

Delaware Electric Cooperative, Inc. Interconnection Application – Net Metering

(For use with systems less than 100 kW DC)

This Interconnection Application also serves as a binding contract between Delaware Electric Cooperative, Inc. (hereinafter referred to as DEC) and each signatory listed herein.

DEC members: Ensure that you have received a copy of the preliminarily approved Interconnection Application before allowing installation of any equipment on your property.

General Instructions and Expectations

 The preliminary portion of this application (Sections 1 through 12) and Addendum A must be submitted via email to <u>interconnection@delaware.coop</u>. The application fee (see Section 6) must be sent via mail to the following address. Optionally, paper applications may be mailed.

Delaware Electric Cooperative, Inc. ATTN: Interconnection Application 14198 Sussex Highway Greenwood, DE 19950

- 2. Should any Interconnection Application require multiple revisions by the Equipment Contractor and subsequent reviews, DEC reserves the right to charge a \$50 fee for each additional review.
- 3. If battery storage will be utilized, the Battery Storage Interconnection Application form must be submitted alongside the standard Interconnection Application.
- 4. Any Generating System requiring an upgrade to the DEC utility system will require the Cooperative member to request that specific upgrade. Full payment for all costs associated with the upgrade is required before construction of the generating system is permitted to begin.
- 5. After DEC has approved and returned the preliminary portion of this application to the Equipment Contractor and member, construction of the generating system may begin.
- 6. The final portion of this application (Sections 1 through 14 and Addendum A) and a scanned copy of the Inspection Certificate (if applicable) must be submitted for final approval after construction of the Generating System is complete. Upon submittal, DEC will review the application and perform a field inspection of the facilities. Any installations deemed unacceptable to DEC's standards, or any installation that alters the original, approved design intent will be corrected by the Equipment Contractor at no cost to DEC before final approval is granted.
- 7. When final approval is granted, DEC will install a net meter and return the approved Interconnection Application to the Equipment Contractor. Only at that time, will "Permission to Operate" be granted.
- 8. This application must be filled out in its entirety or it will be returned without review.



Delaware Electric Cooperative, Inc.				
			– Net Metering	
		ith systems less than 2		
Type of Application:	Initial	or	Addition/Upgrade	
Ownership:	Leased	or	Member Owned	
Account(s):	Single	or	Aggregated	
1. DEC Member Infor	mation			
Name:				
			Zip:	
DEC Account Number:				
2. Equipment Contrac	tor Information			
Name:				
			Zip:	
			p	
Lindii.		111016		
2 Flastwicel Contracts	n Information //f diffe	rant from about		
3. <u>Electrical Contracto</u>				
Name:				
Address:				
City:		State:	Zip:	
Email:		Phone	2:	



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4. Facility & Load Information

Please fill out where applicable below. If the address is the same as Section 1, then the address block does not need to be filled out again.

Sq. ft. of Residence:	Past 24-month average usage: (kWh/		
If less than 24 months but greater than 12 months of usage is available for this property, please specify the past 12 month average usage: (kWh/month)			
If less than 12 months of usage is availa	able for this property, please see	ອ Section 7 for fu	urther guidelines.
Address:			
City:	State:	Zip	:
Nearest DEC equipment tag number: _			
5. <u>General Service Requirements</u>	<u>.</u>		
What size service is required for this sy	rstem?		
Same as existing 200A	320A 400A	600A	CT Metering
If this is a new account for the sole pur	pose of this Generating System,	what Voltage/P	hase will be required?
120/240V – 1Ø			
120/208V – 1Ø			

- $120/208V 3\emptyset$ (Consult DEC before designing 3Ø systems)
- $277/480V 3\emptyset$ (Consult DEC before designing $3\emptyset$ systems)



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6. Application Fee

The application fee is \$50 per application for new or upgraded systems of 25 kW DC or less. For systems over 25 kW DC the fee will be \$50 plus \$1 for each kW DC over the initial 25 kW DC. The application fee for systems where accounts will be aggregated is \$125 per application regardless of kW DC size. All Interconnection Applications submitted to DEC shall be accompanied with the appropriate fee made payable to DEC. The application fee is non-refundable. Applications returned for incomplete information will be subject to an additional \$50 application fee when resubmitted. No applications will be considered without the application fee. Returned checks will be assessed an additional fee based on DEC's Returned Check Policy. Permission to Operate will not be granted for any systems that DEC has not yet received an application fee for. *The DEC member account number and name must be included as a memo on the check*.

7.	Equipment Informa	ation (Fill out wh	ere applicable)			
	of energy source: Wind	Diesel	Natural Gas	Fuel Oil	Other	
Will e	xcess energy be expo	rted to DEC? Y	es No			
Forec	asted <i>monthly</i> produc	tion (kWh)				
(Note	: The forecasted mon	thly production N	1UST be completed usi	ng <u>4.5 peak sunlight</u>	hours per day)	
(A cop	oy of the generator na Quantity of PV Moo	meplate and ma dules:	Model Name, and Nur nufacturer's specificatio Rated outp umber:	on sheet may be support of single PV Modu	plementally include	
			facturer's specification		ementally included)
	Quantity of Inverte	rs:	_ Rated outp	out of single inverter:	(k\	∧)
Will b	attery storage be use	d in conjunction	with this system? Yes	5 No		

If battery storage will be utilized, please complete the supplemental Battery Storage Interconnection Application form included at the end of this application.



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Please fill out the Initial Rating information if there is currently no generating system on site. If adding a generating system to an existing system, fill out the Initial Rating, Added Rating, and the Total Rating sections.

Initial Rating:

AC System Design Capacity

DC System Design Capacity AC System Design Capacity	(kW) (kW)
Added Rating:	
DC System Design Capacity AC System Design Capacity	(kW) (kW)
<u>Total Rating:</u>	
DC System Design Capacity	(kW)

To comply with Delaware State Law regarding output of an interconnection facility, DEC uses the following formula:

(kW)

1.	Enter the 24-month average usage (kWh):	 (Per month)
2.	Multiply line 1 by 110%:	 (Maximum output permitted by Delaware law)
3.	Enter maximum inverter rating (kVA):	 (From nameplate, at appropriate voltage)
4.	Multiply line 3 by 4.5 (hours):	 (This is the average kWh produced per day)
5.	Multiply line 4 by 365 (days):	 (This is the average kWh produced per year)
6.	Divide line 5 by 12 (months):	 (This is the average kWh produced per month)

If line six (6) is equal to or less than line two (2), the system, as designed, will be approved by DEC provided that there is sufficient grid capacity for the added generation.

For DEC members that have greater than 12 months of usage history and less than 24 months of usage history, the most recent 12 months of usage history shall be used to obtain the average monthly usage necessary for calculating the inverter size as described above.

For DEC members that have no usage or less than 12 months of usage history, please see below for the maximum allowable generating systems based on the inhabitable sq. ft. of the residence.

Single-wide trailer	Up to 3.8 kW
Double-wide trailer	
< 2000 sq. f.t residence	
2000 – 3000 sq. f.t residence	-
3000+ sq. ft. residence	Up to 11.7 kW

Revised May 2024



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8. Generator Disconnect Switch

A lockable disconnect device shall be installed within three (3) feet of the DEC meter and accessible at all times by DEC personnel. The cost of this device and the installation thereof shall not be the responsibility of DEC.

9. Equipment Certification

Equipment that utilizes inverter technology must be compliant with *IEEE 929* and *Underwriters Lab. UL1741*. Equipment that utilizes a rotating machine must be compliant with DEC's *Technical Requirements for Parallel Operation of Member Owner Generation* document. By signing below, the Equipment Contractor certifies that the installed generating equipment meets the appropriate preceding requirement(s) and can supply documentation that confirms compliance.

Company:	
Name (print):	Date:
Signature:	_



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10. <u>Aggregate Meter Information (if applicable)</u>

The following accounts shall be combined for the purpose of determining the twenty-four (24) months average usage (kWh) as required in the aforementioned formula regarding inverter sizing. Any surplus energy produced by the Generating System will be credited back to the accounts listed below. Each account must be active and ranked according to the order in which credit shall be applied. The specific method of remuneration will be determined by Delaware State Law, the DEC tariff and member approval.

1.	Name:		Rate:	
	Account No	24-month average usage (kWh):		(monthly)
2.	Name:		Rate:	
	Account No	24-month average usage (kWh):	:	(monthly)
3.	Name:		Rate:	
	Account No	24-month average usage (kWh):	:	(monthly)
4.	Name:		Rate:	
	Account No	24-month average usage (kWh):	·	(monthly)
5	Name:		Rate:	
٦.				
	Account No	24-month average usage (kWh):	:	(monthly)

Any additional meters associated with the aggregated system must be supplied on a separate sheet in the same format.



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11. Signatures

DEC Member

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

Name (print): ______

Date: _____

Signature: ______

Equipment Contractor

I hereby certify that the information regarding the Generating System is complete, accurate, and shall be installed as designed in accordance with all applicable standards.

Company:	
Name (print):	Date:

Electrical Contractor (if different from above)

I hereby certify that all wiring and installation of associated equipment shall be completed in compliance with all applicable *NEC* codes.

Company:	
Name (print):	Date:

12. PRELIMINARY Approval to Proceed with Interconnection

Signature: _____

Signature: _____

Preliminary approval is only valid for <u>180 days</u>. If an acceptable final application is not received within 180 days of the preliminary approval date, then the entire application is void.

Delaware Electric Cooperative has approved this preliminary application	•	Yes	No
Name:	Date:		

Signature: ______



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13. Installation De	<u>etails</u>		
The Generating Syster	n will be installed by:	Owner	State Licensed Electrician
Installing Electrician: _			
Company:			License No.:
Mailing Address:			
City:		State:	Zip:
Email:		Ph	one:
			nd inspected in compliance with the local
Signed (Inspector):			Date:
	(In lieu of signature of In	spector, a copy of the f	inal inspection certificate may be attached)
-		•	vill be submitted, it must be appended to the final to <u>interconnection@delaware.coop</u>
	al or Non-Approval	his interconnection o	polication Voc No

Delaware Electric Cooperative has approved	this interconnection application.	Yes	_ No
Name:	Date:		
Signature:			

"Permission to Operate" has been granted as of: ______



ADDENDUM A- INTERCONNECTION AGREEMENT TERMS AND CONDITIONS

1. Scope of Agreement. The Interconnection Application ("Application") and this Addendum ('collectively the "Agreement") establish conditions pursuant to which Delaware Electric Cooperative (hereinafter "DEC") and the (hereinafter "Member") agree that the electric generating facilities (the "Facilities") listed in the Application may be interconnected to DEC's electric distribution system ("System").

2. **Establishment of Point of Interconnection.** The point where the electric energy first leaves the wires or facilities owned by DEC and enters the wires or facilities provided by Member is the "Point of Interconnection." DEC shall determine the Point of Interconnection in accordance with its rules, regulations, bylaws, rates, and tariffs (the "Rules"), which are incorporated herein by reference. Any interconnection equipment installed by Member ("Interconnection Facilities") shall also be in accordance with the Rules.

3. **Responsibilities of DEC and Member for Installation, Operation and Maintenance of Facilities.** Member will, at their own cost and expense, install, operate, maintain, repair, and inspect, and shall be fully responsible for, the Facilities listed in the Application and Member's Interconnection Facilities. Member's Facilities shall be designed, installed, maintained and operated in a safe and reliable manner, in compliance with all aspects of the Rules, and in accordance with industry standard prudent engineering practice. Maintenance of the Facilities and Interconnection Facilities shall be performed in accordance with the applicable manufacturers' recommended maintenance schedule.

Member also agrees that the design, installation, maintenance and operation of its Facilities and Interconnection Facilities shall minimize the likelihood of a malfunction or other disturbance, damaging or otherwise affecting or impairing the System. Member shall comply with all applicable laws, regulations, zoning codes, building codes, safety rules and environmental restrictions applicable to the design, installation, operation and maintenance of its Facilities and Interconnection Facilities. Member shall obtain all environmental and other permits lawfully required by governmental authorities prior to the commencement of construction of the Facilities and Interconnection Facilities.

DEC will notify Member if there is evidence that operation of the Facilities or Interconnection Facilities causes, or may cause, disruption or deterioration of service to other members of DEC served by the System, or if operation of the Facilities or Interconnection Facilities causes, or may cause, damage or impairment to the System. Member will notify DEC of any emergency or hazardous condition or occurrence with the Facilities or Interconnection Facilities, which could affect safe operation of the System.

4. **Modifications.** Member will not increase the output of the Facilities or make other material changes or modifications to the configuration or operation of the Facilities or Interconnection Facilities without the prior written consent of DEC. In the event that Member plans to undertake a modification that reasonably may be expected to impact the System, Member shall provide DEC with sufficient information to allow DEC to evaluate the potential impact of the modification prior to commencement of any work.

5. **Net Metering.** All power sales to DEC and net metering shall be governed by DEC's tariff and Delaware Code, Chapter 10 of Title 26 (Electric Utility Restructuring). Interconnection of the Facilities with the System does not grant Member the right to export power in excess of the applicable limits set forth in DEC's tariff or Delaware Code, Chapter 10 of Title 26 (Electric Utility Restructuring), nor does it constitute an agreement by DEC to purchase or wheel excess power.

6. **Limitation of Liability and Indemnification.** (a) Member shall be responsible for the safe installation, maintenance, repair and condition of the Facilities and Interconnection Facilities. DEC does not assume any duty of inspecting Member's lines, wires, switches, or other equipment or property and will not be responsible therefor. Member assumes all liability for and shall indemnify



DEC and its members, directors, officers, managers, employees, agents, representatives, affiliates, successors and assignors shall hold them harmless from and against any claims, losses, costs, and expenses of any kind or character that are the result from Member's negligence or other wrongful conduct in connection with the design, construction, installation, operation or maintenance of the Facilities or Interconnection Facilities. Such indemnity shall include, but is not limited to, financial responsibility for (i) monetary losses; (ii) reasonable costs and expenses of defending an action or claim; (iii) damages related to death or injury; (iv) damages to property; and (v) damages for the disruption of business.

DEC's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damages actually incurred. In no event shall DEC be liable to Member for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever. Member shall indemnify, defend, and save DEC 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 construction, design, installation, operation and maintenance of the Facilities.

7. **Right of Access, Equipment Installation, Removal & Inspection.** DEC may send employees, agents or contractors to Member's premises at any time, whether before, during or after the time the Facilities first produce energy to inspect the Facilities and Interconnection Facilities. DEC may monitor and observe the Facility's installation, commissioning (including any testing), startup, operation, and maintenance. DEC shall at all times have direct, unabated access to the disconnect switch and metering equipment of the Facility. DEC shall provide reasonable notice to Member when possible prior to exercising its right of access.

8. Disconnection of Facilities.

(a) DEC may temporarily disconnect the Facilities upon any of the following conditions:

- (1) For scheduled outages upon reasonable notice;
- (2) For unscheduled outages or emergency conditions;
- (3) If the Facilities or Interconnection Facilities do not operate in a manner consistent with the Application or these Terms and Conditions;
- (4) For improper installation or if the Facilities or Interconnection Facilities create a safety, reliability or a power quality problem; or
- (5) The Member's Interconnection Facilities are delisted by the Nationally Recognized Testing Laboratory that provided the listing at the time the interconnection was approved.
- (b) DEC may permanently disconnect or direct Member to disconnect Member's Facility and Interconnection Facilities if this Agreement is terminated.

9. **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 Delaware. Nothing in this Agreement is intended to affect any other agreement between DEC and Member. However, in the event that a provision of the Agreement conflicts with any provision of DEC's tariff, the tariff shall control.



10. **Termination**. This Agreement may be terminated under the following conditions:

(a) By Member: Member may terminate Agreement at any time by providing written notice to DEC;

(b) By DEC: DEC may terminate this Agreement if Member fails to remedy a violation of the terms of this Agreement within 30 calendar days after notice, or such other date as may be mutually agreed to prior to the expiration of the 30 day period.

11. **Severability.** If any portion or provision of this Agreement is held for any reason to be invalid or illegal or unenforceable by any court of competent jurisdiction, such portion shall be deemed to be separate, independent and severable, and the remainder of this Agreement shall remain in full force and effect.

12. **Entirety of Agreement; Amendments.** This Agreement, including the Rules, which are expressly made a part hereof for all purposes, constitutes the entire agreement and understanding between the Parties with regard to the interconnection of the Facilities. No amendments or modifications to this Agreement shall be effective unless in writing and signed by the Parties hereto.

13. **Notices.** Notices given under this Agreement are deemed to have been duly delivered if hand delivered or sent by United States certified mail, return receipt requested, postage prepaid, to Member at the address listed in the Application and to DEC at 14198 Sussex Highway, Greenwood, Delaware 19950.

14. **Member Certification.** I hereby certify that: 1) I have read and understand the Terms and Conditions of the Agreement; 2) I have read and understand the Technical Requirements for Member-Owned Generation; 3) I agree to comply with all provisions of the Terms and Conditions; and 4) to the best of my knowledge and belief, all information provided by me in the Application is true and complete.

Member Signature

Printed Name

Date: _____



Delaware Electric Cooperative, Inc. Interconnection Application – Battery Storage

(Supplemental Form - For Use with Interconnection Application)

This application must be completed when installing a battery unit in conjunction with an interconnected generating system. This form shall be submitted along with the Interconnection Application.

1. DEC Member Information

Name:		
Address:		
City:	_ State:	Zip:
DEC Account Number:		

2. Facility Information

Please fill out where applicable below. If the address is the same as Section 1, then the address block does not need to be filled out again.

Address:		
City:	State:	Zip:
Nearest DEC equipment tag number:		
Is this an add-on to an existing member-generated facility:	/es No	
Stand-alone: With a renewable energy system:		
Share inverter with a renewable energy system? Yes_	No	
If Yes, can it be charged from the distribution grid? Yes	No	
If No, how is the battery energy storage system prevented from	om being discharged	by the distribution system?



Delaware Electric Cooperative, Inc. Interconnection Application – Battery Storage

(Supplemental Form - For Use with Interconnection Application)

3. <u>Battery Storage Information</u>	
Battery System Manufacturer:	Model:
Battery Type: Battery Ch	arge/Discharge Rating (kW DC):
Expected Battery Unit Useful Life (years):	
Battery Energy Capacity (kWh):	PF Setting Range:
Total Number of Battery Units:	Total Energy Capacity of Battery System (kWh):
4. Battery Storage Inverter Information	on (if NOT shared with interconnected generating system)
Manufacturer:	Model:
Type: Forced Commutated	Line Commutated
Rated Output Power (kW): Out	put Voltage (V): Output Current (A):
Efficiency (%): Power Factor (%):	DC Source/Prime Mover:
Inverter UL 1547 Listed: Yes No	
Rated Input Power (kW): Input	Voltage (V): Input Current (A):
Open Circuit Voltage (if applicable) (V):	
Short Circuit Current (if applicable) (A):	
5. If Using for Frequency Regulation:	
Does it have ramp rate control? Yes	No
Does it have the ability for time-delay? Ye	s No
Does it have the ability to limit maximum ch	narge and discharge? Yes No



14198 Sussex Highway Greenwood, Delaware 19950 855-DEC-9090

www.delaware.coop

Delaware Electric Cooperative, Inc. Interconnection Application – Battery Storage

(Supplemental Form - For Use with Interconnection Application)

6. **Operation Information**

Describe the intended operation of the battery:

7. Additional Comments (if applicable)

8. Signature and Member Certification

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

Company: _____

Name (print): _____

Signature: ______

Date: _____

The application must be submitted via email to interconnection@delaware.coop

Optionally, paper applications may be mailed to the following address:

Delaware Electric Cooperative, Inc. ATTN: Interconnection Application 14198 Sussex Highway Greenwood, DE 19950