



Energy for a changing world.™

**MARYLAND COMBINED HEAT AND POWER  
INTERCONNECTION APPLICATION and AGREEMENT**

**based on the**

**MARYLAND LEVEL 2, 3, & 4  
INTERCONNECTION APPLICATION and AGREEMENT**

**with Terms and Conditions for Interconnection**

Send applications via FAX, Email, or Mail to:

The Green Power Connection™ Team

Delmarva Power

Email: [gpc-north@pepcoholdings.com](mailto:gpc-north@pepcoholdings.com)

Mailing Address: Mail Stop 84CP22, 5 Collins Drive, Carneys Point, NJ 08069

Phone (866) 634-5571

Fax (856) 351-7523



## **APPLICATION INSTRUCTIONS FOR COMBINED HEAT AND POWER (CHP) INTERCONNECTIONS**

We support renewable energy and partner with our customers to ensure safe and reliable interconnection of renewable energy into the electric grid.

Combined Heat and Power (CHP) System interconnection requests use the standard Maryland Level 2, 3, and 4 Interconnection Application and Agreement, with a few differences. The application and agreement forms are attached.

Please fill out all fields included in Part I, pages 3 through 31. Since an inverter is not required for CHP systems, do not complete the section labeled “Additional Information for Inverter Based Facilities” on page 30.

To ensure a complete application and minimize delays in processing, please also include with your application the following information:

- A one-line diagram indicating the Small Generator Facility, Interconnection Equipment, Interconnection Facilities, Metering Equipment, and Distribution Upgrades; and
- Generator Characteristics, including reverse flow protection measures and Summarize Operational Data Monitoring and Logging (if applicable) and equipment specification sheets.

Following the CHP system installation, complete and submit Part II, including the signed Certificate of Completion and inspection sticker. Delmarva Power will advise you at the appropriate step in the process.

Your CHP system may be eligible for rebates under the EmPOWER Maryland Energy Savings Program for Commercial & Industrial customers. This requires a separate application. For more information, see <https://cienergyefficiency.delmarva.com/CombinedHeat.aspx>.

Thank you for allowing us to facilitate your CHP interconnection request.

**Pepco Holdings, Inc. | Customer Care**

**green power  
connection™**

[www.delmarva.com/gpc](http://www.delmarva.com/gpc)



**MARYLAND STANDARD AGREEMENT FOR INTERCONNECTION OF SMALL GENERATOR FACILITIES WITH A CAPACITY GREATER THAN 10 kW BUT LESS THAN OR EQUAL TO 2 MW<sup>1</sup>**

This agreement (“Agreement”) is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_ by and between \_\_\_\_\_, (“Interconnection Customer,”) a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, and \_\_\_\_\_, (“Electric Distribution Company”, (EDC)) a \_\_\_\_\_ existing under the laws of the State of Maryland. Interconnection Customer and EDC each may be referred to as a “Party,” or collectively as the “Parties.”

**Recitals:**

**Whereas**, Interconnection Customer is proposing to, install or direct the installation of a Small Generator Facility, or is proposing a generating capacity addition to an existing Small Generator Facility, consistent with the Interconnection Request completed by Interconnection Customer on \_\_\_\_\_; and

**Whereas**, the Interconnection Customer will operate and maintain, or cause the operation and maintenance of the Small Generator Facility; and

**Whereas**, Interconnection Customer desires to interconnect the Small Generator Facility with EDC’s Electric Distribution System.

**Now, therefore**, in consideration of the premises and mutual covenants set forth herein, and other good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, the Parties covenant and agree as follows:

**1. Scope and Limitations of Agreement**

- 1.1. This Agreement shall be used for all approved Level 2, Level 3 and Level 4 Interconnection Requests according to the procedures set forth in the Maryland Standard Small Generator Interconnection Rule. **(COMAR 20.50.09)**
- 1.2. This Agreement governs the terms and conditions under which the Small Generator Facility will interconnect to, and operate in Parallel with, the EDC’s Electric Distribution System.
- 1.3. This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer’s power.

<sup>1</sup> Up to 10 MW for interconnection requests to a radial distribution circuit pursuant to COMAR 20.50.09.08.

- 1.4 Nothing in this Agreement is intended to affect any other agreement between the EDC and the Interconnection Customer. 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.
- 1.5. Responsibilities of the Parties
- 1.5.1. The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations.
- 1.5.2. The EDC shall construct, own, operate, and maintain its Interconnection Facilities in accordance with this Agreement, IEEE Standard 1547, the National Electrical Safety Code and applicable standards promulgated by the Maryland Public Service Commission.
- 1.5.3. The Interconnection Customer shall construct, own, operate, and maintain its Small Generator Facility in accordance with this Agreement, IEEE Standard 1547, the National Electrical Safety Code, the National Electrical Code and applicable standards promulgated by the Maryland Public Service Commission.
- 1.5.4. 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 Interconnection.
- 1.5.5. The Interconnection Customer agrees to design, install, maintain and operate its Small 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.
- 1.6. Parallel Operation Obligations: If it is determined by the EDC that Special Procedures for Parallel Operation are required, the EDC will specify these procedures in Attachment 4. The EDC will re-send the entire signed interconnection agreement to the Interconnection Customer and will require that Attachment 4 is signed by the Customer and returned to the EDC within 30 business days unless an extension is requested in writing and granted by the EDC. Once the Small Generator Facility has been authorized to commence Parallel Operation, the Interconnection Customer shall abide by all written rules and procedures developed by the EDC which pertain to the Parallel Operation of the Small Generator Facility, which are clearly specified in Attachment 4 of this Agreement.
- 1.7. Metering: The Interconnection Customer shall be responsible for the cost of the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Attachments 5 and 6 of this Agreement.
- 1.8. Reactive Power: The Interconnection Customer shall design its Small Generator Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the power factor range required by the EDC's applicable tariff for a comparable load customer. EDC may also require the Interconnection Customer to follow a voltage or VAR schedule if such schedules are applicable to similarly situated generators in the control area on a comparable basis and have been approved by the Commission. The specific requirements for meeting a voltage or VAR schedule shall be clearly specified in Attachment 4. Under no circumstance shall these additional requirements for reactive power or voltage support exceed the normal operating capabilities of the Small Generator Facility.
- 1.9. Capitalized Terms: Capitalized terms used herein shall have the meanings specified in the Definitions in Attachment 1 or the body of this Agreement.

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

2.1. Equipment Testing and Inspection: The Interconnection Customer shall test and inspect its Small Generator Facility including the Interconnection Equipment prior to interconnection in accordance with IEEE Standard 1547 and IEEE Standard 1547.1. The Interconnection Customer shall not operate its Small Generator Facility in Parallel with EDC's Electric Distribution System without prior written authorization by the EDC as provided for in 2.1.1 – 2.1.4.

2.1.1. The EDC shall have the option of performing a Witness Test after construction of the small generator facility is completed. The Interconnection Customer shall provide the EDC at least 20 days notice of the planned Commissioning Test for the small generator facility. If the EDC elects to perform a Witness Test, it shall contact the Interconnection Customer to schedule the Witness Test at a mutually agreeable time within 5 business days of the scheduled commissioning test. If the EDC does not perform the Witness Test within 5 business days of the commissioning test, the Witness Test is deemed waived unless the parties mutually agree to extend the date for scheduling the Witness Test. If the Witness Test is not acceptable to the EDC, the Interconnection Customer will be granted a period of 30 calendar days to address and resolve any deficiencies. The time period for addressing and resolving any deficiencies may be extended upon the mutual agreement of the EDC and the Interconnection Customer. If the Interconnection Customer fails to address and resolve the deficiencies to the satisfaction of the EDC, the applicable cure provisions of 6.5 shall apply. If a Witness Test is not performed by the EDC or an entity approved by the EDC, the Interconnection Customer must still satisfy the interconnection test specifications and requirements set forth in IEEE Standard 1547 Section 5. The Interconnection Customer shall, if requested by the EDC, provide a copy of all documentation in its possession regarding testing conducted pursuant to IEEE Standard 1547.1.

2.1.2. To the extent that the Interconnection Customer decides to conduct interim testing of the Small Generator Facility prior to the Witness Test, it may request that the EDC observe these tests and that these tests be deleted from the final Witness Test. The EDC may, at its own expense, send qualified personnel to the Small Generator Facility to observe such interim testing. Nothing in this Section 2.1.2 shall require the EDC to observe such interim testing or preclude the EDC from performing these tests at the final Witness Test. Regardless of whether the EDC observes the interim testing, the Interconnection Customer shall obtain permission in advance of each occurrence of operating the Small Generator Facility in parallel with the EDC's system.

2.1.3. Upon successful completion of the Witness Test, the EDC shall affix an authorized signature to the Certificate of Completion and return it to the Interconnection Customer approving the interconnection and authorizing Parallel Operation. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

2.2. Commercial Operation: The interconnection customer shall not operate the Small Generator Facility, except for interim testing as provided in 2.1, until such time as the Certificate of Completion is signed by all Parties.

2.3. Right of Access: The EDC shall have access to the disconnect switch and metering equipment of the Small Generator Facility at all times. The EDC shall provide reasonable notice to the customer when possible prior to using its right of access.

### 3. Effective Date, Term, Termination, and Disconnection

- 3.1. Effective Date: This Agreement shall become effective upon execution by the Parties.
- 3.2. Term of Agreement: This Agreement shall become effective on the Effective Date and shall remain in effect in perpetuity unless terminated earlier in accordance with Article 3.3 of this Agreement.
- 3.3. Termination: No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination.
- 3.3.1. The Interconnection Customer may terminate this Agreement at any time by giving the EDC 30 calendar days prior written notice.
- 3.3.2. Either Party may terminate this Agreement after default pursuant to Article 6.5.
- 3.3.3. The EDC may terminate upon 60 calendar days' prior written notice for failure of the Interconnection Customer to complete construction of the Small Generator Facility within 12 months of the in-service date as specified by the Parties in Attachment 2, which may be extended by mutual agreement of the Parties which shall not be unreasonably withheld.
- 3.3.4. The EDC may terminate this Agreement upon 60 calendar days' prior written notice if the Interconnection Customer fails to operate the Small Generator Facility in parallel with EDC's electric system for three consecutive years.
- 3.3.5. Upon termination of this Agreement, the Small Generator Facility will be disconnected from the EDC's Electric Distribution 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.
- 3.3.6. The provisions of this Article shall survive termination or expiration of this Agreement.
- 3.4. Temporary Disconnection: A Party may temporarily disconnect the Small Generator Facility from the Electric Distribution System in the event of an Emergency Condition for so long as the Party determines it is reasonably necessary in the event one or more of the following conditions or events occurs:
- 3.4.1. Emergency Conditions—shall mean any condition or situation: (1) that in the judgment of the Party making the claim is reasonably likely to endanger life or property; or (2) that, in the case of the EDC, is reasonably likely to cause an Adverse System Impact; or (3) that, in the case of the Interconnection Customer, is reasonably likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generator Facility or the Interconnection Equipment. Under Emergency Conditions, the EDC or the Interconnection Customer may immediately suspend interconnection service and temporarily disconnect the Small Generator Facility. The EDC shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generator Facility. The Interconnection Customer shall notify the EDC promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the EDC's Electric Distribution System. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.
- 3.4.2. Scheduled Maintenance, Construction, or Repair – the EDC may interrupt interconnection service or curtail the output of the Small Generator Facility and temporarily disconnect the Small Generator Facility from the EDC's Electric Distribution

System when necessary for scheduled maintenance, construction, or repairs on EDC's Electric Distribution System. The EDC shall provide the Interconnection Customer with five business days notice prior to such interruption. The EDC shall use reasonable efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

- 3.4.3. Forced Outages - During any forced outage, the EDC may suspend interconnection service to effect immediate repairs on the EDC's Electric Distribution System. The EDC shall use reasonable efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the EDC shall, upon written request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.
- 3.4.4. Adverse Operating Effects – the EDC shall provide the Interconnection Customer with a written notice of its intention to disconnect the Small Generator Facility if, based on the operating procedures specified in Attachment 4, the EDC determines that operation of the Small Generator Facility will likely cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generator Facility could cause damage to the EDC's Electric Distribution System. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon written request. The EDC may disconnect the Small Generator Facility if, after receipt of the notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time unless Emergency Conditions exist in which case the provisions of 3.4.1 apply.
- 3.4.5. Modification of the Small Generator Facility - The Interconnection Customer must receive written authorization from the EDC prior to making any change to the Small Generator Facility, other than a Minor Equipment Modification, that could cause an Adverse System Impact. If the Interconnection Customer makes such modification without the EDC's prior written authorization, the EDC shall have the right to temporarily disconnect the Small 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.
- 3.4.6. Reconnection - The Parties shall cooperate with each other to restore the Small Generator Facility, Interconnection Facilities, and EDC's Electric Distribution System to their normal operating state as soon as reasonably practicable following any disconnection pursuant to this section; provided, however, if such disconnection is done pursuant to Section 3.4.5 due to the Interconnection Customer's failure to obtain prior written authorization from the EDC for Minor Equipment Modifications, the EDC shall reconnect the Interconnection Customer only after determining the modifications do not impact the safety or reliability of its Electric Distribution System.

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

##### **4.1. Interconnection Facilities**

- 4.1.1. The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 3 of this Agreement if required under the additional review procedures of Level a 2 review or under a Level 4 review. If a Facilities Study was performed, the EDC shall identify the Interconnection Facilities necessary to safely interconnect the Small Generator Facility with the EDC's Electric Distribution System, the cost of those facilities, and the time required to build and install those facilities.
- 4.1.2. The Interconnection Customer shall be responsible for its expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its Interconnection Equipment, and (2) its reasonable share of operating,

maintaining, repairing, and replacing any Interconnection Facilities owned by the EDC as set forth in Attachment 3 and Attachment 4.

4.2. Distribution Upgrades: The EDC shall design, procure, construct, install, and own any Distribution Upgrades. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the interconnection Customer. The Interconnection Customer may be entitled to financial contribution from any other EDC customer who may in the future utilize the upgrades paid for by the Interconnection Customer. Such contributions shall be governed by the rules, regulations and decisions of the Maryland Public Service Commission.

## 5. Billing, Payment, Milestones, and Financial Security

### 5.1. Billing and Payment Procedures and Final Accounting (Applies to additional reviews conducted under a Level 2 review and Level 4 reviews)

5.1.1. The EDC shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of EDC provided Interconnection Facilities and Distribution Upgrades contemplated by this Agreement as set forth in Appendix 3, on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.

5.1.2. Within ninety (90) calendar days of completing the construction and installation of the EDC's Interconnection Facilities and Distribution Upgrades described in the Attachments 2 and 3 to this Agreement, the EDC shall provide the Interconnection Customer 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 Interconnection Customer and a written explanation for any significant variation; and (2) the Interconnection Customer's previous deposit and aggregate payments to the EDC for such Interconnection Facilities and Distribution Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous deposit and aggregate payments, the EDC shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the EDC within thirty (30) calendar days. If the Interconnection Customer's previous deposit and aggregate payments exceed its cost responsibility under this Agreement, the EDC shall refund to the Interconnection Customer an amount equal to the difference within thirty (30) calendar days of the final accounting report.

5.1.3. If a Party in good faith disputes any portion of its payment obligation pursuant to this Article 5, such Party shall pay in a timely manner all non-disputed portions of its invoice, and such disputed amount shall be resolved pursuant to the dispute resolution provisions contained in Article 8. Provided such Party's dispute is in good faith, the disputing Party shall not be considered to be in default of its obligations pursuant to this Article.

5.2. Interconnection Customer 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 Interconnection Customer shall provide the EDC with a deposit equal to 50% of the estimated costs prior to its beginning design of such facilities, provided the total cost is in excess of \$1,000.

## 6. Assignment, Limitation on Damages, Indemnity, Force Majeure, and Default



6.1. Assignment: This Agreement may be assigned by either Party upon fifteen (15) Business Days prior written notice, and with the opportunity to object by the other Party. Should the Interconnection Customer assign this agreement, the EDC has the right to request the assignee agree to the assignment and the terms of this Agreement in writing. When required, consent to assignment shall not be unreasonably withheld; provided that:

6.1.1. Either Party may assign this Agreement without the consent of the other Party to any affiliate (which shall include a merger of the Party with another entity), of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement;

6.1.2. The Interconnection Customer shall have the right to assign this Agreement, without the consent of the EDC, for collateral security purposes to aid in providing financing for the Small Generator Facility. For Small Generator systems that are integrated into a building facility, the sale of the building or property will result in an automatic transfer of this agreement to the new owner who shall be responsible for complying with the terms and conditions of this Agreement.

6.1.3. Any attempted assignment that violates this Article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same obligations as the Interconnection Customer.

6.2. Limitation on Damages: Except for cases of gross negligence or willful misconduct, the liability of any Party to this Agreement shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances, except for cases of gross negligence or willful misconduct, shall any Party or its directors, officers, employees and agents, or any of them, be liable to another Party, whether in tort, contract or other basis in law or equity for any special, indirect, punitive, exemplary or consequential damages, including lost profits, lost revenues, replacement power, cost of capital or replacement equipment. This limitation on damages shall not affect any Party's rights to obtain equitable relief, including specific performance, as otherwise provided in this Agreement. The provisions of this Section 6.2 shall survive the termination or expiration of the Agreement.

### 6.3. Indemnity

6.3.1. This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in Article 6.2.

6.3.2. The Parties shall at all times indemnify, defend, and hold the other 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, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

6.3.3. Promptly after receipt by an indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this Article may apply, the indemnified Party shall notify the indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

6.3.4. If an indemnified Party is entitled to indemnification under this Article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable

opportunity to proceed under this Article, to assume the defense of such claim, such indemnified Party may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

- 6.3.5. If an indemnifying Party is obligated to indemnify and hold any indemnified Party harmless under this Article, the amount owing to the indemnified person shall be the amount of such indemnified Party's actual loss, net of any insurance or other recovery.

#### 6.4. Force Majeure

6.4.1. As used in this Article, a Force Majeure Event shall mean any act of God, labor disturbance, act of the public enemy, war, acts of terrorism, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment through no direct, indirect, or contributory act of a Party, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of gross negligence or intentional wrongdoing.

6.4.2. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking and will take to mitigate the effects of the event on its performance, and if the initial notification was verbal, it should be promptly followed up with a written notification. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party shall be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be reasonably mitigated. The Affected Party shall use reasonable efforts to resume its performance as soon as possible.

#### 6.5. Default

6.5.1. No default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement, or the result of an act or omission of the other Party.

6.5.2. Upon a default of this Agreement, the non-defaulting Party shall give written notice of such default to the defaulting Party. Except as provided in Article 6.5.3 the defaulting Party shall have 60 calendar days from receipt of the default notice within which to cure such default; provided however, if such default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the default notice; and, if cured within such time, the default specified in such notice shall cease to exist.

6.5.3. If a Party has made an assignment of this Agreement not specifically authorized by Article 6.1, fails to provide reasonable access pursuant to Article 2.3, is in default of its obligations pursuant to Article 7, or if a Party is in default of its payment obligations pursuant to Article 5 of this Agreement, the defaulting Party shall have 30 days from receipt of the default notice within which to cure such default.

6.5.4. If a default is not cured as provided for in this Article, or if a default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all

other damages and remedies to which it is entitled at law or in equity. The provisions of this Article will survive termination of this Agreement.

7. **Insurance:** For Small Generator Facilities with a Nameplate Capacity of 1 MW or above, the Interconnection Customer 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 Interconnection Customer 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.

## 8. Dispute Resolution

8.1. A party shall attempt to resolve all disputes regarding interconnection as provided in this section promptly, equitably, and in a good faith manner.

8.2. When a dispute arises, a party may seek immediate resolution through complaint procedures available through the Maryland Public Service Commission, or an alternative dispute resolution process approved by the Maryland Public Service Commission, by providing written notice to the Maryland Public Service Commission and the other party stating the issues in dispute. Dispute resolution will be conducted in an informal, expeditious manner to reach resolution with minimal costs and delay. When available, dispute resolution may be conducted by phone.

8.3. When disputes relate to the technical application of this section, the Maryland Public Service Commission may designate a technical master to resolve the dispute. The Maryland Public Service Commission may designate a Department of Energy National Laboratory, PJM Interconnection L.L.C., or a college or university with distribution system engineering expertise as the technical master. When the Federal Energy Regulatory Commission identifies a National technical dispute resolution team, the Maryland Public Service Commission may designate the team as its technical master. Upon designation by the Maryland Public Service Commission, the parties shall use the technical master to resolve disputes related to interconnection. Costs for a dispute resolution conducted by the technical master shall be established by the technical master, subject to review by the Maryland Public Service Commission.

8.4. Pursuit of dispute resolution may not affect an Interconnection Customer with regard to consideration of an Interconnection Request or an Interconnection Customer's queue position.

8.5. If the Parties fail to resolve their dispute under the dispute resolution provisions of this Article, nothing in this Article shall affect any Party's rights to obtain equitable relief, including specific performance, as otherwise provided in this Agreement.

## 9. Miscellaneous

9.1. Governing Law, Regulatory Authority, and Rules: The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the State of Maryland, without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations.

9.2. Amendment: Modification of this Agreement shall be only by a written instrument duly executed by both Parties.

9.3. No Third-Party Beneficiaries: This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

#### 9.4. Waiver

9.4.1. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement shall not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

9.4.2. Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from EDC. Any waiver of this Agreement shall, if requested, be provided in writing.

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

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

9.7. No Partnership: This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

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

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

9.10. Subcontractors: Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

9.10.1. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made. Any applicable obligation imposed by this agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such a Party.

9.10.2. The obligations under this Article will not be limited in any way by any limitation of subcontractor's insurance.

9.11. Note about Voltage Rise: 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. 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 +/- 4% (or other secondary voltages such as 208, 240, 480, etc.). Be sure to assume the highest voltage (+ 4%) 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 +/- 4% (or other standard secondary voltages) during the course of the normal load cycle.

**10. Notices**

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

**If to Interconnection Customer**

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

Attention: \_\_\_\_\_

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

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

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

**If to EDC**

EDC: \_\_\_\_\_

Attention: \_\_\_\_\_

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

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

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

10.2. Billing and Payment: Billings and payments shall be sent to the addresses set out below:

**If to Interconnection Customer**

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

Attention: \_\_\_\_\_

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

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

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

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

**If to EDC**

EDC: \_\_\_\_\_

Attention: \_\_\_\_\_

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

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

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

**Interconnection Customer's Operating**

Representative: \_\_\_\_\_

Attention: \_\_\_\_\_

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

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

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-Mail: \_\_\_\_\_

**EDC's Operating Representative**

Attention: \_\_\_\_\_

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

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

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-Mail: \_\_\_\_\_

10.4. Changes to the Notice Information: Either Party may change this notice information by giving five business days written notice prior to the effective date of the change.

**11. Signatures**

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

**For the Interconnection Customer**

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

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

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

**For EDC**

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

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

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



## Attachment 1

### Definitions

**Adverse System Impact** - A negative effect, due to technical or operational limits on conductors or equipment being exceeded, that compromises the safety or reliability of the Electric Distribution System.

**Applicable Laws and Regulations** – All duly promulgated applicable federal, State and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Commissioning Test** – Tests applied to a small generator facility by the applicant after construction is completed to verify that the facility does not create adverse system impacts. At a minimum, the scope of the commissioning tests performed shall include the commissioning test specified IEEE standard 1547 section 5.4 “Commissioning tests”.

**Distribution Upgrades** –A required addition or modification to the EDC's Electric Distribution System at or beyond the Point of Interconnection to accommodate the interconnection of a Small Generator Facility. Distribution upgrades do not include Interconnection Facilities.

**Electric Distribution Company or EDC** - Any electric utility entity subject to the jurisdiction of the Maryland Public Service Commission.

**Electric Distribution System** –The facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries from interchanges with higher voltage transmission networks that transport bulk power over longer distances. The voltage levels at which Electric Distribution Systems operate differ among areas but generally carry less than 69 kilovolts of electricity. Electric Distribution System has the same meaning as the term Area EPS, as defined in 3.1.6.1 of IEEE Standard 1547.

**Facilities Study** – An engineering study conducted by the EDC to determine the required modifications to the EDC's Electric Distribution System, including the cost and the time required to build and install such modifications, as necessary to accommodate an Interconnection Request.

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

**IEEE Standard 1547** - The Institute of Electrical and Electronics Engineers, Inc. (IEEE) Standard 1547 (2003) "Standard for Interconnecting Distributed Resources with Electric Power Systems", as amended and supplemented, at the time the Interconnection Request is submitted.

**IEEE Standard 1547.1** - The IEEE Standard 1547.1 (2005) "Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems", as amended and supplemented, at the time the Interconnection Request is submitted.

**Interconnection Agreement or Agreement** – This agreement between the Interconnection Customer and the EDC, which governs the connection of the Small Generator Facility to the EDC's Electric Distribution System, as well as the ongoing operation of the Small Generator Facility after it is connected to the EDC's Electric Distribution System.

**Interconnection Customer** – The entity proposing to interconnect a Small Generator Facility to the EDC's Electric Distribution System.

**Interconnection Equipment** – A group of components or integrated system connecting an electric generator with a local electric power system or an Electric Distribution System that includes all interface equipment including switchgear, protective devices, inverters or other interface devices. Interconnection Equipment may be installed as part of an integrated equipment package that includes a generator or other electric source.

**Interconnection Facilities** – Facilities and equipment required by the EDC to accommodate the interconnection of a Small Generator Facility. Collectively, Interconnection Facilities include all facilities, and equipment between the Small Generator Facility and the Point of Interconnection, including modification, additions, or upgrades that are necessary to physically and electrically interconnect the Small Generator Facility to the Electric Distribution System. Interconnection Facilities are sole use facilities and do not include Distribution Upgrades.

**Interconnection Request** – An Interconnection Customer's request, in a form approved by the Maryland Public Service Commission, requesting the interconnection of a new Small Generator Facility, or to increase the capacity or operating characteristics of an existing Small Generator Facility that is interconnected with the EDC's Electric Distribution System.

**Maryland Standard Small Generator Interconnection Rules** – The most current version of the procedures for interconnecting Small Generator Facilities adopted by the Maryland Public Service Commission (**COMAR 20.50.09**)

**Parallel Operation or Parallel** - The state of operation which occurs when a Small Generator Facility is connected electrically to the Electric Distribution System and the potential exists for electricity to flow from the Small Generator Facility to the Electric Distribution System.

**Point of Interconnection** - The point where the Small Generator Facility is electrically connected to the Electric Distribution System. Point of Interconnection has the same meaning as the term point of common coupling defined in 3.1.13 of IEEE Standard 1547.

**Small Generator Facility** - The equipment used by an interconnection customer to generate, or store electricity that operates in parallel with the Electric Distribution System. A Small Generator Facility typically includes an electric generator, prime mover, and the Interconnection Equipment required to safely interconnect with the Electric Distribution System or a local electric power system.

**Witness Test**— For lab certified or field approved equipment, verification (either by an on-site observation or review of documents) by the EDC that the interconnection installation evaluation required by IEEE Standard 1547 Section 5.3 and the commissioning test required by IEEE Standard 1547 Section 5.4 have been adequately performed. For interconnection equipment that has not been lab certified or field approved, the witness test shall also include the verification by the EDC of the on-site design tests as required by IEEE Standard 1547 Section 5.1 and verification by the EDC of production tests required by IEEE Standard 1547 Section 5.2. All tests verified by the EDC are to be performed in accordance with the test procedures specified by IEEE Standard 1547.1.

## **Attachment 2**

### **Construction Schedule, Proposed Equipment & Settings**

This attachment shall include the following:

- The construction schedule for the Small Generator Facility
- A single-line diagram indicating the Small Generator Facility, Interconnection Equipment, Interconnection Facilities, Metering Equipment, and Distribution Upgrades
- Component specifications for equipment identified in the one-line diagram
- Component settings
- Proposed sequence of operations

### **Attachment 3**

#### **Description, Costs and Time Required to Build and Install EDC's Interconnection Facilities**

EDC's Interconnection Facilities including any required metering shall be itemized and a best estimate of itemized costs, including overheads, shall be provided based on the Facilities Study.

Also, a best estimate for the time required to build and install EDC's Interconnection Facilities will be provided based on the Facilities Study.

## **Attachment 4**

### **Operating Requirements for Small Generator Facilities Operating in Parallel**

Applicable sections of EDC's operating manuals applying to the small generator interconnection shall be listed and Internet links shall be provided. Any special operating requirements not contained in EDC's existing operating manuals shall be clearly identified.

## **Attachment 5**

### **Monitoring and Control Requirements**

EDC monitoring and control requirements shall be clearly specified and a reference shall be provided to the EDC's written requirements documents from which these documents are derived along with an internet link to the requirements documents.

## **Attachment 6**

### **Metering Requirements**

Metering requirements for the Small Generator Facility shall be clearly indicated along with an identification of the appropriate tariffs that establish these requirements and an internet link to these tariffs.

## **Attachment 7**

### **As Built Documents**

After completion of the Small Generator Facility, the Interconnection Customer shall provide the EDC with documentation indicating the as built status of the following when it returns the Certificate of Completion to the EDC:

- A one-line diagram indicating the Small Generator Facility, Interconnection Equipment, Interconnection Facilities, Metering Equipment, and Distribution Upgrades
- Component specifications for equipment identified in the one-line diagram
- Component settings
- Proposed sequence of operations





**PART 1**

**MARYLAND LEVEL 2, 3, & 4 INTERCONNECTION APPLICATION & AGREEMENT**

**With Terms and Conditions for Interconnection**

**(Lab Certified Inverter-Based Generator Facilities Greater than 10 kW and Less than or Equal to 2 MW)<sup>2,3</sup>**

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

**INTERCONNECTION CUSTOMER CONTACT INFORMATION**

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

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

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

Contact Person (If other than above): \_\_\_\_\_

Mailing Address (If other than above): \_\_\_\_\_

Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail (Required): \_\_\_\_\_

Alternate Contact Information

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

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

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

Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_

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

**FACILITY INFORMATION**

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

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

Delmarva Power Account # of Facility site: \_\_\_\_\_

Energy Source: \_\_\_\_\_ Prime Mover: \_\_\_\_\_

TYPE OF APPLICATION: Initial  Addition/Upgrade<sup>3</sup>

DC Nameplate Rating: \_\_\_\_\_ (kW) \_\_\_\_\_ (kVA), AC Inverter Rating \_\_\_\_\_ (kW)

AC System Design Capacity: \_\_\_\_\_ (kW) \_\_\_\_\_ (kVA)

<sup>2</sup> Up to 10 MW for interconnection requests for a radial distribution circuit pursuant to COMAR 20.50.09.08.

<sup>3</sup> Initial if first time generator request. Addition/Upgrade if this is an add-on to a previously approved system.

Generator (or PV Panel) Manufacturer, Model # & Rating: \_\_\_\_\_  
(A copy of Generator Nameplate and Manufacturer's Specification Sheet May Also be Submitted)

Number of Generators (or PV Panels): \_\_\_\_\_

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

Number of Inverters: \_\_\_\_\_ Model # & Rating: \_\_\_\_\_

Ampere Rating: \_\_\_\_\_ Amps<sub>AC</sub>, Number of Phases:  1  3, Voltage Rating: \_\_\_\_\_ V<sub>AC</sub>,

Nominal DC Voltage: \_\_\_\_\_ V<sub>DC</sub>, Power Factor: \_\_\_\_\_ %, Frequency: \_\_\_\_\_ Hz,

Delmarva Power Accessible Disconnect or Lock Box:  Yes  No, If Yes, Location:

1-line Diagram Attached (Required):  Yes  No

Site Plan Attached (Required):  Yes  No

Do you plan to export power?<sup>4</sup>  Yes  No, If Yes, Estimated Maximum: \_\_\_\_\_ kW<sub>AC</sub>

Estimated Gross Annual Energy Production: \_\_\_\_\_ kWh

Is the inverter IEEE/UL1741 lab certified? Yes  No  (If yes, attach manufacturer's cut sheet showing listing and label information from the appropriate listing authority, e.g. UL 1741 listing. If no, facility is not eligible for Level 1 Application.)

Estimated Commissioning Date: \_\_\_\_\_

**Electric Service Information for Customer Facility Where Generator Will Be Interconnected**  
(If primary service is from Delmarva Power but customer owns their own transformer)

Capacity: \_\_\_\_\_ (A) Voltage: \_\_\_\_\_ (V)

Type of Service:  Single Phase  Three Phase

If 3 Phase Transformer, Indicate Type

Primary Winding  Wye  Delta

Secondary Winding  Wye  Delta

Transformer Size: \_\_\_\_\_ Impedance: \_\_\_\_\_

**Intent of Generation:**

- Offset Partial Load (Unit will operate in parallel, but will not export power at any time to EDC)
- Net Meter (Unit will operate in parallel and will export power pursuant to Maryland Net Metering or other filed tariff(s))
- Wholesale Market Transaction (Unit will operate in parallel and participate in PJM market(s) pursuant to a PJM Wholesale Market Participation Agreement)
- 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.

<sup>4</sup> 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.

**Generator & Prime Mover Data:**

Energy Source: \_\_\_\_\_

Energy Converter Type: \_\_\_\_\_

Generator Size (kW or kVA): \_\_\_\_\_ Number of Generator Units: \_\_\_\_\_

Total Electrical Generation Capacity (kW or kVA): \_\_\_\_\_

Generator Type:  Induction  Inverter  Synchronous  Other: \_\_\_\_\_

**Requested Procedure Under Which to Evaluate Interconnection Request\*:**

Please indicate below which review procedure applies to the interconnection request.

- Level 2** - Certified interconnection equipment with an aggregate electric nameplate capacity less than or equal to 2 MW. Indicate type of certification below. (Application fee amount is \$50 plus \$1 per KW).
  - Lab certified - tested to IEEE 1547.1 and other specified standards by a nationally recognized testing laboratory and is appropriately labeled.
  - Field approved – identical interconnection has been approved by an EDC under a Level 4 study review process within the prior 36 months of the date of this interconnection request.
  
- Level 3** – Small generator facility does not export power. Nameplate capacity rating is equal to or less than 50KW if connecting to area network or equal to or less than 10 MW if connecting to a radial distribution feeder. (Application fee amount is \$100 plus \$2 per KW).
  
- Level 4** – Nameplate capacity rating is less than or equal to 10 MW and the small generator facility does not qualify for a Level 1, Level 2 or Level 3 review or, the small generator facility has been reviewed but not approved under a Level 1, Level 2 or Level 3 review. (Application fee amount is \$100 plus \$2 per KW, to be applied toward any subsequent studies related to this application).

\* Note: Descriptions for interconnection review categories do not list all criteria that must be satisfied. For a complete list of criteria, please refer to the Maryland Standard Small Generator Interconnection Procedures under the heading of Small Generator Interconnection at the following link: [http://webapp.psc.state.md.us/intranet/ElectricInfo/home\\_new.cfm](http://webapp.psc.state.md.us/intranet/ElectricInfo/home_new.cfm)

**Field Approved Equipment:**

If the field approved equipment box is checked above, please provide the estimated completion date in the section that follows, then sign the application and return it with the following information that is required for review of Level 2 field approved small generator facilities:

- A copy of the certificate of completion for the previously approved small generator facility,
- A written statement indicating that the interconnection equipment being proposed is identical, except for minor equipment modification, to the one previously approved.

You do not have to complete the rest of the application if field approved equipment is being proposed.

**Small Generator Facility Information:**

List interconnection components/system(s) to be used in the Small Generation Facility that are lab certified (required for Level 2 Interconnection requests only).

Component/System	NRTL Providing Label & Listing
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

*Please provide copies of manufacturer brochures or technical specifications*

**Energy Production Equipment/Inverter Information:**

Synchronous     Induction     Inverter     Other \_\_\_\_\_

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

Rated Voltage: \_\_\_\_\_ Volts    Rated Current: \_\_\_\_\_ Amps

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

**For Synchronous Machines:**

*Note: Contact EDC to determine if all the information requested in this section is required for the proposed small generator facility.*

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

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

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

Generator Connection:  Delta  Wye  Wye Grounded

Direct-axis Synchronous Reactance: (Xd) \_\_\_\_\_ 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 small generator facility.

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

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

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

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

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

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

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

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

Short Circuit Reactance (X"d) \_\_\_\_\_ ohms

Phases:  Single  Three-Phase

Frame Size: \_\_\_\_\_ Design Letter: \_\_\_\_\_ Temp. Rise: \_\_\_\_\_ °C.

**Reverse Power Relay Information (Level 3 Review Only):**

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

Relay Type: \_\_\_\_\_ Model Number: \_\_\_\_\_

Reverse Power Setting: \_\_\_\_\_

Reverse Power Time Delay (if any): \_\_\_\_\_

**Additional Information for Inverter Based Facilities**

**Inverter Information:**

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

Model: \_\_\_\_\_

Type:  Forced Commuted                       Line Commutated

Rated Output \_\_\_\_\_ Watts \_\_\_\_\_ Volts

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

Inverter UL 1547 Listed:  Yes  No

**DC Source / Prime Mover**

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

Rated Voltage: \_\_\_\_\_ Volts

Open Circuit Voltage (if applicable): \_\_\_\_\_ Volts

Rated Current: \_\_\_\_\_ Amps

Short Circuit Current (if applicable): \_\_\_\_\_ Amps

**EQUIPMENT INSTALLATION CONTRACTOR** Check if owner-installed

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

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

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

Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax Number: \_\_\_\_\_ E-Mail Address (Required): \_\_\_\_\_

**ELECTRICAL CONTRACTOR**

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

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

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

Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_

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

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

**INSURANCE DISCLOSURE**

The attached terms and conditions contain provisions related to liability and indemnification, and should be carefully considered by the interconnection customer. The interconnection customer is not required to obtain general liability insurance coverage as a precondition for interconnection approval; however, the interconnection customer is advised to consider obtaining appropriate insurance coverage to cover the interconnection customer's potential liability under this agreement.

**CUSTOMER SIGNATURE**

I hereby certify that: 1) I have read and understand the terms and conditions which are attached hereto by reference and are a part of this Agreement; 2) I hereby agree to comply with the attached terms and conditions; and 3) to the best of my knowledge, all of the information provided in this application request form is complete and true. I consent to permit the PSC and interconnecting utility to exchange information regarding the generating system to which this application applies.

Interconnection Customer Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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

**Application Fee:**

Refer to fees on page 27. Since Level 2 – 4 applications 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: \_\_\_\_\_



Energy for a changing world.™

**PART 2**

**LEVEL 2, 3, & 4 MARYLAND INTERCONNECTION APPLICATION & AGREEMENT**

**With Terms and Conditions for Interconnection  
(Lab Certified Inverter-Based Generator Facilities Greater than 10 kW and Less than 2 MW)**

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

**Certificate of Completion**

**INTERCONNECTION CUSTOMER CONTACT INFORMATION**

Customer Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_  
Fax Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

**FACILITY INFORMATION**

Facility Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Delmarva Power Account # of Facility site: \_\_\_\_\_  
Energy Source: \_\_\_\_\_ Prime Mover: \_\_\_\_\_  
DC Nameplate Rating: \_\_\_\_\_ (kW) \_\_\_\_\_ (kVA), AC Inverter Rating \_\_\_\_\_ (kW) AC System  
Design Capacity: \_\_\_\_\_ (kW) \_\_\_\_\_ (kVA)  
Generator (or PV Panel) Manufacturer, Model #: \_\_\_\_\_  
Inverter Manufacturer: \_\_\_\_\_ Model # & Rating: \_\_\_\_\_  
Number of Inverters: \_\_\_\_\_

**EQUIPMENT INSTALLATION CONTRACTOR** Check if owner-installed

Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_  
Fax Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_



**FINAL ELECTRIC INSPECTION AND INTERCONNECTION CUSTOMER SIGNATURE**

The Small Generator Facility is complete and has been approved by the local electric inspector having jurisdiction. A signed copy of the electric inspector's form indicating final approval is attached. The Interconnection Customer acknowledges that it shall not operate the Small Generator Facility until receipt of the final acceptance and approval by the EDC as provided below.

Signed: \_\_\_\_\_ Date \_\_\_\_\_  
*(Signature of interconnection customer)*

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

Type of Application: New/Initial  Growth/Increase  System Capacity \_\_\_\_\_ kW (DC)

Check if copy of signed electric inspection form is attached (required)

Check if copy of as built documents is attached (projects larger than 10 kW only)

.....

**ACCEPTANCE AND FINAL APPROVAL FOR INETRCONNECTION *(for EDC use only)***

The interconnection agreement is approved and the Small Generator Facility is approved for interconnected operation upon the signing and return of this Certificate of Completion by EDC:

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

If not waived, date of successful Witness Test: \_\_\_\_\_ Passed: *(Initial)* (\_\_\_\_\_)

EDC Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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