



Maryland Level 2, Level 3 & Level 4 Interconnection Request Application Form (Greater than 10 kW to 10 MW or less)

Interconnection Customer Contact Information

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Alternative Contact Information (if different from Customer Contact Information)

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Facility Address (if different from above): _____

City: _____ State: _____ Zip Code: _____

Electric Distribution Company (EDC) serving Facility site: _____

Electric Supplier (if different from EDC): _____

Account Number of Facility site (existing EDC customers): _____

Inverter Manufacturer: _____ Model _____

Equipment Contractor

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Electrical Contractor (if different from Equipment Contractor):

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

License number: _____

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

Secondary Winding Wye Delta

Transformer Size: _____ Impedance: _____

Intent of Generation

Offset Load (Unit will operate in parallel, but will not export power 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.

Generator & Prime Mover Data

Type of Application Initial Addition ¹

Initial Rating: DC System Design Capacity: _____ (kW) _____ (kVA), Inverter Capacity _____ (maximum AC kW), AC System Design Capacity: _____ (kW) _____ (kVA)

Added Rating: DC System Design Capacity: _____ (kW) _____ (kVA), Inverter Capacity _____ (maximum AC kW), AC System Design Capacity: _____ (kW) _____ (kVA)

Total Rating: DC System Design Capacity: _____ (kW) _____ (kVA), Inverter Capacity _____ (maximum AC kW), AC System Design Capacity: _____ (kW) _____ (kVA)

¹ If this application is for an initial system please fill out both the Initial and Total rating data, but if it is for an addition, please fill out the Initial, Added and Total rating data.

ENERGY SOURCE (Hydro, Wind, Solar, Process Byproduct, Biomass, Oil, Natural Gas, Coal, etc.)		
ENERGY CONVERTER TYPE (Water Turbine, Wind Turbine, Photovoltaic Cell, Fuel Cell, Steam Turbine, MHD, etc.)		
GENERATOR SIZE kW or kVA	NUMBER OF GENERATOR UNITS	TOTAL ELECTRICAL GENERATION CAPACITY kW or kVA
GENERATOR TYPE (Choose one)		
<input type="checkbox"/> Induction <input type="checkbox"/> Inverter <input type="checkbox"/> Synchronous <input type="checkbox"/> Other _____		

Requested Procedure Under Which to Evaluate Interconnection Request¹

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 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).

¹ **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

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

Estimated Commissioning Date: _____

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 Commutated Line Commutated
Rated Output _____ Watts _____ Volts
Efficiency _____% Power Factor _____%
Inverter UL1547 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

Other Facility Information:

One Line Diagram attached: Yes No

Plot Plan attached: Yes No

Customer Signature

I hereby certify that all of the information provided in this application request form is 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: _____

Printed Name: _____

Title: _____ Date: _____

An application fee is required before the application can be processed. Please verify that the appropriate fee is included with the application:

Application fee included

Amount _____

EDC Acknowledgement

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

EDC Signature: _____ Date: _____

Printed Name: _____ Title: _____



Maryland Interconnection Agreement Certificate of Completion

(To be completed and returned to the EDC when installation is complete and final electric inspector approval has been obtained²)

Interconnection Customer Information

Name: _____

Facility Address: _____

City: _____ State: _____ Zip Code: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Installer

Check if owner-installed

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile 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)

Printed Name:

_____ Type of Application New/Initial Growth/Increase System Capacity _____ KW (DC)

Check if copy of signed electric inspection form is attached

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

Acceptance and Final Approval for Interconnection (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: _____

² Prior to interconnected operation, the interconnection customer is required to complete this form and return it to the EDC. Use contact information provided on the EDC's web page for small generator interconnection to obtain mailing address/fax number/e-mail address