

City of Dover Generator Interconnection Application

Single Meter Application – Part I

New Application
(Meaning no other generator installed)

Revised Application
(Meaning existing interconnection to be modified)

A single customer interconnecting to a single meter at a single premise makes a new / revised application on this date _____ to the City of Dover to install and operate a generating facility interconnected with the City's electric utility system.

Section 1. Ownership Type:

Customer Owned and Operated Customer Leased and Operated Third Party Owned and Operated

Applicant must attach a fully executed contract between the vendor and the applicant. The City of Dover has the right to promulgate rules and regulations and while we make best efforts to support our customers desire for net-metering the City of Dover retains the right to decline any application that does not meet the requirements of this application, municipal tariff, or technical considerations.

Section 2. Applicant Information:

New Construction
(Meaning new home or business)

Existing Construction
(Meaning home or business that have solar installations prior to application)

Name: _____ Email: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Installation Location (if different from Mailing Address above): _____

Telephone (Daytime): Area Code ____ Number _____ (Evening) Area Code ____ Number _____

Home/Business Building Age: _____ Power Account No. : _____

Section 3. Generator Technical Information

Customer Type: Residential Non-Residential Farm
Configuration: Single Phase Three-Phase

The purpose of interconnection is to Net Energy Meter ("NEM") Yes No
If No, the generator will not be NEM eligible and will be subject to additional tariff requirements.

NEM Applicants Only:

Is Generator under: 25 kW for Residential, 500 kW for Non-Residential, 100 KW for Farm? Yes No

Is Generator on a farm and applicant requests a waiver of the 100 kW limit? Yes No

Type NEM Qualifying Energy Source: Solar Wind Hydro Electric Car _____ #
 Fuel Cell Anaerobic digestion of organic material

Any approved interconnections already in service at this location: Yes No

If yes use 3B. 3B is for changing existing systems (expanding/shrinking) or approved but not yet installed systems.

3A. Complete for New Generator Installations Only – See 3B. for Modifications

3A. Generator Equipment and Operation Details (If multiple different products are used please detail each).

Generator Manufacturer:	
Generator Model Name:	
Generator Model Number:	
Total Generator Output (kW):	
Inverter Manufacturer:	
Inverter Model Name:	
Inverter Model Number:	
Total Inverter Power Rating (AC Watts):	
Number of Inverters:	
Inverter Efficiency %:	
Intended Inverter Location:	
System Rated Output (Total Generator Output x Inverter Efficiency)	
Customer Consumption (2-year average) from Appendix A	
Generator Expected Annual Production (kWh)	

If Generator is Photovoltaic include as well:

Module Power Rating (DC @ STC): Should match Generator Output (kW)	
Number of Modules:	
Total Solar Output kW (Modules x Power Rating DC @ STC):	
Array Orientation (degrees): Note the size of each array that has different degrees.	
Array Tilt (degrees): Note the size of each array that has different degrees.	
Solar Shading Analysis May be Required (Solar Pathfinder or equivalent accepted): Solar Shading analysis should include readings at all four (4) points of each continuous array and one in the center. Shading analysis may be used by the utility in consideration of NEM benefits.	

3B. Complete for Interconnection Modification Only – See 3A. for New Generators

3B. Generator Equipment and Operation Details (If multiple different products are used please detail each).

Generator Details:	Existing Approved System	Modification (Changes must detail what the new system will be)
Generator Manufacturer:		
Generator Model Name:		
Generator Model Number:		
Total Generator Output (kW):		
Inverter Manufacturer:		
Inverter Model Name:		
Inverter Model Number:		
Total Inverter Power Rating (AC Watts):		
Number of Inverters:		
Inverter Efficiency %:		
Intended Inverter Location:		
System Rated Output (Total Generator Output x Inverter Efficiency)		
Customer Consumption (2-year average) from Appendix A		
Generator Expected Annual Production (kWh)		

If Generator is Photovoltaic include as well:

Module Power Rating (DC @ STC): Should match Generator Output (kW)		
Number of Modules:		
Total Solar Output kW (Modules x Power Rating DC @ STC):		
Array Orientation (degrees): Note the size of each array that has different degrees.		
Array Tilt (degrees): Note the size of each array that has different degrees.		
Solar Shading Analysis May be Required (Solar Pathfinder or equivalent accepted): Solar Shading analysis should include readings at all four (4) points of each continuous array and one in the center. Shading analysis may be used by the utility in consideration of NEM benefits.		

In accordance with the City of Dover Electric Service Handbook, a generator disconnect device is required to be installed and accessible to City of Dover employees.

Section 4. Generator/Equipment Certification

Generating systems that use inverter technology must be compliant with IEEE 1547-2018 and Underwriters Lab UL 1741, Supplement SB. Generating systems must be compliant with the City of Dover’s Power Delivery’s

Technical Considerations Covering Parallel Operations of Customer Owned Generation. **By signing below, the Applicant certifies that the installed generating equipment meets the appropriate preceding requirements and can supply documentation that confirms compliance. The applicant also agrees that if any details about the generator system as detailed in Section 3 change, it is the applicant’s sole responsibility to notify the City of Dover of those changes by submitting a revised Interconnection Application prior to commencing or completing construction / modification. The applicant agrees to wait to receive approval from the City of Dover of any revised Interconnection Application before proceeding with construction. Failure to notify the City of Dover in advance of system changes prior to submitting the Final As-Built Details could cause approval delays or denial of interconnection if the revised system is not compliant with NEM and/or City of Dover requirements. The City of Dover is not responsible for any excess billing if the generating system is turned on prior to the installation of a bi-directional meter and permission to operate is given.**

Section 5. Net Energy Metering

Net Energy Metering is a service to customers which allows customers to generate electricity for their own needs (from an eligible on-site generating facility) and to deliver excess electric into the City’s electric system and then allows the customer to take electric from the City’s electric system when the customer cannot produce the electric required to sustain their own needs.

The customer-sited generating system shall be designed to produce no more than 110% of the initial design load. The initial design load shall be the calculated average of the two previous twelve-month periods of actual electric usage at the time of installation of electric generating equipment. For new building construction, the initial design load will equate to the electric consumption of units of similar size and characteristics at the time of installation of energy generating equipment as determined appropriate by the City of Dover. For new residents of established dwellings, the consumption of the previous occupants may be used in the calculation if the current resident does not have 24 months of occupancy.

Returned consumption credits will be applied to the next bill in the form of a credit against usage. Any excess credits accumulated and available at the end of the annual billing period will be applied to the customer’s next bill.

Section 6. Applicant Signature

I hereby certify that, to the best of my knowledge, all the information provided in this Part I Interconnection Application is true and correct.

Signed (Applicant): _____ Date: _____

Print name: _____

Make sure to include all application sections (1 – 7) and Appendix A with new / modified submissions.

Please submit the following to Solar@dover.de.us for review and approval:

- 1. Completed City of Dover Release Form**
- 2. Signed Part 1 of this application**
- 3. Specifications sheets for the inverters and panels**
- 4. Single line diagram**
- 5. Solar shading report and**
- 6. Executed contract**
- 7. Signed Consent Waiver**

A copy of the Solar Panel brochure can be found here:

<https://www.cityofdover.com/media/Planning%20and%20Inspections/Forms%20and%20Brochures/Brochures/Solar%20Panels>

Section 7. Preliminary Generator/Equipment Installment Approval / Rejection

The total capacity at the _____ substation, on feeder _____ is _____ KW/MWs. Aggregate existing export capacity is currently _____ KW/MWs and there is an aggregate queued capacity of _____ KW/MWs. The available capacity on the feeder is _____ KW/MWs.

The City of Dover: Approves Approves w/ conditions Does NOT Approve

Part I Interconnection Application for a (system type) _____ generator as detailed in this application and located at (installation address) _____.

Signed (City of Dover): _____ Date: _____

Print Name and Title: _____

Approval with Conditions: _____

Reason of Not Approving: _____

Appendix A

Customer Consumption and Generator Production

Item 1: Customer Consumption. Customer is to provide for existing construction **two** previous 12-month period(s) of actual electrical usage at the time of installation of energy generating equipment. For new construction provide estimated electrical consumption for units of similar size and characteristics at the time of installation of the energy generation equipment. **A completed City of Dover Release form is required before the 2-year consumption is released.**

Month/Year	Year 1 Consumption (kwh)	Month/Year	Year 2 Consumption (kwh)
12 Month Total (kwh)			
2 Year Average (kwh)			

The City of Dover will verify the above consumption numbers. If the customer provided consumption numbers differ from the utility the applicant may need to provide copies of actual electric bills at the request of the utility to support the information provided in Item 1.

Item 2: Generator Production. Customer is required to provide estimated annual production totals for the proposed generator and a calculation method in enough detail so the utility can recreate the estimated annual production totals. Calculation totals and method to be attached to Appendix A.

Item 3: (check one)

- I certify that I am applying for net energy metering privileges and that Section 3 system is designed to produce no more than 110% of my facility’s expected electric consumption, calculated on the average of the 2 previous 12-month period(s) of actual electrical usage at the time of installation of energy generating equipment.
- I certify that I am applying for net metering benefits as a new building construction, that the system is being designed for electrical consumption as estimated at 110% of the consumption of units of similar size and characteristics at the time of installation of the energy generation equipment.

I hereby certify that, to the best of my knowledge, all the information provided in Appendix A is true and correct.

Signed (Applicant): _____ Date: _____

Print Name: _____

City of Dover Generator Interconnection Application -Short Form

Part II - Final As-Built Details

A single customer interconnecting to a single meter at a single premise provides Final As-Built Details on this date _____ to the City of Dover to install and operate a generating facility interconnected with the City's utility system.

Section 8. Installation Details

Generating System was installed by: Owner State Licensed Electrician

Installing Electrician: _____ Firm: _____ License No.: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone: Area Code: _____ Number: _____

Installation Completion Date: _____ Interconnection Date: _____
(System connected but shall not be active/live.
System not approved by Utility at this point.)

Supply certification that the generating system has been installed and inspected in compliance with the local Building/Electrical code of the State of Delaware.

Signed (Inspector): _____ Date: _____
(In lieu of signature of Inspector, a copy of the final inspection certificate may be attached)

Generator Technical Information

The applicant certifies that the system described below is the Final As-Built Design and does match any revised application submitted by the applicant and approved by the City prior to the interconnection date.

Generator Equipment and Operation Details (If multiple different products are used please detail)

Generator Manufacturer:	
Generator Model Name:	
Generator Model Number:	
Generator Output (kW):	
Inverter Manufacturer:	
Inverter Model Name:	
Inverter Model Number:	
Inverter Power Rating (AC Watts):	

Number of Inverters:	
Inverter Efficiency %:	
Intended Inverter Location:	
System Rated Output (Total Generator Output x Inverter Efficiency)	
If Generator is Photovoltaic include as well:	
Module Power Rating (DC @ STC): Should match Generator Output (kW)	
Number of Modules:	
Total Solar Output kW (Modules x Power Rating DC @ STC):	
Array Orientation (degrees): Note size of each array with different degrees.	
Array Tilt (degrees): Note size of each array with different degrees.	
May be Required: Completed Generator Installation Pictures Attached. Must show whole generator, inverters, electric permits	

Section 9. Applicant Certifications

I hereby certify that, to the best of my knowledge, all the information provided in the Final As-Built Details is true and correct.

I agree to allow the City of Dover to install a warning sticker on or near my service meter location.

I agree to submit a new or revised Interconnection Application and comply with all governing permitting requirements before adding to in any way or subtract from in any way the current approved electric generating system; including but not limited to expanding, replacing, or removing all or a portion of the current system, adding a new generator type, and/or replacing in anyway the generator system inverter. In the event system reliability concerns occur, the size of this generation system may be reduced in size if no other solutions are available.

I agree to notify the utility in writing through official certified mail at least 30 days before I sell or transfer ownership of the system to another owner to allow the City of Dover to update records and determine if the new owner agrees to the generation and interconnection responsibilities associated with the transfer of ownership. A new property owner, of property that up until the time of sale had an approved Interconnection Agreement in place for net-metering, has 30 days to submit a new Interconnection Agreement for net-metering in his/her name. If the new owner fails to submit an Interconnection Agreement within 30 days of property transfer, certain net-metering transfer rights may be discontinued.

Failure for non-compliance with these certifications will be considered a violation of the net-metering agreement and may result in the disconnection of the electric generator at the discretion of the City of Dover. The sale or transfer of the electric generator shall not compromise law.

I further certify and understand that City of Dover review and approval of this application do not constitute an endorsement of actual equipment performance, nor does it endorse its benefits or economics.

I agree to pay the current purchase price of a bi-directional meter, not to exceed \$200 for residential installations and the full purchase price of a bi-directional meter for commercial/industrial installations. This charge will be included in the next bill after installation of the meter.

I understand that any excess credits accumulated and available at the end of the annual billing period will be applied to the customer's next bill.

Signature of Applicant: _____ Date: _____

Print Name: _____

Make sure to include all application sections (8-11) with final submissions.

Please submit the following to Solar@dover.de.us for review and approval

1. Signed Part II
2. Electrical inspection certificate
3. Copy of approved building/construction permit from City Planning & Inspections
 - a. Located at City Hall, 15 Loockerman Plaza, Dover, DE 19901
(permitsandlicenses@dover.de.us)
4. Proof of payment for bi-directional meter
 - a. Current price of bi-directional meter, not to exceed \$200
 - b. Full purchase price of bi-directional meter(s) for commercial/industrial installations

Submitter will be given Permission to Operate the system only when the conventional meter has been replaced with a bi-directional meter by the City of Dover. Operating the system prior to this notification could result in higher electric consumption for the applicant due to any returned energy from the system being registered as consumption. If it is determined that this has occurred, the City will not be held responsible for additional charges to the service.

Section 10. Final Approval or Non-Approval for Interconnection and System Operation

The City of Dover: Approves Approves w/Conditions Does NOT Approve

The interconnection of a _____ generator as detailed in the Final As-Built Details and located at (installation address) _____.

The City of Dover has verified the applicant’s average electric consumption in Appendix A. Yes No

The City of Dover has verified at the time of installation that the installed electric generator is designed to produce no more than 110% of the applicant’s/customer’s average annual electric consumption as calculated in Appendix A. Yes No

Signed (City of Dover): _____ Date: _____

Print Name & Title: _____

Approval with Conditions: _____

Reason of Not Approving: _____

Approval to connect to the City of Dover system indicates only that the minimum requirements for a safe proper interconnection have been satisfied. Such approval does not imply that the Generator Owner’s facility meets all federal, state and local standards or regulations.

Section 11. City of Dover Internal Notifications

- Payment received for bi-directional meter: Yes
- Warning Label has been installed on/near service meter: Yes
- Notify Billing Dept. of Interconnected Generation: Yes
- Notify T & D Superintendent Yes

Application Process Flow:

1. Solar Entity requests two 12 months of consumption via email and with completed COD Release Form signed by Applicant. City will return consumption request to Solar Entity
2. Solar Entity submits Completed Part I with, specification sheets for inverters & panels, single line diagram showing required disconnect, solar shading report and executed contract with applicant.
3. City reviews Part I and if approved will return signed copy giving Permission to Install
4. Solar Entity is required to obtain a permit for installation of panels, link to brochure is on page 4 of this application
5. When installation is complete, Solar Entity will return signed Part II and Inspection Certificate
6. City will visit the location to validate installation matches submitted design and place warning stickers on meter pan and either transformer or pedestal feeding the location.
7. City will notify applicant of current cost of bi-directional meter and bill for payment.
8. City Metering Department will receive meter change work order and install a bi-directional meter.
9. Once the bi-directional meter is installed, the City will notify the Solar Entity of that they now have Permission to Operate the system.
10. Customer Service is notified by the City of the required account adjustment.
11. Solar Entity will notify applicant of clearance to turn on system.