



An Exelon Company

**NEW JERSEY LEVEL 2 & 3 INTERCONNECTION
APPLICATION/AGREEMENT**

**With Terms and Conditions for Interconnection
For a Level 2 & 3 Review of Inverter Based Generators over 10kW or
Non-Inverter Based Generators of any size**

The Green Power Connection™ Team
Atlantic City Electric
A PHI Company
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(Send applications via Email or Mail to Atlantic City Electric, GPC Team)



An Exelon Company

**NEW JERSEY INTERCONNECTION AGREEMENT FOR
LEVEL 2 OR LEVEL 3 PROJECTS**

This Interconnection Agreement ("Agreement") is made and entered into this ____ day of _____, _____, by Atlantic City Electric Company ("ACE", "Electric Distribution Company" or "EDC"), and _____ ("Customer-Generator"), each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties". In consideration of the mutual covenants set forth herein, the Parties agree as follows:

- 1) **Scope and Limitations of Agreement.** This Agreement shall be used for all approved Level 2 and Level 3 Interconnection Requests according to the procedures set forth by the New Jersey Board of Public Utilities' ("NJ BPU") regulations. This Agreement is applicable to conditions under which the EDC and the Customer-Generator agree that one or more generating facilities as further described in Part 1 ("Facility" or "Facilities"), with an installed nameplate gross capacity of ____ kW, and are to be interconnected at distribution voltages that do not fall under PJM's jurisdiction, may be interconnected to the EDC's system. The facility may be used for exporting retail electricity to the EDC's distribution system only as required for specific net metering regulations stipulated by the NJ BPU. Other than these regulations pertaining to netting generation credits for excess generation, this Agreement does not constitute an agreement to purchase or deliver the Customer-Generator's power. This Agreement is not applicable to purchases of power under any EDC Qualifying Facility power purchase tariff, or for wholesale transactions as defined by the Federal Energy Regulatory Commission ("FERC"), and which are included as part of a PJM Wholesale Market Participation Agreement ("WMPA"). A WMPA uses a separate form of Interconnection Agreement with the EDC.

- 2) **Construction of the Customer-Generator Facility.** The Customer-Generator may proceed to construct the Customer-Generator Facility once the approval to install the Customer-Generator Facility has been received from the EDC. The Customer-Generator Facility shall be constructed in accordance with information provided in the

Interconnection Application, the National Electrical Code (“NEC”), IEEE 1547 and the NJ BPU’s regulations.

The Applicant shall notify the EDC of any changes to the originally proposed Level 2 or 3 Customer-Generator Facility that would be subject to further review (e.g., Inverter Manufacturer/Model Number, Size, etc.).

Once an Interconnection Request is deemed complete, any modification to the proposed Customer-Generator Facility that would affect the application review criteria for a Level 2 or 3 project, and is not agreed to in writing by the EDC, shall require submission of a new Interconnection Application.

- 3) **Interconnection:** The Customer-Generator may interconnect and operate the Customer-Generator Facility with the EDC’s system once all of the following conditions precedent have been satisfied:
 - a) Electrical Inspection: Upon completing construction, the Customer-Generator shall have the Customer-Generator Facility inspected, or otherwise certified, by the local electrical wiring inspection authority having jurisdiction to ensure that the facility meets the requirements of the NEC.
 - b) Certificate of Completion: The Applicant shall provide the EDC with a completed copy of the Certificate of Completion, including evidence of the electrical inspection by the local authority having jurisdiction. The evidence of completion of the electrical inspection may be provided on inspection forms used by local inspecting authorities.
 - c) Inspection: The EDC has either completed its inspection or waived the right to inspection in this Agreement. After receipt of the Certificate of Completion, the EDC may, upon reasonable notice and at a mutually convenient time, conduct an inspection of the Customer-Generator Facility and observe a Witness Test to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with its requirements. “Witness Test” means the verification by an on-site observation by the EDC that the interconnection installation evaluation required by Section 5.3 of IEEE Standard 1547 and the commissioning test required by Section 5.4 of IEEE Standard 1547 have been adequately performed.
 - d) Metering: Revenue quality metering equipment shall be installed and tested by the EDC. The EDC may choose to schedule the Witness Test also at this time. The

Customer-Generator may be responsible for the cost of the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment. The Customer-Generator may also be required to provide a voice-quality phone line within 3 feet of the meter to allow EDC to remotely interrogate the meter.

- e) Breaker Trip Control: Generators 1 MW and greater may require remote generator trip/isolation control by the EDC's system operations control center via a local SCADA unit or similar device.
- f) Acceptance: The EDC's representative has signed and returned the Certificate of Completion or provided notification by electronic mail or other acceptable means that the requirements for interconnection are complete and interconnection of the Customer-Generator Facility is accepted for parallel operation.
- g) Special Procedures for Parallel Operation: Once the Customer-Generator Facility has been authorized to commence parallel operation, the Customer-Generator shall abide by any special written rules and procedures developed by the EDC which pertain to the parallel operation of the Customer-Generator Facility, and which are clearly specified in Attachment D of this Agreement.

4) Operation:

- a) **Applicable Standards**: The Customer-Generator shall construct, own, operate, and maintain its Customer-Generator Facility in accordance with this Agreement, IEEE Standard 1547, the National Electrical Safety Code ("NESC"), the NEC, and applicable standards promulgated by the NJ BPU.
- b) **Areas of Responsibility**: Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own unless otherwise specified in the attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair, and condition of their respective lines and appurtenances on their respective sides of the Point of Common Coupling.
- c) **Minimization of Adverse System Impact**: The Customer-Generator agrees to design, install, maintain, and operate its Customer-Generator Facility so as to minimize the likelihood of causing an adverse system impact on an electric system that is not owned or operated by the EDC.

- d) **Reactive Power:** The Customer-Generator shall design its Customer-Generator Facility to maintain a composite power delivery at continuous rated power output at the Point of Common Coupling at a power factor within the power factor range required by the EDC's applicable tariff for a comparable load customer.
- 5) **Periodic Testing.** All interconnection-related protective functions and associated batteries shall be periodically tested at intervals specified by the manufacturer, system integrator, or other authority that has jurisdiction over the Customer-Generator Facility interconnection. Periodic test reports or a log for inspection shall be maintained.
- 6) **Safe Operations and Maintenance.** The Customer-Generator shall be fully responsible to operate, maintain, and repair the Customer-Generator Facility as required to ensure that the Customer-Generator Facility complies at all times with the interconnection standards it has been certified to meet.
- 7) **Access.** The EDC shall have access to the metering equipment and the disconnecting means of the Customer-Generator Facility at all times. The EDC shall provide reasonable notice to the Customer-Generator, when possible, prior to using its right of access. In an emergency or outage situation, where there is no access to an AC disconnecting means such as a switch or breaker, the EDC may disconnect the service to the premise.
- 8) **Exterior AC Disconnect Switch / Isolation Device.** Small generator facilities shall be capable of being isolated from the EDC by means of a lockable, visible-break isolation device accessible by the EDC in accordance with NEC requirements. The isolation device shall be installed, owned and maintained by the Customer-Generator and located between the small generation facility and the point of interconnection. A draw-out type circuit breaker with a provision for padlocking at the draw-out position can be considered an isolation device for purposes of this requirement. A Customer-Generator may elect to provide the EDC access to an isolation device that is contained in a building or area that may be unoccupied and locked, or not otherwise readily accessible to the EDC, by installing a lockbox for use solely by the EDC for obtaining access to the isolation device. The Customer-Generator shall install the lockbox in a location that is readily

accessible by the EDC and the Customer-Generator, and shall permit the EDC to affix a placard in a location of its choosing that provides clear instructions to EDC operating personnel on access to the isolation device. The Customer-Generator, at its option, may provide and install this placard.

- 9) **Conflicts in Agreements.** Nothing in this Agreement is intended to affect any other agreement between the EDC and the Customer-Generator. However, in the event that the provisions of this Agreement are in conflict with the provisions of the EDC's tariff, the EDC tariff shall control.
- 10) **Disconnection.** The EDC may temporarily disconnect the Customer-Generator Facility upon occurrence of any of the following conditions:
- a) For scheduled outages upon reasonable notice,
 - b) For unscheduled outages or emergency conditions,
 - c) If the EDC determines that the Customer-Generator Facility does not operate in a manner consistent with this Application/Agreement,
 - d) If the EDC determines that continued operation of the Customer-Generator Facility is a safety hazard to the EDC's personnel or to the general public,
 - e) In the event the interconnection equipment used by the Customer-Generator Facility is de-listed by the Nationally Recognized Testing Laboratory that provided the listing at the time the interconnection was approved and the EDC ascertains that the continued operation has the potential to cause a safety, reliability or a power quality problem.
- 11) **Customer-Generator Billing and Payment:**
- a) Payment for Interconnection Facilities: The Customer-Generator shall pay for the cost of the Interconnection Facilities itemized in Attachment C of this Agreement. If a study was performed, the EDC shall identify the Interconnection Facilities necessary to safely interconnect the Customer-Generator's facility with the EDC's Electric Distribution System, the cost of those facilities, and the time required to build and install those facilities.
 - b) Scope of Cost for Interconnection Facilities: The EDC shall bill the Customer-Generator for the design, engineering, procurement, construction, and

commissioning costs of EDC provided interconnection facilities and distribution upgrades contemplated by this Agreement as set forth in Attachment E, on a monthly basis, or as otherwise agreed by the Parties. The Customer-Generator shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.

- c) True-Up of Actual Costs: Within one hundred and twenty (120) calendar days of completing the construction and installation of the EDC's interconnection facilities and Distribution Upgrades described in the Attachment C & E to this Agreement, the EDC shall provide the Customer-Generator with a final accounting report of any difference between (1) the actual cost incurred to complete the construction and installation and the budget estimate provided to the Customer-Generator and a written explanation for any significant variation; and (2) the Customer-Generator's previous deposit and aggregate payments to the EDC for such interconnection facilities and distribution upgrades. If the Customer-Generator's cost responsibility exceeds its previous deposit and aggregate payments, the EDC shall invoice the Customer-Generator for the amount due and the Customer-Generator shall make payment to the EDC within thirty (30) calendar days. If the Customer-Generator's previous deposit and aggregate payments exceed its cost responsibility under this Agreement, the EDC shall refund to the Customer-Generator an amount equal to the difference within thirty (30) calendar days of the final accounting report.
- d) Deposit: At least twenty (20) business days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the EDC's interconnection facilities and distribution upgrades, the Customer-Generator shall provide the EDC with a deposit equal to 100% of the estimated costs prior to its beginning design of such facilities.
- e) Modification of the Customer-Generator Facility: The Customer-Generator must receive written authorization from the EDC prior to making any change to the Customer-Generator Facility, other than a minor equipment modification, that could cause an Adverse System Impact. If the Customer-Generator makes such modification without the EDC's prior written authorization, the EDC shall have the right to temporarily disconnect the Customer-Generator Facility until such time as the EDC reasonably concludes the modification poses no threat to the safety or reliability of its Electric Distribution System.

- 12) **Insurance.** For generator facilities with a Nameplate Capacity of 2 MW or above, the Customer-Generator shall carry adequate insurance coverage that shall be acceptable to the EDC; provided, that the maximum comprehensive/general liability coverage that shall be continuously maintained by the Customer-Generator during the term shall be not less than \$2,000,000 for each occurrence, and an aggregate, if any, of at least \$4,000,000. The EDC, its officers, employees and agents will be added as an additional insured on this policy.
- 13) **Customer-Generator Indemnification.** To the fullest extent permitted by law, Customer-Generator shall indemnify, defend, and hold harmless EDC, any and all of the members of its governing bodies, and its officers, agents, and employees ("EDC Indemnifieds") for, from, and against any and all claims, demands, suits, costs of defense, attorneys' fees, witness fees of any type, losses, damages, expenses, and liabilities, whether direct, indirect or consequential, personal injury, death, or occupational disease of any person, including, but not limited to, all Contractor's or Subcontractor's employees or agents; or due to loss or damage to any real or personal property tangible or intangible; which in whole or in part arise out of, are related to, arise from, or are in any way connected with: (a) Customer-Generator's or any non-EDC party's design, construction, installation, inspection, maintenance, testing or operation of the Customer-Generator Facility or equipment used in connection with this Agreement; (b) the interconnection of the Customer-Generator Facility with, and delivery of energy from the Customer-Generator Facility to, EDC's electrical distribution system; or (c) the performance or nonperformance of Customer-Generator's obligations under this Agreement. It is the intent of EDC and Customer-Generator that EDC shall, in all instances except for loss or damage resulting from the sole negligence of EDC, be indemnified against all liability, loss, or damage of any nature whatsoever for or on account of any injuries or death of person(s) or damages to or destruction of property belonging to any person arising out of, or in any way connected with, Customer-Generator's performance of this Agreement and the interconnection of the Customer-Generator Facility. Customer-Generator's obligations under this Section shall survive the termination of this Agreement.

- 14) **Limitation of Liability.** THE EDC'S TOTAL LIABILITY TO THE CUSTOMER-GENERATOR FOR ALL CLAIMS OR SUITS OF ANY KIND, WHETHER BASED UPON CONTRACT, TORT (INCLUDING NEGLIGENCE), WARRANTY, STRICT LIABILITY OR OTHERWISE, FOR ANY LOSSES, DAMAGES, COSTS OR EXPENSES OF ANY KIND WHATSOEVER ARISING OUT OF, RESULTING FROM, OR RELATED TO THE PERFORMANCE OR BREACH OF THIS CONTRACT SHALL, UNDER NO CIRCUMSTANCES, EXCEED THE FINAL COST OF ANY INTERCONNECTION FACILITIES PAID FOR BY THE CUSTOMER-GENERATOR. THE EDC SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL LOSSES, DAMAGES, COSTS, OR EXPENSES WHATSOEVER (INCLUDING, BUT NOT LIMITED TO, LOST OR REDUCED PROFITS, REVENUES, EFFICIENCY, PRODUCTIVITY, BONDING CAPACITY, OR BUSINESS OPPORTUNITIES, OR INCREASED OR EXTENDED OVERHEAD, OPERATING, MAINTENANCE OR DEPRECIATION COSTS AND EXPENSES).
- 15) **Termination.** This Application/Agreement may be terminated under the following conditions:
- a) By Customer-Generator. The Customer-Generator may terminate this Application/Agreement by providing written notice to the EDC.
 - b) By the EDC. The EDC may terminate this Application/Agreement if the Customer-Generator fails to remedy a violation of terms of this Application/Agreement after providing written notice and a reasonable opportunity to cure.
- 16) **Permanent Disconnection.** In the event the Application/Agreement is terminated, the EDC shall have the right to disconnect its facilities or direct the Customer-Generator to disconnect its Customer-Generator Facility.
- 17) **Survival Rights.** This Application/Agreement shall continue in effect after termination to the extent necessary to allow or require either Party to fulfill its rights or obligations that arose under the Application/Agreement.

- 18) **Assignment/Transfer of Ownership of the Customer-Generator Facility.** The rights granted to the Customer-Generator under this Application/Agreement shall not survive the transfer of ownership of the Customer-Generator Facility to a new owner unless the new owner agrees to the assignment/transfer of this Application/Agreement and accepts the concomitant responsibilities, and so notifies the EDC in writing within fifteen (15) days of such transfer of ownership. In order for the new owner to be treated as a Net Metering customer for billing purposes, the new owner shall be responsible for providing legal evidence to the EDC of an assignment of the existing Application/Agreement, or if the existing agreement has terminated under this provision, a new Application/Agreement will be required before Net Metering will be reinstated.
- 19) **No Third Party Beneficiaries.** This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 20) **No Waiver.** The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered to waive the obligations, rights, or duties imposed upon the Parties.
- 21) **Definitions.** The capitalized terms used herein, and the definitions of such terms, are as those used in N.J.A.C. 14:8-4.2 Net Metering and Interconnection Standards for Class I Renewable Energy Systems.;
- 22) **Notice.** Unless otherwise provided in this Application/Agreement, any written notice, demand or request required or authorized in connection with this Application/Agreement (“Notice”) shall be deemed properly given if delivered in person, sent by Electronic Mail (E-mail), sent by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

If to EDC:

The contact listed on the EDC website as the primary contact for the EDC listed in the Customer-Generator's Facility Information section in Part 1 of this Interconnection Agreement.

If to Customer-Generator:

The contact listed in the Legal Name and Mailing Address of Customer-Generator section on Part 1 of this Interconnection Application. The Customer-Generator is responsible for notifying the EDC of any change in the contact party information.

In the event the original applicant sells or otherwise transfers ownership of the property listed in the Customer-Generator Facility's Information section listed in Part 1 of the Interconnection Agreement, the original applicant shall provide the EDC with the appropriate contact information for the new owner of the property. Upon any subsequent transfer of ownership, the then current owner shall provide the EDC with the new owner's information.

- 23) **Governing Law and Regulatory Authority.** This Agreement shall be governed by, interpreted, construed, and enforced in accordance with the laws of the State of New Jersey. This Agreement is subject to, and the Parties' obligations hereunder include, operating in full compliance with all valid, applicable federal, state, and local laws or ordinances, and all applicable rules, regulations, orders of, and tariffs approved by duly constituted regulatory authorities having jurisdiction.
- 24) **Multiple Counterparts.** This Agreement may be executed in two counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 25) **Important Note.** Running grid-tied generation at a premise will generally raise voltage levels. A proper voltage drop/rise study must be done to insure that resulting voltages do not cause problems at the customer premise and/or to the operation of the inverter. If there are times when generator output will exceed the load of the premise, this will cause voltage rise across the line transformer and service line to the facility. Be sure this is taken into account when doing a voltage drop/rise analysis. If there are other customers that have grid-tied solar and their premise is fed by the same line

transformer, be sure to take that into account when considering voltage rise across the line transformer. If the new generation system causes high voltage for other customers fed by the same transformer, it will be the responsibility of the newest generator installation to remediate the high voltage. The normal voltage at the meter without generation is 120 V +/- 5% (or other secondary voltages such as 208, 240, 480, etc.). Be sure to assume the highest voltage (+ 5%) at the meter when doing the voltage drop/rise analysis to insure acceptable voltage at the premise and at the inverter. **The utility is not responsible for elevated voltage caused by the operation of a generator.** The electrical grid has been designed to maintain 120 V +/- 5% (or other standard secondary voltages) during the course of the normal load cycle.

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

Atlantic City Electric Company _____

Customer-Generator _____

SIGNATURE: _____

SIGNATURE: _____

PRINT NAME: _____

PRINT NAME: _____

TITLE: _____

TITLE: _____

DATE: _____

DATE: _____

ATTACHMENT B
GENERATION AND INTERCONNECTION ONE-LINE DIAGRAM
(To be submitted with Part 1 – Attach separate diagram if applicable)

ATTACHMENT C
DESCRIPTION OF INTERCONNECTION FACILITIES
(Required if Greater Than or Equal to 100 kW)

1. Location of Point of Common Coupling:
The Point of Common Coupling (sometimes referred to as the “Interconnection Point”) will be located at _____

2. Projected Date Customer-Generator’s Facility will connect to EDC’s Electric System:
Energization Date: _____
(Pre-Parallel Operational Testing and Inspection per Article 3.2)
In-service Date: _____

3. Description of Point of Common Coupling: _____

4. Interconnection Facilities Description and Requirements: _____

5. Description of Metering Facilities: _____

6. Description of Telemetry Facilities _____

7. Interconnection Protection Description and Requirements (Must include inverter over/under voltage and over/under frequency settings): _____

8. Generator maximum output capability (Megawatts): ____ MW

9. Milestones:

ATTACHMENT D
SPECIAL PROCEDURES FOR PARALLEL OPERATION
(If Required)

(Special technical considerations for system protection, metering, data acquisition, etc)

ATTACHMENT E
INTERCONNECTION FACILITIES COST ESTIMATE
(If Required)

1. Interconnection Facilities Cost Estimate:

Construction Responsibility and Ownership of Interconnection Facilities

a. Customer-Generator.

Customer-Generator shall construct and, unless otherwise indicated, shall own, the following Interconnection Facilities:

b. EDC.

2. Cost breakdown:

\$	0	Direct Labor
\$	0	Direct Material
\$	0	Indirect Labor
<u>\$</u>	<u>0</u>	Indirect Material
\$	0	Total

3. Security Amount Breakdown:

\$ 0 Estimated Cost of Distribution Upgrades

plus \$ 0 Estimated cost of the work on the required Interconnection Facilities

less \$ 0 Costs already paid by Customer-Generator

\$ 0 Total Security required

4. Estimated annual operation and maintenance expenses:



INTERCONNECTION APPLICATION/AGREEMENT – PART 1

With Terms and Conditions for Interconnection
For a Level 2 & 3 Review

(Application & Conditional Agreement – to be completed prior to installation)

CUSTOMER GENERATOR CONTACT INFORMATION

Legal Name and Mailing Address of Customer-Generator: (if an Individual, Individual's Name)

Customer Name: _____

Mailing Address: _____

City: _____ State: NJ Zip Code: _____

Contact Person/Authorized Agent (If other than above): _____

Mailing Address (If other than above): _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address (Required): _____

Alternate Project Contact Information: (if different from Customer-Generator above)

Alternate Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address (Required): _____

If an email is provided for your alternate contact, that contact will receive all email communications

THE CUSTOMER-GENERATOR FACILITY'S INFORMATION

Facility Address: _____

City: _____ State: NJ Zip Code: _____

Nearest Crossing Street: _____

ACE Account #: _____ Meter #: _____

Current Annual Energy Consumption: _____ kWh

Check if this Facility (building) is, or is going to be, New Construction:

Intent of Generation:

Net Meter (Unit will operate in parallel and will export power pursuant to the Net Energy Metering Rider)

Aggregated Net Meter (Unit will operate in parallel and will export power pursuant to the Aggregated Net Energy Metering Rider)

Rate Schedule Small Power Purchase (Qualifying Facility – Rate SPP)

Wholesale Market Transaction (Unit will operate in parallel and participate in PJM market(s) pursuant to a PJM Wholesale Market Participation Agreement)

Offset Partial Load (Unit will operate in parallel, but will not export power at any time to EDC)

Back-up Generation (Units that temporarily parallel for more than 100 milliseconds)

Note: Backup units that do not operate in parallel for more than 100 milliseconds do not need an interconnection agreement.

PJM Demand Response Market Participant (System will not export energy)

Energy, Capacity, Load Reduction and/or Synchronized Reserve Markets: Yes No

Regulation Market: Yes No (If no, would have to re-apply in future if change to frequency regulation)

Estimated In-service Date: _____

Energy Source: _____ Prime Mover: _____

Type of Application: Initial Addition/Upgrade ¹

Initial Rating DC Generator Total² Nameplate Rating: _____ (kW),
AC Inverter Total³ Rating _____ (kW),
AC System Design Total Capacity⁴: _____ (kW) _____ (kVA)

Added Rating (if upgrade): DC Generator Total Nameplate Rating: _____ (kW),
AC Inverter Total Rating _____ (kW),
AC System Design Total Capacity: _____ (kW) _____ (kVA)

Total Rating (if upgrade): DC Generator Total Nameplate Rating: _____ (kW),
AC Inverter Total Rating _____ (kW),
AC System Design Total Capacity: _____ (kW) _____ (kVA)

Generator (or PV Panel) Manufacturer, Model #⁵: _____

A copy of Generator nameplate and Manufacturer's Specification Sheet may also be submitted

Number of Generators (or PV Panels): _____

Type of Tracking if PV (optional): Fixed Single Axis Double Axis

Array Azimuth if PV (Opt): _____ Array Tilt if PV: _____

Shading Angles if PV at E, 120°, 150°, S, 210°, 240°, W: _____ (Separate with comas)

Inverter Manufacturer⁶: _____ Model Number(s) of Inverter⁷: _____

Number of Inverters⁸: _____ Inverter Type: Forced Commutated Line Commutated

Ampere Rating: _____ Amps_{AC}, Number of Phases: 1 3

Nominal Voltage Rating: _____ V_{AC}, Nominal DC Voltage: _____ V_{DC},

¹ Initial if first time generator request. Addition/Upgrade if this is an add-on to a previously approved system.

² Sum of all generators or PV Panels

³ Sum of all inverters

⁴ This will be your system design capacity based upon your unique system variables.

⁵ If more than one type, please list all manufactures and model numbers.

⁶ If more than one manufacture, please list all.

⁷ If more than one model number, please list all.

⁸ Attach additional sheets as necessary in the event of multiple inverters of various types/sizes

Power Factor: _____ %, Frequency: _____ Hz, Efficiency: _____ %

IEEE1547/UL1741 Certification: Yes No

If yes, attach manufacturer's cut sheet showing listing and label information from the appropriate listing authority, i.g. UL 1741 listing. If no, facility is not eligible.

ACE Taggable, Lockable, Accessible Disconnect⁹: Yes No

If Yes, Location: _____

One-line Diagram Attached (Required): Yes No

Site Plan Attached (Required): Yes No

Do you plan to export power?¹⁰ Yes No If Yes, Estimated Maximum: _____ kW_{AC}

Estimated Gross Annual Energy Production: _____ kWh

Does the Customer own their own transformer, but primary service is from ACE? Yes No

If yes, complete the following electric service information for customer facility where generator will be interconnected:

Capacity: _____ Amps Voltage: _____ Volts

Type of Service: Single Phase Three Phase

If 3 Phase Transformer, Indicate Type

Primary Winding Wye Delta Grounded Wye

Secondary Winding Wye Delta Grounded Wye

Transformer Size: _____ kVA Impedance: _____ %

ADDITIONAL INFORMATION

Additional DC Source Information:

Rating: _____ kW Rating: _____ kVA

Rated Voltage: _____ Volts

Open Circuit Voltage (If applicable): _____ Volts

Rated Current: _____ Amps

Short Circuit Current (If applicable): _____ Amps

Generator & Prime Mover Data (if applicable):

Energy Source: _____

Energy Converter Type: _____

Generator Size(s) (kW or kVA): _____ Number of Generator Units: _____

⁹ This is strongly recommended by the utility. Best practice is to have an externally accessible, lockable, disconnect with visible open/close connection and to have appropriate signage on the disconnect, such as 'Solar PV AC Disconnect' (preferably red) and on the meter housing 'Caution, Solar Electric System' (preferably yellow). If the disconnect is not in the immediate vicinity of the meter, please include the disconnect location on the meter signage. This enables the utility and first responders to more quickly deal with an emergency situation.

¹⁰ Yes, if your expected maximum output of the inverter (kW AC) is greater than the lowest load you anticipate at your facility during maximum PV output (kW). The difference would be the amount you may export.

Total Electrical Generation Capacity (kW or kVA): _____

Generator Type: Induction Inverter Synchronous Other: _____

For Synchronous Machines:

Note: Contact EDC to determine if all the information requested in this section is required for the proposed Customer-Generator Facility.

Manufacturer: _____

Model #: _____ Version #: _____

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: _____

Locked Rotor Current: _____ Amps Synchronous Speed: _____ RPM

Winding Connection: _____ Minimum Operating Frequency/Time: _____

Generator Connection: Delta Wye Wye Grounded

Direct-axis Synchronous Reactance (X_d) _____ ohms

Direct-axis Transient Reactance (X'_d) _____ ohms

Direct-axis Sub-transient Reactance (X''_d) _____ ohms

Negative Sequence Reactance: _____ ohms

Zero Sequence Reactance: _____ ohms

Neutral Impedance or Grounding Resister (if any): _____ ohms

For Induction Machines:

Note: Contact EDC to determine if all the information requested in this section is required for the proposed Customer-Generator Facility.

Manufacturer: _____

Model #: _____ Version #: _____

Locked Rotor Current: _____ Amps

Rotor Resistance (R_r): _____ ohms Exciting Current: _____ Amps

Rotor Reactance (X_r): _____ ohms Reactive Power Required: _____

Magnetizing Reactance (X_m): _____ ohms _____ VARs (No Load)

Stator Resistance (R_s): _____ ohms _____ VARs (Full Load)

Stator Reactance (X_s): _____ ohms

Short Circuit Reactance (X''_d): _____ ohms

Phases: Single Three

Frame Size: _____ Design Letter: _____ Temp. Rise: _____ °C.

EQUIPMENT INSTALLATION CONTRACTOR Owner (Customer) Installed: Yes No

Contractor Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Contact Person: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address (Required): _____

ELECTRICAL CONTRACTOR (If different from Equipment Installation Contractor)

Electrical Contractor Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Contact Person: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

CUSTOMER-GENERATOR INSURANCE DISCLOSURE

The attached Terms and Conditions contain provisions related to liability, and indemnification and should be carefully considered by the Customer-Generator. The Customer-Generator is not required to obtain liability insurance coverage as part of this Application/Agreement; however, the Customer-Generator is advised to consider obtaining appropriate coverage.

CUSTOMER-GENERATOR SIGNATURE

I hereby certify that: 1) I have read and understand the Terms and Conditions which are attached hereto by reference and are made a part of this Application/Agreement. 2) The Equipment Installation Contractor is acting on behalf of the Customer-Generator and the EDC (as defined) is authorized to act in reliance upon the Equipment Installation Contractor's relationship with the Customer-Generator. 3) The Applicant shall notify the EDC of any changes to the proposed Customer-Generator Facility that would be subject to the criteria for a Level 2 & 3 review (e.g., Equipment Installation Contractor, inverter manufacturer/model number, size, etc.). 4) Once an Interconnection Request is deemed complete, any modification to the proposed Customer-Generator Facility that would affect the application review criteria for a Level 2 & 3 review that is not agreed to in writing by the EDC, shall require submission of a new Interconnection Request. and 5) To the best of my knowledge, all of the information provided in this Interconnection Application/Agreement is true and I agree to abide by the attached Terms and Conditions for Interconnection, including the application process set forth therein.

Customer-Generator Signature: _____ Date: _____

Printed Name: _____ Title: _____

Application Fee:

Level 2: \$50.00 plus \$1.00 per kW of the customer-generator facility's capacity, plus the cost of any minor modifications to the electric distribution system or additional review, if required under N.J.A.C. 14:8-5.5(o)3 or 4.

Level 3: \$100.00 plus \$2.00 per kW of the customer-generator facility's capacity, as well as charges for actual time spent on any part of an impact and/or facilities studies required under N.J.A.C. 14:8-5.6

Since Levels 2 & 3 require an application fee, please submit via Mail the application fee in conjunction with the customer application and signed interconnection agreement.

EDC ACKNOWLEDGEMENT (FOR USE BY EDC ONLY)

Receipt of the application fee is acknowledged and the interconnection request is complete.

EDC Signature: _____ Date: _____

Printed Name: _____ Title: _____



An Exelon Company

INTERCONNECTION APPLICATION/AGREEMENT - PART 2
With Terms and Conditions for Interconnection
For a Level 2 & 3 Review

(Final Agreement – to be completed after installation and prior to interconnection)

Certificate of Completion¹¹

CUSTOMER GENERATOR INFORMATION

Legal Name and Mailing Address of Customer-Generator (if an Individual, Individual's Name)

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Contact Person/Authorized Agent (If other than above): _____

Mailing Address (If other than above): _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

THE CUSTOMER-GENERATOR FACILITY'S INFORMATION

Facility Address: _____

City: _____ State: NJ Zip Code: _____

Nearest Crossing Street: _____

ACE Account #: _____ Meter #: _____

Energy Source: _____ Prime Mover _____

Inverter Type: Forced Commutated Line Commutated Number of Inverters: _____

Inverter Manufacturer: _____ Model Number(s) of Inverter: _____

Rating DC Generator Total¹² Nameplate Rating: _____ (kW),
AC Inverter Total¹³ Rating _____ (kW),
AC System Design Total Capacity¹⁴: _____ (kW) _____ (kVA)

EQUIPMENT INSTALLATION CONTRACTOR Owner (Customer) Installed: Yes No

Contractor Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Contact Person: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

The undersigned asserts that the Equipment has been installed in accordance with Part 1 of the Interconnection Application/Agreement as well as all applicable codes and regulations.

Signed: _____ Date: _____

Printed Name: _____ Title: _____

¹¹ Information entered here on Certificate of Completion (Part 2) must match part 1

¹² Sum of all generators or PV Panels

¹³ Sum of all inverters

¹⁴ This will be your system design capacity based upon your unique system variables.

ELECTRICAL CONTRACTOR (if Different from Equipment Installation Contractor)

Electrical Contractor Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Contact Person: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

The undersigned asserts that the Equipment has been installed in accordance with Part 1 of the Interconnection Application/Agreement as well as all applicable codes and regulations.

Signed: _____ Date: _____

Printed Name: _____ Title: _____

ELECTRICAL INSPECTION

Completion of local inspections may be designated on inspection forms used by local inspecting authorities.

The system has been installed and inspected in compliance with the provisions of the National Electrical Code and other applicable codes and standards as well as the local Building/Electrical Code of: _____ **(Appropriate Governmental Authority)**

Signed: _____ Date: _____

Printed Name: _____ Title: _____

CUSTOMER-GENERATOR SIGNATURE¹⁵

The Customer-Generator Facility is complete and ready for interconnected operation in accordance with all of the provisions of the Interconnection Application/Agreement. The Customer-Generator acknowledges that it shall **not** operate the Facility until receipt of Final Acceptance (below), or as otherwise provided for by regulation.

Signed: _____ Date: _____

Printed Name: _____ Title: _____

Final Acceptance to Interconnect Small Generator Facility (for Use by EDC Only)

The requirements for interconnection are complete and interconnection of the Customer-Generator Facility is accepted upon signature and return of this Certificate of Completion or by notification by electronic mail or other acceptable means by the EDC.

Electric Distribution Company waives Witness Test? **(Initial)** Yes No

If no, Successful Witness Test Date: _____ Passed: **(Initial)**

EDC Signature: _____ Date: _____

Printed Name: _____ Title: _____

15 As a condition of interconnected operation, you are required to send mail/e-mail a completed signed copy of this Certificate of Completion to your EDC at the address in the Terms & Conditions for Interconnection.