) Unmetered, single-phase, 60 hertz, alternating current supplied to Authority-owned, operated, and maintained lighting facilities, and
- e) Provided for approximately 4,090 hours per year (4,102 for a leap year), at suitable voltages chosen by the Authority, and
- f) Provided to high pressure sodium (HPS), ~~and~~ metal halide (MH) and light emitting diode (LED) facilities.

3. Rates and Chargesa) Rates per Lighting Facility per Month

<u>Lamp Type</u>	<u>Type Luminaire</u>	<u>Approximate Lumens</u>	<u>Total Watts</u>	<u>Monthly Rates</u>
<del>High Pressure Sodium</del> <u>HPS</u> *	Area Light	6,400	108	\$18.70
<del>High Pressure Sodium</del> <u>HPS</u> *	Flood Light	27,500	309	\$22.94
<del>High Pressure Sodium</del> <u>HPS</u> *	Flood Light	50,000	476	\$30.48
<del>Metal Halide</del> <u>MH</u> *	Flood Light	36,000	453	\$31.01
<del>Metal Halide</del> <u>MH</u> *	Flood Light	110,000	1093	\$33.78
<del>High Pressure Sodium</del> <u>HPS</u> **	Full Cut-off	4,000	63	\$25.42
<del>High Pressure Sodium</del> <u>HPS</u> **	Full Cut-off	6,300	91	\$25.49
<del>High Pressure Sodium</del> <u>HPS</u>	Full Cut-off	9,500	128	\$25.85

| Long Island Power Authority

~~Ninth-Tenth~~ Revised Leaf No. 244

| ~~\*Commencing October 1, 2003, not available for new installations or replacements.~~

## VIII. SERVICE CLASSIFICATIONS (continued):

## M. SERVICE CLASSIFICATION NO. 7A

Outdoor Area Lighting - HPS (High Pressure Sodium) ~~and~~ MH (Metal Halide) ~~and~~ LED (Light Emitting Diode) (continued):

(Rate Codes: 781, 782)

Rates and Charges (continued):

Lamp Type	Type Luminaire	Approximate Lumens	Total Watts	Monthly Rates
<del>High Pressure</del>				
<del>Sodium</del> HPS**	Full Cut-off	<del>0</del> 28,500	<del>305</del>	\$28.97
<del>High Pressure</del>				
<del>Sodium</del> HPS**	Full Cut-off	<del>0</del> 50,000	<del>455</del>	\$37.32
<del>Metal Halide</del> MH**	Full Cut-off	<del>0</del> 20,500	<del>288</del>	\$29.12
<del>Metal Halide</del> MH**	Full Cut-off	<del>0</del> 36,000	<del>455</del>	\$37.32
LED	Full Cut-off	19,270	168	\$28.97
LED	Full Cut-off	29,100	255	\$37.32

\*Commencing October 1, 2003, not available for new installations or replacements.

\*\* Effective January 1, 2019 these luminaires are no longer available for new installations or unit replacements. Effective January 1, 2022, bulbs and photocells replacements for these luminaires will also no longer be available.

a) The charge for Additional Overhead Secondary Cable and Poles dedicated to the Customer is \$14.57 per span per month.

b) Adjustments to Rates and Charges

Each Customer's bill will be adjusted for the Power Supply Charge, Increases in Rates and Charges to Recover PILOT Payments, the Shoreham Property Tax Settlement Rider, the Distributed Energy Resources Cost Recovery Rate, the New York State Assessment Factor, the Securitization Offset Charge, and the Delivery Service Adjustment.

4. Minimum Charge

The monthly Minimum Charge is the facilities charge computed under the rates in 3 a), b) and c) above for the number of lighting facilities in place on the billing date.

5. Terms of Payment

The Customer shall pay the balance due in cash, including checks and money orders, on receiving the bill. Late payments shall be subject to Late Payment Charges.



**VIII. SERVICE CLASSIFICATIONS (continued):****M. SERVICE CLASSIFICATION NO. 7A**

**Outdoor Area Lighting - HPS (High Pressure Sodium) ~~and~~ MH (Metal Halide) ~~and~~ LED (Light Emitting Diode)** (continued):

**(Rate Codes: 781, 782)**

**Rates and Charges (continued):**

**6. Term of Service**

- a) The Term of Service is two (2) years, and the Authority will provide service to the Customer until service is terminated either by the Customer or the Authority.
- b) The Customer shall give the Authority five (5) days written notice when requesting termination of service, after two (2) years from the start of service.
- c) The Authority may terminate service to the Customer in accordance with the provisions of this Tariff.
- d) The Authority may terminate service immediately if, for any reason, the Authority is not able to maintain the lines needed to supply the facility or is unable to maintain the facility.

**VIII.SERVICE CLASSIFICATIONS (continued):****M. SERVICE CLASSIFICATION NO. 7A**

**Outdoor Area Lighting - HPS (High Pressure Sodium) ~~and~~ MH (Metal Halide) ~~and~~ LED (Light Emitting Diode)** (continued):

**(Rate Codes: 781, 782)**

**Term of Service (continued):**

- e) The Authority will terminate service to a location and remove the facilities if the Authority decides that a location is too costly because of damaged equipment, unless a satisfactory arrangement can be made between the Authority and the Customer.

**7. Special Provisions**

**a) Authority Furnished and Installed Fixtures**

The Authority will furnish and install the outdoor lighting fixtures if:

- (1) The Customer has assured the Authority that the service will be on a continuous and reasonably permanent basis, and

~~(2)~~ The Customer signs a contract agreeing to the terms of this service classification.

~~(2)(3)~~ For a Customer that would like to replace an existing HPS or MH fixture with an LED fixture may do so given they have already met their two year term of service (See VIII.M.6).

**b) Fixture Types and Their Locations**

- (1) Only fixtures approved by the Authority will be installed and maintained at Authority-approved locations.
- (2) The Authority will only locate facilities where they can be maintained with the use of its aerial vehicles, and
- (3) The Authority will relocate fixtures or replace a fixture with one of different design if the Customer pays in advance for the relocation or replacement.

**c) Service and Maintenance**

- (1) The Authority will service and maintain the equipment only during normal working hours, and
- (2) The Authority will replace burned out lamps after being notified by the Customer unless prevented by conditions outside the Authority's control, and
- (3) If there is a service interruption:
  - (a) The Authority will allow the Customer a facilities and energy credit for each 24-hour period the lighting facility is out of service, after being notified by the Customer, and
  - (b) If service is not restored within twenty-four (24) hours.

**II. SERVICE CLASSIFICATIONS (continued):****M. SERVICE CLASSIFICATION NO. 7A**

**Outdoor Area Lighting - HPS (High Pressure Sodium) and MH (Metal Halide) and LED (Light Emitting Diode) (continued):**

**(Rate Codes: 781, 782)**

**Special Provisions (continued):**

**d) Energy Delivery Points**

The Authority will supply electricity for lighting facilities at the following Energy Delivery Points:

- (1) For overhead-supplied lighting facilities, at the overhead secondary distribution lines on the utility pole, and
- (2) For underground-supplied lighting facilities:
  - (a) At the Authority's overhead secondary distribution lines if the Authority's system is overhead, or
  - (b) At a pull box, provided and installed by the Customer, not more than one (1) foot from a designated Authority-owned manhole or splicing chamber, if the Authority's system is underground.

**e) Notification Obligations of the Customer**

- (1) The Customer shall be responsible for notifying the Authority in writing within thirty (30) days of any changes to existing lighting fixtures, including the addition of new fixtures, the deletion of fixtures or any other type of change in facilities.
- (2) The Customer shall be responsible for notifying the Authority when a fixture needs to be repaired.
- (3) The Customer may receive an adjustment to their bill covering the period from two business days after the date the Authority is notified to the date the fixture is repaired.
- (4) Customers who do not report such changes to the Authority are not entitled to receive an adjustment to their bill.
- (5) Upon request by the Authority, the Customer shall complete an easement application for dedicated poles.

## **Proposal Concerning Modifications to LIPA's Tariff for Electric Service**

### **Requested Action:**

The Long Island Power Authority ("the Authority") staff proposes to revise the Electric Service Tariff to update the eligible lighting technologies under Service Classification No. 7A, Outdoor Area Lighting, to add efficient Light-Emitting Diode ("LED") lighting fixtures.

### **Background:**

Service Classifications ("SC") No. 7 and 7A offer rates and charges for outdoor area dusk to dawn lighting that is owned, operated, and maintained by the Authority on behalf of eligible customers. Under SC 7A there are two lighting technology types currently available: high-pressure sodium and metal halide. LED lighting has since undergone improvements in technology, declines in cost, and more widespread adoption for outdoor lighting use. Many utilities across the nation have been replacing existing lighting fixtures with those utilizing LED lighting technology. LED lighting has the potential for significant measureable customer savings due to the efficiency of LED lighting technology while also benefitting the environment.

### **Proposal:**

Effective January 1, 2019, the Authority Staff proposes to provide two LED lighting options in its Tariff for Electric Service under Service Classification SC No. 7A and phase out obsolete lighting technologies over a three-year period. By replacing these lights, the Authority will provide energy savings to customers and reduce greenhouse gas emissions.

The customer will benefit from an approximate 50% reduction in energy costs, will not be charged installation costs for the LED fixtures, and will experience no change in the customer's existing monthly base charges for an equivalent LED fixture.

Additionally, the Authority would like to carry out a three-year replacement program that will allow for existing, Authority-owned lighting fixtures within the service territory to be replaced with LED fixtures. Customers will be informed of the impending change to their fixture and be given the option to keep their existing fixture.

The Service Provider will also consider customer requests for LED replacement ahead of the planned implementation schedule. Any failed fixture or those that have met the end of their useful life and require replacement will be converted to LED fixtures, with one exception: the High Pressure Sodium 100 watt fixture will still be available for replacement since there is no equivalent LED currently available.

Authority Staff also proposes to update the Tariff to indicate that, effective January 1, 2019 existing Metal Halide and High Pressure Sodium fixtures (with the exception of the 100 watt High Pressure Sodium option) will no longer be available for replacement. Customers will be required to select from the other available fixture options (either one of the two LED fixtures or the High Pressure Sodium 100 watt fixture). Additionally, effective January 1, 2022, existing Metal Halide and High Pressure Sodium (with the exception of the 100 watt

High Pressure Sodium option) bulbs and photocells will also no longer be replaced. The affected fixtures will be replaced from one of our currently available fixture options.

As noted above, all customers will be given the option to keep their existing light fixture. However, customers with operating flood lights will be encouraged to accept early replacement of the existing flood lights with LED fixtures. The Authority has not installed new flood lights since 2003 and the existing flood lights on the system are aging. Customers with existing flood lights may choose to keep the functioning flood light, but the Authority will only replace bulbs in such lights for a maximum of three years (until December 31, 2022). After such time, upon failure, the flood light will be replaced with an LED fixture or the account will be closed.

**Financial Impacts:** The three-year project plan will entail the use of approximately \$16 million in capital to replace approximately 11,700 existing fixtures with their LED equivalent. As a result of the reduction in energy from the LED technology, savings will be passed along to customers in the Power Supply Charge. This project will provide an approximate Power Supply Charge savings to customers of \$57 per year for those who switch from an HPS 250 watt to the LED equivalent and \$84 per year for switching from a HPS 400 watt to the LED equivalent<sup>1</sup>. The approximate energy savings, assuming existing inventory gets fully replaced with LED technology would be 9,660 MWh equating to approximately \$483,000 in Power Supply Charge savings<sup>2</sup>. This project will also have an estimated annual operating and maintenance savings of \$300,000<sup>3</sup> due to the extended ten year life of the LED bulb technology.

**Affected Tariff Leaf:** 241, 244, 245, 246 and 247

**Summary of Proposed Changes:**

To update the Electric Service Tariff Service Classifications 7 and 7A to include LED lighting options, and include additional clarifying language with regard to the replacement of obsolete lighting.

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<sup>1</sup> The Power Supply Charge savings were based on a \$.10 cent per kWh charge.

<sup>2</sup> Ibid, assuming half of the power supply charge is based on variable costs.

<sup>3</sup> Current lighting repair budget is approximately \$500,000, however due to LED bulb life extension from four to ten years this would result in O&M savings per year. The actual savings could be higher in the first five years since all of the LED bulbs will be new.

**VIII. SERVICE CLASSIFICATIONS (continued):****J. SERVICE CLASSIFICATION NO. 7****Outdoor Area Lighting:**  
**(Rate Code: 780)**1. Who Is Eligible

Customers who used this service for outdoor lighting before December 5, 1986, provided:

- a) Suitable overhead distribution facilities exist, except,
- b) When only one (1) span of overhead secondary cable per lighting fixture is needed. In such cases, the Authority will provide the cable on existing poles.

2. Character of Service

- a) Unmetered, single-phase, 60 hertz, alternating current supplied to Authority-owned, operated, and maintained lighting facilities, and
- b) Provided for approximately 4,210 hours per year (4,222 for a leap year), at suitable voltages chosen by the Authority, and
- c) Provided to mercury vapor and incandescent lighting facilities.

3. Rates and Chargesa) Rates per Mercury Vapor Facility per Month

<u>Type Luminaire</u>	<u>Approximate Lumens</u>	<u>Total Watts</u>	<u>Monthly Rates</u>
Area Light*	7,000	200	\$12.86
Area Light*	21,000	455	\$18.24
Flood Light*	21,000	455	\$19.90
Flood Light*	52,000	1,100	\$41.76

b) Rates per Incandescent Facility per Month

<u>Type Luminaire</u>	<u>Approximate Lumens</u>	<u>Total Watts</u>	<u>Monthly Rates</u>
Flood Light*	100 c.p.	92	\$5.26
Flood Light *	250 c.p.	189	\$8.97

\* These luminaires are no longer available for new installations or unit replacements.

c) Adjustments to Rates and Charges

Each Customer's bill will be adjusted for the Power Supply Charge, Increases in Rates and Charges to Recover PILOT Payments, the Shoreham Property Tax Settlement Rider, the Distributed Energy Resources Cost Recovery Rate, the New York State Assessment Factor, the Securitization Offset Charge, and the Delivery Service Adjustment.

**VIII. SERVICE CLASSIFICATIONS (continued):****M. SERVICE CLASSIFICATION NO. 7A**

**Outdoor Area Lighting - HPS (High Pressure Sodium) and MH (Metal Halide) and LED (Light Emitting Diode):**  
**(Rate Codes: 781, 782)**

**1. Who Is Eligible**

Customers who will use this service for outdoor lighting, provided:

- a) Suitable overhead distribution facilities exist, except
- b) When only one (1) span of overhead secondary cable per lighting fixture is needed. In such cases, the Authority will provide the cable on existing poles. Charges for additional cable and poles are given below.

**2. Character of Service**

- d) Unmetered, single-phase, 60 hertz, alternating current supplied to Authority-owned, operated, and maintained lighting facilities, and
- e) Provided for approximately 4,090 hours per year (4,102 for a leap year), at suitable voltages chosen by the Authority, and
- f) Provided to high pressure sodium (HPS), ~~and~~ metal halide (MH) and light emitting diode (LED) facilities.

**3. Rates and Charges****a) Rates per Lighting Facility per Month**

<u>Lamp Type</u>	<u>Type Luminaire</u>	<u>Approximate Lumens</u>	<u>Total Watts</u>	<u>Monthly Rates</u>
<del>High Pressure Sodium HPS*</del>	Area Light	6,400	108	\$18.70
<del>High Pressure Sodium HPS*</del>	Flood Light	27,500	309	\$22.94
<del>High Pressure Sodium HPS*</del>	Flood Light	50,000	476	\$30.48
<del>Metal Halide MH*</del>	Flood Light	36,000	453	\$31.01
<del>Metal Halide MH*</del>	Flood Light	110,000	1093	\$33.78
<del>High Pressure Sodium HPS**</del>	Full Cut-off	4,000	63	\$25.42
<del>High Pressure Sodium HPS**</del>	Full Cut-off	6,300	91	\$25.49
<del>High Pressure Sodium HPS</del>	Full Cut-off	9,500	128	\$25.85

| Long Island Power Authority

~~Ninth-Tenth~~ Revised Leaf No. 244

| ~~\*Commencing October 1, 2003, not available for new installations or replacements.~~



**VIII. SERVICE CLASSIFICATIONS (continued):****M. SERVICE CLASSIFICATION NO. 7A****Outdoor Area Lighting - HPS (High Pressure Sodium) ~~and~~ MH (Metal Halide) ~~and~~ LED (Light Emitting Diode)** (continued):

(Rate Codes: 781, 782)

**Rates and Charges (continued):**

<u>Lamp Type</u>	<u>Type Luminaire</u>	<u>Approximate Lumens</u>	<u>Total Watts</u>	<u>Monthly Rates</u>
<del>High Pressure</del>				
<del>Sodium HPS**</del>	Full Cut-off	<del>0</del> 28,500	<del>305</del>	\$28.97
<del>High Pressure</del>				
<del>Sodium HPS**</del>	Full Cut-off	<del>0</del> 50,000	<del>455</del>	\$37.32
<del>Metal Halide MH**</del>	Full Cut-off	<del>0</del> 20,500	<del>288</del>	\$29.12
<del>Metal Halide MH**</del>	Full Cut-off	<del>0</del> 36,000	<del>455</del>	\$37.32
LED	Full Cut-off	19,270	168	\$28.97
LED	Full Cut-off	29,100	255	\$37.32

\*Commencing October 1, 2003, not available for new installations or replacements.\*\* Effective January 1, 2019 these luminaires are no longer available for new installations or unit replacements. Effective January 1, 2022, bulbs and photocells replacements for these luminaires will also no longer be available.

a) The charge for Additional Overhead Secondary Cable and Poles dedicated to the Customer is \$14.57 per span per month.

b) Adjustments to Rates and Charges

Each Customer's bill will be adjusted for the Power Supply Charge, Increases in Rates and Charges to Recover PILOT Payments, the Shoreham Property Tax Settlement Rider, the Distributed Energy Resources Cost Recovery Rate, the New York State Assessment Factor, the Securitization Offset Charge, and the Delivery Service Adjustment.

**4. Minimum Charge**

The monthly Minimum Charge is the facilities charge computed under the rates in 3 a), b) and c) above for the number of lighting facilities in place on the billing date.

**5. Terms of Payment**

The Customer shall pay the balance due in cash, including checks and money orders, on receiving the bill. Late payments shall be subject to Late Payment Charges.

**VIII. SERVICE CLASSIFICATIONS (continued):****M. SERVICE CLASSIFICATION NO. 7A**

**Outdoor Area Lighting - HPS (High Pressure Sodium) ~~and~~ MH (Metal Halide) ~~and~~ LED (Light Emitting Diode)** (continued):

**(Rate Codes: 781, 782)**

**Rates and Charges (continued):**

**6. Term of Service**

- a) The Term of Service is two (2) years, and the Authority will provide service to the Customer until service is terminated either by the Customer or the Authority.
- b) The Customer shall give the Authority five (5) days written notice when requesting termination of service, after two (2) years from the start of service.
- c) The Authority may terminate service to the Customer in accordance with the provisions of this Tariff.
- d) The Authority may terminate service immediately if, for any reason, the Authority is not able to maintain the lines needed to supply the facility or is unable to maintain the facility.

**VIII. SERVICE CLASSIFICATIONS (continued):****M. SERVICE CLASSIFICATION NO. 7A**

**Outdoor Area Lighting - HPS (High Pressure Sodium) ~~and~~ MH (Metal Halide) ~~and~~ LED (Light Emitting Diode)** (continued):

**(Rate Codes: 781, 782)**

**Term of Service (continued):**

- e) The Authority will terminate service to a location and remove the facilities if the Authority decides that a location is too costly because of damaged equipment, unless a satisfactory arrangement can be made between the Authority and the Customer.

**7. Special Provisions**

**a) Authority Furnished and Installed Fixtures**

The Authority will furnish and install the outdoor lighting fixtures if:

- (1) The Customer has assured the Authority that the service will be on a continuous and reasonably permanent basis, and

~~(2)~~ The Customer signs a contract agreeing to the terms of this service classification.

~~(2)~~(3) For a Customer that would like to replace an existing HPS or MH fixture with an LED fixture may do so given they have already met their two year term of service (See VIII.M.6).

**b) Fixture Types and Their Locations**

- (1) Only fixtures approved by the Authority will be installed and maintained at Authority-approved locations.
- (2) The Authority will only locate facilities where they can be maintained with the use of its aerial vehicles, and
- (3) The Authority will relocate fixtures or replace a fixture with one of different design if the Customer pays in advance for the relocation or replacement.

**c) Service and Maintenance**

- (1) The Authority will service and maintain the equipment only during normal working hours, and
- (2) The Authority will replace burned out lamps after being notified by the Customer unless prevented by conditions outside the Authority's control, and
- (3) If there is a service interruption:
  - (a) The Authority will allow the Customer a facilities and energy credit for each 24-hour period the lighting facility is out of service, after being notified by the Customer, and
  - (b) If service is not restored within twenty-four (24) hours.

**II. SERVICE CLASSIFICATIONS (continued):****M. SERVICE CLASSIFICATION NO. 7A**

**Outdoor Area Lighting - HPS (High Pressure Sodium) and MH (Metal Halide) and LED (Light Emitting Diode) (continued):**

**(Rate Codes: 781, 782)**

**Special Provisions (continued):**

**d) Energy Delivery Points**

The Authority will supply electricity for lighting facilities at the following Energy Delivery Points:

- (1) For overhead-supplied lighting facilities, at the overhead secondary distribution lines on the utility pole, and
- (2) For underground-supplied lighting facilities:
  - (a) At the Authority's overhead secondary distribution lines if the Authority's system is overhead, or
  - (b) At a pull box, provided and installed by the Customer, not more than one (1) foot from a designated Authority-owned manhole or splicing chamber, if the Authority's system is underground.

**e) Notification Obligations of the Customer**

- (1) The Customer shall be responsible for notifying the Authority in writing within thirty (30) days of any changes to existing lighting fixtures, including the addition of new fixtures, the deletion of fixtures or any other type of change in facilities.
- (2) The Customer shall be responsible for notifying the Authority when a fixture needs to be repaired.
- (3) The Customer may receive an adjustment to their bill covering the period from two business days after the date the Authority is notified to the date the fixture is repaired.
- (4) Customers who do not report such changes to the Authority are not entitled to receive an adjustment to their bill.
- (5) Upon request by the Authority, the Customer shall complete an easement application for dedicated poles.

**RECOMMENDATION FOR APPROVAL OF MODIFICATIONS TO LIPA'S TARIFF FOR ELECTRIC SERVICE RELATED TO ENERGY STORAGE INTERCONNECTION**

**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 procuring cost-effective clean and renewable resources, integrating cost-effective distributed energy production and storage technologies into the power supply portfolio, 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**, in its 2018 Utility 2.0 Plan, PSEG Long Island proposed developing grid scale and behind-the-meter energy storage programs; and

**WHEREAS**, in Case 18-E-0018 et al. *In the Matter of Proposed Amendments to the New York State Standardized Interconnection Requirements (SIR) for Small Distributed Generators*, the New York Public Service Commission issued an Order on Modifying Standardized Interconnection Requirements (issued April 19, 2018) (the "PSC Order"), which directs New York's investor owned utilities to update their interconnection procedures to accommodate energy storage systems together with other modifications; and

**WHEREAS**, the Authority Staff has proposed modifications consistent with the Board Policy on Resource Planning and the PSC Order; 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 12, 2018, two public hearings were held in Nassau and Suffolk counties on November 16, 2018, 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 of the Board of Trustees hereby recommends approval of the proposed modifications to the Authority's Tariff to be effective January 1, 2019; and be it further

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

Dated: December 19, 2018



**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, ~~2017~~2019

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## Section I. Application Process

### Section I.A. Introduction

The Smart Grid Small Generator Standardized Interconnection Procedures (“~~Smart Grid~~ 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 ~~aan~~ 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.~~ iii. Modifications to existing distributed generation facilities and/or ESS facilities with ~~aan~~ 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.
- ~~iii.~~ 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.
- ~~iv.~~ 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.

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

The application procedures set forth in Section I are organized to facilitate efficient review of potential interconnections to LIPA’s Distribution System. ~~These procedures~~ 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.

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

~~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)~~

~~The application procedures set forth below are primarily applicable to systems of 50 kW or less. However, applications for inverter based systems above 50 kW up to 300 kW may follow the expedited application process outlined below of the Smart Grid SGIP under the following circumstances:~~

- i. ~~Where an inverter-based system above 0 kW up to 300 kW has been certified and tested in accordance with UL 1741 and PSEG Long Island has approved the project accordingly.~~

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 ~~from~~ upon receipt of the original application submittal to determine ~~and 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, ~~inverter based 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. ~~For any system below 50 kW that If PSEG Long Island determines that the non-inverter based system is not eligible for the fast track or expedited application process (for example, if the system's inverter is not certified as compliant with UL1741), the applicant will proceed with the remaining steps of Section I.C (Systems above 50 kW up to 5 MW). If the applicant fails to submit the additional information to PSEG Long Island within thirty (30) Business Days following the date of PSEG Long Island's written notification, the application shall be deemed withdrawn and no further action on the part of PSEG Long Island is required.~~ can:

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

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. ~~Electronic signatures must meet the requirements for filing documents electronically with the Secretary of the NY Public Service Commission.~~ 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 ~~deemed withdrawn~~ 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 ~~accepted~~ application will be placed in ~~each~~ PSEG Long Island's interconnection inventory ~~upon PSEG Long Island's receipt of the Standardized Contract executed by the applicant, 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 ~~the~~ 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 ~~assuring~~ 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. ~~The~~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.

~~Applicants with inverter-based systems above 50 kW up to 300 kW, certified and tested in accordance with the most recent revision of UL 1741, are encouraged but not required to use the expedited application process (Section I.B) of the Smart Grid SGIP and may proceed with such process if approved pursuant to Section I.B.~~

### **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 ~~within three (3) Business Days following the initial communication.~~ 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. ~~Electronic signatures must meet the requirements for filing documents electronically with the Secretary of the NY Public Service Commission, 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.

~~An accepted application will be placed in PSEG Long Island's interconnection inventory upon PSEG Long Island's receipt of the Standardized Contract executed by the applicant. 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 diligently pursue final acceptance, PSEG Long Island may notify the applicant that the applicant's project will be removed from PSEG Long Island's interconnection inventory unless the applicant provides a project status update and justification as to why the project should remain in PSEG Long Island's interconnection inventory. PSEG Long Island's notification to the applicant shall be delivered by U.S. first class mail with delivery receipt confirmation, or other method that provides a receipt for delivery. 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 AP1 through FP8) 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 AP1 through FP8), 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 ~~or withdraw its application. The applicant may request one extension of no more than fifteen (15) Business Days to respond. If the applicant fails to notify PSEG Long Island of their decision within fifteen (15) Business Days of notification of the Preliminary Analysis results, or at the end of the extension, if one was requested, the Interconnection Request shall be removed from the queue and no further action on the part of PSEG Long Island is required. If the applicant does notify PSEG Long Island of its intention to accept the proposed upgrades and proceed with interconnection, PSEG Long Island will return a signed and executed Standardized Interconnection Contract to the applicant within fifteen (15) Business Days of receiving the notification.~~

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 GS1 through IS13) 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 GS1 through IS13), 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 ~~Analysis results meeting. The applicant shall notify PSEG Long Island within fifteen (15) Business Days following such notification indicating the intention of the applicant to accept the upgrades and proceed with the interconnection process or withdraw its application. The applicant may request one extension of no more than fifteen (15) Business Days to respond. If the applicant fails to notify PSEG Long Island of their decision within fifteen (15) Business Days of notification of the Preliminary Analysis results, or at the end of the extension, if one was requested, the Interconnection Request shall be deemed inactive and no further action on the part of PSEG Long Island will be required until positive confirmation is received. If the applicant does notify PSEG Long Island of its intention to accept the upgrades and proceed with interconnection, PSEG Long Island will return a signed and executed Standardized Interconnection Contract to the applicant within fifteen (15) Business Days of receiving the notification~~ Screening Analysis results. The applicant will pay the cost estimate as provided in Section D.

~~i.ii.~~ If the applicant chooses to proceed to a Supplemental Review results meeting and modifications that obviate the need for ~~Supplemental analysis~~ CESIR are not identified and agreed to, the applicant shall notify PSEG Long Island, within ten (10) business days of the meeting, of ~~their~~ the applicant's intention to proceed to a full CESIR or withdraw the ~~Interconnection Request application.~~ If the applicant fails to notify PSEG Long Island of ~~their~~ applicant's decision within thirty (30) ~~business days, the Interconnection Request~~ 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.

~~ii.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•,
- ~~iii.~~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 ~~LIPA System~~ 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.

~~For systems above 50 kW up to 5 MW, additional studies may often be required. A mutually agreed-upon schedule for a CESIR for these systems will not exceed an additional twenty (20) Business Days, or eighty (80) Business Days in total. Systems above 50 kW up to 300 kW are eligible for the Fast Track process.~~

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) Business Days.

PSEG Long Island is not required to procure any equipment or materials 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 ~~EOS~~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~~ Within sixty (60) Business Days after issuance of the formal letter of acceptance, PSEG Long Island shall prepare and submit to the applicant a final reconciliation ~~invoice~~ statement of its actual costs ~~minus the application fee~~ and advance payments made by the applicant. ~~The invoice shall be submitted within thirty (30) days of the later of the~~

~~completion~~ Within twenty (20) Business Days after delivery of the ~~accepted installation~~ or reconciliation statement, the ~~submission of final “as built” 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~~ the utility’s reconciliation. -The applicant may contest the reconciliation with ~~PSEG Long Island, the utility.~~ If ~~PSEG Long Island’s~~ 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 ~~PSEG Long Island, the utility~~ within thirty (30) business days or ~~PSEG Long Island, the utility~~ reserves the right to lock the generating system offline. -If ~~PSEG Long Island’s~~ the utility’s final reconciliation invoice states a reimbursement for overpayment to be paid by ~~PSEG Long Island, 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 receiving the payment, PSEG Long Island will provide the applicant, a signed New York State Standardized Interconnection Contract in the form of Appendix A

PSEG Long Island is not required to procure any equipment or materials 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.

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). 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.

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>3</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.

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<sup>3</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.

- ii. The study process shall determine the appropriate voltage level for the interconnection of the new distributed generation facilities.

**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 ~~\$350~~**\$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, ~~except that a net metering applicant may not be charged in excess of the cost of installing the dedicated transformer(s) or other safety equipment as specified in the LIPA Tariff.~~

**Section I.E.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) ~~Smart Grid~~ 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.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 <sup>2</sup> may <sup>2</sup> 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**

### **1. 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.

~~For additional PSEG Long Island technical requirements, please~~ 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.

#### ~~● Voltage Response~~

~~The required operating range for the generators shall be from +/- 5% of nominal voltage magnitude. For excursions outside these limits the protective device shall automatically initiate a disconnect sequence from the LIPA System as detailed in the most current version of IEEE STD 1547. Clearing time is defined as the time the range is initially exceeded until the generator owner's equipment ceases to energize the PCC and includes detection and intentional time delay. Other static or dynamic voltage functionalities shall be permitted as agreed upon by PSEG Long Island and the generator owner.~~

#### ~~● Frequency Response~~

~~The required operating range technical requirements for the generators shall be from 59.3 Hz to 60.5 Hz. For generators greater than 30 kW PSEG Long Island may request that the generator operate at frequency ranges below 59.3 Hz as defined in IEEE STD 1547. For excursions outside these limits the protective device shall automatically initiate a disconnect sequence from the LIPA System as detailed in the most current version of IEEE STD 1547. Clearing time is defined as the time the range is initially exceeded until the generator owner's equipment ceases to~~

~~energize the PCC and includes detection and intentional time delay. Other static or dynamic frequency functionalities shall be permitted as agreed upon by PSEG Long Island and the generator owner.~~

#### ~~● Reconnection to LIPA's Distribution System~~

~~If the generation facility is disconnected as a result of the operation of a protective device, the generator owner's equipment shall remain disconnected until the LIPA system's service voltage and frequency have recovered to acceptable voltage and frequency limits for a minimum of five (5) minutes. Systems greater than 25 kW that do not utilize inverter based interface equipment shall not have automatic recloser capability unless otherwise approved by PSEG Long Island. If PSEG Long Island determines that a facility must receive permission to reconnect, then any automatic reclosing functions must be disabled and verified to be disabled during verification testing.~~

## ~~2. Synchronous Generators~~

~~Synchronous generation shall require synchronizing facilities. These shall include automatic synchronizing equipment or manual synchronizing with relay supervision, voltage regulator, and power factor control.~~

~~For all synchronous generators sufficient reactive power capability shall be provided by the generator owner to withstand normal voltage changes on LIPA's system. The generator voltage VAR schedule, voltage regulator, and transformer ratio settings shall be jointly determined by PSEG Long Island and the generator owner to ensure proper coordination of voltages and regulator action. Generator owners shall have synchronous generator reactive power capability to withstand voltage changes up to 5% of the base voltage levels.~~

~~A voltage regulator must be provided and be capable of maintaining the generator voltage under steady state conditions within plus or minus 1.5% of any set point and within an operating range of plus or minus 5% of the rated voltage of the generator.~~

~~Generator owners shall adopt one of the following grounding methods for synchronous generators:~~

- ~~a) Solid grounding~~
- ~~b) High or low resistance grounding~~
- ~~c) High or low reactance grounding~~
- ~~d) Ground fault neutralizer grounding~~

~~Synchronous generators shall not be permitted to connect to LIPA secondary network systems without the approval of PSEG Long Island.~~

## ~~3. Induction Generators~~

~~Induction generation may be connected and brought up to synchronous speed (as an induction motor) if it can be demonstrated that the initial voltage drop measured at the PCC is acceptable based on current inrush limits. The same requirements also apply to induction generation connected at or near synchronous speed because a voltage dip is present due to an inrush of magnetizing current. The generator owner shall submit the expected number of starts per specific time period and maximum starting kVA draw data to PSEG Long Island. Starting or rapid load fluctuations on induction generators can adversely impact LIPA's system voltage. Corrective step-switched capacitors or other techniques may be necessary. These measures can, in turn, cause Ferro resonance. If these measures (additional capacitors) are installed on the customer's side of the PCC, PSEG Long Island will review these measures and may require the customer to install additional equipment.~~

#### **~~4. Inverters~~**

~~Direct current generation can only be installed interconnection of DG in parallel with LIPA's system using a synchronous inverter. The design shall be such as to disconnect this synchronous inverter upon a LIPA system interruption. Inverters intended to provide local grid support during system events that result in voltage and/or frequency excursions as described in Section II.B.1 shall be provided with the required onboard functionality to allow for the equipment to remain online for the duration of the event.~~

~~It is recommended that equipment meet all functional requirements of IEEE Standard 1547 and be protected by Utility Grade Relays (as defined in these requirements) using settings approved by PSEG Long Island and verified in the field. The field verification test must demonstrate that the equipment meets the voltage and frequency requirements detailed in this section.~~

~~Synchronization or re-synchronization of an inverter to the LIPA System shall not result in a voltage deviation that exceeds the requirements contained in Section II.E, Power Quality. Only inverters designed to operate in parallel with the LIPA System shall be utilized for that purpose.~~

#### **~~5. Minimum Protective Functions~~**

~~Protective system requirements for distributed generation facilities result from an assessment of many factors, including but not limited to:~~

- ~~• Type and size of the distributed generation facility~~
- ~~• Voltage level of the interconnection~~
- ~~• Location of the distributed generation facility on the circuit~~
- ~~• Distribution transformer~~
- ~~• Distribution system configuration~~
- ~~• Available fault current~~
- ~~• Load that can remain connected to the distributed generation facility under isolated conditions~~
- ~~• Amount of existing distributed generation on the local distribution system.~~

~~As a result, protection requirements cannot be standardized according to any single criteria.~~

~~Minimum protective function requirements shall be as detailed in the table below. ANSI C37.2, Electric Power System Device Function Numbers, are listed with each function. All voltage, frequency, and clearing time set points shall be field-adjustable.~~

<del>Synchronous Generators</del>	<del>Induction Generators</del>	<del>Inverters</del>
<del>Over/Under Voltage (Function 27/5-9)</del>	<del>Over/Under Voltage (Function 27/59)</del>	<del>Over/Under Voltage (Function 27/59)</del>
<del>Over/Under Frequency (Function 81O/81U) ———</del>	<del>Over/Under Frequency (Function 81O/81U)</del>	<del>Over/Under Frequency (Function 81O/81U)</del>
<del>Anti-Islanding Protection</del>	<del>Anti-Islanding Protection</del>	<del>Anti-Islanding Protection</del>
<del>Overcurrent (Function 50P/50G/51P/51G)</del>	<del>Overcurrent (Function 50P/50G/51P/51G)</del>	<del>Overcurrent (Function 50P/50G/51P/51G)</del>

~~The need for additional protective functions shall be determined by PSEG Long Island on a case-by-case basis. If PSEG Long Island determines a need for additional functions, it shall notify the generator owner in writing of the requirements. The notice shall include a description of the specific aspects of LIPA's system that necessitate the addition, and an explicit justification for the necessity of the enhanced capability. PSEG Long Island shall specify and provide settings for those functions that PSEG Long Island designates as being required to satisfy protection practices. Any protective equipment or setting specified by PSEG Long Island shall not be changed or modified at any time by the generator owner without written consent from PSEG Long Island.~~

~~The generator owner shall be responsible for ongoing compliance with all applicable local, state, and federal codes and standardized interconnection requirements set forth in Section II herein, as they pertain to the interconnection of the generating equipment. Protective devices shall utilize their own current transformers and potential transformers and not share electrical equipment associated with PSEG Long Island revenue metering.~~

~~A failure of the generator owner's protective devices, including loss of control power, shall open the automatic disconnect device, thus disconnecting the generation from the LIPA System. A generator owner's protection equipment shall utilize a non-volatile memory design such that a loss of internal or external control power, including batteries, will not cause a loss of interconnection protection functions or loss of protection set points.~~

~~All interface protection and control equipment shall operate as specified independent of the calendar date.~~

## **~~6. Metering~~**

~~The need for additional revenue metering or modifications to existing metering will be reviewed by PSEG Long Island on a case-by-case basis.~~

~~Any incremental metering costs are included in interconnection costs that may be required of an applicant, except where the Tariff specifies the cost responsibilities for net metered customers.~~

## **~~7. Islanding~~**

~~Systems must be designed and operated so that islanding is not sustained on LIPA's distribution circuits or on substation bus and transmission systems. The requirements listed in this document are designed and intended to prevent islanding. Special protection schemes and system modifications may be necessary based on the capacity of the proposed system and the configuration and existing loading on the subject circuit.~~

~~The need for zero sequence voltage (3Vo) and direct transfer trip (DTT) protection schemes shall be based on 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 [LINK TO BE PROVIDED].

## **Section II.-C. Operating Requirements**

~~The generator owner shall provide a 24-hour telephone contact. This contact will be used by PSEG Long Island to arrange access for repairs, inspection or emergencies. PSEG Long Island will make such arrangements (except for emergencies) during normal business hours.~~

~~Voltage and frequency trip set point adjustments shall be accessible to service personnel only. Any changes to these settings must be reviewed and approved by PSEG Long Island.~~

~~The generator owner shall not supply power to PSEG Long Island during any outages of LIPA's system that serves the PCC. The generator owner's generation may be operated during such outages only with an open tie to PSEG Long Island. Islanding will not be permitted. The generator owner shall not energize a de-energized PSEG Long Island circuit for any reason.~~

~~The disconnect switch specified for system size larger than 25kW and non-inverter based systems of 25 kW or less in Section II.E, Disconnect Switch, may be opened by PSEG Long Island at any time for any of the following reasons:~~

- ~~a. To eliminate conditions that constitute a potential hazard to PSEG Long Island or LIPA personnel or the general public;~~
- ~~b. Pre-emergency or emergency conditions on the LIPA System;~~
- ~~c. A hazardous condition is revealed by a PSEG Long Island inspection;~~
- ~~d. Protective device tampering;~~
- ~~e. Parallel operation prior to PSEG Long Island approval to interconnect.~~

~~The disconnect switch may be opened by PSEG Long Island for the following reasons, after notice to the responsible party has been delivered and a reasonable time to correct (consistent with the conditions) has elapsed:~~

- ~~a. A generator owner has failed to make available records of verification tests and maintenance of its protective devices;~~
- ~~b. A generator owner's system adversely impacts the operation of LIPA equipment or equipment belonging to other customers;~~
- ~~c. A generator owner's system is found to adversely affect the quality of service to adjoining customers.~~

~~PSEG Long Island will provide a name and telephone number so that the generator owner can obtain information about PSEG Long Island's lock-out.~~

~~The generator owner shall be allowed to disconnect from PSEG Long Island without prior notice in order to self-generate.~~

~~If a generator owner proposes any modification to the system that has an impact on the interface at the PCC after it has been installed and a contract between LIPA and the generator owner has~~

~~already been executed, then any such modifications must be reviewed and approved by PSEG Long Island before the modifications are made.~~

#### **~~Section II. D. Dedicated Transformer~~**

~~PSEG Long Island reserves the right to require a power-producing facility to connect to the LIPA System through a dedicated transformer. The transformer shall either be provided by PSEG Long Island at the generator owner's expense purchased from PSEG Long Island, or conform to PSEG Long Island's specifications. The transformer may be necessary to ensure conformance with PSEG Long Island safe work practices, to enhance service restoration operations or to prevent detrimental effects to other PSEG Long Island customers. The transformer that is part of the normal electrical service connection of a generator owner's facility may meet this requirement if there are no other customers supplied from it. A dedicated transformer is not required if the installation is designed and coordinated with PSEG Long Island to protect the PSEG Long Island System and its customers adequately from potential detrimental net effects caused by the operation of the generator.~~

~~If PSEG Long Island determines a need for a dedicated transformer, it shall notify the generator owner in writing of the requirements. The notice shall include a description of the specific aspects of the LIPA System that necessitate the addition, the conditions under which the dedicated transformer is expected to enhance safety or prevent detrimental effects, and the expected response of a normal, shared transformer installation to such conditions.~~

#### **~~Section II. E. Disconnect Switch~~**

~~Generating equipment with equipment size larger than 25 kW and non-inverter based systems of 25 kW or less shall be capable of being isolated from the LIPA System by means of an external, manual, visible, gang-operated, load break disconnecting switch. The disconnect switch shall be installed, owned, and maintained by the customer-generator, and located between the generating equipment and its interconnection point with the LIPA System.~~

~~The disconnect switch must be rated for the voltage and current requirements of the installation. The basic insulation level (BIL) of the disconnect switch shall be such that it will coordinate with that of LIPA's equipment. Disconnect devices shall meet applicable UL, ANSI, and IEEE standards, and shall be installed to meet all applicable local, state, and federal codes. (Applicable Local City Building Code may require additional certification.)~~

~~The disconnect switch shall be clearly marked, "Generator Disconnect Switch," with permanent 3/8 inch or larger letters or larger.~~

~~The disconnect switch shall be located within 10 feet of PSEG Long Island's external electric service meter. If such location is not possible, the customer-generator will propose, and PSEG Long Island will approve, an alternate location. The location and nature of the disconnect switch shall be indicated in the immediate proximity of the electric service entrance. The disconnect switch shall be readily accessible for operation and locking by PSEG Long Island personnel in accordance with Section II.B, Operating Requirements. The disconnect switch must be lockable in the open position with a 3/8" shank LIPA padlock.~~

~~For installations above 600V or with a full load output of greater than 960A, a draw-out type circuit breaker with the provision for padlocking at the draw-out position can be considered a disconnect switch for the purposes of this requirement unless the use of such a circuit breaker is specifically granted by PSEG Long Island, based on site-specific technical requirements. If PSEG Long Island grants such use, the generator owner will be required, upon PSEG Long Island's request, to provide qualified operating personnel to open the draw-out circuit breaker and ensure isolation of the DG system, with such operation to be witnessed by PSEG Long Island followed immediately by PSEG Long Island locking the device to prevent re-energization. In an emergency or outage situation, where there is no access to the draw-out breaker or no qualified personnel, utilities may disconnect the electric service to the premise in order to isolate the DG system.~~

### **Section II. F. Power Quality**

~~The maximum harmonic limits for electrical equipment shall be in accordance with IEEE 519 to limit the maximum individual frequency voltage harmonic to 3% of the fundamental frequency and the voltage Total Harmonic Distortion (THD) to 5% on LIPA's side of the PCC. Mitigation measures necessary to comply with these requirements shall at the generator owner's expense. In addition, any voltage fluctuation resulting from the connection of the customer's energy producing equipment to LIPA's system must not exceed the limits defined by the maximum permissible voltage fluctuations border line of visibility curve identified in IEEE STD 519. This requirement is necessary to minimize the adverse voltage effect upon other customers on the LIPA System.~~

### **Section II. G. Power Factor**

~~The Small Generator shall maintain an average power factor, as measured at the PCC, of no less than 0.9 (leading or lagging). The method of power factor correction necessitated by the installation of the generator will be negotiated with PSEG Long Island as a commercial item. If the average power factor of the generator is proven to be above the minimum of 0.9 (leading or lagging) by the customer and accepted by PSEG Long Island, that power factor value shall be used for any further PSEG Long Island design calculations and requirements.~~

~~Induction power generators may be provided VAR capacity from LIPA's system at the generator owner's expense. The installation of VAR correction equipment by the generator owner on the generator owner's side of the PCC must be reviewed and approved by PSEG Long Island prior to installation.~~

### **Section II. H. Equipment Certification**

~~In order for the equipment to be acceptable for interconnection to the LIPA System without additional protective devices, the interface equipment must be equipped with the minimum protective function requirements listed in the table in Section II.A. 5 and be tested by a Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration (OSHA) in compliance with Underwriter's Laboratories (UL) 1741, Inverters, Converters, Controllers and **Interconnection System Equipment for Use With Distributed Energy Resources.** **Inventory**~~



~~For each interconnection application, documentation including the proposed equipment certification, stating compliance with UL 1741 by an NRTL, shall be provided by the applicant to PSEG Long Island. Supporting information from the Public Service Commission's website (<http://www.dps.state.ny.us/distgen.htm>), an NRTL website or UL's website stating compliance is acceptable for documentation.~~

~~PSEG Long Island is not responsible for reviewing and approving equipment tested and certified by a non-NRTL.~~

~~If equipment is UL 1741 certified by NRTL and compliance documentation is submitted to PSEG Long Island, PSEG Long Island shall accept such equipment for interconnection in New York State. All equipment certified to UL 1741 by an NRTL shall be deemed "certified equipment" even if it does not appear on the Public Service Commission's website.~~

~~Utility Grade Relays need not be certified per the requirements of this section.~~

## **~~Section II. I. Verification Testing~~**

~~All interface equipment must include a verification test procedure as part of the documentation presented to PSEG Long Island. Except for the case of small single-phase inverters as discussed later, the verification test must establish that the protection settings meet the Smart Grid SGIP requirements. The verification testing may be site-specific and is conducted periodically to assure continued acceptable performance.~~

~~Upon initial parallel operation of a generating system, or any time interface hardware or software is changed, the verification test must be performed. A qualified individual must perform verification testing in accordance with the manufacturer's published test procedure. Qualified individuals include professional engineers, factory-trained and certified technicians, and licensed electricians with experience in testing protective equipment. PSEG Long Island reserves the right to witness verification testing or require written certification that the testing was successfully performed.~~

~~Verification testing shall be performed at least once every four years. All verification tests prescribed by the manufacturer shall be performed. If wires must be removed to perform certain tests, each wire and each terminal must be clearly and permanently marked. The generator owner shall maintain verification test reports for inspection by PSEG Long Island.~~

~~Single-phase inverters and inverter systems rated 25 kW and below shall be verified upon initial parallel operation and once every four years as follows: the generator owner shall interrupt PSEG Long Island's source and verify that the equipment automatically disconnects and does not reconnect for at least five minutes after PSEG Long Island's source is reconnected. The owner shall maintain a log of these operations for inspection by PSEG Long Island. Any system that depends upon a battery for trip power shall be checked and logged at least annually for proper voltage. Once every four (4) years the battery must be either replaced or a discharge test performed.~~

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.

**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 ~~utilities~~ 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.

**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:** ~~Any entity including The owner of the Transmission Owner Unit or any of the affiliates or subsidiaries of either, that entity that~~ proposes to interconnect ~~its Small Generator~~ with ~~LIPA's~~ LIPA's Distribution System.

~~**Interconnection Facilities:** LIPA's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generator and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generator to LIPA's electric system. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Network Upgrades or System Upgrade Facilities.~~

**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

**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/~~File~~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 Service 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

## APPENDIX A

arrangement, or any successor or assignee thereof providing certain operation, maintenance and other services to LIPA.

"Unit" means the distributed generation ~~Unit 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 ~~generating~~ capacity. The nameplate generating and energy storage capacity of the Unit shall not exceed 5 MW in aggregate.

### 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 ~~customer~~Interconnection Customer at least sixty (60) days' prior written notice, terminate this Agreement for cause. The Interconnection Customer's non-compliance with ~~an upgrade~~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.

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### 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 applicant's Interconnection Customer's facility will be allowed to commence parallel operation upon satisfactory completion of the verification test. The applicant 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 SIRSGIP, 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 applicant Interconnection Customer a formal letter of acceptance for interconnection, or may request that the applicant 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

## APPENDIX A

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 customersuch installations generally.

**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. ~~All~~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 aan 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.

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### 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.

**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 ~~aan~~ 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), ~~PSEG-Long Island~~ 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



## APPENDIX A

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 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, ~~a~~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.



**APPENDIX A**

**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.

**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 Servco 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**

**LONG ISLAND LIGHTING COMPANY D/B/A LIPA  
STANDARDIZED 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** \_\_\_\_\_

**APPENDIX B**

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) \_\_\_\_\_

**Solar Panel Information:**

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

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

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

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

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

~~Inverter Efficiency: \_\_\_\_\_ %~~

~~Potential Panel Net~~

**Energy Storage System Information:**

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

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

**Total Output \_\_\_\_\_ kW 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 ~~lesser of Potential Panel Net Total Output or~~ Total Rating of All  
 Inverters)

~~Type: \_\_\_\_\_ ( ) Forced Commutated ( ) Line Commutated~~

**APPENDIX B**

( ) Utility Interactive ( ) Stand Alone

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

~~Equipment Type Tested Output Connection:~~ Ramp Rate: \_\_\_\_\_

Method of Grounding: ( ) Grounded ( ) Ungrounded

~~( ) Delta ( ) Wye ( ) Wye Grounded~~

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

**Applicable Attachments:**

Detailed One Line Diagram attached ( ) Yes

If applicable, NRTL/UL 1741 Certification attached: ( ) Yes

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**

**LONG ISLAND LIGHTING COMPANY D/B/A LIPA  
STANDARDIZED 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 ( $X_d$ ): \_\_\_\_\_ ohmsRevised Jan 2019

**APPENDIX C**Direct-axis Transient Reactance ( $X'd$ ) : \_\_\_\_\_ ohmsDirect-axis Sub-transient Reactance ( ~~$X''d$~~  :  $X'd$ ) : \_\_\_\_\_ ohms**For Induction Machines:**Rotor Resistance ( ~~$R_r$~~ ) : \_\_\_\_\_ ohms      Exciting Current : \_\_\_\_\_ AmpsRotor 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 ( $X_s$ ) : \_\_\_\_\_ ohmsShort 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****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****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.

Generator Type	Generator Size	Equipment Cost to <b>Residential</b> Net Metered Customers	Equipment Cost to <b>Non-Residential</b> Net Metered Customers
Micro-CHP	Less than or equal to 10 kW	\$350 maximum	N/A
Fuel Cell	Less than or equal to 10 kW	\$350 maximum	As determined by Utility*
Fuel Cell	Over 10 kW up to 2MW	N/A	As determined by Utility*
Solar	Less than or equal to 25 kW	\$350 maximum	\$350 maximum
Solar	Over 25 kW up to 2 MW	N/A	As determined by Utility*
Micro-hydroelectric	Less than or equal to 25 kW	\$350 maximum	As determined by Utility*
Micro-hydroelectric	Over 25 kW up to 2 MW	N/A	As determined by Utility*
Wind **	Less than or equal to 25 kW	\$750 maximum	\$750 maximum
Wind	Over 25 kW up to 2 MW	N/A	As determined by Utility*
Farm Wind ***	Over 25 kW up to 500 kW	N/A	\$5,000 maximum***
Farm Waste ***	Up to 1 MW	N/A	\$5,000 maximum***

**APPENDIX F****APPLICATION PACKAGE 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

## PRELIMINARY SCREENING ANALYSIS

**Screen A: Is the PCC on a Networked Secondary System?**

~~Does the proposed system connect~~Please refer ~~to a secondary network system?~~

- If yes (fail),
- If no (pass), continue to Screen B.

**Screen B: Is Certified Equipment Used?**

~~Does the~~PSEG Long Island's Smart Grid Small Generator ~~Interconnection Request propose to~~  
~~use equipment that has been listed to meet UL1741 (Inverters, Converters~~Technical  
~~Requirements and Charge Controllers~~Screening Criteria ~~for Use~~Operating ~~in Independent Power~~  
~~Systems) by a nationally recognized testing laboratory?~~

- If yes (pass), continue to Screen C.
- If no (fail)

**Screen C: Is the Electric Power System (EPS) Rating Exceeded?**

~~Do the maximum aggregated Gross Ratings for all the Generating Facilities connected to an EPS~~  
~~exceed any EPS rating, modified per established~~Parallel with LIPA's ~~Distribution Provider~~  
~~practice, absent any Generating Facilities?~~

- If yes (fail),
- If no (pass), continue to Screen D.

**Screen D: Is the Line Configuration Compatible with the Interconnection Type?**

~~Line Configuration Screen: Identify primary distribution line configuration that will serve the~~  
~~Generating Facility. Based on the type of Interconnection to be used for the Generating Facility,~~  
~~determine from the table below if the proposed Generating Facility passes the Screen.~~

- If yes (pass), continue to Screen E.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result / Criteria
Three-phase, three wire, > 5 kV	3-phase	Pass
Three-phase, four wire, >5 kV	Effectively-grounded 3 phase	Pass
All	Single phase, phase- phase, or ineffectively grounded sources or transformers	Fail

## APPENDIX G

### ~~Screen E: Simplified Penetration Test~~

~~Is the aggregate Generating facility capacity on the Line Section less than 15% of the annual peak load for all Line Sections bounded by automatic sectionalizing devices?~~

- ~~• If yes (pass), continue to Screen F.~~
- ~~• If no (fail), Supplemental Review is required, continue to Screen F.~~

### ~~Screen F: Simplified Voltage Fluctuation Test~~

~~In aggregate with existing generation on the Line Section~~

~~a. Can the Generating Facility parallel with the Distribution Provider's Distribution System without causing a voltage fluctuation at the PCC greater than 5% of the prevailing voltage level of the Distribution System at the PCC?~~

- ~~• If yes (pass), System for Preliminary Screening Analysis is complete. [LINK TO BE PROVIDED]~~
- ~~• If no (fail), Supplemental Review is required~~

## SUPPLEMENTAL SCREENING ANALYSIS

### ~~Screen G: Supplemental Penetration Test~~

~~Where 12 months of line section minimum load data is available, can be calculated, can be estimated from existing data, or determined from a power flow model, is the aggregate Generating Facility capacity on the Line Section less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the Generating Facility?~~

- ~~• If yes (pass), continue to Screen H.~~
- ~~• If no (fail), a quick review of the failure may determine the requirements to address the failure; otherwise the Interconnecting Customer may be required go on to the Coordinated Electric System Interconnection Review (CESIR) process. Continue to Screen H.~~

### ~~Screen H: Power Quality and Voltage Tests~~

~~In aggregate with existing generation on the Line Section,~~

~~a. Can it be determined within the Supplemental Review that the voltage regulation on the line section can be maintained in compliance with current voltage regulation requirements under all system conditions?~~

~~b. Can it be determined within the Supplemental Review that the voltage fluctuation is within acceptable limits as defined by IEEE 1453 or utility practice similar to IEEE1453?~~

~~c. Can it be determined within the Supplemental Review that the harmonic levels meet IEEE519 limits at the Point of Common Coupling (PCC)?~~

- ~~• If yes to all of the above (pass), continue to Screen I.~~
- ~~• If no to any of the above (fail), a quick review of the failure may determine the requirements to address the failure; otherwise the Interconnecting Customer may be required go on to the Coordinated Electric System Interconnection Review (CESIR) process. Continue to Screen I.~~

**APPENDIX G****~~Screen I: Safety and Reliability Tests~~**

~~Does the location of the proposed Generating Facility or the aggregate generation capacity on the Line Section creates specific impacts to safety or reliability that cannot be adequately addressed without a detailed study?~~

- ~~• If yes (fail), a quick review of the failure may determine the requirements to address the failure; otherwise the Interconnecting Customer will be provided with information on the specific points of failure in the supplemental review results and may go to the Coordinated Electric System Interconnection Review (CESIR) process.~~
- ~~• If no (pass), Supplemental Review is complete.~~

## APPENDIX H

### ~~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.~~

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## APPENDIX F

**~~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.~~

**APPENDIX ~~H~~P1**

- ~~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.~~
- ~~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.~~



**APPENDIX ~~H~~P1**

~~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.~~

~~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~~

**APPENDIX H****P1**

~~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 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~~

**APPENDIX ~~H~~P1**

~~Customer's Application under Section H.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~~

**APPENDIX ~~H~~P1**

~~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 H.A.9 of the PSEG Long Island Small Generator Interconnection Procedures.~~

~~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 ~~12~~P2**

**~~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 J4Q1****~~System Impact 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 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

**APPENDIX J4Q1**

~~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.~~

~~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.~~

**APPENDIX J4Q1**

- ~~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 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 of 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~~



**APPENDIX J4Q1**

~~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,~~

**APPENDIX J4Q1**

~~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~~

**APPENDIX J4Q1**

~~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 H.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 ~~J2Q2~~****~~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 ~~K1R1~~****~~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 Distributor 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~~

**APPENDIX ~~K1R1~~**

~~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.~~

~~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~~

**APPENDIX ~~K1R1~~**

~~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.~~

~~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~~

**APPENDIX K1R1**

~~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 Generator 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.~~

~~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.~~



**APPENDIX ~~K1R1~~**

~~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 H.A.9 of the PSEG Long Island Small Generator Interconnection Procedures.~~

**APPENDIX ~~K1R1~~**

~~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 G

~~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 G**

~~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 \_\_\_\_\_ Date: \_\_\_\_\_  
receive back feed power~~

~~Generation Testing \_\_\_\_\_ Date: \_\_\_\_\_~~

~~Commercial Operation \_\_\_\_\_ Date: \_\_\_\_\_~~

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.[ LINK TO BE PROVIDED].

**APPENDIX K2****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

**APPENDIX H**

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

\_\_\_\_\_ [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 / 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.
- 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. 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. Indicate whether the ES and DG system inverter(s)/converter(s) are DC-coupled or AC-coupled.
- n. 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. 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. 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. 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 M****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.

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

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

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

## APPENDIX L

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

**APPENDIX M**  
**INTERCONNECTION AGREEMENT**  
**FOR A SYSTEM**  
**GREATER THAN 5 MW AND -LESS THAN10 MW**

**INTERCONNECTION AGREEMENT**  
**FOR A SYSTEM**  
**GREATER THAN 5 MW AND -LESS THAN10 MW**  
**AT [ADDRESS]**

**BETWEEN**

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

**AND**

**[PARTY NAME]**

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**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

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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.

**“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.

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**“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.

**“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

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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.**

**“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.

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**“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.

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

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**“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 Service 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.

**ARTICLE 2**  
**TERM**

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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 ~~five (5)~~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 ~~twentieth (20) Business Day~~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

~~Fax: (516) 545-6134~~

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  
~~Fax: (516) 222-9137~~

- ii. Generator:  
[NAME]  
[ADDRESS]



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Attention:

Fax: \_\_\_\_\_

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

**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.



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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 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.

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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 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

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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 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

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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 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:

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- (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 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.

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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

(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



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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.

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.



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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

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action at law or in equity to seek enforcement, interpretation or remedy of any breach of this Agreement.

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

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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. 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.

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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.

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.

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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.

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:

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(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 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



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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.

**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

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(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.

**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  
~~Fax: (516) 222-9137~~

With a copy to:  
 Long Island Power Authority



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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  
~~Fax: (516) 545-6134~~

To Generator:

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

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

**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

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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.

**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

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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 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.

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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 (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.

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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.

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.

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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 SERVCO 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**

**Interconnection Guide**

The Interconnection Facilities shall be subject to the interconnection standards provided in the ~~“Requirements for Generating Facility”~~ “Smart Grid Small Generator Interconnection to the LIPA Transmission System.”~~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**

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 Facility Interconnection Facilities interconnection to the LIPA Transmission System.”

Add other procedures 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 ~~in accordance with NPCC Document A-4, "Minimum Maintenance Criteria for Protective Systems."~~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.

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- (f) Relays have been tested at pick-up and three multiples of minimum pick-ups (e.g., three, five, and eight times).

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 LIPA's then-currentthe latest maintenance ~~procedures and~~ Good Utility Practice.intervals in NERC PRC-005 or any applicable reliability requirements.

Add other procedures 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 progress billed in three (3) equal installments. Estimated costs are subject to a final reconciliation which required during construction and any excess will be reconciled and invoiced upon completion of all work and final accounting of all costs.

## **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 as applicable.

**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.

## APPENDIX P1

- 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.
- 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.



## APPENDIX P1

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.

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

## APPENDIX P1

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 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

## APPENDIX P1

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

**APPENDIX P1**

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.

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 P2

### 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****System Impact 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 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

## APPENDIX Q1

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.

- 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.

## APPENDIX Q1

- 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 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



## APPENDIX Q1

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,

## APPENDIX Q1

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

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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 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

### 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****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

## APPENDIX R1

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.

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

## APPENDIX R1

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.

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

## APPENDIX R1

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 Generator Interconnection 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.
- 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.



## APPENDIX R1

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.

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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 ~~MR2~~**  
**INTERCONNECTION AGREEMENT**  
**FOR A SYSTEM**  
**~~GREATER THAN 5 MW AND LESS THAN 10 MW~~**

**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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**APPENDIX ~~MR2~~**  
**INTERCONNECTION AGREEMENT**  
**FOR A SYSTEM**  
**~~GREATER THAN 5 MW AND LESS THAN 10 MW~~**

Bus length from generation to interconnection station:

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Line length from interconnection station to LIPA's System.

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

---

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      Date:  
receive back feed power

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 (“Staff”) proposes to modify the Authority’s Tariff for Electric Service (the “Tariff”) effective January 1, 2019 to reflect, as appropriate, the New York Public Service Commission (the “Commission”)’s *Order Modifying Standardized Interconnection Requirements* (the “SIR Order”)<sup>1</sup>. These changes will be incorporated into the PSEG Long Island Smart Grid Small Generator Interconnection Procedures (SGIP).

### **Background:**

As part of the *Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters* (the “VDER Order”)<sup>2</sup>, the Commission directed Department of Public Service Staff to meet with stakeholders regarding integrating energy storage systems (ESS) into the interconnection process and for extending “Value Stack” compensation under VDER Tariffs to projects larger than 2 MW. Two working groups were formed, the Interconnection Policy Working Group (IPWG) and the Interconnection Technical Working Group (ITWG) among other forums to suggest proposed changes to the SIR. PSEG Long Island attended ITWG meetings along with the other utilities.

### **Proposal:**

Staff proposes to modify the SGIP and Standardized Contract for Interconnection (Appendix A of the SGIP), addendums to the tariff, in order to comply with the SIR Order as appropriate for the Authority’s service territory. The significant updates are outlined.

### **Energy Storage Systems (ESS):**

The revised SGIP will include a new section, Section I.E - Application Process for Energy Storage Systems. The section covers 4 types of ESS applications, including: 1) new Distributed Generation (DG) projects paired with ESS; 2) stand-alone ESS; 3) the addition of ESS to an already interconnected DG facility; and 4) modifications to an existing ESS mode of operation.

Application Requirements, System Operating Characteristics and Market Participation for ESS have been added as Appendix J of the SGIP.

### **Payment and Construction Milestones:**

The revised SGIP will now include a new section on Payment and Construction Milestones. This section outlines what each party will be responsible for and when payments and commitments must be submitted.

### **Technical References:**

A number of technical references and requirements from the SGIP are being moved to “PSEG Long Island’s Smart Grid Small Generator Interconnection Technical Requirements and

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<sup>1</sup> CASE 18-E-0018 et al. *In the Matter of Proposed Amendments to the New York State Standardized Interconnection Requirements (SIR) for Small Distributed Generators*, Order on Modifying Standardized Interconnection Requirements (issued April 19, 2018).

<sup>2</sup> Case 15-E-0751 et al., *In the Matter of the Value of Distributed Energy Resources* (“VDER Proceeding”), Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters (issued March 9, 2017).

Screening Criteria for Operating in Parallel with LIPA’s Distribution System” document which will address 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

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, as such document may be modified by LIPA from time to time.

The SGIP is a procedural document that generally describes the process and requirements for interconnecting eligible DGs. The “PSEG Long Island’s Smart Grid Small Generator Interconnection Technical Requirements and Screening Criteria for Operating in Parallel with LIPA’s Distribution System” provides additional details as listed above. The Technical Requirements and Screening Criteria document may be modified by the Authority as needed and updated versions will be posted on the PSEG Long Island website.

**Financial Impacts:**

This Tariff proposal is not expected to have any financial impact on the Authority. This proposal only addresses procedural rules and changes to the DG applicant’s requirements as outlined in the revised Integrated Application and modifies the *pro forma* interconnection agreements to include Energy Storage Systems.

**Affected Tariff Leaves:** No tariff leaf changes.

**Reason for Proposed Changes:**

To conform to recent NY PSC policy and Order Modifying Standardized Interconnection Requirements issued April 19, 2018.

**Summary of Proposed Changes:**

The proposed changes to LIPA’s Tariff for Electric Service update their PSEG Long Island Smart Grid Small Generator Interconnection Procedures to include Energy Storage Systems, a section on payments on and construction timelines, a new document on the technical requirements, and the new requirement to send the PSC an Interconnection Inventory Report.



**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, ~~2017~~2019

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## Section I. Application Process

### Section I.A. Introduction

The Smart Grid Small Generator Standardized Interconnection Procedures (~~“Smart Grid-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;**
- ~~ii.~~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.
- ~~iii.~~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.
- ~~iv.~~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.

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

The application procedures set forth in Section I are organized to facilitate efficient review of potential interconnections to LIPA’s Distribution System. ~~These procedures~~**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.

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

~~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)~~

~~The application procedures set forth below are primarily applicable to systems of 50 kW or less. However, applications for inverter-based systems above 50 kW up to 300 kW may follow the expedited application process outlined below of the Smart Grid SGIP under the following circumstances:~~

- ~~i. Where an inverter-based system above 0 kW up to 300 kW has been certified and tested in accordance with UL 1741 and PSEG Long Island has approved the project accordingly.~~

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 ~~from~~ upon receipt of the original application submittal to determine ~~and 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, ~~inverter-based~~ 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. ~~For any system below 50 kW that If PSEG Long Island determines that the non-inverter based system is not eligible for the fast-track or expedited application process (for example, if the system's inverter is not certified as compliant with UL1741),, the applicant will proceed with the remaining steps of Section I.C (Systems above 50 kW up to 5 MW). If the applicant fails to submit the additional information to PSEG Long Island within thirty (30) Business Days following the date of PSEG Long Island's written notification, the application shall be deemed withdrawn and no further action on the part of PSEG Long Island is required.~~can:

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

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. ~~Electronic signatures must meet the requirements for filing documents electronically with the Secretary of the NY Public Service Commission.~~ 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 ~~deemed withdrawn~~ 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 ~~accepted~~ application will be placed in ~~each~~ PSEG Long Island's interconnection inventory ~~upon PSEG Long Island's receipt of the Standardized Contract executed by the applicant 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 ~~the~~ 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 ~~assuring~~ **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. ~~The~~ **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.

~~Applicants with inverter-based systems above 50 kW up to 300 kW, certified and tested in accordance with the most recent revision of UL 1741, are encouraged but not required to use the expedited application process (Section I. B) of the Smart Grid SGIP and may proceed with such process if approved pursuant to Section I.B.~~

### **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 ~~within three (3) Business Days following the initial communication.~~ 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. ~~Electronic signatures must meet the requirements for filing documents electronically with the Secretary of the NY Public Service Commission, 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.

~~An accepted application will be placed in PSEG Long Island's interconnection inventory upon PSEG Long Island's receipt of the Standardized Contract executed by the applicant. 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 diligently pursue final acceptance, PSEG Long Island may notify the applicant that the applicant's project will be removed from PSEG Long Island's interconnection inventory unless the applicant provides a project status update and justification as to why the project should remain in PSEG Long Island's interconnection inventory. PSEG Long Island's notification to the applicant shall be delivered by U.S. first class mail with delivery receipt confirmation, or other method that provides a receipt for delivery. 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 **AP1** through **FP8**) 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 **AP1** through **FP8**), 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 ~~or withdraw its application. The applicant may request one extension of no more than fifteen (15) Business Days to respond. If the applicant fails to notify PSEG Long Island of their decision within fifteen (15) Business Days of notification of the Preliminary Analysis results, or at the end of the extension, if one was requested, the Interconnection Request shall be removed from the queue and no further action on the part of PSEG Long Island is required. If the applicant does notify PSEG Long Island of its intention to accept the proposed upgrades and proceed with interconnection, PSEG Long Island will return a signed and executed Standardized Interconnection Contract to the applicant within fifteen (15) Business Days of receiving the notification.~~

~~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 GS1 through IS13) 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 GS1 through IS13), 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 ~~Analysis results meeting. The applicant shall notify PSEG Long Island within fifteen (15) Business Days following such notification indicating the intention of the applicant to accept the upgrades and proceed with the interconnection process or withdraw its application. The applicant may request one extension of no more than fifteen (15) Business Days to respond. If the applicant fails to notify PSEG Long Island of their decision within fifteen (15) Business Days of notification of the Preliminary Analysis results, or at the end of the extension, if one was requested, the Interconnection Request shall be deemed inactive and no further action on the part of PSEG Long Island will be required until positive confirmation is received. If the applicant does notify PSEG Long Island of its intention to accept the upgrades and proceed with interconnection, PSEG Long Island will return a signed and executed Standardized Interconnection Contract to the applicant within fifteen (15) Business Days of receiving the notification.~~ Screening Analysis results. The applicant will pay the cost estimate as provided in Section D.

- i.ii. If the applicant chooses to proceed to a Supplemental Review results meeting and modifications that obviate the need for ~~Supplemental analysis~~ CESIR are not identified and agreed to, the applicant shall notify PSEG Long Island, within ten (10) business days of the meeting, of ~~their~~ the applicant's intention to proceed to a full CESIR or withdraw the ~~Interconnection Request~~ application. If the applicant fails to notify PSEG Long Island of ~~their~~ applicant's decision within thirty (30) ~~business days, the Interconnection Request~~ 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.
- ii.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 ~~LIPA System~~ 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.

~~For systems above 50 kW up to 5 MW, additional studies may often be required. A mutually agreed-upon schedule for a CESIR for these systems will not exceed an additional twenty (20) Business Days, or eighty (80) Business Days in total. Systems above 50 kW up to 300 kW are eligible for the Fast Track process.~~

~~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) Business Days.

PSEG Long Island is not required to procure any equipment or materials 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 ~~COB~~ 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~~ Within sixty (60) Business Days after issuance of the formal letter of acceptance, PSEG Long Island shall prepare and submit to the applicant a final reconciliation ~~invoice~~ statement of its actual costs ~~minus the application fee~~ and advance payments made by the applicant. ~~The invoice shall be submitted within thirty (30) days of the later of the~~



~~completion~~ Within twenty (20) Business Days after delivery of the ~~accepted installation~~ or reconciliation statement, the ~~submission of final “as built” 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~~ the utility’s reconciliation. ~~The applicant may contest the reconciliation with PSEG Long Island, the utility.~~ If ~~PSEG Long Island’s~~ 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 ~~PSEG Long Island~~ the utility within thirty (30) business days or ~~PSEG Long Island~~ the utility reserves the right to lock the generating system offline. ~~If PSEG Long Island’s~~ the utility’s final reconciliation invoice states a reimbursement for overpayment to be paid by ~~PSEG Long Island~~ 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 receiving the payment, PSEG Long Island will provide the applicant, a signed New York State Standardized Interconnection Contract in the form of Appendix A

PSEG Long Island is not required to procure any equipment or materials 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.

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). 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 25% 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.

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 New York State 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>3</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.

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<sup>3</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.

- ii. The study process shall determine the appropriate voltage level for the interconnection of the new distributed generation facilities.

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### **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 ~~\$350~~**\$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, ~~except that a net metering applicant may not be charged in excess of the cost of installing the dedicated transformer(s) or other safety equipment as specified in the LIPA Tariff.~~

**Section I.E 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) ~~Smart Grid~~ 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.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**

### **1. 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.

~~For additional PSEG Long Island technical requirements, please~~ 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.

#### ~~● Voltage Response~~

~~The required operating range for the generators shall be from +/- 5% of nominal voltage magnitude. For excursions outside these limits the protective device shall automatically initiate a disconnect sequence from the LIPA System as detailed in the most current version of IEEE STD 1547. Clearing time is defined as the time the range is initially exceeded until the generator owner's equipment ceases to energize the PCC and includes detection and intentional time delay. Other static or dynamic voltage functionalities shall be permitted as agreed upon by PSEG Long Island and the generator owner.~~

#### ~~● Frequency Response~~

~~The required operating range technical requirements for the generators shall be from 59.3 Hz to 60.5 Hz. For generators greater than 30 kW PSEG Long Island may request that the generator operate at frequency ranges below 59.3 Hz as defined in IEEE STD 1547. For excursions outside these limits the protective device shall automatically initiate a disconnect sequence from the LIPA System as detailed in the most current version of IEEE STD 1547. Clearing time is defined as the time the range is initially exceeded until the generator owner's equipment ceases to~~

~~energize the PCC and includes detection and intentional time delay. Other static or dynamic frequency functionalities shall be permitted as agreed upon by PSEG Long Island and the generator-owner.~~

#### ~~● Reconnection to LIPA's Distribution System~~

~~If the generation facility is disconnected as a result of the operation of a protective device, the generator-owner's equipment shall remain disconnected until the LIPA system's service voltage and frequency have recovered to acceptable voltage and frequency limits for a minimum of five (5) minutes. Systems greater than 25 kW that do not utilize inverter based interface equipment shall not have automatic recloser capability unless otherwise approved by PSEG Long Island. If PSEG Long Island determines that a facility must receive permission to reconnect, then any automatic reclosing functions must be disabled and verified to be disabled during verification testing.~~

### ~~2. Synchronous Generators~~

~~Synchronous generation shall require synchronizing facilities. These shall include automatic synchronizing equipment or manual synchronizing with relay supervision, voltage regulator, and power factor control.~~

~~For all synchronous generators sufficient reactive power capability shall be provided by the generator owner to withstand normal voltage changes on LIPA's system. The generator voltage VAR schedule, voltage regulator, and transformer ratio settings shall be jointly determined by PSEG Long Island and the generator owner to ensure proper coordination of voltages and regulator action. Generator owners shall have synchronous generator reactive power capability to withstand voltage changes up to 5% of the base voltage levels.~~

~~A voltage regulator must be provided and be capable of maintaining the generator voltage under steady state conditions within plus or minus 1.5% of any set point and within an operating range of plus or minus 5% of the rated voltage of the generator.~~

~~Generator owners shall adopt one of the following grounding methods for synchronous generators:~~

- ~~a) Solid grounding~~
- ~~b) High or low resistance grounding~~
- ~~c) High or low reactance grounding~~
- ~~d) Ground fault neutralizer grounding~~

~~Synchronous generators shall not be permitted to connect to LIPA secondary network systems without the approval of PSEG Long Island.~~

### ~~3. Induction Generators~~

~~Induction generation may be connected and brought up to synchronous speed (as an induction motor) if it can be demonstrated that the initial voltage drop measured at the PCC is acceptable based on current inrush limits. The same requirements also apply to induction generation connected at or near synchronous speed because a voltage dip is present due to an inrush of magnetizing current. The generator owner shall submit the expected number of starts per specific time period and maximum starting kVA draw data to PSEG Long Island. Starting or rapid load fluctuations on induction generators can adversely impact LIPA's system voltage. Corrective step-switched capacitors or other techniques may be necessary. These measures can, in turn, cause Ferro resonance. If these measures (additional capacitors) are installed on the customer's side of the PCC, PSEG Long Island will review these measures and may require the customer to install additional equipment.~~

#### **~~4. Inverters~~**

~~Direct current generation can only be installed interconnection of DG in parallel with LIPA's system using a synchronous inverter. The design shall be such as to disconnect this synchronous inverter upon a LIPA system interruption. Inverters intended to provide local grid support during system events that result in voltage and/or frequency excursions as described in Section II.B.1 shall be provided with the required onboard functionality to allow for the equipment to remain online for the duration of the event.~~

~~It is recommended that equipment meet all functional requirements of IEEE Standard 1547 and be protected by Utility Grade Relays (as defined in these requirements) using settings approved by PSEG Long Island and verified in the field. The field verification test must demonstrate that the equipment meets the voltage and frequency requirements detailed in this section.~~

~~Synchronization or re-synchronization of an inverter to the LIPA System shall not result in a voltage deviation that exceeds the requirements contained in Section II.E, Power Quality. Only inverters designed to operate in parallel with the LIPA System shall be utilized for that purpose.~~

#### **~~5. Minimum Protective Functions~~**

~~Protective system requirements for distributed generation facilities result from an assessment of many factors, including but not limited to:~~

- ~~• Type and size of the distributed generation facility~~
- ~~• Voltage level of the interconnection~~
- ~~• Location of the distributed generation facility on the circuit~~
- ~~• Distribution transformer~~
- ~~• Distribution system configuration~~
- ~~• Available fault current~~
- ~~• Load that can remain connected to the distributed generation facility under isolated conditions~~
- ~~• Amount of existing distributed generation on the local distribution system.~~

~~As a result, protection requirements cannot be standardized according to any single criteria.~~

~~Minimum protective function requirements shall be as detailed in the table below. ANSI C37.2, Electric Power System Device Function Numbers, are listed with each function. All voltage, frequency, and clearing time set points shall be field adjustable.~~

<del>Synchronous Generators</del>	<del>Induction Generators</del>	<del>Inverters</del>
<del>Over/Under Voltage (Function 27/5-9)</del>	<del>Over/Under Voltage (Function 27/59)</del>	<del>Over/Under Voltage (Function 27/59)</del>
<del>Over/Under Frequency (Function 81O/81U) ———</del>	<del>Over/Under Frequency (Function 81O/81U)</del>	<del>Over/Under Frequency (Function 81O/81U)</del>
<del>Anti-Islanding Protection</del>	<del>Anti-Islanding Protection</del>	<del>Anti-Islanding Protection</del>
<del>Overcurrent (Function 50P/50G/51P/51G)</del>	<del>Overcurrent (Function 50P/50G/51P/51G)</del>	<del>Overcurrent (Function 50P/50G/51P/51G)</del>

~~The need for additional protective functions shall be determined by PSEG Long Island on a case-by-case basis. If PSEG Long Island determines a need for additional functions, it shall notify the generator owner in writing of the requirements. The notice shall include a description of the specific aspects of LIPA's system that necessitate the addition, and an explicit justification for the necessity of the enhanced capability. PSEG Long Island shall specify and provide settings for those functions that PSEG Long Island designates as being required to satisfy protection practices. Any protective equipment or setting specified by PSEG Long Island shall not be changed or modified at any time by the generator owner without written consent from PSEG Long Island.~~

~~The generator owner shall be responsible for ongoing compliance with all applicable local, state, and federal codes and standardized interconnection requirements set forth in Section II herein, as they pertain to the interconnection of the generating equipment. Protective devices shall utilize their own current transformers and potential transformers and not share electrical equipment associated with PSEG Long Island revenue metering.~~

~~A failure of the generator owner's protective devices, including loss of control power, shall open the automatic disconnect device, thus disconnecting the generation from the LIPA System. A generator owner's protection equipment shall utilize a non-volatile memory design such that a loss of internal or external control power, including batteries, will not cause a loss of interconnection protection functions or loss of protection set points.~~

~~All interface protection and control equipment shall operate as specified independent of the calendar date.~~

## **~~6. Metering~~**

~~The need for additional revenue metering or modifications to existing metering will be reviewed by PSEG Long Island on a case-by-case basis.~~

~~**Any incremental metering costs are included in interconnection costs that may be required of an applicant, except where the Tariff specifies the cost responsibilities for net metered customers.**~~

## **7. ~~Islanding~~**

~~Systems must be designed and operated so that islanding is not sustained on LIPA's distribution circuits or on substation bus and transmission systems. The requirements listed in this document are designed and intended to prevent islanding. Special protection schemes and system modifications may be necessary based on the capacity of the proposed system and the configuration and existing loading on the subject circuit.~~

~~The need for zero sequence voltage (3Vo) and direct transfer trip (DTT) protection schemes shall be based on~~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 [LINK TO BE PROVIDED].

## **Section II.-C. Operating Requirements**

~~The generator owner shall provide a 24-hour telephone contact. This contact will be used by PSEG Long Island to arrange access for repairs, inspection or emergencies. PSEG Long Island will make such arrangements (except for emergencies) during normal business hours.~~

~~Voltage and frequency trip set point adjustments shall be accessible to service personnel only. Any changes to these settings must be reviewed and approved by PSEG Long Island.~~

~~The generator owner shall not supply power to PSEG Long Island during any outages of LIPA's system that serves the PCC. The generator owner's generation may be operated during such outages only with an open tie to PSEG Long Island. Islanding will not be permitted. The generator owner shall not energize a de-energized PSEG Long Island circuit for any reason.~~

~~The disconnect switch specified for system size larger than 25kW and non-inverter based systems of 25 kW or less in Section II.E, Disconnect Switch, may be opened by PSEG Long Island at any time for any of the following reasons:~~

- ~~a. To eliminate conditions that constitute a potential hazard to PSEG Long Island or LIPA personnel or the general public;~~
- ~~b. Pre-emergency or emergency conditions on the LIPA System;~~
- ~~c. A hazardous condition is revealed by a PSEG Long Island inspection;~~
- ~~d. Protective device tampering;~~
- ~~e. Parallel operation prior to PSEG Long Island approval to interconnect.~~

~~The disconnect switch may be opened by PSEG Long Island for the following reasons, after notice to the responsible party has been delivered and a reasonable time to correct (consistent with the conditions) has elapsed:~~

- ~~a. A generator owner has failed to make available records of verification tests and maintenance of its protective devices;~~
- ~~b. A generator owner's system adversely impacts the operation of LIPA equipment or equipment belonging to other customers;~~
- ~~c. A generator owner's system is found to adversely affect the quality of service to adjoining customers.~~

~~PSEG Long Island will provide a name and telephone number so that the generator owner can obtain information about PSEG Long Island's lock-out.~~

~~The generator owner shall be allowed to disconnect from PSEG Long Island without prior notice in order to self-generate.~~

~~If a generator owner proposes any modification to the system that has an impact on the interface at the PCC after it has been installed and a contract between LIPA and the generator owner has~~

~~already been executed, then any such modifications must be reviewed and approved by PSEG Long Island before the modifications are made.~~

#### **~~Section II. D. Dedicated Transformer~~**

~~PSEG Long Island reserves the right to require a power-producing facility to connect to the LIPA System through a dedicated transformer. The transformer shall either be provided by PSEG Long Island at the generator owner's expense purchased from PSEG Long Island, or conform to PSEG Long Island's specifications. The transformer may be necessary to ensure conformance with PSEG Long Island safe work practices, to enhance service restoration operations or to prevent detrimental effects to other PSEG Long Island customers. The transformer that is part of the normal electrical service connection of a generator owner's facility may meet this requirement if there are no other customers supplied from it. A dedicated transformer is not required if the installation is designed and coordinated with PSEG Long Island to protect the PSEG Long Island System and its customers adequately from potential detrimental net effects caused by the operation of the generator.~~

~~If PSEG Long Island determines a need for a dedicated transformer, it shall notify the generator owner in writing of the requirements. The notice shall include a description of the specific aspects of the LIPA System that necessitate the addition, the conditions under which the dedicated transformer is expected to enhance safety or prevent detrimental effects, and the expected response of a normal, shared transformer installation to such conditions.~~

#### **~~Section II. E. Disconnect Switch~~**

~~Generating equipment with equipment size larger than 25 kW and non-inverter based systems of 25 kW or less shall be capable of being isolated from the LIPA System by means of an external, manual, visible, gang operated, load break disconnecting switch. The disconnect switch shall be installed, owned, and maintained by the customer-generator, and located between the generating equipment and its interconnection point with the LIPA System.~~

~~The disconnect switch must be rated for the voltage and current requirements of the installation. The basic insulation level (BIL) of the disconnect switch shall be such that it will coordinate with that of LIPA's equipment. Disconnect devices shall meet applicable UL, ANSI, and IEEE standards, and shall be installed to meet all applicable local, state, and federal codes. (Applicable Local City Building Code may require additional certification.)~~

~~The disconnect switch shall be clearly marked, "Generator Disconnect Switch," with permanent 3/8 inch or larger letters or larger.~~

~~The disconnect switch shall be located within 10 feet of PSEG Long Island's external electric service meter. If such location is not possible, the customer-generator will propose, and PSEG Long Island will approve, an alternate location. The location and nature of the disconnect switch shall be indicated in the immediate proximity of the electric service entrance. The disconnect switch shall be readily accessible for operation and locking by PSEG Long Island personnel in accordance with Section II.B, Operating Requirements. The disconnect switch must be lockable in the open position with a 3/8" shank LIPA padlock.~~



~~For installations above 600V or with a full load output of greater than 960A, a draw-out type circuit breaker with the provision for padlocking at the draw-out position can be considered a disconnect switch for the purposes of this requirement unless the use of such a circuit breaker is specifically granted by PSEG Long Island, based on site specific technical requirements. If PSEG Long Island grants such use, the generator owner will be required, upon PSEG Long Island's request, to provide qualified operating personnel to open the draw-out circuit breaker and ensure isolation of the DG system, with such operation to be witnessed by PSEG Long Island followed immediately by PSEG Long Island locking the device to prevent re-energization. In an emergency or outage situation, where there is no access to the draw-out breaker or no qualified personnel, utilities may disconnect the electric service to the premise in order to isolate the DG system.~~

### **Section II. F. Power Quality**

~~The maximum harmonic limits for electrical equipment shall be in accordance with IEEE 519 to limit the maximum individual frequency voltage harmonic to 3% of the fundamental frequency and the voltage Total Harmonic Distortion (THD) to 5% on LIPA's side of the PCC. Mitigation measures necessary to comply with these requirements shall at the generator owner's expense. In addition, any voltage fluctuation resulting from the connection of the customer's energy producing equipment to LIPA's system must not exceed the limits defined by the maximum permissible voltage fluctuations border line of visibility curve identified in IEEE STD 519. This requirement is necessary to minimize the adverse voltage effect upon other customers on the LIPA System.~~

### **Section II. G. Power Factor**

~~The Small Generator shall maintain an average power factor, as measured at the PCC, of no less than 0.9 (leading or lagging). The method of power factor correction necessitated by the installation of the generator will be negotiated with PSEG Long Island as a commercial item. If the average power factor of the generator is proven to be above the minimum of 0.9 (leading or lagging) by the customer and accepted by PSEG Long Island, that power factor value shall be used for any further PSEG Long Island design calculations and requirements.~~

~~Induction power generators may be provided VAR capacity from LIPA's system at the generator owner's expense. The installation of VAR correction equipment by the generator owner on the generator owner's side of the PCC must be reviewed and approved by PSEG Long Island prior to installation.~~

### **Section II. H. Equipment Certification**

~~In order for the equipment to be acceptable for interconnection to the LIPA System without additional protective devices, the interface equipment must be equipped with the minimum protective function requirements listed in the table in Section II.A. 5 and be tested by a Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration (OSHA) in compliance with Underwriter's Laboratories (UL) 1741, Inverters, Converters, Controllers and **Interconnection System Equipment for Use With Distributed Energy Resources.**~~  
**Inventory**

~~For each interconnection application, documentation including the proposed equipment certification, stating compliance with UL 1741 by an NRTL, shall be provided by the applicant to PSEG Long Island. Supporting information from the Public Service Commission’s website (<http://www.dps.state.ny.us/distgen.htm>), an NRTL website or UL’s website stating compliance is acceptable for documentation.~~

~~PSEG Long Island is not responsible for reviewing and approving equipment tested and certified by a non-NRTL.~~

~~If equipment is UL 1741 certified by NRTL and compliance documentation is submitted to PSEG Long Island, PSEG Long Island shall accept such equipment for interconnection in New York State. All equipment certified to UL 1741 by an NRTL shall be deemed “certified equipment” even if it does not appear on the Public Service Commission’s website.~~

~~Utility Grade Relays need not be certified per the requirements of this section.~~

## **Section II. I. Verification Testing**

~~All interface equipment must include a verification test procedure as part of the documentation presented to PSEG Long Island. Except for the case of small single phase inverters as discussed later, the verification test must establish that the protection settings meet the Smart Grid SGIP requirements. The verification testing may be site-specific and is conducted periodically to assure continued acceptable performance.~~

~~Upon initial parallel operation of a generating system, or any time interface hardware or software is changed, the verification test must be performed. A qualified individual must perform verification testing in accordance with the manufacturer’s published test procedure. Qualified individuals include professional engineers, factory-trained and certified technicians, and licensed electricians with experience in testing protective equipment. PSEG Long Island reserves the right to witness verification testing or require written certification that the testing was successfully performed.~~

~~Verification testing shall be performed at least once every four years. All verification tests prescribed by the manufacturer shall be performed. If wires must be removed to perform certain tests, each wire and each terminal must be clearly and permanently marked. The generator owner shall maintain verification test reports for inspection by PSEG Long Island.~~

~~Single-phase inverters and inverter systems rated 25 kW and below shall be verified upon initial parallel operation and once every four years as follows: the generator owner shall interrupt PSEG Long Island’s source and verify that the equipment automatically disconnects and does not reconnect for at least five minutes after PSEG Long Island’s source is reconnected. The owner shall maintain a log of these operations for inspection by PSEG Long Island. Any system that depends upon a battery for trip power shall be checked and logged at least annually for proper voltage. Once every four (4) years the battery must be either replaced or a discharge test performed.~~

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.

**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 ~~utilities~~ 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.

**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:** ~~Any entity including~~ The owner of the ~~Transmission Owner~~ Unit or any ~~of the affiliates or subsidiaries of either, that entity that~~ proposes to interconnect ~~its Small Generator~~ with LIPA's Distribution System.

~~**Interconnection Facilities:** LIPA's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generator and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generator to LIPA's electric system. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Network Upgrades or System Upgrade Facilities.~~

**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**

**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/~~File~~**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

## APPENDIX A

arrangement, or any successor or assignee thereof providing certain operation, maintenance and other services to LIPA.

"Unit" means the distributed generation ~~Unit~~ 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 ~~generating~~ capacity. The nameplate generating and energy storage capacity of the Unit shall not exceed 5 MW in aggregate.

### 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 ~~customer~~ Interconnection Customer at least sixty (60) days' prior written notice, terminate this Agreement for cause. The Interconnection Customer's non-compliance with ~~an upgrade~~ 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 **applicant's Interconnection Customer's** facility will be allowed to commence parallel operation upon satisfactory completion of the verification test. The **applicant 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 **SIRSGIP**, 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 **applicant Interconnection Customer** a formal letter of acceptance for interconnection, or may request that the **applicant 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**

## APPENDIX A

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 **customersuch** installations generally.

**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. ~~All~~ 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.

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### 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.
- 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 ~~aan~~ **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), ~~PSEG-Long Island~~ **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



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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 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, ~~aan~~ **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.**

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**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.

**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**

**LONG ISLAND LIGHTING COMPANY D/B/A LIPA  
STANDARDIZED 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:** \_\_\_\_\_

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**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** \_\_\_\_\_

**APPENDIX B**

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) \_\_\_\_\_

**Solar Panel Information:**

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

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

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

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

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

~~Inverter Efficiency: \_\_\_\_\_ %~~

~~Potential Panel Net~~

**Energy Storage System Information:**

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

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

**Total Output \_\_\_\_\_ kW 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 ~~lessor of Potential Panel Net Total Output or~~ Total Rating of All  
Inverters)

Type: ( ) Forced Commutated ( ) Line Commutated

**APPENDIX B**

**( ) Utility Interactive      ( ) Stand Alone**

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

~~Equipment Type Tested Output Connection: Ramp Rate: \_\_\_\_\_~~

Method of Grounding:      ( ) Grounded      ( ) Ungrounded

~~( ) Delta ( ) Wye ( ) Wye Grounded~~

Interconnection Voltage:      Volts

**Applicable Attachments:**

Detailed One Line Diagram attached ( ) Yes

If applicable, NRTL/UL 1741 Certification attached: ( ) Yes

**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**

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

**APPENDIX C**Direct-axis Transient Reactance ( $X'd$ ) : \_\_\_\_\_ ohmsDirect-axis Sub-transient Reactance ( ~~$X''d$~~  :  $X'd$ ) : \_\_\_\_\_ ohms**For Induction Machines:**Rotor Resistance ( ~~$R_r$~~ ) : \_\_\_\_\_ ohms      Exciting Current : \_\_\_\_\_ AmpsRotor 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 ( $X_s$ ) : \_\_\_\_\_ ohmsShort 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****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****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.

Generator Type	Generator Size	Equipment Cost to <b>Residential</b> Net Metered Customers	Equipment Cost to <b>Non-Residential</b> Net Metered Customers
Micro-CHP	Less than or equal to 10 kW	\$350 maximum	N/A
Fuel Cell	Less than or equal to 10 kW	\$350 maximum	As determined by Utility*
Fuel Cell	Over 10 kW up to 2MW	N/A	As determined by Utility*
Solar	Less than or equal to 25 kW	\$350 maximum	\$350 maximum
Solar	Over 25 kW up to 2 MW	N/A	As determined by Utility*
Micro-hydroelectric	Less than or equal to 25 kW	\$350 maximum	As determined by Utility*
Micro-hydroelectric	Over 25 kW up to 2 MW	N/A	As determined by Utility*
Wind **	Less than or equal to 25 kW	\$750 maximum	\$750 maximum
Wind	Over 25 kW up to 2 MW	N/A	As determined by Utility*
Farm Wind ***	Over 25 kW up to 500 kW	N/A	\$5,000 maximum***
Farm Waste ***	Up to 1 MW	N/A	\$5,000 maximum***

**APPENDIX F****APPLICATION PACKAGE 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****PRELIMINARY SCREENING ANALYSIS****Screen A: Is the PCC on a Networked Secondary System?**

~~Does the proposed system connect~~Please refer to a secondary network system?

- If yes (fail);
- If no (pass), continue to Screen B.

**Screen B: Is Certified Equipment Used?**

~~Does the PSEG Long Island's Smart Grid Small Generator Interconnection Request propose to use equipment that has been listed to meet UL1741 (Inverters, Converters Technical Requirements and Charge Controllers Screening Criteria for Use Operating in Independent Power Systems) by a nationally recognized testing laboratory?~~

- If yes (pass), continue to Screen C.
- If no (fail)

**Screen C: Is the Electric Power System (EPS) Rating Exceeded?**

~~Do the maximum aggregated Gross Ratings for all the Generating Facilities connected to an EPS exceed any EPS rating, modified per established Parallel with LIPA's Distribution Provider practice, absent any Generating Facilities?~~

- If yes (fail);
- If no (pass), continue to Screen D.

**Screen D: Is the Line Configuration Compatible with the Interconnection Type?**

~~Line Configuration Screen: Identify primary distribution line configuration that will serve the Generating Facility. Based on the type of Interconnection to be used for the Generating Facility, determine from the table below if the proposed Generating Facility passes the Screen.~~

- If yes (pass), continue to Screen E.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result / Criteria
Three-phase, three wire, > 5 kV	3-phase	Pass
Three-phase, four wire, >5 kV	Effectively-grounded 3 phase	Pass
All	Single phase, phase-phase, or ineffectively grounded sources or transformers	Fail

## APPENDIX G

### ~~Screen E: Simplified Penetration Test~~

~~Is the aggregate Generating facility capacity on the Line Section less than 15% of the annual peak load for all Line Sections bounded by automatic sectionalizing devices?~~

- ~~• If yes (pass), continue to Screen F.~~
- ~~• If no (fail), Supplemental Review is required, continue to Screen F.~~

### ~~Screen F: Simplified Voltage Fluctuation Test~~

~~In aggregate with existing generation on the Line Section~~

~~a. Can the Generating Facility parallel with the Distribution Provider's Distribution System without causing a voltage fluctuation at the PCC greater than 5% of the prevailing voltage level of the Distribution System at the PCC?~~

- ~~• If yes (pass), System for Preliminary Screening Analysis is complete. [LINK TO BE PROVIDED]~~
- ~~• If no (fail), Supplemental Review is required~~

## SUPPLEMENTAL SCREENING ANALYSIS

### ~~Screen G: Supplemental Penetration Test~~

~~Where 12 months of line section minimum load data is available, can be calculated, can be estimated from existing data, or determined from a power flow model, is the aggregate Generating Facility capacity on the Line Section less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the Generating Facility?~~

- ~~• If yes (pass), continue to Screen H.~~
- ~~• If no (fail), a quick review of the failure may determine the requirements to address the failure; otherwise the Interconnecting Customer may be required go on to the Coordinated Electric System Interconnection Review (CESIR) process. Continue to Screen H.~~

### ~~Screen H: Power Quality and Voltage Tests~~

~~In aggregate with existing generation on the Line Section,~~

~~a. Can it be determined within the Supplemental Review that the voltage regulation on the line section can be maintained in compliance with current voltage regulation requirements under all system conditions?~~

~~b. Can it be determined within the Supplemental Review that the voltage fluctuation is within acceptable limits as defined by IEEE 1453 or utility practice similar to IEEE1453?~~

~~c. Can it be determined within the Supplemental Review that the harmonic levels meet IEEE519 limits at the Point of Common Coupling (PCC)?~~

- ~~• If yes to all of the above (pass), continue to Screen I.~~
- ~~• If no to any of the above (fail), a quick review of the failure may determine the requirements to address the failure; otherwise the Interconnecting Customer may be required go on to the Coordinated Electric System Interconnection Review (CESIR) process. Continue to Screen I.~~

**APPENDIX G****~~Screen I: Safety and Reliability Tests~~**

~~Does the location of the proposed Generating Facility or the aggregate generation capacity on the Line Section creates specific impacts to safety or reliability that cannot be adequately addressed without a detailed study?~~

- ~~• If yes (fail), a quick review of the failure may determine the requirements to address the failure; otherwise the Interconnecting Customer will be provided with information on the specific points of failure in the supplemental review results and may go to the Coordinated Electric System Interconnection Review (CESIR) process.~~
- ~~• If no (pass), Supplemental Review is complete.~~

## APPENDIX H

### ~~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.~~

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## APPENDIX F

**~~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.~~



**APPENDIX HP1**

- ~~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.~~
- ~~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.~~

**APPENDIX H P1**

~~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.~~

~~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~~

APPENDIX ~~H~~P1

~~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 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~~

APPENDIX ~~HP~~1~~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~~

**APPENDIX ~~H~~P1**

~~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 H.A.9 of the PSEG Long Island Small Generator Interconnection Procedures.~~

~~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 ~~I2P2~~**

**~~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 J1Q1****~~System Impact 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 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~~

**APPENDIX J1Q1**

~~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.~~

~~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.~~



APPENDIX ~~J1~~Q1

~~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 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 of 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~~

## APPENDIX J1Q1

~~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,~~

APPENDIX **J1Q1**

~~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~~

**APPENDIX J1Q1**

~~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 H.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 ~~J2Q2~~

~~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 K1R1****~~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 Distributor 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~~

## APPENDIX ~~K1R1~~

~~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.~~

~~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~~

APPENDIX ~~K1R1~~

~~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.~~

~~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~~



APPENDIX ~~K1R1~~

~~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 Generator 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 H.A.4 of PSEG Long Island's Small Generator Interconnection Procedures.~~
- ~~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.~~

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~~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 H.A.9 of the PSEG Long Island Small Generator Interconnection Procedures.~~

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~~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 G

~~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?~~

---

---

---

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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:~~

---

---

---

---

~~Bus length from generation to interconnection station:~~

---

---

---

---

**APPENDIX G**

~~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 \_\_\_\_\_ Date: \_\_\_\_\_  
receive back feed power~~

~~Generation Testing \_\_\_\_\_ Date: \_\_\_\_\_~~

~~Commercial Operation \_\_\_\_\_ Date: \_\_\_\_\_~~

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.[ [LINK TO BE PROVIDED](#)].

**APPENDIX K2****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

**APPENDIX H**

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****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>	<b>DEVELOPER</b>	[name]
		[contact information]
	<b>PROJECT</b>	[Project/PAM number]
	<b>PROPERTY</b>	[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 / 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.
- 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. 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. Indicate whether the ES and DG system inverter(s)/converter(s) are DC-coupled or AC-coupled.
- n. 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. 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. 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. 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 M****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.

<b>Milestone</b>	<b>Estimated Time Duration to Completion (Weeks)</b>	<b>Responsible Party</b>
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 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: \_\_\_\_\_

**APPENDIX L**

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

**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**  
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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

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

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.

**“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.

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

**“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.

**“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

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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.

**“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.

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**“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.

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

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**“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.

**ARTICLE 2**  
**TERM**

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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 ~~five (5)~~**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 ~~twentieth (20) Business Day~~**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

~~Fax: (516) 545-6134~~

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  
~~Fax: (516) 222-9137~~

- ii. Generator:  
[NAME]  
[ADDRESS]



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Attention:

Fax: \_\_\_\_\_

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

**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.

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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 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.

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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 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

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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 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

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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 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:

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- (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 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.



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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

(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



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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.

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.

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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

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action at law or in equity to seek enforcement, interpretation or remedy of any breach of this Agreement.

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

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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. 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.

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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.

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.

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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.

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:



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(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 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

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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.

**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



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(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.

**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  
~~Fax: (516) 222-9137~~

With a copy to:  
 Long Island Power Authority

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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  
~~Fax: (516) 545-6134~~

To Generator:

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

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

**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

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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.

**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

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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 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.

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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 (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.

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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.

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.

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**GREATER THAN 5 MW AND LESS THAN 10 MW**

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

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 SERVCO 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: \_\_\_\_\_



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

**EXHIBIT A**  
**SYSTEM ONE-LINE / POINT OF ATTACHMENT**  
**AND INTERCONNECTION AND INTERCONNECTION**  
**FACILITIES / DEMARCATION POINTS**

**APPENDIX M**  
**INTERCONNECTION AGREEMENT**  
**FOR A SYSTEM**  
**GREATER THAN 5 MW AND -LESS THAN10 MW**

**EXHIBIT B**  
**INTERCONNECTION AND METERING STANDARDS**

**Interconnection Guide**

The Interconnection Facilities shall be subject to the interconnection standards provided in the ~~“Requirements for Generating Facility”~~ “Smart Grid Small Generator Interconnection ~~to the LIPA Transmission System.”~~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**

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 Facility Interconnection-Facilities interconnection to the LIPA Transmission System.”~~”

Add other procedures as applicable.

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

**EXHIBIT C**  
**FACILITY DESIGN AND VERIFICATION STUDIES**

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

**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 ~~in accordance with NPCC Document A-4, "Minimum Maintenance Criteria for Protective Systems."~~ 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.

**APPENDIX M**  
**INTERCONNECTION AGREEMENT**  
**FOR A SYSTEM**  
**GREATER THAN 5 MW AND -LESS THAN10 MW**

- (f) Relays have been tested at pick-up and three multiples of minimum pick-ups (e.g., three, five, and eight times).

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 ~~LIPA's then-current~~ the latest maintenance procedures and ~~Good Utility Practice~~ intervals in NERC PRC-005 or any applicable reliability requirements.

Add other procedures 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 cost costs. Progress payments will be ~~progress billed in three (3) equal installments. Estimated costs are subject to a final reconciliation which~~ required during construction and any excess will be reconciled and invoiced upon completion of all work and final accounting of all costs.

## 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 as applicable.

**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.



## APPENDIX P1

- 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.
- 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.

## APPENDIX P1

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.

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

## APPENDIX P1

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 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

## APPENDIX P1

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

**APPENDIX P1**

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.

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

### 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****System Impact 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 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

## APPENDIX Q1

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.

- 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.



## APPENDIX Q1

- 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 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

## APPENDIX Q1

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,

## APPENDIX Q1

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

## APPENDIX Q1

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 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 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 Q2

### 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****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

## APPENDIX R1

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.

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



## APPENDIX R1

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.
- 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



## APPENDIX R1

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 Generator Interconnection 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.
- 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.

**APPENDIX R1**

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 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 MR2**  
**INTERCONNECTION AGREEMENT**  
**FOR A SYSTEM**  
**GREATER THAN 5 MW AND LESS THAN 10 MW**

**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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**APPENDIX MR2**  
**INTERCONNECTION AGREEMENT**  
**FOR A SYSTEM**  
**~~GREATER THAN 5 MW AND LESS THAN 10 MW~~**

Bus length from generation to interconnection station:

---

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      Date:  
receive back feed power

Generation Testing      Date:

Commercial Operation      Date:

**RECOMMENDATION FOR APPROVAL OF MODIFICATIONS TO LIPA'S TARIFF FOR ELECTRIC SERVICE RELATED TO VALUE STACK COMPENSATION ELIGIBILITY**

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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 procuring cost-effective clean and renewable resources, integrating cost-effective distributed energy production and storage technologies into the power supply portfolio, 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**, in Case 15-E-0751 et al., *In the Matter of the Value of Distributed Energy Resources*, the New York PSC issued an Order on Phase One Value of Distributed Energy Resources Project Size CAP and Related Matters (issued February 22, 2018) (the "PSC Order"), directing New York's investor-owned utilities to raise the size cap on resources eligible for value stack compensation from 2,000 kilowatts to 5,000 kilowatts; and

**WHEREAS**, the proposal is consistent with the Board Policy on Resource Planning and the PSC Order; 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 12, 2018, two public hearings were held in Nassau and Suffolk counties on November 16, 2018, the public comment period has since expired, and written comments were addressed by Staff;

**NOW, THEREFORE, BE IT RESOLVED**, that for the reasons set forth herein and in the accompanying Memorandum, the Finance and Audit Committee of the Board of Trustees hereby recommends approval of the proposed modifications to the Authority's Tariff to be effective January 1, 2019; and be it further

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

Dated: December 19, 2018

**I. General Information (continued):****B. Abbreviations and Definitions (continued):**

**Demand Customer:** A Customer who is billed for Demand charges.

**Demand Meter:** The device that records the maximum amount of power used by the Customer over a 15-minute interval during a specific period, such as a month.

**Department:** The New York State Department of Public Service.

**Deposit:** A sum of money given as security for payment of service.

**Distribution Facilities:** Facilities used to distribute electric energy to consumers, including supply lines, distribution lines, service laterals, and accessory equipment.

**Distribution Line(s):** A system of poles, wires, ducts, conduits, and additional equipment used for the shared distribution of electricity to Customers.

**E**

**Easement:** (See *Right-of-way*)

**Eligible Net Metering Technologies:** The list of eligible technologies is: Solar Electric Generating Equipment, Wind Electric Generating Equipment, Micro-Hydroelectric Generating Equipment, Micro-Combined Heat and Power (CHP) Generating Equipment, Fuel Cell Electric Generating Equipment, and Farm Waste Electric Generating Equipment. See definition of Solar Electric Generating Equipment, Wind Electric Generating Equipment, Micro-Hydroelectric Generating Equipment, Micro-Combined Heat and Power (CHP) Generating Equipment, Fuel Cell Electric Generating Equipment, and Farm Waste Electric Generating equipment for further details.

**Energy:** Energy is electric power, used or supplied over time, and measured in KWH.

**Existing Overhead Areas:** Areas in which electric distribution facilities are constructed overhead, and there are no requirements to construct facilities underground.

**F**

**Farm Waste Electric Generating Equipment:** Equipment that generates electric energy from biogas produced by anaerobic digestion of agricultural wastes, such as livestock manure, farming wastes and food processing wastes with a rated capacity of not more than ~~two thousand (2,000) kilowatts~~ five thousand (5,000) kilowatts that is manufactured, installed and operated by Customer-generator in accordance with applicable government and industry standards, connected to the electric system and operated in conjunction with the Authority's transmission and distribution facilities, operated in compliance with the Authority's standards and requirements established therefor, fueled at a minimum of ninety (90) percent on an annual basis by biogas produced from the anaerobic digestion of agricultural waste such as livestock manure materials, crop residues, and food processing waste, and fueled by biogas generated by anaerobic digestion with at least fifty (50) percent by weight of its feed stock being livestock manure on an annual basis.

**Fuel Cell Electric Generating Equipment:** A solid oxide, molten carbonate, proton exchange membrane or phosphoric acid fuel cell, with a combined rated capacity of not more than ten (10) kilowatts for a residential customer or with a rated capacity of not more than ~~two thousand (2,000) five thousand (5,000) kilowatts~~ for a non-residential customer, that is manufactured, installed and operated in accordance with applicable government and industry standards, that is connected to the electric system and operated in compliance with the Authority's standards and requirements established therefor. This definition, including the capacity limits specified herein, does not apply to fuel cells participating in the Fuel Cell Feed-in Tariff.

**Fuel and Purchased Power Cost Adjustment Clause:** See definition for Power Supply Charge.

**Full-Requirements Customer:** A Customer whose electric power requirements are all supplied by the Authority. (See *Customer – Full Requirements Customer*)

**G**

**Generation Project:** A specific project that is eligible to participate in the Commercial Solar or Fuel Cell Feed-In Tariff under Service Classification No. 11 – Buy-Back Service.

**I. General Information (continued):****B. Abbreviations and Definitions (continued):**

**Load:** (See *Demand*)

**Load Factor:** The ratio of a Customer(s) average demand to peak demand during a specified period.

**Location:** Property with stated boundaries which is owned or occupied by a single legal entity.

**M**

**Manager:** PSEG Long Island LLC, the entity engaged by the Authority to operate, maintain, manage and act as agent for the Authority's system pursuant to the terms and conditions of the Operations Services Agreement. Nothing herein shall be read to change or modify Manager's duties and obligations or create any liability on the part of Manager beyond that set forth in the Operations Services Agreement.

**Mass Market Customer(s):** Residential or Small Commercial Service Classification that are not billed for demand.

**Mass Market Project(s):** Projects using an Eligible Net Metering Technologies owned by a Mass Market Customer(s).

**Micro-Combined Heat and Power Generating Equipment:** Any Residential customer with an integrated cogenerating building heating and electrical power generation system, operating on any fuel and any applicable engine, fuel cell, or other technology, with a rated capacity of at least one kilowatt and not more than ten (10) kilowatts electric and any thermal output that all full load has a design total fuel use efficiency in the production of heat and electricity of not less than eighty percent, and annually produces at least two thousand (2,000) kilowatt hours of useful energy in the form of electricity that may work in combination with supplemental, or parallel conventional heating system, that is manufactured, installed and operated in accordance with applicable government and industry standards operated in conjunction with the Authority's transmission and distribution facilities.

**Micro-Hydroelectric Generating Equipment:** A Hydroelectric system, with a rated capacity of not more than 25 kW for a residential customer or with a rated capacity of not more than ~~2,000-kW-five~~ thousand (5,000) kilowatts for a non-residential customer, that is manufactured, installed and operated in accordance with applicable government and industry standards, connected to the electric system and operated in conjunction with the Authority's transmission and distribution facilities.

**Month:** A Month in this document is defined as a 30-day period, and monthly rates for billing periods other than a Month are prorated.

**Multi-phase:** Producing, carrying, or powered by multiple alternating voltages, each of which reaches its highest level at different time intervals. (See *Alternating Voltage*)

**Multiple-Occupancy or Multiple Dwelling Building:** A building designed to contain three (3) or more individual residential units for permanent occupancy. Each unit should contain kitchen, bath, and sleeping areas. In some instances, the Tariff may differentiate between buildings that contain three or more units and those that contain four or more units.

**N**

**Net Energy Metering:** 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 the Authority to the Customer-generator and/or the net amount of electricity provided by the Customer-generator to the Authority.



**I. General Information (continued):****B. Abbreviations and Definitions (continued):**

**Service Line or Lateral:** A system of conductors and equipment for delivering electricity from the Authority's distribution system to the wiring system of a building or address.

**Service Termination:** The point at which the service line or lateral ends and the Customer connects with the wiring system.

**Shared Meter:** Any Authority meter that measures electric service provided to a tenant's dwelling and to areas outside that dwelling, and the tenant pays for all usage recorded on the meter.

**Shared-Meter Customer:** Any tenant who rents a dwelling with a shared meter from the owner of the dwelling, and the tenant, rather than the owner, is the Authority's Customer of record.

**Short-Term or Temporary Customer - Non-Residential:** (See *Customer - Short-Term or Temporary Customer*)

**Short-Term or Temporary Customer - Residential:** (See *Customer - Short-Term or Temporary Customer*)

**Single-phase:** Producing, carrying, or powered by a single alternating voltage. (See *Alternating Voltage*)

**Solar Electric Generating Equipment:** A photovoltaic system with a rated capacity of equal to or less than twenty five kilowatts (25 kW) for residential Customers or with a rated capacity equal to or less than ~~2,000 kilowatts~~ five thousand (5,000) kilowatts for Non-residential Customers which is manufactured, installed and operated in accordance with applicable government and industry standards, is connected to the Authority's electric system and operated in conjunction with the Authority's transmission and distribution facilities, and which is operated in compliance with the Authority's standards and requirements.

**State Agency:** Any board, authority, agency, department, commission, public corporation, body politic, or instrumentality of the State of New York.

**Subdivision:** (See *Residential Subdivision*)

**Submetering:** The redistribution of electric service to multiple meters not owned by the Authority.

**Substantially Interconnected:** Will be determined by reference to the PSEG-Long Island Smart Grid Small Generator Standardized Interconnection Procedures ("Smart Grid SGIP"). Systems in the Smart Grid SGIP Fast Track process will be considered substantially interconnected upon completion of Step 6 of the Fast Track process. Systems sized between 50 kW and 2,000 kW will be considered substantially interconnected upon completion of Step 7 of the Smart Grid SGIP. (Systems larger than 2,000 kW will continue to be ineligible for net metering.)

**Supply Line:** A part of a distribution line that is installed between an existing electric distribution system and an underground distribution line within an underground-designated area. (See *Underground-Designated Area*)

**Surcharge:** In connection with extension of distribution facilities, a monthly, bimonthly, or annual charge assessed Residential Customers over a period that does not exceed ten years and which recovers the cost of the distribution facilities Customers are directly responsible for.

**I. General Information (continued):****C. Abbreviations and Definitions (continued):****Voltampere = VA**

The unit of measure of Apparent Power. (See *Power*) Multiplying the volts by the amperes in an electric circuit will result in the voltamperes.

**W****Watt = W**

A unit of measurement of Real Electrical Power. (See *Power*)

**Watt-hour = W-hr**

The total amount of energy used in an electricity consuming device. Energy is measured as power used over time. For example, a device using one (1) watt-hour of energy is using the equivalent of one (1) watt of power over a period of one (1) hour.

**Watt-hour Meter:** The recording device that measures energy in watt-hours.

**Wind Electric Generating Equipment:** A wind generator or generators with the combined rated capacity of not more than twenty five kilowatts (25 kW) for a Residential Customer-generator, and not more than 500 kW for a Residential Farm Customer, and not more than ~~five thousand 2(5,000)-kW~~ kilowatts for a Non-residential Customer which is manufactured, installed and operated in accordance with applicable government and industry standards, is connected to the electric system and operated in conjunction with the Authority's transmission and distribution facilities, and which is operated in compliance with the Authority's standards and requirements.

**I. General Information (continued):****C. General Terms and Conditions (continued):****14. Net Metering****a) Residential Net Metering Requirements**

- (1) A Residential Solar or Wind Customer-generator shall be net metered only if the rated capacity of the Solar or Wind Electric Generating Equipment is (1) equal to or less than twenty five (25) kilowatts and (2) equal to or less than 110% of the customer's last twelve months of load or customer provided load letter. If the rated capacity of the Solar or Wind Electric Generating Equipment owned and/or operated by the residential Customer-generator is (1) greater than twenty-five (25) kilowatts, or (2) greater than 110% of the customer's last twelve months of load or customer provided load letter, net metering shall not apply and Customer-generator may be served under Service Classification 11-Buy-Back service.
- (2) A Residential Farm Customer shall be net metered only if the rated capacity of the Solar Electric Generating Equipment is equal to or less than one hundred (100) kilowatts or the Wind Electric Generating Equipment is equal to or less than five hundred (500) kilowatts. If the rated capacity of the Solar Electric Generating Equipment is greater than one hundred (100) kilowatts or the Wind Electric Generating Equipment is greater than five hundred (500) kilowatts, net metering shall not apply and Customer-generator may be served under Service Classification 11-Buy-Back service.
- (3) A Residential Farm Waste Customer-generator shall be net metered only if the rated capacity of the Farm Waste Generating Equipment is equal to or less than ~~two-five~~ thousand (~~25~~,000) kilowatts. If the rated capacity of the Farm Waste Electric Generating Equipment owned and/or operated by the Customer-generator is greater than ~~two-five~~ thousand (~~25~~,000) kilowatts, net metering shall not apply and Customer-generator may be served under Service Classification 11-Buy-Back service.
- (4) A Residential Micro-Combined-Heat-and-Power (Micro-CHP) Customer-generator shall be net metered only if the rated capacity of the Micro-CHP generating equipment is at least one (1) kilowatt and less than or equal to ten (10) kilowatts. If the rated capacity of the Micro-CHP generating equipment owned and/or operated by the residential Customer-generator is greater than ten (10) kilowatts, net metering shall not apply and Customer-generator may be served under Service Classification 11-Buy Back service.
- (5) A Residential Fuel Cell Customer generator shall be net metered only if the rated capacity of the Fuel Cell Electric Generating Equipment is less than or equal to ten (10) kilowatts. If the rated capacity of the Fuel Cell Generating Equipment owned and/or operated by the residential Customer-generator is greater than ten (10) kilowatts, net metering shall not apply and Customer-generator may be served under Service Classification 11-Buy Back service.

**II. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering (continued):**

- (6) A Residential Micro-Hydroelectric Customer-generator shall be net metered only if the rated capacity of the Micro-Hydroelectric generating equipment is equal to or less than twenty five (25) kilowatts. If the rated capacity of the Micro-Hydroelectric Generating Equipment owned and/or operated by the residential Customer-generator is greater than 25 kilowatts, net metering shall not apply and Customer-generator may be served under Service Classification 11-Buy-Back Service.
- (7) A Residential Customer-generator that combines Solar Electric, Wind Electric, or Micro-Hydroelectric Generating Equipment in a hybrid system shall be net metered only if:
  - (a) The rated capacity of the combined system is equal to or less than twenty five (25) kilowatts, or five hundred (500) kilowatts if a Residential Farm Customer , and
  - (b) The solar portion of the installation meets the eligibility for Residential Solar Electric Generating Equipment and
  - (c) The wind portion of the installation meets the eligibility for Residential Customers or a Residential Farm Customer for the Wind Electric Generating Equipment and
  - (d) The micro-hydroelectric portion of the installation meets the eligibility for Residential Micro-Hydroelectric Generating Equipment.

**b) Non-Residential Net Metering Requirements**

- ~~(1)~~ A Non-residential Solar, or Wind, or Farm Waste, or Fuel Cell, or Micro-Hydroelectric Electric Customer-generator shall be net metered if the rated capacity of the Electric Generating Equipment is equal to or less than ~~25~~,000 kilowatts. If the rated capacity of the Solar or Wind or Farm Waste, or Fuel Cell, or Micro-Hydroelectric Electric Generating Equipment is greater than the limits specified herein, net metering shall not apply and the Customer-generator may be served under Service Classification 11-Buy-Back service.

~~(+)(2)~~ Existing generators sized greater than 2,000 kilowatts and up to 5,000 kilowatts that meet the eligibility criteria above, and are not currently compensated under the Value Stack tariff shall be permitted to opt-in to participate in the VDER tariff and receive Value Stack Compensation.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering (continued):****d) Termination of the Interconnection Agreement**

The "Interconnection Agreement" between the Authority and Customer-generator may be terminated as follows:

- (1) The Customer-generator may terminate the Agreement at any time, by giving the Authority sixty (60) days' written notice;
- (2) If the Customer-generator fails to seek final acceptance by the Authority within twelve (12) months after completion of construction, then the Authority may terminate the Agreement on thirty (30) days prior written notice;
- (3) 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 terms and conditions of the "Interconnection Agreement". The terminating Party shall specify in the notice the basis of the termination and shall provide a reasonable opportunity to correct the default;
- (4) The Authority may, by giving the Customer-generator at least sixty (60) days prior written notice, terminate this agreement for cause. The Customer-generator's non-compliance with the Authority's "Smart Grid Small Generator Interconnection Procedures" or non-compliance with the "Interconnection Agreement" shall constitute a good cause;
- (5) Unless the Interconnection Agreement is terminated pursuant to items (1) through (4) above, the net energy metering service will be provided for a term of ten years from the date of installation of service and thereafter will be automatically renewed for annual periods unless the Authority provides thirty days prior written notice of termination before the end of the term.

**e) Net Billing Procedures for Eligible Customer-generators**

- (1) Projects with Eligible Net Metering Technologies are subject to the billing procedures described in items (a) through (h) below when (1) Mass Market Projects have become Substantially Interconnected before January 1, 2018 or (2) Large Onsite Projects have submitted complete applications as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" before May 1, 2018 and are in service before January 1, 2020 and whose rated capacity of the Electric Generating Equipment is equal to or less than 2,000 kilowatts:
  - (a) In the event that the amount of electricity supplied by the Authority during the billing period exceeds the amount of electricity provided to the Authority by the Customer-generator, the Authority shall charge the Customer-generator for the net (excess) electricity it supplied to the Customer-generator at the same rate per kilowatt-hour applicable: (a) to service provided to other Customers in the same service class who do not generate electricity on site, and (b) to the month the energy was generated.

**I. General Information (continued):****C. General Terms and Conditions (continued):  
Remote Net Metering (continued):**

- a) The aggregate rated capacity of net-metered generating equipment of the Remote Net Metering Host Account(s) designated to serve a Satellite plus the rated capacity of net-metered generating equipment on the Remote Net Metered Satellite account, if any, cannot exceed two thousand (2,000) kilowatts for existing Net Metering or Phase One NEM. The aggregate rated capacity of generating equipment of the RNM Host Account(s) designated to serve an RNM Satellite Account plus the rated capacity of net-metered generating equipment on the RNM Satellite Account, if any, shall not exceed five thousand (5,000) kilowatts for the Value Stack Tariff.
  - b) If a Remote Net Metered Satellite account is also a net-metered Customer-generator, charges and credits will first be applied pursuant to section I.C.15.h. Remote Net Metering credits will then be applied pursuant to section I.C.16.b.4 & 5.
- (3) In the event that the amount of electric energy supplied by the Authority to the Host Account during the billing period exceeds the amount of electric energy provided by the Host account to the Authority during the same billing period, the Authority shall charge the Host account the rates provided in the Service Classifications applicable to the Host account Customer-generator for only the net amount of energy provided to the Host account, plus the amount of demand actually recorded in that billing month and other charges as applicable. The appropriate Service Classification for the Host account will be determined on the basis of the larger of the load at the Host account or the generation at the Host account.
- (4) In the event that the amount of electric energy provided by the Host account to the Authority in any billing period exceeds the amount of electric energy supplied by the Authority to the Host account during the same billing period, the Host account shall be regarded as having received no electric energy (kWh) during that billing period.
- a) Demand and other applicable charges will still apply to the Host account and the Satellite accounts. Host Accounts and Satellite accounts will be subject to applicable actual demand charges consumed in the billing period. The Authority will not adjust the demand charge to reflect demand ratchets or monthly demand minimums that might be applied to a standard tariff for net metering purposes.
  - b) If the Host account has excess on-site generation, the excess generation shall be converted to a monetary credit and applied as a direct credit to the host account's outstanding electric charges.
  - c) In the event that the excess on-site generation of the Host account as described in b) above exceeds all components of the host account's outstanding balance owed to the Authority, the remaining monetary credit will be allocated to the eligible designated Satellite accounts in the following manner:
    - (1) Any remaining monetary credit will be applied to the eligible designated Satellite accounts at the percentage designated by the Customer-generator and in the order that each subsequent Satellite account bills in the Authority's billing system. This process will continue through each day in the current and subsequent billing cycle until each Satellite account has been billed. The monetary credit applied to each Satellite account shall not exceed the Satellite account's charges for that billing period. Any allocated credits that exceed the amount that can be used by a Satellite account in that billing cycle will be returned to the Host account. If a Remote Net Metering Satellite account has more than one Remote Net Metering Host, it will receive credits

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from the Remote Net Metering Host Accounts in the order in which the Host Accounts are billed.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering of Community Distributed Generation (continued):**

- g) Projects with eligible Net Metering Technologies will receive credits calculated and applied as described in items (1) through (8) below when (1) Mass Market Projects have become Substantially Interconnected on or after January 1, 2018, ~~or~~ (2) Large Onsite Projects have submitted complete applications as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" on or after May 1, 2018 or (3) Existing generators sized greater than two thousand (2,000) kilowatts to five thousand (5,000) kilowatts that meet the eligibility criteria and are not currently compensated under the Value Stack shall be permitted to opt-in to participation in the Value Stack compensation.
- (1) The CDG Host account will be billed in accordance with the procedures used to calculate a bill for an individually net metered Customer, except that Excess Generation remaining after the bill has been calculated will be monetized based on a calculation described in Section 1.C.18.C - Value Stack Crediting then the Excess Generation will be allocated to Mass Market Customer Satellite accounts and the monetized Value Stack Crediting will be allocated to Large Onsite Customer Satellite accounts in accordance with the CDG Host's designated allocation requests. Any monetized value remaining after the allocation will remain with the CDG Host account as a bill credit to be allocated to the Satellite accounts in future billing periods.
  - (2) For Mass Market Customer Satellite accounts, as each is billed, Excess Generation allocated to the Satellite account will be applied to the Mass Market Satellite account as if the Customer were individually net metered. For Mass Market Satellite accounts served under time-of-use rates, the Excess Generation will be further allocated to the rating periods applicable to the Mass Market Satellite account in proportion to the times, days and seasons when the Excess Generation was delivered to the Authority.
  - (3) For Mass Market Customer Satellite account, if any allocated Excess Generation remains after application to the Satellite account, the remaining allocated Excess Generation shall be carried forward on the Mass Market Satellite's account as a volumetric (kWh) credit for future bill periods.
  - (4) For Large Onsite Customer Satellite account, as each Large Onsite Satellite account is billed the monetized Value Stack Crediting will be allocated to that account.
  - (5) For Large Onsite Customer Satellite account, if any bill credit remains on the Satellite account, the remaining bill credit shall be carried forward on the Large Onsite Satellite's account for future bill periods.
  - (6) Annual Allocation Requests  
Once a year, following the annual anniversary of the CDG Host, after the CDG Host and all CDG Satellite accounts have been billed and credits allocated in accordance with this Tariff, the Authority shall supply the CDG Host a calculation of any excess credits returned to the CDG Host and/or any unallocated excess credits remaining at the CDG Host. By the following anniversary date, the CDG Host must provide to the Authority an annual allocation request for distributing these excess credits to one or more of the CDG Satellite Accounts. No distribution shall be made if an allocation request is not received by the required date, and undistributed credits on the CDG Host shall be subject to forfeit.
  - (7) The day following the twenty-fifth (25) anniversary of the in service date, projects still in operation and injecting energy onto the Authority's electric system, will be compensated under the tariff then in effect.



**VIII. SERVICE CLASSIFICATIONS (continued):****O. SERVICE CLASSIFICATION NO. 11 - Buy-Back Service (continued):  
(Rate Code: 289)****1. Feed-in Tariff for Solar Photovoltaic Renewable Resources**

- a) The Authority will offer to purchase specific amounts of solar photovoltaic power and all environmental attributes at a fixed price per kWh for a term of 20 years at a fixed price to meet its objectives for specific renewable resources. The terms of the offer are defined below.
- a) Generators must enter into a Feed-In Tariff Solar Power Purchase Agreement (the "PPA") and qualify under and satisfy all the requirements of the Small Generator Interconnection Procedures, including attachment at distribution voltages and with a minimum output of greater than 50 kW and maximum output of no more than 20,000 kW. Generators participating in the second installment of the Solar Feed-In Tariff (enrollment period commencing September 30, 2013 through September 30, 2015) must enter into a Feed-In Tariff Solar Power Purchase Agreement (the "PPA"), and satisfy all the requirements of the Small Generator Interconnection Procedures with a minimum output of greater than 100 kW and maximum output of ~~20~~25,000 kW.
- b) Generators that were interconnected to the Authority's system prior to July 1, 2012 are not eligible to participate.
- c) Generators that received a solar pioneer rebate, a solar entrepreneur program rebate or research and development funding from the Authority are not eligible to participate, regardless of whether the payment was made to the current Customer or a previous Customer at the same location.
- d) The eligible generator will be connected directly to the Authority's system with a dedicated stand-alone meter, and 100% of the output from the facility will be sold to the Authority pursuant to the PPA, including any beneficial attributes associated with renewable generation.
- e) The eligible generator will be responsible for all interconnection costs and other costs of developing, installing and maintaining the renewable generating resource, as specified in this Service Classification or elsewhere in the Tariff. The eligible Generator must meet all the requirements of the Small Generator Interconnection Procedures and maintain the PPA and an Interconnection Agreement with the Authority for the duration of their participation in the Purchase of Specific Resources.

## **Proposal Concerning Modifications to LIPA’s Tariff for Electric Service**

### **Requested Action:**

The Long Island Power Authority (the “Authority”) staff proposes to revise the Tariff for Electric Service (the “Tariff”) to expand the eligibility for compensation under the Authority’s Value of Distributed Resources tariff to projects with a capacity between (2,000) kilowatts and five thousand (5,000) kilowatts in compliance with the New York Public Service Commission (the “Commission”)’s *Order on Phase One Value of Distributed Energy Resources Project Size Cap and Related Matters*<sup>1</sup>, issued and effective on February 22, 2018 (the “VDER Project Size Order”).

### **Background:**

On March 9, 2017, the Commission issued its *Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters* (the “VDER Phase One Order”), which established the first phase of a plan to establish a new system for compensation of distributed energy resources based on the component values those resources provide to the electric grid (the “Value Stack”). On December 19, 2017, the Authority adopted Tariff changes implementing the VDER Phase One Order.

Eligibility for Value Stack compensation was initially limited in the VDER Phase One Order and the Authority’s Tariff to projects sized up to 2,000 kilowatts. In an effort to continuously refine and improve VDER, the Department of Public Service (“DPS”) Staff has held working group meetings with stakeholders on a number of different topics, including expanding the eligibility of VDER projects to those sized above 2,000 kilowatts and below 5,000 kilowatts. PSEG Long Island participated the working group meetings on behalf of the Authority. The Commission ultimately issued the Order expanding the eligibility for Value Stack compensation under VDER to include non-residential customers with solar, wind, farm waste, fuel cell, or micro-hydroelectric generating equipment with a rated capacity of greater than 2,000 kilowatts and not more than 5,000 kilowatts.

### **Proposal:**

Consistent with the VDER Project Size Order, the Authority Staff proposes to expand eligibility for Value Stack compensation under the Value of Distributed Energy Resources tariff to include new and existing projects with a rated capacity between 2,000 and 5,000 kilowatts.

### **Financial Impacts:**

The proposal will not have a material financial impact on the Authority because revenues lost from VDER are recovered through the Authority’s Revenue Decoupling Mechanism. Depending on participation, the proposal could have an impact on non-participating customers. In 2017, the Authority has only received one Distributed Energy Project that was sized at the 2,000 kilowatt cap. Assuming that five projects applying for VDER compensation at the 2,000-kilowatt cap instead applied at the newly proposed 5,000-kilowatt cap – the estimated impact on non-participating customers would be \$1.6 million per year, which equates to an average customer bill impact of 0.04% per year.

**Affected Tariff Leaves:** 16, 18, 22, 24, 34A, 34A-1, 34E, 34J, 34O and 254.

### **Summary of Proposed Changes:**

Update the tariff to increase the eligibility of Value Stack Compensation to generating projects from 2,000 to 5,000 kilowatts.

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<sup>1</sup> Case 15-E-0751 et al., *In the Matter of the Value of Distributed Energy Resources* (“VDER Proceeding”), Order on Phase One Value of Distributed Energy Resources Project Size CAP and Related Matters (issued February 22, 2018).

**I. General Information (continued):****B. Abbreviations and Definitions (continued):**

**Demand Customer:** A Customer who is billed for Demand charges.

**Demand Meter:** The device that records the maximum amount of power used by the Customer over a 15-minute interval during a specific period, such as a month.

**Department:** The New York State Department of Public Service.

**Deposit:** A sum of money given as security for payment of service.

**Distribution Facilities:** Facilities used to distribute electric energy to consumers, including supply lines, distribution lines, service laterals, and accessory equipment.

**Distribution Line(s):** A system of poles, wires, ducts, conduits, and additional equipment used for the shared distribution of electricity to Customers.

**E**

**Easement:** (See *Right-of-way*)

**Eligible Net Metering Technologies:** The list of eligible technologies is: Solar Electric Generating Equipment, Wind Electric Generating Equipment, Micro-Hydroelectric Generating Equipment, Micro-Combined Heat and Power (CHP) Generating Equipment, Fuel Cell Electric Generating Equipment, and Farm Waste Electric Generating Equipment. See definition of Solar Electric Generating Equipment, Wind Electric Generating Equipment, Micro-Hydroelectric Generating Equipment, Micro-Combined Heat and Power (CHP) Generating Equipment, Fuel Cell Electric Generating Equipment, and Farm Waste Electric Generating equipment for further details.

**Energy:** Energy is electric power, used or supplied over time, and measured in KWH.

**Existing Overhead Areas:** Areas in which electric distribution facilities are constructed overhead, and there are no requirements to construct facilities underground.

**F**

**Farm Waste Electric Generating Equipment:** Equipment that generates electric energy from biogas produced by anaerobic digestion of agricultural wastes, such as livestock manure, farming wastes and food processing wastes with a rated capacity of not more than ~~two thousand (2,000) kilowatts~~ **five thousand (5,000) kilowatts** that is manufactured, installed and operated by Customer-generator in accordance with applicable government and industry standards, connected to the electric system and operated in conjunction with the Authority's transmission and distribution facilities, operated in compliance with the Authority's standards and requirements established therefor, fueled at a minimum of ninety (90) percent on an annual basis by biogas produced from the anaerobic digestion of agricultural waste such as livestock manure materials, crop residues, and food processing waste, and fueled by biogas generated by anaerobic digestion with at least fifty (50) percent by weight of its feed stock being livestock manure on an annual basis.

**Fuel Cell Electric Generating Equipment:** A solid oxide, molten carbonate, proton exchange membrane or phosphoric acid fuel cell, with a combined rated capacity of not more than ten (10) kilowatts for a residential customer or with a rated capacity of not more than ~~two thousand (2,000) five thousand (5,000) kilowatts~~ for a non-residential customer, that is manufactured, installed and operated in accordance with applicable government and industry standards, that is connected to the electric system and operated in compliance with the Authority's standards and requirements established therefor. This definition, including the capacity limits specified herein, does not apply to fuel cells participating in the Fuel Cell Feed-in Tariff.

**Fuel and Purchased Power Cost Adjustment Clause:** See definition for Power Supply Charge.

**Full-Requirements Customer:** A Customer whose electric power requirements are all supplied by the Authority. (See *Customer – Full Requirements Customer*)

**G**

**Generation Project:** A specific project that is eligible to participate in the Commercial Solar or Fuel Cell Feed-In Tariff under Service Classification No. 11 – Buy-Back Service.

**I. General Information (continued):****B. Abbreviations and Definitions (continued):**

**Load:** (See *Demand*)

**Load Factor:** The ratio of a Customer(s) average demand to peak demand during a specified period.

**Location:** Property with stated boundaries which is owned or occupied by a single legal entity.

**M**

**Manager:** PSEG Long Island LLC, the entity engaged by the Authority to operate, maintain, manage and act as agent for the Authority's system pursuant to the terms and conditions of the Operations Services Agreement. Nothing herein shall be read to change or modify Manager's duties and obligations or create any liability on the part of Manager beyond that set forth in the Operations Services Agreement.

**Mass Market Customer(s):** Residential or Small Commercial Service Classification that are not billed for demand.

**Mass Market Project(s):** Projects using an Eligible Net Metering Technologies owned by a Mass Market Customer(s).

**Micro-Combined Heat and Power Generating Equipment:** Any Residential customer with an integrated cogenerating building heating and electrical power generation system, operating on any fuel and any applicable engine, fuel cell, or other technology, with a rated capacity of at least one kilowatt and not more than ten (10) kilowatts electric and any thermal output that all full load has a design total fuel use efficiency in the production of heat and electricity of not less than eighty percent, and annually produces at least two thousand (2,000) kilowatt hours of useful energy in the form of electricity that may work in combination with supplemental, or parallel conventional heating system, that is manufactured, installed and operated in accordance with applicable government and industry standards operated in conjunction with the Authority's transmission and distribution facilities.

**Micro-Hydroelectric Generating Equipment:** A Hydroelectric system, with a rated capacity of not more than 25 kW for a residential customer or with a rated capacity of not more than ~~2,000-kW~~ **five thousand (5,000) kilowatts** for a non-residential customer, that is manufactured, installed and operated in accordance with applicable government and industry standards, connected to the electric system and operated in conjunction with the Authority's transmission and distribution facilities.

**Month:** A Month in this document is defined as a 30-day period, and monthly rates for billing periods other than a Month are prorated.

**Multi-phase:** Producing, carrying, or powered by multiple alternating voltages, each of which reaches its highest level at different time intervals. (See *Alternating Voltage*)

**Multiple-Occupancy or Multiple Dwelling Building:** A building designed to contain three (3) or more individual residential units for permanent occupancy. Each unit should contain kitchen, bath, and sleeping areas. In some instances, the Tariff may differentiate between buildings that contain three or more units and those that contain four or more units.

**N**

**Net Energy Metering:** 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 the Authority to the Customer-generator and/or the net amount of electricity provided by the Customer-generator to the Authority.

**I. General Information (continued):****B. Abbreviations and Definitions (continued):**

**Service Line or Lateral:** A system of conductors and equipment for delivering electricity from the Authority's distribution system to the wiring system of a building or address.

**Service Termination:** The point at which the service line or lateral ends and the Customer connects with the wiring system.

**Shared Meter:** Any Authority meter that measures electric service provided to a tenant's dwelling and to areas outside that dwelling, and the tenant pays for all usage recorded on the meter.

**Shared-Meter Customer:** Any tenant who rents a dwelling with a shared meter from the owner of the dwelling, and the tenant, rather than the owner, is the Authority's Customer of record.

**Short-Term or Temporary Customer - Non-Residential:** (See *Customer - Short-Term or Temporary Customer*)

**Short-Term or Temporary Customer - Residential:** (See *Customer - Short-Term or Temporary Customer*)

**Single-phase:** Producing, carrying, or powered by a single alternating voltage. (See *Alternating Voltage*)

**Solar Electric Generating Equipment:** A photovoltaic system with a rated capacity of equal to or less than twenty five kilowatts (25 kW) for residential Customers or with a rated capacity equal to or less than ~~2,000 kilowatts~~ five thousand (5,000) kilowatts for Non-residential Customers which is manufactured, installed and operated in accordance with applicable government and industry standards, is connected to the Authority's electric system and operated in conjunction with the Authority's transmission and distribution facilities, and which is operated in compliance with the Authority's standards and requirements.

**State Agency:** Any board, authority, agency, department, commission, public corporation, body politic, or instrumentality of the State of New York.

**Subdivision:** (See *Residential Subdivision*)

**Submetering:** The redistribution of electric service to multiple meters not owned by the Authority.

**Substantially Interconnected:** Will be determined by reference to the PSEG-Long Island Smart Grid Small Generator Standardized Interconnection Procedures ("Smart Grid SGIP"). Systems in the Smart Grid SGIP Fast Track process will be considered substantially interconnected upon completion of Step 6 of the Fast Track process. Systems sized between 50 kW and 2,000 kW will be considered substantially interconnected upon completion of Step 7 of the Smart Grid SGIP. (Systems larger than 2,000 kW will continue to be ineligible for net metering.)

**Supply Line:** A part of a distribution line that is installed between an existing electric distribution system and an underground distribution line within an underground-designated area. (See *Underground-Designated Area*)

**Surcharge:** In connection with extension of distribution facilities, a monthly, bimonthly, or annual charge assessed Residential Customers over a period that does not exceed ten years and which recovers the cost of the distribution facilities Customers are directly responsible for.

**I. General Information (continued):****C. Abbreviations and Definitions (continued):****Voltampere = VA**

The unit of measure of Apparent Power. (See *Power*) Multiplying the volts by the amperes in an electric circuit will result in the voltamperes.

**W****Watt = W**

A unit of measurement of Real Electrical Power. (See *Power*)

**Watt-hour = W-hr**

The total amount of energy used in an electricity consuming device. Energy is measured as power used over time. For example, a device using one (1) watt-hour of energy is using the equivalent of one (1) watt of power over a period of one (1) hour.

**Watt-hour Meter:** The recording device that measures energy in watt-hours.

**Wind Electric Generating Equipment:** A wind generator or generators with the combined rated capacity of not more than twenty five kilowatts (25 kW) for a Residential Customer-generator, and not more than 500 kW for a Residential Farm Customer, and not more than ~~five thousand 2(5,000)-kW~~ **five thousand 2(5,000)-kW** ~~kilowatts~~ for a Non-residential Customer which is manufactured, installed and operated in accordance with applicable government and industry standards, is connected to the electric system and operated in conjunction with the Authority's transmission and distribution facilities, and which is operated in compliance with the Authority's standards and requirements.

**I. General Information (continued):****C. General Terms and Conditions (continued):****14. Net Metering****a) Residential Net Metering Requirements**

- (1) A Residential Solar or Wind Customer-generator shall be net metered only if the rated capacity of the Solar or Wind Electric Generating Equipment is (1) equal to or less than twenty five (25) kilowatts and (2) equal to or less than 110% of the customer's last twelve months of load or customer provided load letter. If the rated capacity of the Solar or Wind Electric Generating Equipment owned and/or operated by the residential Customer-generator is (1) greater than twenty-five (25) kilowatts, or (2) greater than 110% of the customer's last twelve months of load or customer provided load letter, net metering shall not apply and Customer-generator may be served under Service Classification 11-Buy-Back service.
- (2) A Residential Farm Customer shall be net metered only if the rated capacity of the Solar Electric Generating Equipment is equal to or less than one hundred (100) kilowatts or the Wind Electric Generating Equipment is equal to or less than five hundred (500) kilowatts. If the rated capacity of the Solar Electric Generating Equipment is greater than one hundred (100) kilowatts or the Wind Electric Generating Equipment is greater than five hundred (500) kilowatts, net metering shall not apply and Customer-generator may be served under Service Classification 11-Buy-Back service.
- (3) A Residential Farm Waste Customer-generator shall be net metered only if the rated capacity of the Farm Waste Generating Equipment is equal to or less than ~~two-five~~ thousand (25,000) kilowatts. If the rated capacity of the Farm Waste Electric Generating Equipment owned and/or operated by the Customer-generator is greater than ~~two-five~~ thousand (25,000) kilowatts, net metering shall not apply and Customer-generator may be served under Service Classification 11-Buy-Back service.
- (4) A Residential Micro-Combined-Heat-and-Power (Micro-CHP) Customer-generator shall be net metered only if the rated capacity of the Micro-CHP generating equipment is at least one (1) kilowatt and less than or equal to ten (10) kilowatts. If the rated capacity of the Micro-CHP generating equipment owned and/or operated by the residential Customer-generator is greater than ten (10) kilowatts, net metering shall not apply and Customer-generator may be served under Service Classification 11-Buy Back service.
- (5) A Residential Fuel Cell Customer generator shall be net metered only if the rated capacity of the Fuel Cell Electric Generating Equipment is less than or equal to ten (10) kilowatts. If the rated capacity of the Fuel Cell Generating Equipment owned and/or operated by the residential Customer-generator is greater than ten (10) kilowatts, net metering shall not apply and Customer-generator may be served under Service Classification 11-Buy Back service.



**II. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering (continued):**

- (6) A Residential Micro-Hydroelectric Customer-generator shall be net metered only if the rated capacity of the Micro-Hydroelectric generating equipment is equal to or less than twenty five (25) kilowatts. If the rated capacity of the Micro-Hydroelectric Generating Equipment owned and/or operated by the residential Customer-generator is greater than 25 kilowatts, net metering shall not apply and Customer-generator may be served under Service Classification 11-Buy-Back Service.
- (7) A Residential Customer-generator that combines Solar Electric, Wind Electric, or Micro-Hydroelectric Generating Equipment in a hybrid system shall be net metered only if:
  - (a) The rated capacity of the combined system is equal to or less than twenty five (25) kilowatts, or five hundred (500) kilowatts if a Residential Farm Customer , and
  - (b) The solar portion of the installation meets the eligibility for Residential Solar Electric Generating Equipment and
  - (c) The wind portion of the installation meets the eligibility for Residential Customers or a Residential Farm Customer for the Wind Electric Generating Equipment and
  - (d) The micro-hydroelectric portion of the installation meets the eligibility for Residential Micro-Hydroelectric Generating Equipment.
- b) Non-Residential Net Metering Requirements

(1) A Non-residential Solar, or Wind, or Farm Waste, or Fuel Cell, or Micro-Hydroelectric Electric Customer-generator shall be net metered if the rated capacity of the Electric Generating Equipment is equal to or less than ~~25~~,000 kilowatts. If the rated capacity of the Solar or Wind or Farm Waste, or Fuel Cell, or Micro-Hydroelectric Electric Generating Equipment is greater than the limits specified herein, net metering shall not apply and the Customer-generator may be served under Service Classification 11-Buy-Back service.

~~(1)~~(2) Existing generators sized greater than 2,000 kilowatts and up to 5,000 kilowatts that meet the eligibility criteria above, and are not currently compensated under the Value Stack tariff shall be permitted to opt-in to participate in the VDER tariff and receive Value Stack Compensation.



**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering (continued):****d) Termination of the Interconnection Agreement**

The “Interconnection Agreement” between the Authority and Customer-generator may be terminated as follows:

- (1) The Customer-generator may terminate the Agreement at any time, by giving the Authority sixty (60) days’ written notice;
- (2) If the Customer-generator fails to seek final acceptance by the Authority within twelve (12) months after completion of construction, then the Authority may terminate the Agreement on thirty (30) days prior written notice;
- (3) 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 terms and conditions of the “Interconnection Agreement”. The terminating Party shall specify in the notice the basis of the termination and shall provide a reasonable opportunity to correct the default;
- (4) The Authority may, by giving the Customer-generator at least sixty (60) days prior written notice, terminate this agreement for cause. The Customer-generator’s non-compliance with the Authority’s “Smart Grid Small Generator Interconnection Procedures” or non-compliance with the “Interconnection Agreement” shall constitute a good cause;
- (5) Unless the Interconnection Agreement is terminated pursuant to items (1) through (4) above, the net energy metering service will be provided for a term of ten years from the date of installation of service and thereafter will be automatically renewed for annual periods unless the Authority provides thirty days prior written notice of termination before the end of the term.

**e) Net Billing Procedures for Eligible Customer-generators**

- (1) Projects with Eligible Net Metering Technologies are subject to the billing procedures described in items (a) through (h) below when (1) Mass Market Projects have become Substantially Interconnected before January 1, 2018 or (2) Large Onsite Projects have submitted complete applications as per Step 3 of the Authority’s “Smart Grid Small Generator Interconnection Procedures” before May 1, 2018 and are in service before January 1, 2020 and whose rated capacity of the Electric Generating Equipment is equal to or less than 2,000 kilowatts:
  - (a) In the event that the amount of electricity supplied by the Authority during the billing period exceeds the amount of electricity provided to the Authority by the Customer-generator, the Authority shall charge the Customer-generator for the net (excess) electricity it supplied to the Customer-generator at the same rate per kilowatt-hour applicable: (a) to service provided to other Customers in the same service class who do not generate electricity on site, and (b) to the month the energy was generated.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Remote Net Metering (continued):**

- a) The aggregate rated capacity of net-metered generating equipment of the Remote Net Metering Host Account(s) designated to serve a Satellite plus the rated capacity of net-metered generating equipment on the Remote Net Metered Satellite account, if any, cannot exceed two thousand (2,000) kilowatts ~~for existing Net Metering or Phase One NEM. The aggregate rated capacity of generating equipment of the RNM Host Account(s) designated to serve an RNM Satellite Account plus the rated capacity of net-metered generating equipment on the RNM Satellite Account, if any, shall not exceed five thousand (5,000) kilowatts for the Value Stack Tariff.~~
  - b) If a Remote Net Metered Satellite account is also a net-metered Customer-generator, charges and credits will first be applied pursuant to section I.C.15.h. Remote Net Metering credits will then be applied pursuant to section I.C.16.b.4 & 5.
- (3) In the event that the amount of electric energy supplied by the Authority to the Host Account during the billing period exceeds the amount of electric energy provided by the Host account to the Authority during the same billing period, the Authority shall charge the Host account the rates provided in the Service Classifications applicable to the Host account Customer-generator for only the net amount of energy provided to the Host account, plus the amount of demand actually recorded in that billing month and other charges as applicable. The appropriate Service Classification for the Host account will be determined on the basis of the larger of the load at the Host account or the generation at the Host account.
- (4) In the event that the amount of electric energy provided by the Host account to the Authority in any billing period exceeds the amount of electric energy supplied by the Authority to the Host account during the same billing period, the Host account shall be regarded as having received no electric energy (kWh) during that billing period.
- a) Demand and other applicable charges will still apply to the Host account and the Satellite accounts. Host Accounts and Satellite accounts will be subject to applicable actual demand charges consumed in the billing period. The Authority will not adjust the demand charge to reflect demand ratchets or monthly demand minimums that might be applied to a standard tariff for net metering purposes.
  - b) If the Host account has excess on-site generation, the excess generation shall be converted to a monetary credit and applied as a direct credit to the host account's outstanding electric charges.
  - c) In the event that the excess on-site generation of the Host account as described in b) above exceeds all components of the host account's outstanding balance owed to the Authority, the remaining monetary credit will be allocated to the eligible designated Satellite accounts in the following manner:
    - (1) Any remaining monetary credit will be applied to the eligible designated Satellite accounts at the percentage designated by the Customer-generator and in the order that each subsequent Satellite account bills in the Authority's billing system. This process will continue through each day in the current and subsequent billing cycle until each Satellite account has been billed. The monetary credit applied to each Satellite account shall not exceed the Satellite account's charges for that billing period. Any allocated credits that exceed the amount that can be used by a Satellite account in that billing cycle will be returned to the Host account. If a Remote Net Metering Satellite account has more than one Remote Net Metering Host, it will receive credits

| Long Island Power Authority

~~Third-Fourth~~ Revised Leaf No. 34J

from the Remote Net Metering Host Accounts in the order in which the Host Accounts are billed.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering of Community Distributed Generation (continued):**

g) Projects with eligible Net Metering Technologies will receive credits calculated and applied as described in items (1) through (8) below when (1) Mass Market Projects have become Substantially Interconnected on or after January 1, 2018, ~~or~~ (2) Large Onsite Projects have submitted complete applications as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" on or after May 1, 2018 **or (3) Existing generators sized greater than two thousand (2,000) kilowatts to five thousand (5,000) kilowatts that meet the eligibility criteria and are not currently compensated under the Value Stack shall be permitted to opt-in to participation in the Value Stack compensation.**

- (1) The CDG Host account will be billed in accordance with the procedures used to calculate a bill for an individually net metered Customer, except that Excess Generation remaining after the bill has been calculated will be monetized based on a calculation described in Section 1.C.18.C - Value Stack Crediting then the Excess Generation will be allocated to Mass Market Customer Satellite accounts and the monetized Value Stack Crediting will be allocated to Large Onsite Customer Satellite accounts in accordance with the CDG Host's designated allocation requests. Any monetized value remaining after the allocation will remain with the CDG Host account as a bill credit to be allocated to the Satellite accounts in future billing periods.
- (2) For Mass Market Customer Satellite accounts, as each is billed, Excess Generation allocated to the Satellite account will be applied to the Mass Market Satellite account as if the Customer were individually net metered. For Mass Market Satellite accounts served under time-of-use rates, the Excess Generation will be further allocated to the rating periods applicable to the Mass Market Satellite account in proportion to the times, days and seasons when the Excess Generation was delivered to the Authority.
- (3) For Mass Market Customer Satellite account, if any allocated Excess Generation remains after application to the Satellite account, the remaining allocated Excess Generation shall be carried forward on the Mass Market Satellite's account as a volumetric (kWh) credit for future bill periods.
- (4) For Large Onsite Customer Satellite account, as each Large Onsite Satellite account is billed the monetized Value Stack Crediting will be allocated to that account.
- (5) For Large Onsite Customer Satellite account, if any bill credit remains on the Satellite account, the remaining bill credit shall be carried forward on the Large Onsite Satellite's account for future bill periods.
- (6) Annual Allocation Requests  
Once a year, following the annual anniversary of the CDG Host, after the CDG Host and all CDG Satellite accounts have been billed and credits allocated in accordance with this Tariff, the Authority shall supply the CDG Host a calculation of any excess credits returned to the CDG Host and/or any unallocated excess credits remaining at the CDG Host. By the following anniversary date, the CDG Host must provide to the Authority an annual allocation request for distributing these excess credits to one or more of the CDG Satellite Accounts. No distribution shall be made if an allocation request is not received by the required date, and undistributed credits on the CDG Host shall be subject to forfeit.
- (7) The day following the twenty-fifth (25) anniversary of the in service date, projects still in operation and injecting energy onto the Authority's electric system, will be compensated under the tariff then in effect.

**VIII. SERVICE CLASSIFICATIONS (continued):****O. SERVICE CLASSIFICATION NO. 11 - Buy-Back Service (continued):  
(Rate Code: 289)****1. Feed-in Tariff for Solar Photovoltaic Renewable Resources**

- a) The Authority will offer to purchase specific amounts of solar photovoltaic power and all environmental attributes at a fixed price per kWh for a term of 20 years at a fixed price to meet its objectives for specific renewable resources. The terms of the offer are defined below.
- a) Generators must enter into a Feed-In Tariff Solar Power Purchase Agreement (the "PPA") and qualify under and satisfy all the requirements of the Small Generator Interconnection Procedures, including attachment at distribution voltages and with a minimum output of greater than 50 kW and maximum output of no more than 20,000 kW. Generators participating in the second installment of the Solar Feed-In Tariff (enrollment period commencing September 30, 2013 through September 30, 2015) must enter into a Feed-In Tariff Solar Power Purchase Agreement (the "PPA"), and satisfy all the requirements of the Small Generator Interconnection Procedures with a minimum output of greater than 100 kW and maximum output of ~~25~~,000 kW.
- b) Generators that were interconnected to the Authority's system prior to July 1, 2012 are not eligible to participate.
- c) Generators that received a solar pioneer rebate, a solar entrepreneur program rebate or research and development funding from the Authority are not eligible to participate, regardless of whether the payment was made to the current Customer or a previous Customer at the same location.
- d) The eligible generator will be connected directly to the Authority's system with a dedicated stand-alone meter, and 100% of the output from the facility will be sold to the Authority pursuant to the PPA, including any beneficial attributes associated with renewable generation.
- e) The eligible generator will be responsible for all interconnection costs and other costs of developing, installing and maintaining the renewable generating resource, as specified in this Service Classification or elsewhere in the Tariff. The eligible Generator must meet all the requirements of the Small Generator Interconnection Procedures and maintain the PPA and an Interconnection Agreement with the Authority for the duration of their participation in the Purchase of Specific Resources.

**RECOMMENDATION FOR APPROVAL OF MODIFICATIONS TO LIPA'S TARIFF  
FOR ELECTRIC SERVICE RELATED TO SMART METER OPT-OUT**

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**WHEREAS**, as envisioned in the LIPA Reform Act and the Operations Services Agreement, PSEG Long Island has developed and submitted annual Utility 2.0 Plans for review by the Authority and the New York Department of Public Service; and

**WHEREAS**, PSEG Long Island's 2018 Utility 2.0 Plan proposed a territory-wide deployment of Advanced Metering Infrastructure ("AMI") equipped smart meters; and

**WHEREAS**, consistent with guidance from the Department of Public Service and the practices of other New York utilities, PSEG Long Island and the Authority propose to implement procedures and charges for customers who opt out or request removal of an existing smart meter;

**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 12, 2018, two public hearings were held in Nassau and Suffolk counties on November 16, 2018, 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 of the Board of Trustees hereby recommends approval of the proposed modifications to the Authority's Tariff to be effective January 1, 2019; and be it further

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

Dated: December 19, 2018

**ADDENDA**

<b><u>Statement of:</u></b>	<b><u>See Leaf No.</u></b>
Bill Credit Adjustment for the Long Island Choice Program	299
Distribution Facility Charges	107
Energy and Peak Demand Losses	181
Distributed Energy Resources Cost Recovery Rate	182C
Feed-in Tariff Rates	255B
Power Supply Charge	168
Increases in Rates and Charges to Recover Pilot Payments	170
Installed Capacity and Local ICAP for the Long Island Choice Program	286
Interest on Customer Deposits	106
Market Energy Prices	253
New York State Assessment (NYSA) Factor	182H
Shoreham Property Tax (SPT) Settlement Factors (Surcharge Factors)	172
Visual Benefits Assessment Rate	182F
Securitization Offset Charge	182J
Revenue Decoupling Mechanism	182K
Delivery Service Adjustment	182O
Commercial System Relief Program Payments	326
Direct Load Control Program Payments	328
Distribution Load Relief Program Payments	348
<b><u>AMI Smart Meter Fees</u></b>	<b><u>107B</u></b>

**III. Overhead and Underground Distribution of Electricity (continued):****E. Meters (continued):****3. Meter Testing**

- a) The Authority will test meters if requested directly by the Customer.
- b) The Authority shall pay the cost of the testing.
- c) The Authority will perform the tests within sixty (60) days of the request, unless prevented by events it cannot control.

**4. Types of Meters**

The Authority will determine the type of meter installed.

**5. Existing Customer without an AMI smart meter:**

Effective January 1, 2019, Residential Service Classification No. 1 Customers (rates 180, 380, 480, 481, 580, 880), receiving service through a non-AMI equipped meter will be notified of replacement with an AMI equipped smart meter. With the following exceptions, residential Customers may opt-out of receiving the smart meter:

- a) Customers who participate in net metering;
- b) Retail choice program participants (Long Island Choice and Green Choice); and
- c) Residential Customers served under time-of-use service classifications (1-VMRP(S), and 1-VMRP(L)).

Commercial service classifications are ineligible to opt-out of smart meter installation.

The customer will receive communication from the Authority at least 45 days prior to the install date of the AMI equipped smart meter. If the customer does not want an AMI equipped smart meter they may request that service be continued through a non-communicating meter.

Residential Service Classification No.1 Customers who do not object to installation of an AMI equipped smart meter and later request removal of the AMI equipped smart meter and replacement with a non-communicating meter will be subject to a meter removal fee as described in Section IV.C.11.

Beginning in January 1, 2023, customers who have opted out of receiving the AMI equipped smart meter will be charged a daily opt out service fee ("AMI Smart Meter Daily Opt-Out Fee") as described in Section IV.C.11.



**IV. Billing Process and Payment of Bills (continued):****C. Charges for Miscellaneous Services (continued):****10. Meter Reading Historical Information:**

- a) Customers, ESCO's and DRC's may request and will be provided, if available, up to twenty-four (24) months of monthly or bi-monthly historical meter reading information without charge. Monthly or bi-monthly historical meter reading information for historical periods beyond the twenty-four (24) months will be provided, as available, for a charge of forty dollars (\$40.00) regardless of the number of months of information requested or provided. Hourly or fifteen (15) minute interval data covering any historical monthly period will be provided, if available, at a charge of ten dollars (\$10.00) for each meter reading period's requested data.
- b) Customers who request their remote AMI meter reading data to be provided to them on a monthly basis will individually enter into a negotiated price agreement with the Authority.

AMI customers can retrieve all available meter data from the Manager's Website at no charge. Where available AMI will be used to collect meter data and measure net electricity transactions.

**11. Metering Related AMI Charges:**

- a) Residential Service Classification No.1 Customers (rates 180, 380, 480, 481, 580, 880) who are eligible to opt-out from installation of a smart meter (see Section III.E.5) but did not opt-out until after installation will be subject to a one-time fee ("One Time Meter Removal Fee") as per the Statement of AMI Smart Meter Fees.
- b) Beginning January 1, 2023, customers who have opted out of receiving an AMI equipped smart meter will be subject to a daily opt-out fee ("AMI Smart Meter Daily Opt-Out Fee") as per the Statement of AMI Smart Meter Fees.

**LIPA Statement No. 1 – AMI**

**Long Island Power Authority**

**Statement of AMI Smart Meter Fees (AMI)**

Applicable to Residential Service Classification No.1 Customers who have Opted Out of having an AMI equipped Smart Meter installed.

One Time Meter Removal Fee..... \$65.61

\*AMI Smart Meter Daily Opt-Out Fee.....N/A

\*Note that this charge is currently not in effect.

## **Proposal Concerning Modifications to LIPA’s Tariff for Electric Service**

### **Requested Action:**

The Long Island Power Authority (the “Authority”) staff proposes to revise the Tariff for Electric Service to include the details of an Advanced Metering Infrastructure (“AMI”) equipped smart meter removal fee (“One Time Meter Removal Fee”) and future manual meter reading fee (“AMI Smart Meter Daily Opt-Out Fee”) associated with the PSEG Long Island smart meter full deployment project.

### **Background:**

PSEG Long Island began deploying AMI equipped smart meters as part of PSEG Long Island’s 2017 Utility 2.0 plan and has filed a 2018 Utility 2.0 plan<sup>1</sup> featuring a proposal for full service-territory-wide smart meter deployment to all customer classes by 2023.

One of the primary goals of the smart meter deployment project is to provide the foundation for New York State’s comprehensive energy strategy, Reforming the Energy Vision (“REV”). Consistent with REV, full deployment of smart meters will empower PSEG Long Island customers to make more informed energy choices, enable the development of new energy products and services, and advance the Authority’s mission to provide clean, reliable, and affordable electric service.

As described in full in the 2018 Utility 2.0 Plan Update and as demonstrated by many utilities, full-scale deployment of smart meters offers several additional benefits: it improves customer satisfaction, increases energy efficiency, drives operational excellence, and reduces costs. Full deployment of smart meters will allow PSEG Long Island to align with utility best practices and leverage PSEG Long Island’s significant AMI experience to advance all of these objectives.

Further, smart meters will assist with LIPA’s mission to enable clean, reliable, and affordable electric service for customers.

- Clean. AMI provides the technological underpinning for innovative energy efficiency programs and supports a greater penetration of DER to help maintain a clean environment.
- Reliable. AMI is proven at many utilities to improve outage management and with advanced analytics, prevent outages.
- Affordable. AMI reduces operational costs in meter reading and services and provides capabilities for improvements to business management and electric grid operations, resulting in lower cost of service

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<sup>1</sup> Matter: 14-01299 In the Matter of PSEG-LI Utility 2.0 Long Range Plan. *Utility 2.0 Long Range Plan 2018 Annual Update* (filed June 29, 2018).

**Proposal:**

In order to successfully deploy smart meters throughout the service territory, the Authority is requesting to update the Tariff for Electric Service to include a (1) meter removal fee for Residential customers billed under Service Classification I who initially accept installation of a smart meter and subsequently request post-installation removal. (2) Identify that beginning on January 1, 2023, customers who have opted-out of receiving an AMI equipped smart meter will incur a daily opt-out fee (“AMI Smart Meter Daily Opt-Out Fee”) to recover the Authority’s cost to manually read those meters.

With the following exceptions, residential customers billed on Service Classification I will have the ability to opt-out of receiving a smart meter during the full-scale deployment period, at no charge, by notifying PSEG Long Island. The exceptions are that residential customers who participate in net metering, time-of-use rates, or a retail choice program (Long Island Choice and Green Choice) are ineligible to opt-out from smart meter installation. All commercial customers are ineligible to opt-out.

Customers will receive general media coverage and announcements throughout the implementation of AMI and will be able to opt-out at any time prior to meter installation at no costs. Specifically each customer will be notified:

- At least 45 days before meter installation, customers will receive a welcome letter informing them that PSEG Long Island will be changing their meter.
  - They also will receive information on how to opt-out should they choose not to receive a smart meter.
  - The letter will also identify PSEG Long Island’s intention to implement a monthly manual meter reading fee of approximately \$9.19 for non-AMI (“non-communicating”) meters after January 1st 2023.
- At least 14 days before meter installation, customers will receive a reminder call.
- At least 7 days before meter installation, customers will receive a welcome kit.

If no response is received and no objection is raised by the customer at the time of installation, the smart meter will be installed. If a residential customer does not object to installation of a smart meter and later requests removal of the meter, Staff proposes that a one-time meter removal fee (“One Time Meter Removal Fee”) of \$110.61 be charged for removal of the smart meter and replacement with a non-communicating meter.

The proposed meter removal fee is consistent with the fees charged by other utilities in New York State and throughout the country in their smart meter deployment plans. Currently, Consolidated Edison, Orange & Rockland, Central Hudson and Niagara Mohawk all include meter removal fees in their tariffs.

After complete saturation of AMI equipped smart meters, which is anticipated to occur by December of 2022, customers who have opted-out of having an AMI equipped smart meter installed will be subject to pay the AMI Smart Meter Daily Opt-Out Fee beginning on January 1, 2023. Staff proposes this fee be approximately \$9.19 per month and will be calculated based on the actual cost of reading the meter on a monthly basis.

The One Time Meter Removal Fee alleviates unnecessary expense on all rate payers for the additional cost associated with installing and then removing and re-installing a non-communicating meter for those customers who do not object to initial installation of a smart meter and subsequently request removal. The AMI Smart Meter Daily Opt-Out Fee alleviates the unnecessary expense on all rate payers for the additional costs associated with manual monthly meter reads.

The One Time Meter Removal Fee and the AMI Smart Meter Daily Opt-Out Fee will be posted in the “Statement of AMI Smart Meter Fees (AMI)” on the Authority’s website to be updated as needed based on the actual costs of removing a AMI meter and the actual cost of manually reading non-AMI meters.

**Financial Impacts:** No financial impacts are expected to result from this proposal. The One Time Meter Removal Fee is designed to recover the costs associated with replacing a customer’s smart meter with a non-communicating meter and the AMI Smart Meter Daily Opt-Out Fee is designed to recover the costs associated with a manual monthly meter read.

**Affected Tariff Leaf:** 6B, 91, and 107B

**Affected Statements:** New Statement: AMI Smart Meter Fees

**Summary of Proposed Changes:**

If a residential customer does not object to initial installation of a smart meter and later requests removal and replacement with a non-communicating meter, Staff proposes charging a one-time fee of \$110.61. After January 1<sup>st</sup>, 2023 any residential customers that have a non-AMI meter will be subject to the AMI Smart Meter Daily Opt-Out Fee which is approximately \$9.19 per month.

**ADDENDA**

<b><u>Statement of:</u></b>	<b><u>See Leaf No.</u></b>
Bill Credit Adjustment for the Long Island Choice Program	299
Distribution Facility Charges	107
Energy and Peak Demand Losses	181
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**III. Overhead and Underground Distribution of Electricity (continued):****E. Meters (continued):****3. Meter Testing**

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- c) The Authority will perform the tests within sixty (60) days of the request, unless prevented by events it cannot control.

**4. Types of Meters**

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Effective January 1, 2019, Residential Service Classification No. 1 Customers (rates 180, 380, 480, 481, 580, 880), receiving service through a non-AMI equipped meter will be notified of replacement with an AMI equipped smart meter. With the following exceptions, residential Customers may opt-out of receiving the smart meter:

- a) Customers who participate in net metering;
- b) Retail choice program participants (Long Island Choice and Green Choice); and
- c) Residential Customers served under time-of-use service classifications (1-VMRP(S), and 1-VMRP(L)).

Commercial service classifications are ineligible to opt-out of smart meter installation.

The customer will receive communication from the Authority at least 45 days prior to the install date of the AMI equipped smart meter and may execute and submit an application to request that service be continued through a non-communicating meter.

Residential Service Classification No.1 Customers who do not object to installation of an AMI equipped smart meter and later request removal of the AMI equipped smart meter and replacement with a non-communicating meter will be subject to a meter removal fee as described in Section IV.C.11.

Beginning in January 1, 2023, customers who have opted out of receiving the AMI equipped smart meter will be charged a daily opt out service fee ("AMI Smart Meter Daily Opt-Out Fee") as described in Section IV.C.11.

**IV. Billing Process and Payment of Bills (continued):****C. Charges for Miscellaneous Services (continued):****10. Meter Reading Historical Information:**

- a) Customers, ESCO's and DRC's may request and will be provided, if available, up to twenty-four (24) months of monthly or bi-monthly historical meter reading information without charge. Monthly or bi-monthly historical meter reading information for historical periods beyond the twenty-four (24) months will be provided, as available, for a charge of forty dollars (\$40.00) regardless of the number of months of information requested or provided. Hourly or fifteen (15) minute interval data covering any historical monthly period will be provided, if available, at a charge of ten dollars (\$10.00) for each meter reading period's requested data.
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AMI customers can retrieve all available meter data from the Manager's Website at no charge. Where available AMI will be used to collect meter data and measure net electricity transactions.

**11. Metering Related AMI Charges:**

- a) Residential Service Classification No.1 Customers (rates 180, 380, 480, 481, 580, 880) who are eligible to opt-out from installation of a smart meter (see Section III.E.5) but did not opt-out until after installation will be subject to a one-time fee ("One Time Meter Removal Fee") as per the Statement of AMI Smart Meter Fees.
- b) Beginning January 1, 2023, customers who have opted out of receiving an AMI equipped smart meter will be subject to a daily opt-out fee ("AMI Smart Meter Daily Opt-Out Fee") as per the Statement of AMI Smart Meter Fees.



**LIPA Statement No. 1 – AMI**

**Long Island Power Authority**

**Statement of AMI Smart Meter Fees (AMI)**

Applicable to Residential Service Classification No.1 Customers who have Opted Out of having an AMI equipped Smart Meter installed.

One Time Meter Removal Fee..... \$110.61

\*AMI Smart Meter Daily Opt-Out Fee.....\$0.3063

\*Note that this charge is currently not in effect.

**RECOMMENDATION FOR APPROVAL OF MODIFICATIONS TO LIPA'S TARIFF  
FOR ELECTRIC SERVICE RELATED TO SOLAR BUSINESS PRACTICES**

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**WHEREAS**, the Long Island Power Authority is committed to ensuring that its customers have access to affordable electric service, as set forth in the Regionally Comparable Electric Rates Policy adopted by the Board of Trustees; and

**WHEREAS**, in Case 15-M-0180, the New York Public Service Commission issued an Order Establishing Oversight Framework and Uniform Business Practices for Distributed Energy Resource Suppliers (issued October 19, 2017) (the "PSC Order"), directing New York's investor-owned utilities to adopt uniform business practices ensuring that customers have access to accurate information regarding the costs and benefits of procuring energy from Distributed Energy Resource Suppliers; and

**WHEREAS**, the Authority Staff has proposed that the Authority adopt business practices consistent with the PSC Order and the Regionally Comparable Electric Rates Policy; 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 12, 2018, two public hearings were held in Nassau and Suffolk counties on November 16, 2018, 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 of the Board of Trustees hereby recommends approval of the proposed modifications to the Authority's Tariff to be effective January 1, 2019; and be it further

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

Dated: December 19, 2018

**Table of Contents (continued):**

**Additional Documents**

Uniform Business Practices for Distributed Energy Resource Suppliers in the LIPA Service Territory (UBP-DERS-LIPA)

Feed-In Tariff Solar Power Purchase Agreement ("PPA")

Long Island Choice Operating Procedures ("Operating Procedures")

Smart Grid Small Generator Standardized Interconnection Procedures ("Smart Grid SGIP")

Specifications and Requirements for Electrical Installations ("Red Book")

Submetering Procedures ("Requirements for Residential Submetering")

**Uniform Business Practices for Distributed Energy Resource Suppliers in the  
LIPA Service Territory (UBP-DERS-LIPA)**

**EFFECTIVE DATE: JANUARY 1, 2019**

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## **SECTION 1: DEFINITIONS**

As used in these Uniform Business Practices for Distributed Energy Resource Suppliers in the LIPA Service Territory (UBP-DERS-LIPA), the following terms shall have the following meanings:

Authority - The Long Island Power Authority. Depending on usage, this term may include or refer to the Authority's subsidiary which owns the electric transmission and distribution system, and/or the Manager which is responsible for providing services on behalf of the Authority and/or its subsidiary under the terms of the Amended and Restated Operations Services Agreement between Long Island Lighting Company d/b/a LIPA and PSEG Long Island LLC dated as of December 31, 2013.

CDG Provider – An entity that is acting or planning to act as a CDG Sponsor for one or more CDG projects, or that is otherwise engaged in soliciting customers, members, or subscribers for a CDG project or CDG projects, through its own employees or agents, on its own behalf. A CDG Sponsor is the entity that organizes, owns, and/or operates a CDG project.

CDG Marketing Representative - An entity that is either a CDG Provider or an agent conducting, on behalf of the CDG Provider, any marketing activity that is designed to result in the enrollment of customers with the CDG Provider.

Commission – The New York State Public Service Commission (PSC).

Customer Inquiry – A question or request for information from a customer relating to a rate, term, or condition of service provided by a DER supplier, distribution utility, DSP, or other service provider.

Customer Service Representative (CSR) – An employee or agent of a CDG Provider responsible for responding to customer inquiries and complaints.

Department – The New York State Department of Public Service.

Distributed Energy Resources (DER) – A broad category of resources including end-use energy efficiency, demand response, distributed storage, and distributed generation.

Distributed Energy Resource (DER) Supplier – A supplier of one or more DERs that participates in an Authority authorized or DSP-operated program or market. Suppliers may choose to provide DERs as stand-alone products or services, or may choose to bundle them with energy commodity. CDG Providers and On-Site Mass Market DG Providers are included within the definition of DER suppliers. Entities which sell both DERs and energy commodity are both DER suppliers and ESCOs.

Distributed Energy Resource (DER) Supplier Marketing Representative – An entity that is either the DER supplier or an agent conducting, on behalf of the DER supplier, any marketing activity that is designed to enroll customers with the DER supplier. CDG Marketing Representatives and On-Site Mass Market DG Marketing Representatives are also a DER Supplier Marketing Representatives.

Distributed System Platform (DSP) – The DSP is an intelligent network platform that will provide safe, reliable and efficient electric services by integrating diverse resources to meet customers' and society's evolving needs. The DSP fosters broad market activity that monetizes system and social values, by enabling active customer and third party engagement that is aligned with the wholesale market and bulk power system.

Electronic Data Interchange (EDI) – The computer-to-computer exchange of routine information in a standard format using established data processing protocols. EDI transactions are used in retail access programs to switch customers from one supplier to another or to exchange customers' history, usage or billing data between a distribution utility or Meter Data Service Provider and an ESCO.

Transaction set standards, processing protocols, and test plans are authorized in orders issued by the Public Service Commission in Case 98-M-0667, In the Matter of Electronic Data Interchange, and available on the Department of Public Service website at: <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=98-m-0667&submit=Search+by+Case+Number>.

Energy Services Company (ESCO) – An entity eligible to sell electricity to end-use customers using the transmission or distribution system of the Authority. ESCOs may perform other retail service functions.

Interval Data – Actual energy usage for a specific time interval for a specific period recorded by a meter or other measurement device.

Large Customer – An Authority customer that is a non-residential demand-based customer.

Where a DER supplier or DER supplier marketing representative does not have sufficient information to determine whether a customer is a mass market or a large customer, that customer should be treated as a mass market customer unless and until the DER supplier or DER supplier marketing representative acquires sufficient information and determines that the customer is a large customer.

Load Profile – Actual or estimated customer energy usage by interval over a period representing usage for a customer or average usage for a customer class.

Manager - PSEG Long Island LLC, through its operating subsidiary Long Island Electric Utility Servco LLC, the entity engaged by the Authority to operate, maintain, and manage LIPA's electric system and act as LIPA's agent pursuant to the terms and conditions of the Operations Services Agreement. Nothing herein shall be read to change or modify Manager's duties and obligations or create any liability on the part of Manager beyond that set forth in the Operations Services Agreement.

Mass Market Customer – An Authority customer that is a residential or small commercial service class and is not billed based on peak demand.

Where a DER supplier or DER supplier marketing representative does not have sufficient information to determine whether a customer is a mass market or a large customer, that customer should be treated as a mass market customer unless and until the DER supplier or DER supplier marketing representative acquires sufficient information and determines that the customer is a large customer.

Marketing – The publication, dissemination or distribution of informational or advertising materials regarding a DER supplier's services and products to the public by print, broadcast, electronic media, direct mail or by telecommunication.

Meter – A device that measures the units of electric or natural gas service supplied to consumers.

New York State Independent System Operator (NYISO) – An independent management organization, authorized by the Federal Energy Regulatory Commission, operating the bulk electric transmission system and wholesale electric market.

Office of Consumer Services (OCS) – Office within the Department of Public Service that receives consumer complaints and makes determinations concerning customer complaints. OCS identifies the exiting Office or its successor in the event that the Office name is changed.

On-Site Mass Market DG Provider – An entity that is engaged in soliciting mass market customers for a project or service that involves the installation of distributed generation equipment, such as solar panels, on the property of those mass market customers, through its own employees or contractors, on its own behalf rather than as a contractor.

On-Site Mass Market DG Marketing Representative - An entity that is either an On-Site Mass Market DG Provider or an agent conducting, on behalf of the Provider, any marketing activity that is designed to result in the enrollment of customers with the Provider.

Plain Language – Clear and coherent language using words with common and everyday meanings and avoiding legal or energy industry terms, acronyms and abbreviations that a person of ordinary circumstances should not be expected to understand. If the use of a technical term is necessary, the term must be clearly defined in the portion of the text where it is used.

Residential Customer – A person or entity receiving service under a SC-1 service classification.

Sales Agreement – An agreement between a customer and a DER supplier that contains the terms and conditions governing the provision of products and services by a DER supplier. The agreement may be a written contract signed by the customer or a statement supporting a customer's verifiable verbal or electronic authorization to enter into an agreement with the DER supplier for the products and services specified.

Termination Fee – A fee specified in a DER supplier sales agreement that may be charged to a customer for terminating the sales agreement before the end of the term described in that agreement, regardless of whether the assessed amount is identified as a fee, a charge, liquidated damages or a methodology for the calculation of damages, and regardless of whether it is fixed, scaled or subject to calculation based on market factors.

Dynamic Load Management Program – A program designed to reduce load in periods or places of high demand, including but not limited to peak shaving programs, local distribution reliability programs to address local reliability needs, and direct load control programs.



**SECTION 2: GENERALLY APPLICABLE PROVISIONS FOR DER SUPPLIERS**

Applicability: The provisions of these sections apply to all DER suppliers that participate in a Authority DSP-operated program or market with respect to transactions between the DER supplier and the customer of the Authority. These provisions are designed to ensure that accurate information is provided to customers and will require minimal or no changes to existing DER supplier business practices.

**SECTION 2A: SALES AGREEMENTS**  
**(Generally Applicable)**

- A. A DER supplier shall obtain a customer's consent to a sales agreement prior to billing a customer or enrolling a customer in a DSP, Authority, and NYSEERDA.
  - 1. The sales agreement may be a written contract signed by the customer or the customer's verbal or electronic authorization to enter into an agreement with the DER supplier for the products and services specified.
  - 2. A DER supplier entering into a sales agreement for a large or ongoing transaction (as defined below) shall retain the sales agreement and record of customer consent for at least two years or the length of the agreement, whichever is longer.
    - a. A large transaction is any transaction in which a customer makes a payment to a DER supplier of \$500 or more.
    - b. An ongoing transaction is any transaction which, regardless of the size of the transaction, either (a) results in the DER supplier billing the customer for a period of three or more months or (b) results in the DER supplier enrolling the customer in a program through which the customer or the DER supplier will receive compensation, including bill credits, for a period of three or more months.

**SECTION 2B: GENERAL MARKETING STANDARDS**  
**(Generally Applicable)**

- A. DER supplier shall:
  - 1. Not engage in misleading or deceptive conduct as defined by state or federal law or regulation, Authority rule, or Commission rule or Order;
  - 2. Not make false or misleading representations including misrepresenting rates or savings offered by the DER supplier;
  - 3. Provide a mass market customer upon request with written information regarding the DER supplier and its products or services or with a website address at which information can be obtained;
  - 4. Use reasonable efforts to provide accurate and timely information about services and products. Such information will include information about rates, contract terms, termination fees and right of cancellation;
  - 5. Ensure that any product or service offering that is made by a DER supplier in a transaction with a mass market customer contains information written in plain language that is designed to be understood by the customer. This shall include providing any written information to the customer in a language in which the DER supplier representative has substantive discussions with the customer or in which a contract is negotiated;
  - 6. Comply with local laws and regulations regarding door-to-door marketing;
  - 7. Comply with the state and federal laws regarding telemarketing, including the Do-Not-Call law;
  - 8. Cooperate with the Department and Authority regarding the practices prescribed by these UBP-DERS-LIPA and with other regulatory entities, including law enforcement, in investigations concerning deceptive marketing practices.

**SECTION 2C: CUSTOMER DATA**

- A. Applicability. This Section establishes practices for release and protection of customer information by the Authority or DSPs to DER suppliers using EDI. It also identifies the content

of information sets transmitted using EDI standards. The Authority or DSP and a DER supplier shall use standards, systems, and protocols developed for these purposes for transmittal of customer information. This section does not impose any obligations on DER suppliers that do not request or receive data using EDI.

- B. Customer Authorization Process: The Authority or DSP shall provide information about a specific customer requested by an EDI-eligible DER supplier authorized by the customer to receive the information.
1. In obtaining customer authorization, a DER supplier shall inform the customer of the types of information to be obtained, to whom it will be given, how it will be used, and how long the authorizations will be valid. The authorization is valid for no longer than six months unless the sales agreement provides for a longer time.
  2. The Authority or DSP shall assume that a DER supplier obtained proper customer authorization if the DER supplier submits a valid information request, as defined in EDI rules.
  3. A DER supplier shall retain, for a minimum of two years or for the length of the sales agreement, whichever is longer, verifiable proof, including but not limited to a recording or signed writing, of authorization for each customer. Verification record shall be provided by a DER supplier, upon request of the Department, within five calendar days after a request is made after a request is made. Locations for storage of the records shall be at the discretion of the DER supplier.
  4. Upon request by a customer, the Authority or DSP shall block access by DER suppliers to information about the customer.
  5. A DER supplier and its agent shall comply with statutory and regulatory requirements pertaining to applicable state and federal do-not-call registries.
- C. Customer Information Provided to DER suppliers
1. Release of Information: The Authority shall respond within three business days to valid requests for information as established in EDI transaction standards and within seven business days to requests for data and information for which an EDI transaction standard is not available. The Authority shall provide the reason for rejection of any valid information request including for reasons of a DER suppliers' non-compliance with the UBP-DERS-LIPA.
  2. Customer Contact Information Set: The Authority, to the extent it possesses the information, shall provide, upon a DER supplier request, consumption history for an electric account.
    - a. Consumption history <sup>3</sup> for an electric account shall include:
      1. Customer's service address;
      2. Electric account number;
      3. Sales tax district used by the Authority and whether the Authority identifies the customer as tax exempt;
      4. Rate service class by meter, where applicable;
      5. Electric load profile reference category or code, which indicates the customer's peak electricity demand;
      6. Customer's number of meters and account numbers;
      7. Usage type (e.g., kWh), reporting period, and type of consumption (actual, estimated, or billed);
      8. Whether the customer's commodity service is currently provided by the utility;
      9. 12 months, or the life of the account, whichever is less, of customer data and, upon separate request, an additional 12 months, or the life of the account, whichever is less, of customer data, and, where applicable, demand information<sup>4</sup>; if the customer has more than one account, the Authority or DSP shall provide the applicable information, if available, for each account; and

<sup>3</sup> The Authority, in addition to EDI transmittal, may provide web-based access to customer history information

<sup>4</sup> May provide data for a standard 24 months or life of the account, whichever is less.

10. Electronic interval data in summary form (billing determinants aggregated in the rating periods under the Authority's tariff), and if requested in detail, an acceptable alternative format.

- D. Charges for Customer Data: Are described in the Authority's tariff.
- E. Unauthorized Information Release. A DER supplier, its employees, agents, and designees, is prohibited from selling, disclosing or providing any customer information obtained from the Authority or DSP, in accordance with this Section, to others, including their affiliates, unless such sale, disclosure or provision is required to facilitate or maintain service to the customer or is specifically authorized by the customer or required by legal authority. If such authorization is requested from the customer, the DER supplier shall, prior to authorization, describe to the customer the information it intends to release and the recipient of the information.
- F. NIST Cybersecurity Framework. DER suppliers that obtain customer information from the Authority or DPS must have processes and procedures in place regarding cybersecurity consistent with the National Institute of Standards and Technology Cybersecurity Framework.
- G. Data Security. DER suppliers that obtain customer information from the Authority or DSP must comply with any data security requirements imposed by the Authority or by Commission rules on ESCOs and/or any data security requirements associated with EDI eligibility.

## **SECTION 2D: RESPONSIBILITY FOR CONTRACTORS AND OTHER THIRD PARTY AGENTS** **(Generally Applicable)**

- A. If a DER supplier enlists a third party to assist them in marketing, data collection or analysis, billing, or any other activity, that DER supplier is responsible for making commercially reasonable efforts to ensure that the third party's activities conform with the relevant regulations and requirements.
- B. The provisions of the preceding subsection also apply when a DER supplier purchases a list of potential customers or similar information from a third party that assembled that list through its own advertising. In such cases, the DER supplier purchasing the list is responsible for making reasonable efforts to ensure that the list was not assembled through deceptive marketing.

## **SECTION 2E: CUSTOMER INQUIRIES AND COMPLAINTS** **(Generally Applicable)**

- A. Department Staff will accept inquiries and complaints related to DER suppliers and will make efforts to investigate and resolve those complaints and, if necessary, bring those complaints to the Authority for consideration in accordance with the Authority's Tariff for Electric Service.
- B. For customers of large or ongoing transactions, as defined in Section 2A.A.2, DER suppliers must retain summary complaint records for at least two years from the date of the transaction or for the length of the agreement, whichever is longer.

## **SECTION 2F: CONSEQUENCES FOR VIOLATIONS** **(Generally Applicable)**

- A. A DER supplier may be held responsible for actions by its officers, its employees, and contractors or other third-party agents acting on its behalf or under its direction. In addition, a DER supplier purchasing a customer list or similar information or services from a third-party marketer is responsible for making reasonable efforts to ensure that the list was not assembled in a manner inconsistent with the UBP-DERS-LIPA.

- B. A DER supplier may be subject to the consequences listed in UBP-DERS-LIPA Section 2F.C.2. for reasons, including, but not limited to:
1. False or misleading information in the registration package required of CDG and On-Site Mass Market DG Providers;
  2. Failure to adhere to the policies and procedures described in its sales agreement;
  3. Enrolling a customer in a DSP, Authority, NYSEERDA, Commission, or Department-run or authorized program or billing a customer without obtaining that customer's consent through a sales agreement or similar method;
  4. Failure to comply with required customer protections;
  5. Failure to comply with relevant reporting requirements or the Authority and/or the Department oversight requirements;
  6. Failure to provide notice to the Department of any material changes in the information contained in the Registration Form or registration package, if required;
  7. Failure to comply with the UBP-DERS-LIPA;
  8. Failure to comply with procedures, protocols or practices for communicating with the Authority's as required by UBP-DERS-LIPA;
  9. Failure to comply with other DER Commission Orders, Rules or Regulations; or
  10. A material pattern of consumer complaints on matters within the DER supplier's control.
- C. In determining the appropriate consequence for a failure or non-compliance in one or more of the categories set forth in UBP-DERS-LIPA Section 2F.B., the Department may take into account the nature, the circumstances, including the scope of harm to individual customers, and the gravity of the failure or non-compliance, as well as the DER supplier's history of previous violations and whether the DER supplier has taken any actions or made any commitment to remediate any harm caused by the violation.
1. The Department shall:
    - a. Either (a) notify the DER supplier in writing of its failure to comply and request that the DER supplier take appropriate corrective action or provide remedies within the directed cure period, which will be based on a reasonable amount of time given the nature of the issue to be cured; or (b) order that the DER supplier show cause why a consequence should not be imposed.
    - b. The Department or, if involving Authority programs, tariffs or data, Authority, the Authority upon the recommendation of the Department may impose the consequences listed in subparagraph C.2.(a-b) if the DER supplier fails to take corrective actions or provide remedies within the cure period;
    - c. Consequences shall not be imposed until after the DER supplier is provided notice and an opportunity to respond.
  2. Consequences for non-compliance in one or more of the categories set forth in UBP-DERS-LIPA Section 2F.B. may include one or more of the following restrictions on a DER supplier's access to information, programs, or tariffs.:
    - a. Suspension from enrolling new customers in the Authority's programs and tariffs;
    - b. Suspension of the ability to acquire customer data from the Authority;;
    - c. Imposition of requirements to modify procedures to obtain customer authorization for purchase, and to verify such customer authorization;
    - d. Imposition of requirements to modify procedures regarding the protection of consumer information; and
    - e. Imposition of a requirement to file a customer service improvement plan to the Department identifying actions to be taken and timelines to improve customer service, and/or a requirement to file periodic reports to the Department identifying the extent to which the customer service improvement plan is achieving its objectives.
    - f. Revocation of a DER supplier's eligibility to access programs, tariffs, or solicitations initiated or controlled by the Authority and/or acquire customer data by means established by the Authority; and
    - g. Any other measures that the Commission may deem appropriate.

3. The Department may give a DER supplier the option to avoid consequences or face lesser consequences on the condition that it provide refunds, corrective pricing, or other remedies to customers impacted by its violation.

## **SECTION 2G: OVERSIGHT REQUIREMENTS** **(Generally Applicable)**

- A. Applicability: This Section establishes requirements for DER suppliers to assist the Authority and the Department in monitoring the development, conduct and performance of New York's energy markets.
- B. All DER suppliers shall:
  1. Provide information on complaints received regarding DER products and services, as requested by the Authority or the Department.
  2. Provide information as requested by Department Staff, in relation to its efforts in monitoring the development, conduct and performance of energy markets. Such information requests may be through informal requests or interrogatories, including but not limited to, information regarding the DER supplier's business operations and financials.
  3. Permit Department Staff to examine the books, accounts, contracts, records, and documents of the DER supplier.
  4. Permit Department Staff to access any information needed to audit the DER supplier and cooperate with Department Staff's conducting of such an audit.

## **SECTION 3: PROVISIONS SPECIFIC TO CDG AND ON-SITE MASS MARKET DG PROVIDERS**

Applicability: The provisions of these sections apply to all CDG Providers and On-Site Mass Market Distributed Generation (DG) providers.

## **SECTION 3A: REGISTRATION REQUIREMENTS** **(CDG and On-Site Mass Market DG Providers)**

- A. Applicability. This Section sets forth the process that CDG Providers and On-Site Mass Market DG Providers are required to follow to register with the Department.
- B. Registration Package.
  1. Registrants planning to become CDG or On-Site Mass Market DG Providers are required to submit to the Department a registration package containing the following information and attachments:
    - a. A completed Registration Form. The registration form will be available on the Department's website, [www.dps.ny.gov](http://www.dps.ny.gov), no later than October 30, 2017 and will be included in this document as Attachment 2. Information that must be provided on or attached to the registration form includes:
      1. Name, postal and e-mail addresses, and telephone and fax numbers for the registrant's main office;
      2. Names and addresses of any entities that hold ownership interests of 10% or more in the CDG or On-Site Mass Market DG Provider, including a contact name for corporate entities and partnerships;
      3. Detailed explanation of any criminal or regulatory sanctions imposed during the previous 24 months against the CDG or On-Site Mass Market DG Provider, any senior officers of the DER supplier, or any entities holding ownership interests of 10% or more in the CDG or On-Site Mass Market DG Provider;
      4. Disclosure of any decisions or pending escalated regulatory actions in other states that affect the CDG or On-Site Mass Market DG Provider's ability to operate, such as suspension, revocation, or limitation of operating authority;
      5. A list and description of current investigations involving the CDG or On-Site Mass Market DG Provider being conducted by law enforcement or

regulatory entities.

6. A summary of the registrant's history of bankruptcy, dissolution, merger, or acquisition in the 24 months immediately preceding the date of application;
  7. Detailed explanation regarding ongoing investigations by the US Securities and Exchange Commission, the US Department of Justice, or the US Federal Energy Regulatory Commission;
  8. Identification of the employee(s) responsible for resolving consumer complaints received by the Department;
  9. A list of material categories of CDG or On-Site Mass Market products or services that will be offered and the customer classifications (*i.e.*, residential, small/mid-sized non-residential) to whom they will be offered;
  10. A list and description of any security breaches associated with customer proprietary information in the last 24 months, as well as a thorough description of the actions taken in response to any such instances.
- b. Sample sales agreements and sample bills for each customer class for each material category of the CDG or On-Site Mass Market products or services that will be offered; and
  - c. Proof of registration with the New York State Department of State.
2. The Department shall maintain a list of CDG and On-Site Mass Market DG Providers that successfully complete these requirements.
  3. A CDG Provider or On-Site Mass Market DG Provider that knowingly makes false statements in its registration package shall be subject to denial or revocation of eligibility.
  4. If the registration package contains information that is a trade secret or sensitive for security reasons, the registrant may request that the Department withhold disclosure of the information, pursuant to the New York State Freedom of Information Law (Public Officers Law Article 6) and Public Service Commission regulations (16 NYCRR §6-1.3).

#### C. Department Review Process

1. The Department shall review each registration package submitted. The CDG Provider or On-Site Mass Market DG Provider shall immediately notify the Department of any material changes in the information submitted in the Registration Form and/or registration package that occurs during the Department review process. The Department shall notify the registrant, in writing, of any deficiencies in the registration package. The CDG Provider must modify the registration package in response to such a notification within 30 days.
2. If the modified package does not remedy the deficiency identified by Staff, the Department shall notify the CDG or On-Site Mass Market DG Provider in writing and, to the extent the matter involves Authority tariffs, programs, or data, shall refer the matter, together with a recommended resolution, to the Authority for its consideration.
3. For CDG Providers or On-Site Mass Market DG Providers that begin operating in New York State after April 1, 2019, a registration package must be submitted and approved before the CDG Provider or On-Site Mass Market DG Provider begins marketing to customers. It is expected that Department Staff will review the registration package within 30 days of submittal and notify the registrant, in writing, either that the registration is accepted as complete or that deficiencies exist in the registration package.

#### D. Maintaining Active Status

1. CDG Providers and On-Site Mass Market DG Providers shall submit by March 31 of each year (March 31 Statement):
  - a. A statement that the information and attachments in its Registration Form and registration package are current; or
  - b. A description of revisions to the Registration Form and registration package along with a copy of the revised portions; and
2. A CDG or On-Site Mass Market DG Provider shall update all the information it submitted in its original registration package to the Department every three

years, starting from the filing date of its registration package. A Provider's status as an eligible provider is continuous from the filing date of its registration package, unless revoked or otherwise limited in accordance with UBP-DERS-LIPA Section 2F. If the three-year anniversary falls within one month of April 1, the Provider shall resubmit its registration package in lieu of the April 1 statement.

3. A CDG or On-Site Mass Market DG Provider shall submit at other times during the year:
  - a. A description of any material revision in the terms and conditions applicable to the business relationship between the Provider and its customers, including provisions governing the process for termination of sales agreements. For any such revisions, the Provider shall provide a copy of the revised portions. This provision does not require CDG Providers to file sample sales agreements based individually negotiated sales agreements with large customers or to update sample sales agreements based on changes made for individual customers.
  - b. Material Change in Financial Status including (1) bankruptcy or insolvency filings, (2) initiation of lawsuits which could materially and adversely impact the current or future ability of the Provider to meet its financial obligations.
  - c. Changes in the Provider's business and customer service information provided in the application.
  - d. Changes in personnel identified in the registration package as responsible for resolving consumer complaints received by the Department and referred to the Provider.

### **SECTION 3B: ENHANCED MARKETING AND ADVERTISING STANDARDS** **(CDG and On-Site Mass Market DG Providers)**

- A. Applicability: This Section describes the enhanced standards that CDG Providers, On-Site Mass Market DG Providers and their marketing representatives must follow when marketing and advertising products and services to potential mass market customers in New York.
- B. Training of Marketing Representatives
  1. Providers shall ensure that the training of their marketing representatives includes:
    - a. Knowledge of this Section and awareness of the other Sections of the UBP-DERS-LIPA;
    - b. Knowledge of the Provider's products and services;
    - c. Knowledge of the Provider's rates and payment options and the customers' right to cancel, including the applicability of a termination fee;
    - d. Knowledge of the applicable provisions of the Home Energy Fair Practices Act that pertains to residential customers; and,
    - e. The ability to provide the customer with a toll-free number from which the customer may obtain information about the Provider's mechanisms for handling billing questions, disputes, and complaints.
- C. When marketing materials or information conveyed to mass market customers or potential mass market customers includes savings estimates, CDG and mass market on-site DG providers must include, in addition to any other forecasts used, a forecast using the following baseline: a three-year average of actual historical utility rates for the three most recent calendar years for which data is available, for the customer's actual utility and service class. The provider may choose to apply an assumed escalation rate of up to 3% per year to this baseline in generating a forecast; if the provider does so, it must disclose the escalation rate used. The forecast generated must estimate savings for the same potential contract term as any other forecast provided. This forecast must be presented with similar prominence to other forecasts and all forecasts must be appropriately labeled to permit customers to understand their source.

Example: A CDG Provider prepares marketing materials for SC-1 customers, showing their expected savings over a 10-year contract term. Over the past 3 calendar years, SC-



1 customer in that utility territory have had average utility rates of \$0.10/kWh, \$0.09/kWh, and \$0.08/kWh. In addition to any other savings forecasts, the CDG developer must provide a 10-year savings estimate to the customer based on a utility rate of \$0.09/kWh, with no more than a 3% annual escalation rate, and identify the escalation rate used.

D. Contact with Customers

1. This subsection applies only to contacts with MassMarket Customers.
2. In-Person Contact with Mass Market Customers Marketing representatives who contact mass marketcustomers in person at a location other than the Provider's place of business for the purpose of selling any product or service shall, before making any other statements or representations to the customer:
  - a. Introduce him or herself with an opening statementthat identifies the Provider which he or she represents; identifies him or herself as a representative of that specific Provider; explains that he or she does not represent the Authority; and, explains the purpose of the solicitation.
  - b. Produce identification, to be visible at alltimes thereafter, which:
    1. Prominently displays in reasonably sized type face the first name and employee identification number of the marketing representative;
    2. Displays a photograph of the marketing representative and depicts the legitimate trade name and logo of the Provider they are representing; and,
    3. Provides the Provider's telephone number forinquires, verification and complaints.
  - c. A CDG or On-Site Mass Market DG Provider marketing representative must provide each prospective mass market customer with a business card or similar tangible object with the marketing representative's first name and employee identification number; Provider's name,address, and phone number; date and time of visit and website information for inquires, verification and complaints.
  - d. A CDG or On-Site Mass Market DG Provider marketing representative must provide the customer with written information regarding the Provider's products and services immediately upon request which must include the Provider's name and telephone number for inquires, verification and complaints. Any written materials, including contracts, sales agreements, and marketing materials must be provided to the customer in the same language utilized to solicit the customer.
  - e. When it is apparent that the customer's English language skills are insufficient to allow the customer to understand and respond to the information conveyed by the marketing representative or when the customer or another third party informs the marketing representative of this circumstance, the marketing representative shall either find a representative in the area who is fluent in the customer's language to continue the marketing activity in his/her stead or terminate the in-person contact with the customer. The use of translation services and language identification cards is permitted.
  - f. A marketing representative must leave the premises of a customer when requested to do so by the customer orthe owner/occupant of the premises.
  - g. All Providers who have marketing representatives conducting door-to-door marketing must maintain a daily record, by zip code, of the territories in which the Provider's marketing representatives have conducted door-to-door marketing. The information should be in a form that can be reported to Staff upon request, and should be retained by the Provider for a minimum of sixmonths.
3. Telephone Contact with Mass Market Customers Marketing representatives who contact mass marketcustomers by telephone for the purpose of selling any product or service offered by the Providers shall:
  - a. Provide the marketing representative's first name and, on request, the identification number;
  - b. State the name of the Provider on whose behalf the call is being made;
  - c. State the purpose of the telephone call;
  - d. When it is apparent that the customer's English language skills are insufficient to allow the customer to understand and respond to the information conveyed bythe marketing representative or when the customer or another third party informs the



- CDG marketing representative of this circumstance, the marketing representative will immediately transfer the customer to a representative who speaks the customer's language, if such a representative is available, or terminate the call; and,
- e. Remove customers' names from the marketing database upon customers' request.
  - f. When marketing to residential customers, the marketing representative must also:
    - 1. Explain that he or she does not represent the distribution utility;
    - 2. Explain the purpose of the solicitation; and,
    - 3. Provide any written materials, including contracts, sales agreements, and marketing materials to the customer in the same language utilized to solicit the customer.

### **SECTION 3C: MINIMUM STANDARDS FOR SALES AGREEMENTS** **(CDG and On-Site Mass Market DG Providers)**

- A. Applicability: This Section establishes minimum standards for sales agreements between CDG and On-Site Mass Market DG Providers (Providers) and mass market customers.
- B. A Provider, or its agent, may solicit and enter into a sales agreement with a customer subject to the following requirements.
  - 1. The DER supplier shall obtain a customer agreement to purchase the product or service and customer authorization to release information to the DER supplier, and retain verifiable proof of such authorization for at least two years or the length of the agreement, whichever is longer.
  - 2. Sales agreements shall include the following information written in plain language in the same language that the Provider has used to market to the customer:
    - A. Terms and conditions applicable to the business relationship between the Provider and the customer which includes:
      - 1. Provisions governing the process for rescinding or terminating an agreement by the Provider or the customer including provisions stating that a residential customer may rescind the agreement within three business days after its receipt without charge or penalty;
      - 2. The price, the terms and conditions of the agreement, including the term and end date, if any, of the agreement, the amount of the termination fee and the method of calculating the termination fee, if any, the amount of late payment fees, if applicable, and the provisions, if any, for the renewal of the agreement;
      - 3. A clear description of the conditions, if any, that must be present in order for savings to be provided to the customer, if savings are guaranteed.
      - 4. Information for residential customers of their rights under HEFPA; and
      - 5. Information regarding contacting the Department for dispute resolution.
      - 6. DER supplier contact information, including a local or toll-free number from the customer's service location.
- C. In addition to the requirements of subsection B, contracts for on-site mass market distributed generation must include a description of the distributed generation system, including the make and model of major system components, and an outline of system specifications. All contracts shall include, at a minimum:
  - 1. For purchased systems, the total system purchase price, itemized costs of system components, and any other taxes, fees or overheads that are the responsibility of the customer; or
  - 2. For leases or purchased power agreements (PPAs), the total number of payments, amount of payments, payment frequency, and due date;
  - 3. An estimate of annual energy output, including loss analysis (e.g. in the case of a solar system, the percentage of the available solar resource that the solar electric

- system will receive, accounting for losses from shading, array azimuth, and tilt);
4. The rate at which the customer can be compensated for any electricity sold to the Authority;
5. The installation location;
6. Installation schedule;
7. The potential value of all federal, state, and local tax credits, electric utility rate credits, Renewable Energy Credits, incentives, or rebates that the customer may receive and/or be required to sign over to the DER provider;
8. Disclosure of any restrictions on the customer's ability to sell the system and/or his/her property;
9. System and/or production warranties;
10. Disclosure of any binding arbitration clauses or other terms that limit the customer's right to enforce the contract or seek damages from the courts; and
11. Assignment of responsibilities (e.g., for maintenance and repairs, insurance coverage, etc.), including whether such maintenance or repairs may be sold or transferred to a third party.

**SECTION 3D: STANDARD CUSTOMER DISCLOSURE STATEMENTS**  
**(CDG and On-Site Mass Market DG Providers)**

- A. A completed Standard Customer Disclosure Statement shall be provided to all customers of CDG or On-Site Mass Market DG Providers as part of the sales agreement. Standard Customer Disclosure Statements will be available on the Department's website, [www.dps.ny.gov](http://www.dps.ny.gov), no later than October 30, 2017 and will be included in this document as Attachment 1.
- B. In the event that the text in the Standard Customer Disclosure Statement differs from or is in conflict with a term stated elsewhere in the agreement, the term described by the text in the Standard Customer Disclosure Statement shall constitute the agreement with the customer notwithstanding a conflicting term expressed elsewhere.

**SECTION 3E: CUSTOMER INQUIRIES AND COMPLAINTS**  
**(CDG and On-Site Mass Market DG Providers)**

- A. Applicability: This Section establishes requirements for responses by a CDG or On-Site Mass Market DG Provider (Provider) to customer inquiries concerning CDG products or services. Providers shall respond to customer inquiries sent by means of electronic mail, telecommunication services, mail, or in meetings. The subjects raised in inquiries may result in the filing of complaints.
- B. General
  1. Providers shall provide consistent and fair treatment to customers.
  2. Providers shall maintain processes and procedures to resolve customer inquiries without undue discrimination and in an efficient manner and provide an acknowledgement or response to a customer inquiry within 2 days and, if only an acknowledgement is provided, a response within 14 days.
  3. Providers shall provide local or toll-free telephone access from the customer's service area to customer service representatives (CSRs) responsible for responding to customer inquiries and complaints. The Provider's customer service center should be operational at least eight hours per day Monday through Friday except holidays, starting no earlier than 7 AM EST.
  4. If the inquiry is specific to the Authority's service, the CSR shall take one of the following actions:
    - a. Forward/transfer the inquiry to the Authority;
    - b. Direct the customer to contact the Authority; or,
    - c. Contact the Authority to resolve the matter and provide a response to the customer.
  5. Each Provider shall maintain information regarding customer inquiries and

complaints pertaining to its products and services and designate a representative to provide information relating to customer inquiries and complaints to the Department.

C. Emergency Contacts

1. An emergency call means any communication from a customer concerning an emergency situation relating to the distribution system, including, but not limited to, natural disaster, downed wires, electrical contact, or fire.
2. A Provider's CSR shall transfer emergency calls directly to the Authority's emergency number.

**SECTION 3F: REPORTING REQUIREMENTS**

**(CDG and On-Site Mass Market DG Providers)**

- A. Applicability: This Section establishes requirements for reporting by a CDG or On-Site Mass Market DG Provider (Provider).
- B. Each Provider shall submit to the Department an annual report by March 31 containing information for the previous calendar year including aggregate number of customers served, a summary of services provided, and information on the number and classification of complaints received in a format to be established by the Department, to assist the Department in monitoring CDG and On-Site Mass Market DG markets.
- C. Each CDG Sponsor shall send an annual report to the Department for each calendar year to each of its subscribers by March 31 of the following year. The annual report must include the amount of credits that the member has received, expressed both in kWh and dollars, as well as the total amount the customer has paid in subscription fees and any other payments to the Sponsor. The report shall follow the standard format provided by Department Staff in Case 15-M-0180.<sup>5</sup>
- D. A CDG Sponsor that generates or allocates banked credits in a calendar year must file a report to the Department by March 31 of the following year detailing how many credits were banked, how many banked credits were allocated, what percentage of that allocation was provided to mass market customers, and what percentage was allocated to large customers.

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<sup>5</sup> <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=15-M-0180&submit=Search+by+Case+Number>

## **Proposal Concerning Modifications to LIPA's Tariff for Electric Service**

### **Requested Action:**

The Authority is requesting to adopt an amended version of the Uniform Business Practices for Distributed Energy Resource Suppliers Manual as set forth in the New York Public Service Commission ("PSC") Order<sup>1</sup> which approved its first regulations governing the relationship between distributed energy resource companies and their customers.

### **Background:**

Through the Reforming the Energy Vision ("REV") initiative, the increased deployment and integration of Distributed Energy Resources ("DERs") has become increasingly common and also a significant part of electric service to customers.

The Commission, which has the responsibility of ensuring that customers are protected, determined that with the increased prevalence of customers participating in DER markets and associated programs additional action was required to ensure that customers understand the costs and benefits of their investments and are afforded protection from confusion, fraud, and abusive marketing. Additionally, clear guidance on appropriate marketing and contracting practices will create a fair market for DER suppliers and support reasonable competition between suppliers and between various DER options.

The Commission concluded that a manual of Uniform Business Practices ("UBP") can effectively create a robust set of protections for New Yorkers participating in the evolving DER programs and markets, while ensuring that small and innovative businesses will not be overburdened. As a result of the Order<sup>2</sup>, New York utilities were directed to include a Uniform Business Practices for Distributed Energy Resource Suppliers Manual as an addendum to their gas and electric tariffs. The manual includes the following:

- General Marketing Standards for DER suppliers to prevent misleading and deceptive conduct.
- Responsibility of contractors and other third party agents of DER suppliers.
- Customer inquiries and complaints/oversight requirements and consequences for violations.
- Provisions specific to Community Distributed Generation ("CDG") and On-Site Mass Market providers, which include the following.
  - Registration Requirements - sets forth the process that CDG Providers and On-Site Mass Market DG Providers are required to follow in order to register with the Department of Public Service.
  - Enhanced Marketing and Advertising Standards – enhanced standards that CDG Providers, On-Site Mass Market DG Providers and their marketing representatives must follow when marketing and advertising products and services to potential mass market customers in New York.
  - Minimum Standards For Sales Agreements – establishes minimum standards for sales agreements between CDG and On-Site Mass Market DG Providers ("Providers") and mass market customers.
  - Standard Customer Disclosure Statements – shall be provided to all customers of CDG or On-Site Mass Market DG Providers as part of the sales agreement.

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<sup>1</sup> New York Public Service Commission - Order Establishing Oversight Framework and Uniform Business Practices for Distributed Energy Resource Suppliers, Case 15-M-0180, October 19, 2017.

<sup>2</sup> Ibid.

- Customer Inquiries And Complaints – establishes requirements for responses by a CDG or On-Site Mass Market DG Provider to customer inquiries concerning CDG products or services.
- Reporting Requirements – each CDG or On-Site Market DG Provider shall file an annual report containing information for the previous calendar year including aggregate number of customers served, a summary of services provided, and information on the number and classification of complaints received.

**Proposal:**

The Authority is proposing to effectuate the oversight envisioned in the New York Uniform Business Practices for Distributed Energy Resource Suppliers Manual in the Authority's service territory. Staff proposes to insert the New York business practices as an addendum to the Authority's Tariff for Electric Service in order to be consistent with the rest of the utilities in the State, which have already adopted such practices.

The Authority proposes to adopt a manual of Uniform Business Practices for Distributed Energy Resource Suppliers ("UBP-DERS-LIPA") in the LIPA Service Territory with the following modification: If the Department of Public Service (the "Department") finds that a consequence for failure or non-compliance with the UBP-DERS-LIPA is warranted, the DER supplier fails to take corrective action, and enforcement of the consequence involves Authority programs, tariffs, or data, then the Department will provide a written recommendation to the Authority as to the appropriate consequence to be imposed by the Authority.

**Financial Impacts:**

This proposal is not expected to have any financial impact on the Authority. This proposal only addresses procedural rules and changes for DER providers.

**Affected Tariff Leaf:** 6C and Addendum: The Business Practices for Distributed Energy Resource Suppliers Manual.

**Summary of Proposed Changes:**

To add an addendum to the Electric Service Tariff to include a manual of Business Practices for Distributed Energy Resource Suppliers, this will allow the Department and the Authority to monitor DER providers in the Authority's service territory.

**Table of Contents (continued):**

**Additional Documents**

Uniform Business Practices for Distributed Energy Resource Suppliers in the LIPA Service Territory (UBP-DERS-LIPA)

Feed-In Tariff Solar Power Purchase Agreement ("PPA")

Long Island Choice Operating Procedures ("Operating Procedures")

Smart Grid Small Generator Standardized Interconnection Procedures ("Smart Grid SGIP")

Specifications and Requirements for Electrical Installations ("Red Book")

Submetering Procedures ("Requirements for Residential Submetering")

**Uniform Business Practices for Distributed Energy Resource Suppliers in the  
LIPA Service Territory (UBP-DERS-LIPA)**

**EFFECTIVE DATE: JANUARY 1, 2019**

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## **SECTION 1: DEFINITIONS**

As used in these Uniform Business Practices for Distributed Energy Resource Suppliers in the LIPA Service Territory (UBP-DERS-LIPA), the following terms shall have the following meanings:

Authority - The Long Island Power Authority. Depending on usage, this term may include or refer to the Authority's subsidiary which owns the electric transmission and distribution system, and/or the Manager which is responsible for providing services on behalf of the Authority and/or its subsidiary under the terms of the Amended and Restated Operations Services Agreement between Long Island Lighting Company d/b/a LIPA and PSEG Long Island LLC dated as of December 31, 2013.

CDG Provider – An entity that is acting or planning to act as a CDG Sponsor for one or more CDG projects, or that is otherwise engaged in soliciting customers, members, or subscribers for a CDG project or CDG projects, through its own employees or agents, on its own behalf. A CDG Sponsor is the entity that organizes, owns, and/or operates a CDG project.

CDG Marketing Representative - An entity that is either a CDG Provider or an agent conducting, on behalf of the CDG Provider, any marketing activity that is designed to result in the enrollment of customers with the CDG Provider.

Commission – The New York State Public Service Commission (PSC).

Customer Inquiry – A question or request for information from a customer relating to a rate, term, or condition of service provided by a DER supplier, distribution utility, DSP, or other service provider.

Customer Service Representative (CSR) – An employee or agent of a CDG Provider responsible for responding to customer inquiries and complaints.

Department – The New York State Department of Public Service.

Distributed Energy Resources (DER) – A broad category of resources including end-use energy efficiency, demand response, distributed storage, and distributed generation.

Distributed Energy Resource (DER) Supplier – A supplier of one or more DERs that participates in an Authority authorized or DSP-operated program or market. Suppliers may choose to provide DERs as stand-alone products or services, or may choose to bundle them with energy commodity. CDG Providers and On-Site Mass Market DG Providers are included within the definition of DER suppliers. Entities which sell both DERs and energy commodity are both DER suppliers and ESCOs.

Distributed Energy Resource (DER) Supplier Marketing Representative – An entity that is either the DER supplier or an agent conducting, on behalf of the DER supplier, any marketing activity that is designed to enroll customers with the DER supplier. CDG Marketing Representatives and On-Site Mass Market DG Marketing Representatives are also a DER Supplier Marketing Representatives.

Distributed System Platform (DSP) – The DSP is an intelligent network platform that will provide safe, reliable and efficient electric services by integrating diverse resources to meet customers' and society's evolving needs. The DSP fosters broad market activity that monetizes system and social values, by enabling active customer and third party engagement that is aligned with the wholesale market and bulk power system.

Electronic Data Interchange (EDI) – The computer-to-computer exchange of routine information in a standard format using established data processing protocols. EDI transactions are used in retail access programs to switch customers from one supplier to another or to exchange customers' history, usage or billing data between a distribution utility or Meter Data Service Provider and an ESCO.

Transaction set standards, processing protocols, and test plans are authorized in orders issued by the Public Service Commission in Case 98-M-0667, In the Matter of Electronic Data Interchange, and available on the Department of Public Service website at: <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=98-m-0667&submit=Search+by+Case+Number>.

Energy Services Company (ESCO) – An entity eligible to sell electricity to end-use customers using the transmission or distribution system of the Authority. ESCOs may perform other retail service functions.

Interval Data – Actual energy usage for a specific time interval for a specific period recorded by a meter or other measurement device.

Large Customer – An Authority customer that is a non-residential demand-based customer.

Where a DER supplier or DER supplier marketing representative does not have sufficient information to determine whether a customer is a mass market or a large customer, that customer should be treated as a mass market customer unless and until the DER supplier or DER supplier marketing representative acquires sufficient information and determines that the customer is a large customer.

Load Profile – Actual or estimated customer energy usage by interval over a period representing usage for a customer or average usage for a customer class.

Manager - PSEG Long Island LLC, through its operating subsidiary Long Island Electric Utility Servco LLC, the entity engaged by the Authority to operate, maintain, and manage LIPA's electric system and act as LIPA's agent pursuant to the terms and conditions of the Operations Services Agreement. Nothing herein shall be read to change or modify Manager's duties and obligations or create any liability on the part of Manager beyond that set forth in the Operations Services Agreement.

Mass Market Customer – An Authority customer that is a residential or small commercial service class and is not billed based on peak demand.

Where a DER supplier or DER supplier marketing representative does not have sufficient information to determine whether a customer is a mass market or a large customer, that customer should be treated as a mass market customer unless and until the DER supplier or DER supplier marketing representative acquires sufficient information and determines that the customer is a large customer.

Marketing – The publication, dissemination or distribution of informational or advertising materials regarding a DER supplier's services and products to the public by print, broadcast, electronic media, direct mail or by telecommunication.

Meter – A device that measures the units of electric or natural gas service supplied to consumers.

New York State Independent System Operator (NYISO) – An independent management organization, authorized by the Federal Energy Regulatory Commission, operating the bulk electric transmission system and wholesale electric market.

Office of Consumer Services (OCS) – Office within the Department of Public Service that receives consumer complaints and makes determinations concerning customer complaints. OCS identifies the exiting Office or its successor in the event that the Office name is changed.

On-Site Mass Market DG Provider – An entity that is engaged in soliciting mass market customers for a project or service that involves the installation of distributed generation equipment, such as solar panels, on the property of those mass market customers, through its own employees or contractors, on its own behalf rather than as a contractor.

On-Site Mass Market DG Marketing Representative - An entity that is either an On-Site Mass Market DG Provider or an agent conducting, on behalf of the Provider, any marketing activity that is designed to result in the enrollment of customers with the Provider.

Plain Language – Clear and coherent language using words with common and everyday meanings and avoiding legal or energy industry terms, acronyms and abbreviations that a person of ordinary circumstances should not be expected to understand. If the use of a technical term is necessary, the term must be clearly defined in the portion of the text where it is used.

Residential Customer – A person or entity receiving service under a SC-1 service classification.

Sales Agreement – An agreement between a customer and a DER supplier that contains the terms and conditions governing the provision of products and services by a DER supplier. The agreement may be a written contract signed by the customer or a statement supporting a customer's verifiable verbal or electronic authorization to enter into an agreement with the DER supplier for the products and services specified.

Termination Fee – A fee specified in a DER supplier sales agreement that may be charged to a customer for terminating the sales agreement before the end of the term described in that agreement, regardless of whether the assessed amount is identified as a fee, a charge, liquidated damages or a methodology for the calculation of damages, and regardless of whether it is fixed, scaled or subject to calculation based on market factors.

Dynamic Load Management Program – A program designed to reduce load in periods or places of high demand, including but not limited to peak shaving programs, local distribution reliability programs to address local reliability needs, and direct load control programs.

## **SECTION 2: GENERALLY APPLICABLE PROVISIONS FOR DER SUPPLIERS**

Applicability: The provisions of these sections apply to all DER suppliers that participate in a Authority DSP-operated program or market with respect to transactions between the DER supplier and the customer of the Authority. These provisions are designed to ensure that accurate information is provided to customers and will require minimal or no changes to existing DER supplier business practices.

### **SECTION 2A: SALES AGREEMENTS** **(Generally Applicable)**

- A. A DER supplier shall obtain a customer's consent to a sales agreement prior to billing a customer or enrolling a customer in a DSP, Authority, and NYSEERDA.
  - 1. The sales agreement may be a written contract signed by the customer or the customer's verbal or electronic authorization to enter into an agreement with the DER supplier for the products and services specified.
  - 2. A DER supplier entering into a sales agreement for a large or ongoing transaction (as defined below) shall retain the sales agreement and record of customer consent for at least two years or the length of the agreement, whichever is longer.
    - a. A large transaction is any transaction in which a customer makes a payment to a DER supplier of \$500 or more.
    - b. An ongoing transaction is any transaction which, regardless of the size of the transaction, either (a) results in the DER supplier billing the customer for a period of three or more months or (b) results in the DER supplier enrolling the customer in a program through which the customer or the DER supplier will receive compensation, including bill credits, for a period of three or more months.

### **SECTION 2B: GENERAL MARKETING STANDARDS** **(Generally Applicable)**

- A. DER supplier shall:
  - 1. Not engage in misleading or deceptive conduct as defined by state or federal law or regulation, Authority rule, or Commission rule or Order;
  - 2. Not make false or misleading representations including misrepresenting rates or savings offered by the DER supplier;
  - 3. Provide a mass market customer upon request with written information regarding the DER supplier and its products or services or with a website address at which information can be obtained;
  - 4. Use reasonable efforts to provide accurate and timely information about services and products. Such information will include information about rates, contract terms, termination fees and right of cancellation;
  - 5. Ensure that any product or service offering that is made by a DER supplier in a transaction with a mass market customer contains information written in plain language that is designed to be understood by the customer. This shall include providing any written information to the customer in a language in which the DER supplier representative has substantive discussions with the customer or in which a contract is negotiated;
  - 6. Comply with local laws and regulations regarding door-to-door marketing;
  - 7. Comply with the state and federal laws regarding telemarketing, including the Do-Not-Call law;
  - 8. Cooperate with the Department and Authority regarding the practices prescribed by these UBP-DERS-LIPA and with other regulatory entities, including law enforcement, in investigations concerning deceptive marketing practices.

### **SECTION 2C: CUSTOMER DATA**

- A. Applicability. This Section establishes practices for release and protection of customer information by the Authority or DSPs to DER suppliers using EDI. It also identifies the content

of information sets transmitted using EDI standards. The Authority or DSP and a DER supplier shall use standards, systems, and protocols developed for these purposes for transmittal of customer information. This section does not impose any obligations on DER suppliers that do not request or receive data using EDI.

- B. Customer Authorization Process: The Authority or DSP shall provide information about a specific customer requested by an EDI-eligible DER supplier authorized by the customer to receive the information.
1. In obtaining customer authorization, a DER supplier shall inform the customer of the types of information to be obtained, to whom it will be given, how it will be used, and how long the authorizations will be valid. The authorization is valid for no longer than six months unless the sales agreement provides for a longer time.
  2. The Authority or DSP shall assume that a DER supplier obtained proper customer authorization if the DER supplier submits a valid information request, as defined in EDI rules.
  3. A DER supplier shall retain, for a minimum of two years or for the length of the sales agreement, whichever is longer, verifiable proof, including but not limited to a recording or signed writing, of authorization for each customer. Verification record shall be provided by a DER supplier, upon request of the Department, within five calendar days after a request is made after a request is made. Locations for storage of the records shall be at the discretion of the DER supplier.
  4. Upon request by a customer, the Authority or DSP shall block access by DER suppliers to information about the customer.
  5. A DER supplier and its agent shall comply with statutory and regulatory requirements pertaining to applicable state and federal do-not-call registries.
- C. Customer Information Provided to DER suppliers
1. Release of Information: The Authority shall respond within three business days to valid requests for information as established in EDI transaction standards and within seven business days to requests for data and information for which an EDI transaction standard is not available. The Authority shall provide the reason for rejection of any valid information request including for reasons of a DER suppliers' non-compliance with the UBP-DERS-LIPA.
  2. Customer Contact Information Set: The Authority, to the extent it possesses the information, shall provide, upon a DER supplier request, consumption history for an electric account.
    - a. Consumption history <sup>3</sup> for an electric account shall include:
      1. Customer's service address;
      2. Electric account number;
      3. Sales tax district used by the Authority and whether the Authority identifies the customer as tax exempt;
      4. Rate service class by meter, where applicable;
      5. Electric load profile reference category or code, which indicates the customer's peak electricity demand;
      6. Customer's number of meters and account numbers;
      7. Usage type (e.g., kWh), reporting period, and type of consumption (actual, estimated, or billed);
      8. Whether the customer's commodity service is currently provided by the utility;
      9. 12 months, or the life of the account, whichever is less, of customer data and, upon separate request, an additional 12 months, or the life of the account, whichever is less, of customer data, and, where applicable, demand information<sup>4</sup>; if the customer has more than one account, the Authority or DSP shall provide the applicable information, if available, for each account; and

<sup>3</sup> The Authority, in addition to EDI transmittal, may provide web-based access to customer history information

<sup>4</sup> May provide data for a standard 24 months or life of the account, whichever is less.

10. Electronic interval data in summary form (billing determinants aggregated in the rating periods under the Authority's tariff), and if requested in detail, an acceptable alternative format.
- D. Charges for Customer Data: Are described in the Authority's tariff.
  - E. Unauthorized Information Release. A DER supplier, its employees, agents, and designees, is prohibited from selling, disclosing or providing any customer information obtained from the Authority or DSP, in accordance with this Section, to others, including their affiliates, unless such sale, disclosure or provision is required to facilitate or maintain service to the customer or is specifically authorized by the customer or required by legal authority. If such authorization is requested from the customer, the DER supplier shall, prior to authorization, describe to the customer the information it intends to release and the recipient of the information.
  - F. NIST Cybersecurity Framework. DER suppliers that obtain customer information from the Authority or DPS must have processes and procedures in place regarding cybersecurity consistent with the National Institute of Standards and Technology Cybersecurity Framework.
  - G. Data Security. DER suppliers that obtain customer information from the Authority or DSP must comply with any data security requirements imposed by the Authority or by Commission rules on ESCOs and/or any data security requirements associated with EDI eligibility.

**SECTION 2D: RESPONSIBILITY FOR CONTRACTORS AND OTHER THIRD PARTY AGENTS**  
**(Generally Applicable)**

- A. If a DER supplier enlists a third party to assist them in marketing, data collection or analysis, billing, or any other activity, that DER supplier is responsible for making commercially reasonable efforts to ensure that the third party's activities conform with the relevant regulations and requirements.
- B. The provisions of the preceding subsection also apply when a DER supplier purchases a list of potential customers or similar information from a third party that assembled that list through its own advertising. In such cases, the DER supplier purchasing the list is responsible for making reasonable efforts to ensure that the list was not assembled through deceptive marketing.

**SECTION 2E: CUSTOMER INQUIRIES AND COMPLAINTS**  
**(Generally Applicable)**

- A. Department Staff will accept inquiries and complaints related to DER suppliers and will make efforts to investigate and resolve those complaints and, if necessary, bring those complaints to the Authority for consideration in accordance with the Authority's Tariff for Electric Service.
- B. For customers of large or ongoing transactions, as defined in Section 2A.A.2, DER suppliers must retain summary complaint records for at least two years from the date of the transaction or for the length of the agreement, whichever is longer.

**SECTION 2F: CONSEQUENCES FOR VIOLATIONS**  
**(Generally Applicable)**

- A. A DER supplier may be held responsible for actions by its officers, its employees, and contractors or other third-party agents acting on its behalf or under its direction. In addition, a DER supplier purchasing a customer list or similar information or services from a third-party marketer is responsible for making reasonable efforts to ensure that the list was not assembled in a manner inconsistent with the UBP-DERS-LIPA.

- B. A DER supplier may be subject to the consequences listed in UBP-DERS-LIPA Section 2F.C.2. for reasons, including, but not limited to:
1. False or misleading information in the registration package required of CDG and On-Site Mass Market DG Providers;
  2. Failure to adhere to the policies and procedures described in its sales agreement;
  3. Enrolling a customer in a DSP, Authority, NYSEERDA, Commission, or Department-run or authorized program or billing a customer without obtaining that customer's consent through a sales agreement or similar method;
  4. Failure to comply with required customer protections;
  5. Failure to comply with relevant reporting requirements or the Authority and/or the Department oversight requirements;
  6. Failure to provide notice to the Department of any material changes in the information contained in the Registration Form or registration package, if required;
  7. Failure to comply with the UBP-DERS-LIPA;
  8. Failure to comply with procedures, protocols or practices for communicating with the Authority's as required by UBP-DERS-LIPA;
  9. Failure to comply with other DER Commission Orders, Rules or Regulations; or
  10. A material pattern of consumer complaints on matters within the DER supplier's control.
- C. In determining the appropriate consequence for a failure or non-compliance in one or more of the categories set forth in UBP-DERS-LIPA Section 2F.B., the Department may take into account the nature, the circumstances, including the scope of harm to individual customers, and the gravity of the failure or non-compliance, as well as the DER supplier's history of previous violations and whether the DER supplier has taken any actions or made any commitment to remediate any harm caused by the violation.
1. The Department shall:
    - a. Either (a) notify the DER supplier in writing of its failure to comply and request that the DER supplier take appropriate corrective action or provide remedies within the directed cure period, which will be based on a reasonable amount of time given the nature of the issue to be cured; or (b) order that the DER supplier show cause why a consequence should not be imposed.
    - b. The Department or, if involving Authority programs, tariffs or data, Authority, the Authority upon the recommendation of the Department may impose the consequences listed in subparagraph C.2.(a-b) if the DER supplier fails to take corrective actions or provide remedies within the cure period;
    - c. Consequences shall not be imposed until after the DER supplier is provided notice and an opportunity to respond.
  2. Consequences for non-compliance in one or more of the categories set forth in UBP-DERS-LIPA Section 2F.B. may include one or more of the following restrictions on a DER supplier's access to information, programs, or tariffs.:
    - a. Suspension from enrolling new customers in the Authority's programs and tariffs;
    - b. Suspension of the ability to acquire customer data from the Authority;;
    - c. Imposition of requirements to modify procedures to obtain customer authorization for purchase, and to verify such customer authorization;
    - d. Imposition of requirements to modify procedures regarding the protection of consumer information; and
    - e. Imposition of a requirement to file a customer service improvement plan to the Department identifying actions to be taken and timelines to improve customer service, and/or a requirement to file periodic reports to the Department identifying the extent to which the customer service improvement plan is achieving its objectives.
    - f. Revocation of a DER supplier's eligibility to access programs, tariffs, or solicitations initiated or controlled by the Authority and/or acquire customer data by means established by the Authority; and
    - g. Any other measures that the Commission may deem appropriate.



3. The Department may give a DER supplier the option to avoid consequences or face lesser consequences on the condition that it provide refunds, corrective pricing, or other remedies to customers impacted by its violation.

## **SECTION 2G: OVERSIGHT REQUIREMENTS** **(Generally Applicable)**

- A. Applicability: This Section establishes requirements for DER suppliers to assist the Authority and the Department in monitoring the development, conduct and performance of New York's energy markets.
- B. All DER suppliers shall:
  1. Provide information on complaints received regarding DER products and services, as requested by the Authority or the Department.
  2. Provide information as requested by Department Staff, in relation to its efforts in monitoring the development, conduct and performance of energy markets. Such information requests may be through informal requests or interrogatories, including but not limited to, information regarding the DER supplier's business operations and financials.
  3. Permit Department Staff to examine the books, accounts, contracts, records, and documents of the DER supplier.
  4. Permit Department Staff to access any information needed to audit the DER supplier and cooperate with Department Staff's conducting of such an audit.

## **SECTION 3: PROVISIONS SPECIFIC TO CDG AND ON-SITE MASS MARKET DG PROVIDERS**

Applicability: The provisions of these sections apply to all CDG Providers and On-Site Mass Market Distributed Generation (DG) providers.

## **SECTION 3A: REGISTRATION REQUIREMENTS** **(CDG and On-Site Mass Market DG Providers)**

- A. Applicability. This Section sets forth the process that CDG Providers and On-Site Mass Market DG Providers are required to follow to register with the Department.
- B. Registration Package.
  1. Registrants planning to become CDG or On-Site Mass Market DG Providers are required to submit to the Department a registration package containing the following information and attachments:
    - a. A completed Registration Form. The registration form will be available on the Department's website, [www.dps.ny.gov](http://www.dps.ny.gov), no later than October 30, 2017 and will be included in this document as Attachment 2. Information that must be provided on or attached to the registration form includes:
      1. Name, postal and e-mail addresses, and telephone and fax numbers for the registrant's main office;
      2. Names and addresses of any entities that hold ownership interests of 10% or more in the CDG or On-Site Mass Market DG Provider, including a contact name for corporate entities and partnerships;
      3. Detailed explanation of any criminal or regulatory sanctions imposed during the previous 24 months against the CDG or On-Site Mass Market DG Provider, any senior officers of the DER supplier, or any entities holding ownership interests of 10% or more in the CDG or On-Site Mass Market DG Provider;
      4. Disclosure of any decisions or pending escalated regulatory actions in other states that affect the CDG or On-Site Mass Market DG Provider's ability to operate, such as suspension, revocation, or limitation of operating authority;
      5. A list and description of current investigations involving the CDG or On-Site Mass Market DG Provider being conducted by law enforcement or



regulatory entities.

6. A summary of the registrant's history of bankruptcy, dissolution, merger, or acquisition in the 24 months immediately preceding the date of application;
  7. Detailed explanation regarding ongoing investigations by the US Securities and Exchange Commission, the US Department of Justice, or the US Federal Energy Regulatory Commission;
  8. Identification of the employee(s) responsible for resolving consumer complaints received by the Department;
  9. A list of material categories of CDG or On-Site Mass Market products or services that will be offered and the customer classifications (*i.e.*, residential, small/mid-sized non-residential) to whom they will be offered;
  10. A list and description of any security breaches associated with customer proprietary information in the last 24 months, as well as a thorough description of the actions taken in response to any such instances.
- b. Sample sales agreements and sample bills for each customer class for each material category of the CDG or On-Site Mass Market products or services that will be offered; and
  - c. Proof of registration with the New York State Department of State.
2. The Department shall maintain a list of CDG and On-Site Mass Market DG Providers that successfully complete these requirements.
  3. A CDG Provider or On-Site Mass Market DG Provider that knowingly makes false statements in its registration package shall be subject to denial or revocation of eligibility.
  4. If the registration package contains information that is a trade secret or sensitive for security reasons, the registrant may request that the Department withhold disclosure of the information, pursuant to the New York State Freedom of Information Law (Public Officers Law Article 6) and Public Service Commission regulations (16 NYCRR §6-1.3).

#### C. Department Review Process

1. The Department shall review each registration package submitted. The CDG Provider or On-Site Mass Market DG Provider shall immediately notify the Department of any material changes in the information submitted in the Registration Form and/or registration package that occurs during the Department review process. The Department shall notify the registrant, in writing, of any deficiencies in the registration package. The CDG Provider must modify the registration package in response to such a notification within 30 days.
2. If the modified package does not remedy the deficiency identified by Staff, the Department shall notify the CDG or On-Site Mass Market DG Provider in writing and, to the extent the matter involves Authority tariffs, programs, or data, shall refer the matter, together with a recommended resolution, to the Authority for its consideration.
3. For CDG Providers or On-Site Mass Market DG Providers that begin operating in New York State after April 1, 2019, a registration package must be submitted and approved before the CDG Provider or On-Site Mass Market DG Provider begins marketing to customers. It is expected that Department Staff will review the registration package within 30 days of submittal and notify the registrant, in writing, either that the registration is accepted as complete or that deficiencies exist in the registration package.

#### D. Maintaining Active Status

1. CDG Providers and On-Site Mass Market DG Providers shall submit by March 31 of each year (March 31 Statement):
  - a. A statement that the information and attachments in its Registration Form and registration package are current; or
  - b. A description of revisions to the Registration Form and registration package along with a copy of the revised portions; and
2. A CDG or On-Site Mass Market DG Provider shall update all the information it submitted in its original registration package to the Department every three

years, starting from the filing date of its registration package. A Provider's status as an eligible provider is continuous from the filing date of its registration package, unless revoked or otherwise limited in accordance with UBP-DERS-LIPA Section 2F. If the three-year anniversary falls within one month of April 1, the Provider shall resubmit its registration package in lieu of the April 1 statement.

3. A CDG or On-Site Mass Market DG Provider shall submit at other times during the year:
  - a. A description of any material revision in the terms and conditions applicable to the business relationship between the Provider and its customers, including provisions governing the process for termination of sales agreements. For any such revisions, the Provider shall provide a copy of the revised portions. This provision does not require CDG Providers to file sample sales agreements based individually negotiated sales agreements with large customers or to update sample sales agreements based on changes made for individual customers.
  - b. Material Change in Financial Status including (1) bankruptcy or insolvency filings, (2) initiation of lawsuits which could materially and adversely impact the current or future ability of the Provider to meet its financial obligations.
  - c. Changes in the Provider's business and customer service information provided in the application.
  - d. Changes in personnel identified in the registration package as responsible for resolving consumer complaints received by the Department and referred to the Provider.

### **SECTION 3B: ENHANCED MARKETING AND ADVERTISING STANDARDS** **(CDG and On-Site Mass Market DG Providers)**

- A. Applicability: This Section describes the enhanced standards that CDG Providers, On-Site Mass Market DG Providers and their marketing representatives must follow when marketing and advertising products and services to potential mass market customers in New York.
- B. Training of Marketing Representatives
  1. Providers shall ensure that the training of their marketing representatives includes:
    - a. Knowledge of this Section and awareness of the other Sections of the UBP-DERS-LIPA;
    - b. Knowledge of the Provider's products and services;
    - c. Knowledge of the Provider's rates and payment options and the customers' right to cancel, including the applicability of a termination fee;
    - d. Knowledge of the applicable provisions of the Home Energy Fair Practices Act that pertains to residential customers; and,
    - e. The ability to provide the customer with a toll-free number from which the customer may obtain information about the Provider's mechanisms for handling billing questions, disputes, and complaints.
- C. When marketing materials or information conveyed to mass market customers or potential mass market customers includes savings estimates, CDG and mass market on-site DG providers must include, in addition to any other forecasts used, a forecast using the following baseline: a three-year average of actual historical utility rates for the three most recent calendar years for which data is available, for the customer's actual utility and service class. The provider may choose to apply an assumed escalation rate of up to 3% per year to this baseline in generating a forecast; if the provider does so, it must disclose the escalation rate used. The forecast generated must estimate savings for the same potential contract term as any other forecast provided. This forecast must be presented with similar prominence to other forecasts and all forecasts must be appropriately labeled to permit customers to understand their source.

Example: A CDG Provider prepares marketing materials for SC-1 customers, showing their expected savings over a 10-year contract term. Over the past 3 calendar years, SC-

1 customer in that utility territory have had average utility rates of \$0.10/kWh, \$0.09/kWh, and \$0.08/kWh. In addition to any other savings forecasts, the CDG developer must provide a 10-year savings estimate to the customer based on a utility rate of \$0.09/kWh, with no more than a 3% annual escalation rate, and identify the escalation rate used.

D. Contact with Customers

1. This subsection applies only to contacts with MassMarket Customers.
2. In-Person Contact with Mass Market Customers Marketing representatives who contact mass marketcustomers in person at a location other than the Provider's place of business for the purpose of selling any product or service shall, before making any other statements or representations to the customer:
  - a. Introduce him or herself with an opening statementthat identifies the Provider which he or she represents; identifies him or herself as a representative of that specific Provider; explains that he or she does not represent the Authority; and, explains the purpose of the solicitation.
  - b. Produce identification, to be visible at alltimes thereafter, which:
    1. Prominently displays in reasonably sized type face the first name and employee identification number of the marketing representative;
    2. Displays a photograph of the marketing representative and depicts the legitimate trade name and logo of the Provider they are representing; and,
    3. Provides the Provider's telephone number forinquires, verification and complaints.
  - c. A CDG or On-Site Mass Market DG Provider marketing representative must provide each prospective mass market customer with a business card or similar tangible object with the marketing representative's first name and employee identification number; Provider's name,address, and phone number; date and time of visit and website information for inquires, verification and complaints.
  - d. A CDG or On-Site Mass Market DG Provider marketing representative must provide the customer with written information regarding the Provider's products and services immediately upon request which must include the Provider's name and telephone number for inquires, verification and complaints. Any written materials, including contracts, sales agreements, and marketing materials must be provided to the customer in the same language utilized to solicit the customer.
  - e. When it is apparent that the customer's English language skills are insufficient to allow the customer to understand and respond to the information conveyed by the marketing representative or when the customer or another third party informs the marketing representative of this circumstance, the marketing representative shall either find a representative in the area who is fluent in the customer's language to continue the marketing activity in his/her stead or terminate the in-person contact with the customer. The use of translation services and language identification cards is permitted.
  - f. A marketing representative must leave the premises of a customer when requested to do so by the customer orthe owner/occupant of the premises.
  - g. All Providers who have marketing representatives conducting door-to-door marketing must maintain a daily record, by zip code, of the territories in which the Provider's marketing representatives have conducted door-to-door marketing. The information should be in a form that can be reported to Staff upon request, and should be retained by the Provider for a minimum of sixmonths.
3. Telephone Contact with Mass Market Customers Marketing representatives who contact mass marketcustomers by telephone for the purpose of selling any product or service offered by the Providers shall:
  - a. Provide the marketing representative's first name and, on request, the identification number;
  - b. State the name of the Provider on whose behalf the call is being made;
  - c. State the purpose of the telephone call;
  - d. When it is apparent that the customer's English language skills are insufficient to allow the customer to understand and respond to the information conveyed bythe marketing representative or when the customer or another third party informs the

- CDG marketing representative of this circumstance, the marketing representative will immediately transfer the customer to a representative who speaks the customer's language, if such a representative is available, or terminate the call; and,
- e. Remove customers' names from the marketing database upon customers' request.
  - f. When marketing to residential customers, the marketing representative must also:
    - 1. Explain that he or she does not represent the distribution utility;
    - 2. Explain the purpose of the solicitation; and,
    - 3. Provide any written materials, including contracts, sales agreements, and marketing materials to the customer in the same language utilized to solicit the customer.

### **SECTION 3C: MINIMUM STANDARDS FOR SALES AGREEMENTS** **(CDG and On-Site Mass Market DG Providers)**

- A. Applicability: This Section establishes minimum standards for sales agreements between CDG and On-Site Mass Market DG Providers (Providers) and mass market customers.
- B. A Provider, or its agent, may solicit and enter into a sales agreement with a customer subject to the following requirements.
  - 1. The DER supplier shall obtain a customer agreement to purchase the product or service and customer authorization to release information to the DER supplier, and retain verifiable proof of such authorization for at least two years or the length of the agreement, whichever is longer.
  - 2. Sales agreements shall include the following information written in plain language in the same language that the Provider has used to market to the customer:
    - A. Terms and conditions applicable to the business relationship between the Provider and the customer which includes:
      - 1. Provisions governing the process for rescinding or terminating an agreement by the Provider or the customer including provisions stating that a residential customer may rescind the agreement within three business days after its receipt without charge or penalty;
      - 2. The price, the terms and conditions of the agreement, including the term and end date, if any, of the agreement, the amount of the termination fee and the method of calculating the termination fee, if any, the amount of late payment fees, if applicable, and the provisions, if any, for the renewal of the agreement;
      - 3. A clear description of the conditions, if any, that must be present in order for savings to be provided to the customer, if savings are guaranteed.
      - 4. Information for residential customers of their rights under HEFPA; and
      - 5. Information regarding contacting the Department for dispute resolution.
      - 6. DER supplier contact information, including a local or toll-free number from the customer's service location.
- C. In addition to the requirements of subsection B, contracts for on-site mass market distributed generation must include a description of the distributed generation system, including the make and model of major system components, and an outline of system specifications. All contracts shall include, at a minimum:
  - 1. For purchased systems, the total system purchase price, itemized costs of system components, and any other taxes, fees or overheads that are the responsibility of the customer; or
  - 2. For leases or purchased power agreements (PPAs), the total number of payments, amount of payments, payment frequency, and due date;
  - 3. An estimate of annual energy output, including loss analysis (e.g. in the case of a solar system, the percentage of the available solar resource that the solar electric

- system will receive, accounting for losses from shading, array azimuth, and tilt);
4. The rate at which the customer can be compensated for any electricity sold to the Authority;
  5. The installation location;
  6. Installation schedule;
  7. The potential value of all federal, state, and local tax credits, electric utility rate credits, Renewable Energy Credits, incentives, or rebates that the customer may receive and/or be required to sign over to the DER provider;
  8. Disclosure of any restrictions on the customer's ability to sell the system and/or his/her property;
  9. System and/or production warranties;
  10. Disclosure of any binding arbitration clauses or other terms that limit the customer's right to enforce the contract or seek damages from the courts; and
  11. Assignment of responsibilities (e.g., for maintenance and repairs, insurance coverage, etc.), including whether such maintenance or repairs may be sold or transferred to a third party.

**SECTION 3D: STANDARD CUSTOMER DISCLOSURE STATEMENTS**  
**(CDG and On-Site Mass Market DG Providers)**

- A. A completed Standard Customer Disclosure Statement shall be provided to all customers of CDG or On-Site Mass Market DG Providers as part of the sales agreement. Standard Customer Disclosure Statements will be available on the Department's website, [www.dps.ny.gov](http://www.dps.ny.gov), no later than October 30, 2017 and will be included in this document as Attachment 1.
- B. In the event that the text in the Standard Customer Disclosure Statement differs from or is in conflict with a term stated elsewhere in the agreement, the term described by the text in the Standard Customer Disclosure Statement shall constitute the agreement with the customer notwithstanding a conflicting term expressed elsewhere.

**SECTION 3E: CUSTOMER INQUIRIES AND COMPLAINTS**  
**(CDG and On-Site Mass Market DG Providers)**

- A. Applicability: This Section establishes requirements for responses by a CDG or On-Site Mass Market DG Provider (Provider) to customer inquiries concerning CDG products or services. Providers shall respond to customer inquiries sent by means of electronic mail, telecommunication services, mail, or in meetings. The subjects raised in inquiries may result in the filing of complaints.
- B. General
  1. Providers shall provide consistent and fair treatment to customers.
  2. Providers shall maintain processes and procedures to resolve customer inquiries without undue discrimination and in an efficient manner and provide an acknowledgement or response to a customer inquiry within 2 days and, if only an acknowledgement is provided, a response within 14 days.
  3. Providers shall provide local or toll-free telephone access from the customer's service area to customer service representatives (CSRs) responsible for responding to customer inquiries and complaints. The Provider's customer service center should be operational at least eight hours per day Monday through Friday except holidays, starting no earlier than 7 AM EST.
  4. If the inquiry is specific to the Authority's service, the CSR shall take one of the following actions:
    - a. Forward/transfer the inquiry to the Authority;
    - b. Direct the customer to contact the Authority; or,
    - c. Contact the Authority to resolve the matter and provide a response to the customer.
  5. Each Provider shall maintain information regarding customer inquiries and

complaints pertaining to its products and services and designate a representative to provide information relating to customer inquiries and complaints to the Department.

C. Emergency Contacts

1. An emergency call means any communication from a customer concerning an emergency situation relating to the distribution system, including, but not limited to, natural disaster, downed wires, electrical contact, or fire.
2. A Provider's CSR shall transfer emergency calls directly to the Authority's emergency number.

**SECTION 3F: REPORTING REQUIREMENTS**

**(CDG and On-Site Mass Market DG Providers)**

- A. Applicability: This Section establishes requirements for reporting by a CDG or On-Site Mass Market DG Provider (Provider).
- B. Each Provider shall submit to the Department an annual report by March 31 containing information for the previous calendar year including aggregate number of customers served, a summary of services provided, and information on the number and classification of complaints received in a format to be established by the Department, to assist the Department in monitoring CDG and On-Site Mass Market DG markets.
- C. Each CDG Sponsor shall send an annual report to the Department for each calendar year to each of its subscribers by March 31 of the following year. The annual report must include the amount of credits that the member has received, expressed both in kWh and dollars, as well as the total amount the customer has paid in subscription fees and any other payments to the Sponsor. The report shall follow the standard format provided by Department Staff in Case 15-M-0180.<sup>5</sup>
- D. A CDG Sponsor that generates or allocates banked credits in a calendar year must file a report to the Department by March 31 of the following year detailing how many credits were banked, how many banked credits were allocated, what percentage of that allocation was provided to mass market customers, and what percentage was allocated to large customers.

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<sup>5</sup> <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=15-M-0180&submit=Search+by+Case+Number>

**RECOMMENDATION FOR APPROVAL OF MODIFICATIONS TO LIPA'S TARIFF  
FOR ELECTRIC SERVICE RELATED TO WIRELESS PHONE CONTACTS**

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**WHEREAS**, the Federal Communications Commission ("FCC") issued a Declaratory Ruling on August 4, 2016 establishing guidelines for utilities' use of wireless telephone numbers to communicate with customers (*see In the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991 Blackboard, Inc. Petition for Expedited Declaratory Ruling Edison Electric Institute and American Gas Association Petition for Expedited Declaratory Ruling*, CG Docket No. 02-278); and

**WHEREAS**, Authority Staff and PSEG Long Island have proposed changes to the Tariff for Electric Service consistent with the FCC Declaratory Ruling; 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 12, 2018, two public hearings were held in Nassau and Suffolk counties on November 16, 2018, 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 of the Board of Trustees hereby recommends approval of the proposed modifications to the Authority's Tariff to be effective January 1, 2019; and be it further

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

Dated: December 19, 2018



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**I. General Information (continued):****C. General Terms and Conditions (continued):****c) Billing**

- (1) Upon enrollment (or, for customers already enrolled as of the effective date of this Leaf, upon renewal), each Qualifying Low Income Customer who is (a) eligible for a Balanced Billing Plan (in accordance with Section IV D. 2); (b) not already enrolled in a Balanced Billing Plan; and (c) not a participant in the Division of Social Service direct voucher payment program will be notified that the Authority will enroll the customer in a Balanced Billing Plan unless the customer prefers to remain on standard billing. After a reasonable opportunity to decline Balanced Billing has been provided, any such Qualifying Low Income Customer who does not decline will be enrolled in a Balanced Billing Plan.
- (2) If the total bill credit identified in C.21.b) (1) exceeds the charges for the entire billing period including Power Supply Charge, the current billing period's discount will equal the total bill for that period.

**d) Reconnection Charges**

As per section V.H.3.d) the "Reconnection Charge" will not apply to Qualifying Low Income Customers receiving financial assistance from a local social services department.

**22. Customer Contact Consent**

- a) Customers who provide their wireless telephone number to the Authority when they initially sign up to receive utility service, subsequently supply the wireless telephone number, or later update their contact information, are giving consent to be contacted by the Authority at that number with messages that are closely related to the utility service, which may include but not limited to the following: notification of planned or unplanned service outages; notification of field work that directly affects the customer's utility service; and notification that failure to make payment will result in service curtailment.

## **Proposal Concerning Modifications to LIPA's Tariff for Electric Service**

### **Requested Action:**

The Long Island Power Authority ("the Authority") staff proposes to revise the Tariff for Electric Service to include language that provides clarity regarding customer consent to be contacted on a wireless telephone number.

### **Background:**

The Federal Communications Commission ("FCC") issued a Declaratory Ruling on August 4, 2016<sup>1</sup> establishing guidelines for utilities' use of wireless telephone numbers to communicate with customers. "In the absence of facts supporting a contrary finding, prior to the termination of a customer's utility service, a customer who provided a wireless telephone number when he or she initially signed up to receive utility service, subsequently supplied the wireless telephone number, or later updated his or her contact information, is deemed to have given prior express consent to be contacted by their utility company for calls that are closely related to the service, and calls to warn about the likelihood that failure to make payment will result in service curtailment."<sup>2</sup>

Calls closely related to the utility service are defined as including "those that warn about planned or unplanned service outages; provide updates about service outages or service restoration; ask for confirmation of service restoration or information about lack of service; provide notification of meter work, tree trimming, or other field work that directly affects the customer's utility service; notify consumers they may be eligible for subsidized or low-cost services due to certain qualifiers such as, e.g., age, low income or disability; and calls that provide information about potential brown-outs due to heavy energy usage."<sup>3</sup>

### **Proposal:**

The Authority Staff proposes to update the Tariff for Electric Service to include language notifying customers of their rights consistent with the FCC Declaratory Ruling. Specifically, Staff proposes to indicate to customers that by providing their wireless telephone number, they consent to being contacted at the provided telephone number for matters closely related to utility service (as defined in the FCC Declaratory Ruling and described above).

Related to this proposed Tariff change, the Authority's Service Provider also intends to update company forms that request a contact telephone number to include a disclosure notifying customers who provide a wireless telephone number that by doing so they are consenting to be contacted on that number for matters closely related to utility service. Communications with customers is essential to providing safe, efficient and reliable electric service.

**Financial Impacts:** There are no financial impacts associated with this proposal.

**Affected Tariff Leaf:** Leaf 25

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<sup>1</sup> *In the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991 Blackboard, Inc. Petition for Expedited Declaratory Ruling Edison Electric Institute and American Gas Association Petition for Expedited Declaratory Ruling, CG Docket No. 02-278.*

<sup>2</sup> *Ibid.*, FCC Declaratory Ruling at paragraph 32.

<sup>3</sup> *Ibid.*, FCC Declaratory Ruling at paragraph 30.

**Summary of Proposed Changes:**

To update the Tariff for Electric Service to include language to indicate to customers that by providing their wireless telephone number, they have provided consent to be contacted at the provided telephone number for matters closely related to utility service.

**I. General Information (continued):****C. General Terms and Conditions:****1. Legal Authority**

This Tariff is adopted under the power vested in the Authority by the Long Island Power Authority Act. See Public Authorities Law, Title 1-A.

**2. Implementation and Administration of this Tariff**

- a) The duties and responsibilities of the Authority may, at the Authority's discretion, be carried out by the Authority, the Authority's subsidiary, or the Manager.
- b) In administering the provisions of this Tariff, the Authority shall give effect to the rights, protections, and obligations of Customers contained in Article 2 and Sections 117 and 118 of the Public Service Law, and Section 131-s of the Social Services Law.

**3. Availability of this Tariff**

A copy of this Tariff shall be maintained and made available for public inspection at all business offices of the Authority that are open to the public.

**4. Altering, Changing, and Eliminating the Provisions of this Tariff**

Any of the provisions of this Tariff may be modified, at any time, upon approval of the Authority's Trustees.

**5. Employee Identification**

- a) Every employee who is authorized by the Authority to enter Customers' premises to read meters, test meters, collect electric bills, or for any other Authority business, will be issued an Identification Card.
- b) The Identification Card will bear the employee's photograph and the name of the Authority or its Manager.
- c) Customers should not admit anyone claiming to represent the Authority who cannot show the Identification Card.

**6. Customer Contact Consent**

- a) Customers who provide their wireless telephone number to the Authority when they initially sign up to receive utility service, subsequently supply the wireless telephone number, or later update their contact information, are giving consent to be contacted by the Authority at that number with messages that are closely related to the utility service, which may include but not limited to the following: notification of planned or unplanned service outages; notification of field work that directly affects the customer's utility service; and notification that failure to make payment will result in service curtailment.



**Department of  
Public Service**

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Chief Executive Officer

**Thomas Congdon**  
Deputy Chair and  
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**John J. Sipos**  
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**Kathleen H. Burgess**  
Secretary

December 14, 2018

Honorable Ralph V. Suozzi, Chairman  
Board of Trustees  
Long Island Power Authority  
333 Earle Ovington Blvd.  
Uniondale, New York 11553

Re: 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, 2019. 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 certain of the proposals be adopted in accordance with the discussion set forth herein.

The Authority submitted to the DPS three proposals for modifying its tariff consistent with recent Public Service Commission (PSC or Commission) Orders. These proposals modify the Authority's tariff: 1) to expand the eligibility for compensation under the Authority's Value of Distributed Resources (VDER) tariff to projects with a capacity between 2,000 and 5,000 kilowatts (kW);<sup>23</sup> 2) to modify the tariff in compliance with the Commission's Standard Interconnection Requirements (SIR) for Small Distributed Generators which are incorporated in an addendum to the tariff;<sup>4</sup> and 3) to adopt a Uniform Business Practices (UBP) for Distributed Energy Resource

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<sup>1</sup> Public Service Law §3-b(3)(a).

<sup>2</sup> Case 15-E-0751, In the Matter of the Value of Distributed Energy Resources, Order on Phase One Value of Distributed Energy Resources Project Size Cap and Related Matters (issued February 22, 2018).

<sup>3</sup> 1,000 kilowatts are equal to 1 MW.

<sup>4</sup> Cases 15-E-0557 et al., In the Matter of Proposed Amendments to the New York State Standardized Interconnection Requirements (SIR) for Small Distributed Generators, Order Modifying Standard Interconnection Requirements for Small Distributed Generators (issued April 19, 2018).

(DER) Suppliers attached as an addendum to the tariff, to protect customers participating in DER programs.<sup>5</sup>

The Authority also submitted to the DPS five additional proposals modifying the tariff to include: 1) smart meter removal and opt-out fees; 2) an update to the eligible lighting technologies available under Service Classification No. 7A, Outdoor Area Lighting to include Light-Emitting Diode (LED) lighting fixtures; 3) a provision consistent with Federal Communications Commission (FCC) guidelines regarding a utilities' use of wireless telephone numbers to communicate with customers; 4) a property tax rider associated with LIPA's T&D system to be charged to customers as a line item on their bills, and 5) modifications to implement rate changes for all electric customers consistent with the Authority's annual budget process and to modify components of the Authority's Revenue Decoupling Mechanism (RDM).

The tariff proposals were noticed in the State Register in accordance with the State Administrative Procedure Act and posted on LIPA's website on September 12, 2018. LIPA held public hearings on the proposals in conjunction with its budget hearings on November 16, 2018. LIPA accepted written comments through November 23, 2018.

#### Value of Distributed Energy Resources

The Authority proposes to expand eligibility for Value Stack compensation consistent with the Commission's February 22, 2018 Order (VDER Project Size Cap Order).<sup>6</sup> The Department recommends that the Authority adopt the amendments as proposed and continue to enhance the Authority's VDER tariff consistent with future Commission orders as appropriate.

On March 9, 2017, the PSC, in its Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters (VDER Phase One Order), established the first phase of a new system for compensation of DERs based on the value those resources provide to the electric grid. This new system for compensation is known as the Value Stack.<sup>7</sup> On December 19, 2017, the Authority implemented the provisions of the VDER Phase One Order and the Value Stack on Long Island through tariff amendment.

Originally, the VDER Phase One Order capped eligibility for Value Stack compensation to projects sized up to 2 MW. When LIPA implemented the provisions of the VDER Phase One Order it adopted the same eligibility requirement. The PSC on February 22, 2018 expanded the eligibility for Value Stack compensation to include to non-residential customers with solar, wind, farm waste, fuel cell, or micro-hydroelectric generating equipment with a rated capacity of greater than 2 MW but not more than 5 MW. The Commission stated in the VDER Project Size Cap Order, "to unlock the economy of scale and efficiency benefits that will result in the development of additional clean generation without impacting nonparticipating ratepayers, the Commission

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<sup>5</sup> Case 15-M-0180, In the Matter of Regulation and Oversight of Distributed Energy Resource Providers and Products, Order Establishing Oversight Framework and Uniform Business Practices for Distributed Energy Resource Suppliers, (issued October 19, 2017).

<sup>6</sup> Case 15-E-0751, supra, Order on Phase One Value of Distributed Energy Resources Project Size Cap and Related Matters (issued February 22, 2018).

<sup>7</sup> Case 15-E-0751, supra, Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters (issued March 9, 2017).

expands eligibility for participation in Value Stack tariffs to projects up to 5 MW.” The Authority’s proposal would modify the tariff to implement eligibility requirements consistent with the Commission’s Order. The Authority expects that the proposal will have no material financial impact on the Authority as lost revenues associated with VDER are recovered through the Authority’s RDM. The proposal is also expected to have minimal impact on non-participating customers.

As stated in the PSC’s VDER Project Size Cap Order:

“[T]his Order takes a major step in decreasing DER project soft costs by enabling economies of scale and reducing inefficiencies. The Commission expects that continued cost reductions, through both Commission action and continued technological process, will enable and accelerate the development of DERs with limited or no impact on nonparticipating ratepayers. This scale of deployment will drive the clean, distributed, transactive, and integrated electric system REV envisions.”<sup>8</sup>

The Department recommends that the Authority adopt this proposal because it achieves the accelerated development of DERs consistent with the rest of New York State’s utilities with little to no impact to ratepayers. Furthermore, the Department recognizes the Authority’s efforts to continue to enhance its VDER tariff consistent with Commission Order and encourages the Authority to pursue enhancements provided for in future Commission orders regarding the VDER and REV proceedings<sup>9</sup> as appropriate.

#### Standard Interconnection Requirements for Small Distributed Generators

The Authority proposes to modify its tariff to enhance the Small Generation Interconnection Procedures (SGIP) and Standardized Contract for Interconnection consistent with the Commission’s Order Modifying Standard Interconnection Requirements (SIR) for Small Distributed Generators (SIR Order).<sup>10</sup> The proposed modifications address integrating energy storage systems (ESS) into the interconnection process, payment and construction milestones, and provide clarifications to the technical references and procedures. The Department recommends that the Authority adopt the tariff amendments as proposed and recommends that the Authority continue to enhance the Authority’s interconnection procedures consistent with future Commission orders as appropriate.

As part of the VDER Phase One Order, the Commission directed Department Staff to meet with interested stakeholders regarding integrating ESS into the interconnection process and for extending “Value Stack” compensation under VDER Tariffs to projects larger than 2 MW. To that end, two working groups were formed, the Interconnection Policy Working Group (IPWG) and the Interconnection Technical Working Group (ITWG). The focus of these working groups was to, in part, propose changes to the SIR. As stated in the Authority’s proposal, significant updates to the SGIP and standardized contract include new sections regarding the application

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<sup>8</sup> *Id.*, p. 18.

<sup>9</sup> Case 14-M-0101, Reforming the Energy Vision.

<sup>10</sup> Cases 15-E-0557 *et al.*, supra, Order Modifying Standard Interconnection Requirements for Small Distributed Generators (issued April 19, 2018).

process for energy storage systems, payment and construction milestones, and technical references and requirements consistent with the SIR Order. The Authority does not expect the proposal to have any financial impact on it.

The Commission stated in the SIR Order, “the overall goal for these SIR modifications is to enhance and speed up the interconnection application and review process, as well as the overall interconnection process.”<sup>11</sup> DPS reiterates that the growth of DER resources is an important aspect of meeting the State’s Clean Energy and Renewable goals, and the modifications to the Authority’s tariff facilitate accelerated growth of distributed generation. Yet, it is important to note that “though these changes... will enhance the SIR, further modifications and changes will need to be made as additional lessons are learned and technology evolves.”<sup>12</sup> Continued enhancement of the Authority’s SGIP will be necessary to enable the efficient inclusion of increasing and evolving generation resources.

As the Commission noted in the SIR Order, “additional endeavors intended to further improve interconnections in New York are expected in the near future, allowing for continued growth in the area of distributed generation.”<sup>13</sup> For instance, “several of the other interconnection cost areas of interest, such as cost sharing and standardization of interconnection fees and costs, will be addressed in the future by the Interconnection Technical Working Group.”<sup>14</sup> DPS recommends that the Authority should continue its progress to enhance the SGIP to remain consistent with the outcome of these endeavors.

The Department has reviewed the Authority’s proposal and the attached modifications to the SGIP and believes they will enhance the efficiency and effectiveness of the Authority’s SIR processes. As such, the Department recommends that the Authority adopt the modifications as proposed and continue to develop the Authority’s interconnection procedures consistent with future Commission orders as appropriate.

#### Uniform Business Practices for Distributed Energy Resource Suppliers

The Authority proposes to adopt an amended version of the Uniform Business Practices for Distributed Energy Resource Suppliers Manual as provided for in the PSC’s Order Establishing Oversight Framework and Uniform Business Practices for Distributed Energy Resource Suppliers (DER UBP Order)<sup>15</sup> which implemented initial regulations governing the relationship between distributed energy resource companies and their customers. The Department recommends that the Authority adopt the proposal and continue to develop its DER UBP consistent with future Commission orders as appropriate.

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<sup>11</sup> Id., p. 13.

<sup>12</sup> Id.

<sup>13</sup> Id., p. 25.

<sup>14</sup> Id., p. 19.

<sup>15</sup> Case 15-M-0180, In the Matter of Regulation and Oversight of Distributed Energy Resource Providers and Products, Order Establishing Oversight Framework and Uniform Business Practices for Distributed Energy Resource Suppliers, (issued October 19, 2017).



The Commission's DER UBP Order stated:

As DERs become an increasingly common and significant part of electric and gas service to customers, the Commission has the responsibility of ensuring that customers participating in DER markets and programs understand the costs and benefits of their investments and are protected from confusion, fraud, and abusive marketing. Furthermore, clear and robust guidance on appropriate marketing and contracting practices will create a level playing field for DER suppliers and support fair competition between suppliers and between various DER options.<sup>16</sup>

The Authority's proposal expresses its commitment to ensuring that customers on Long Island are protected from the confusion, fraud, and abusive marketing similar to the protection afford to other utility customers throughout the state. The Authority's proposal tracks closely with the processes and requirements establish by the Commission for other NYS Utilities, adapting the processes and procedures to recognize the Authority's relationship with its service provider PSEG LI.

LIPA's proposal creates a manual to inform DER suppliers' business practices and creates the necessary tariff provisions to ensure that customers are afforded the protections contemplated in the DER UBP Order. As noted in the DER UBP Order "a clear and consistent process for managing complaints and investigating and addressing violations will ensure that both customers and DER suppliers understand their rights and responsibilities."<sup>17</sup> In this case, both LIPA and the Department are authorized to investigate and address customer issues regarding DER suppliers.

While the Commission's DER UBP Order represents a first step in creating regulations governing the relationship between distributed energy resource companies and their customers, "as markets continue to evolve, these requirements will require and receive ongoing review and modifications to ensure that customers are appropriately protected and that DER markets are able to thrive."<sup>18</sup> The Authority's commitment to establishing similar processes and procedures to govern the relationship should recognize a similar necessity. Updates and modifications to the Authority's DER UBP processes should be pursued as appropriate to maintain a thriving DER market, while providing for the appropriate protections and guidelines for customers and suppliers. The Authority accordingly should continue to enhance its DER UBP as the Commission adopts modifications to the DER UBP.

The Authority's proposal to adopt the DER UBP will enable LIPA and the Department to appropriately monitor DER providers in the Authority's service territory. The proposal will create necessary protections for customers while identifying clear and consistent guidelines for DER suppliers. As such, the Department recommends that the Authority adopt the proposal and continue to develop its DER UBP consistent with future Commission orders as appropriate.

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<sup>16</sup> Case 15-M-180, supra, Order Establishing Oversight Framework and Uniform Business Practices for Distributed Energy Resource Suppliers, (issued October 19, 2017), p. 1

<sup>17</sup> Id., p. 2

<sup>18</sup> Id., p. 3.

Smart Meter Removal Fees

The Authority proposes to update its tariff to include a one-time meter removal fee for residential customers who initially accept installation of a smart meter and subsequently request post-installation removal. The proposal also modifies the tariff to provide for an opt-out fee for meter reading for customers without smart meters. The Authority's proposal to modify the tariff effectuates LIPA and PSEG LI's proposal to implement full scale deployment of its Advanced Metering Infrastructure (AMI) and smart meters as part of its annual update to its Utility 2.0 plan.<sup>19</sup> The Department issued its recommendations regarding Utility 2.0, including AMI, on November 1, 2018.<sup>20</sup> In conjunction with the Department's recommendations regarding Utility 2.0, the Department recommends that the Authority adopt the one-time meter removal fee and propose a revised opt-out fee as discussed below.

As stated in the proposal:

[T]he meter removal fee alleviates unnecessary expense on all rate payers for the additional cost associated with installing and then removing and re-installing a non-communicating meter for those customers who do not object to initial installation of a smart meter and subsequently request removal. The AMI Smart Meter Daily Opt-Out Fee alleviates the unnecessary expense on all rate payers for the additional costs associated with manual monthly meter reads.<sup>21</sup>

LIPA and PSEG LI initially proposed a one-time meter removal fee of \$110.61 for removal of the smart meter and replacement with a non-communicating meter. During the Department's review, PSEG LI submitted to the Department a revised figure and supporting calculations in the amount of:

- \$65.61 for the one-time meter removal fee; and
- \$15.37 for the monthly opt-out fee; collected as an approximate \$0.51 daily service charge.

LIPA and PSEG LI stated in the original proposal and the supplemental material that the one-time meter removal fee will be collected beginning January 1, 2019 for any customer who does not object to installation of an AMI smart meter and later requests removal and replacement of the smart meter with a non-communicating traditional meter. The monthly opt-out fee will not begin to be collected until January 1, 2023 when the full implementation of AMI smart meters is expected.

Based on PSEG LI's calculations, the one-time meter removal fee is appropriate, and the \$65.61 fee is consistent with the removal fees charged by other NYS Utilities deploying smart meter technologies. However, the \$15.37 monthly opt-out meter reading fee is calculated based

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<sup>19</sup> Matter No. 14-01299, In the Matter of PSEG-LI Utility 2.0 Long Range Plan, PSEG LI Utility 2.0 2018 Annual Update.

<sup>20</sup> Matter No. 14-01299, supra, Recommendations Regarding PSEG Long Island's Annual Update to the Utility 2.0 Long Range Plan (issued November 1, 2018).

<sup>21</sup> LIPA's Proposal Concerning Modifications to LIPA's Tariff for Electric Service – One Time Meter Removal Fee, p. 3.

upon the number of customers projected to opt-out. Since the fee will not be collected from customers until 2023 and the fee amount is based on a presently undetermined customer opt-out rate, the Department recommends that PSEG LI revise the amount once a firm opt-out rate has been determined, in advance of January 1, 2023.

The proposal states that each residential customer will be notified in advance of meter installation at three specific intervals, 45 days, 14 days, and 7 days prior to meter installation. After multiple attempts, if no response is received, the smart meter will be installed. The Department stresses the importance of effective and repeated customer contact to ensure customers are informed that they may accept an AMI smart meter or opt out, and the consequences of opting out.

As stated in the proposal, “full deployment of smart meters will empower PSEG Long Island customers to make more informed energy choices, enable the development of new energy products and services, and advance the Authority’s mission to provide clean, reliable, and affordable electric service.”<sup>22</sup> LIPA and PSEG LI’s proposal of a one-time meter removal fee and the monthly opt-out fee are consistent with the practices of other NYS Utilities, and the Department recognizes that these fees alleviate expenses on all ratepayers. The Department recommends that the Authority adopt the one-time meter removal fee and a revised opt-out fee as discussed above.

#### Light-Emitting Diode Lighting Fixtures

The Authority proposes to modify its tariff, specifically, Service Classification SC No. 7A (SC 7A), to include two LED lighting options and phase out obsolete lighting technologies (metal halide and high-pressure sodium) over a three-year period. This proposal functions in conjunction with the LIPA and PSEG LI’s three-year lighting phase-out plan, beginning January 1, 2019. The phase-out plan is expected to result in reduced operating expenses for PSEG LI, energy and customer bill savings, and beneficial efficiency and environmental impacts associated with utilizing LED technologies. The Department recommends the Authority adopt the modifications to SC 7A as proposed.

The proposal states that beginning on January 1, 2019 two LED lighting options will become available to customers on SC 7A which governs the rates and charges for outdoor dawn to dusk lighting. Simultaneously, most existing Metal Halide (MH) and High-Pressure Sodium (HPS) fixtures will no longer be available as an option for SC 7A customers. In addition, starting January 1, 2022, most existing MH and HPS bulbs and photocells will no longer be replaced. LED lights will be used in their stead.

LIPA and PSEG LI expect that customers will benefit from an approximate 50% reduction in energy costs by choosing LEDs. Furthermore, the proposal states that customers will not be charged upfront for installation or removal costs and customers will not experience any changes in monthly fixture charges for an equivalent LED lightbulb. An expected annual savings of between \$57 to \$84 per fixture will benefit SC 7A customers utilizing LEDs through reductions in

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<sup>22</sup> Id. p. 1.

their Power Supply Charge. In addition, PSEG LI expects an annual operating and maintenance savings of \$300,000 due to the extended life of the LED bulb technology.

The Authority's proposal and the associated phase-out plan will increase the adoption of LED technology which is expected to result in energy and bill savings to customers, reductions in PSEG LI's operating expenses, and provide for beneficial efficiency and environmental impacts. As such, the Department recommends that the Authority adopt the tariff modifications as proposed.

#### Customer Cell Phone Notifications

The Authority proposes to modify its tariff to notify customers of their rights consistent with an FCC Declaratory Ruling which establishes guidelines for a utility's use of wireless telephone numbers to contact its customers with robocalls and automated texts consistent with the provisions of the Telephone Consumer Protection Act (TCPA).<sup>23</sup> The Department recommends that the Authority adopt the modifications in conformance with the FCC ruling as proposed.

On August 4, 2016, the FCC issued a Declaratory Ruling in *In re Blackboard, Inc. Petition for Expedited Declaratory Ruling* which established guidelines for utilities' use of wireless telephone numbers to communicate with customers.<sup>24</sup> As stated in the FCC ruling, to be consistent with the provisions of the TCPA, a utility should consider that:

[P]rior to the termination of a customer's utility service, a customer who provided a wireless telephone number when he or she initially signed up to receive utility service, subsequently supplied the wireless telephone number, or later updated his or her contact information, is deemed to have given prior express consent to be contacted by their utility company for calls that are closely related to the service, and calls to warn about the likelihood that failure to make payment will result in service curtailment."<sup>25</sup>

The Authority proposes to update its tariff to include language notifying customers of their rights consistent with the FCC Declaratory Ruling.

The modifications to the tariff, as proposed, will inform customers that, by providing their wireless telephone number, customers consent to being contacted at the provided telephone number for matters closely related to utility service. The proposed tariff language indicates that "may include but [is] not limited to the following: notification of planned or unplanned service outages; notification of field work that directly affects the customer's utility service; and notification that failure to make payment will result in service curtailment."<sup>26</sup> Relatedly, PSEG LI intends to update Company forms that request a contact telephone number to include a disclosure notifying customers who provide a wireless telephone number in doing so the customers consents to be contacted on that number for matters closely related to utility service.

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<sup>23</sup> 47 U.S.C.S. § 227.

<sup>24</sup> *In re Blackboard, Inc. Petition for Expedited Declaratory Ruling*, 31 FCC Rcd 9054, 2016 FCC LEXIS 2680, 65 Comm. Reg. (P & F) 226 (F.C.C. August 4, 2016).

<sup>25</sup> *Id.*, p. 9067.

<sup>26</sup> LIPA's Proposal Concerning Modifications to LIPA's Tariff for Electric Service – Cell Phone Contact Consent, p. 2.

As stated in the FCC ruling, calls closely related to the utility service are defined as including

those that warn about planned or unplanned service outages; provide updates about service outages or service restoration; ask for confirmation of service restoration or information about lack of service; provide notification of meter work, tree trimming, or other field work that directly affects the customer's utility service; notify consumers they may be eligible for subsidized or low-cost services due to certain qualifiers such as, e.g., age, low income or disability; and calls that provide information about potential brown-outs due to heavy energy usage."<sup>27</sup>

LIPA's tariff modifications comport with the specific provisions and guidelines discussed in the FCC ruling and PSEG LI's coordinated inclusion of additional disclosures are appropriate to conform with the standards contemplated.

Communication with customers is essential to providing safe and reliable electric service, however, customer contact must be considered in the context of an increased reliance on wireless telephone communications, balanced against consumer protections. The FCC stated its ruling ensures that "the TCPA does not thwart welcome and expected communications from... utilities without diluting the TCPA's core consumer protections." Customer communication is essential for the specific purposes outlined in the ruling.<sup>28</sup>

LIPA's tariff modifications comport with guidance provided by the FCC and will provide its customers adequate notice that providing wireless telephone numbers to be contacted by PSEG LI constitutes agreement to be contacted as described above. As such, the Department recommends the Authority adopt the modifications to conform with the FCC's ruling as proposed.

#### Property Tax Rider

LIPA proposes to track property-based PILOTs, that are currently recovered through the Delivery Charges, and create a separate property tax recovery mechanism. As shown in the table below, \$295 million in T&D property tax PILOTs are currently included in Delivery Charges. The proposal would create a separate Statement of "Local Property Tax Charge." The Charge will indicate the amount that is recovered as a percentage of Delivery Service Revenues. For example:

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<sup>27</sup> Id., p. 9066.

<sup>28</sup> Id.

<b>Calculation of Long Island</b>		
<b><u>Property Tax Factors (\$ millions)</u></b>	<b><u>2018</u></b>	<b><u>2019</u></b>
Delivery Charge Revenue	\$1,516	\$1,557
T&D Property Tax PILOTs	289	295
Net Delivery Charge Revenue	\$1,226	\$1,262
<i>Percent of Revenue</i>	<i>19.1%</i>	<i>19.0%</i>
<hr/>		
<b>T&amp;D Property Tax Factor</b>	<b>23.6%</b>	<b>23.4%</b>

LIPA proposes that this statement/mechanism will become effective on January 1, 2019, however, a line-item on customer's bills may not be created until January 1, 2020. Under this proposal, LIPA will track the Local Property-Based PILOTs currently included in Delivery Charges and assess customers a fee for PILOTs in proportion to Delivery Charges.

The proposal also incorporates an annual true-up of local PILOT payments which have been true-up in annual rate adjustments of Delivery Charges as provided for in LIPA's Three-Year Rate Plan. Following the three-year rate period which concludes in 2018, LIPA will true-up this amount on an annual basis through adjustment to its delivery charge.

All of LIPA's PILOTs, taxes and assessments are currently true-up either through the Power Supply Charge, as part of a reconciliation of the New York State Assessment (NYSA) performed by DPS, or through PILOT adjustments performed as part of the staged adjustment for Delivery Charges. LIPA stated that its rationale for the proposal is to demonstrate to customers, elected officials and external stakeholders, the reductions in T&D PILOTs that result from LIPA's challenge of tax assessments on its T&D properties.

The Department recommends that the Board take no action at this time on the Property Tax Rider to allow for further review. Customers' utility bills, specifically the rates and charges imposed, should be presented in a clear and understandable manner. In instances where rates and charges are composed of numerous components, further identification and explanation of a particular component may increase customers' understanding of the bill. Such additional transparency benefits customers when the component's value fluctuates based upon the efforts of the utility. In this case, the T&D PILOTs assessed to LIPA's customers, are impacted by the Authority's pursuit of tax challenges. The Department supports the intent of the Rider, but is continuing to review how the billing changes will take place to ensure the intent is achieved when implemented.

#### Budget and RDM Modifications

LIPA proposes to modify its tariff, effective January 1, 2019, to implement rate adjustments as determined through the Authority's annual budget process and to modify components of the Authority's Revenue Decoupling Mechanism (RDM) enabling the forward-looking component to be suspended at the discretion of LIPA's Chief Executive Officer (CEO) in any year in which an updated sales forecast is used by the Authority to calculate rates, and to transfer collection of Low Income Discounts through base rates. The Department recommends

that the Authority adopt the modifications regarding the Authority's budget and its RDM as proposed.

LIPA proposes to modify its tariff to implement rate adjustments as determined through the Authority's annual budget process. As stated in the proposal, consistent with the Authority's annual budget process, a proposed budget<sup>29</sup> was distributed in November 2018, in advance of the budget workshop for the Authority's Board, held on November 14th, and public comment hearings, held in Nassau and Suffolk counties on November 16, 2018.

As discussed in the LIPA Proposed 2019 Budget, the resulting rate adjustments will increase the annual aggregate delivery revenues of the Authority by an amount not to exceed two and one-half percent and electric bills are forecasted to be reduced by \$3.30 per month in 2019. This represents approximately a 2% reduction from 2018 budgeted levels.<sup>30</sup>

LIPA also proposes to modify the provisions governing its RDM. The Authority's RDM is a reconciliation mechanism which recovers variances between actual revenues and budgeted revenues. The RDM captures variances in delivery service revenues including lost net revenues associated electric sales, energy efficiency, net metering, and abnormal weather and/or economic conditions. LIPA's RDM also includes a forward-looking component which recovers estimated variances for the coming year, based on experienced variances in previous years. A benefit of the forward-looking component is that it provides additional rate stability by levelizing rates over the year, reducing future variances that may accumulate which would then be passed on to customers creating rate shock. Another benefit is that the more contemporaneous collection of a shortfall in revenue mitigates the need for the Authority to utilize short-term financing for its operations.

As discussed above, the RDM accounts for variances attributed to electric sales, based on a projected sales forecast established in LIPA's Three-Year Rate Proceeding.<sup>31</sup> Because the Three-Year Plan concludes at the end of 2018, LIPA intends to update its sales forecast used to set rates. Updating the sales forecast is intended to reduce the variances attributable to sales because the updated forecast is expected to be more accurate. If the forecast is highly accurate, the variance is expected to be de-minimis, and as a result utilization of the forward-looking component contained in the RDM to capture historic variances could result in overcollection from customers. The Authority states, that at its discretion, the forward-looking component will be suspended in any year in which an updated sales forecast is used to calculate rates.

The Authority expects that the RDM proposal will not have a financial impact to the Authority or its customers. As stated in the proposal, "revenues that would have been collected through the RDM's forward-looking component in a year without a sales forecast update instead will be collected through base rates in any year in which the suspension of the forward-looking component is exercised."<sup>32</sup>

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<sup>29</sup> [https://www.lipower.org/wp-content/uploads/2018/11/LIPA\\_2019Budget\\_WEB.pdf](https://www.lipower.org/wp-content/uploads/2018/11/LIPA_2019Budget_WEB.pdf)

<sup>30</sup> *Id.*, p. 28

<sup>31</sup> Matter No. 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 Rate Recommendation (issued September 28, 2015) p. 22.

<sup>32</sup> LIPA's Proposal Concerning Modifications to LIPA's Tariff for Electric Service – Annual Budget and Rate Updates, RDM, p. 2.

The Department recommended adoption of the Authority's RDM in 2015<sup>33</sup> and the Authority adopted the forward-looking component in 2016. The Department stated in its 2015 recommendations:

A Revenue Decoupling Mechanism is designed to ensure that a distribution utility collects all of its approved revenues for Delivery Service from customers; excess recoveries are refunded to customers and insufficient recoveries are surcharged in the following year. Introduction of a RDM is consistent with PSC policy and as such DPS believes this measure comports with the LRA and is an acceptable modification.<sup>34</sup>

The Department believes the modification as proposed in 2018 comports with the Department's recommendations in 2015 as the proposal seeks to constrain unnecessary overcollection of revenues from customers. As such, the Department recommends that the Authority adopt the modifications to the RDM as proposed.

The Authority also proposes to modify its tariff to transition recovery of the increases in low-income customer discounts to base rates, rather than recover such increases through the RDM. LIPA notes that there are no additional increases in customer discounts, revenue impacts, or rule changes associated with this change in recovery method.

In July 2018, the Department issued its recommendations regarding LIPA's proposal to modify its tariff regarding Low Income Discounts.<sup>35</sup> The Department recommended adoption of these modifications to introduce a tiered system of low-income discounts consistent with the Commission Order in Case 14-M-0565<sup>36</sup>, which called for benefit levels that vary based on a customer's level of need targeting a total household energy burden of no more than 6% of household income.<sup>37</sup> The Authority's current proposal comports with the Department's July 2018 recommendations and the transition of costs from the RDM to base rates results in a more equitable recovery of these costs from all customer classes while providing for the approved benefit levels without additional revenue impacts. The Department recommends that the Authority adopt the modifications to transition recovery of these discounts from the RDM to base rates as proposed.

In accordance with the discussion above, the Department recommends that the Authority adopt the modifications regarding the Authority's budget and its RDM as proposed.

## Conclusion

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<sup>33</sup> Matter No. 15-00355, Tariff Filing by Long Island Power Authority to Modify its Tariff for Electric Service, Recommendations Regarding Long Island Power Authority's Proposed Modifications to its Tariff for Electric Service (issued March 17, 2015).

<sup>34</sup> Id. p. 2.

<sup>35</sup> Matter No. 18-01439, Tariff Filing of Long Island Power Authority to Modify its Tariff for Electric Service, DPS Recommendations Regarding LIPA's Tariff for Electric Service (issued July 17, 2018).

<sup>36</sup> Case 14-M-0565, Low Income Proceeding, Order Adopting Low Income Program Modifications and Directing Utility Filing (issued May 20, 2016).

<sup>37</sup> Id. p. 5.



DPS finds that 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 certain of the proposed tariff modifications. DPS recommends that the BOT take no action at this time on the PILOT Payment Rider pending further review by DPS and coordination between DPS and LIPA.

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,  
Chair

CC: Thomas Falcone, LIPA Chief Executive Officer  
Anna Chacko, LIPA General Counsel and Secretary  
Dan Eichorn, PSEG LI President and Chief Operating Officer  
Guy Mazza, DPS LI Director