Tier II Interconnection Application

This form is for Distributed Energy Resources (DERs) that meets the eligibility of a Tier II track. This includes backup fossil fuel generation, standalone energy storage systems and electric vehicles designed to provide backup service to the residence.

The Interconnection Application is to be filled out completely by the applicant or as noted in each section of the application. Section that are noted with * are required to be filled out along with bolded items.

Checklist for Submission to Area EPS Operator	
The items below shall be included with submittal of the Interconnection Application to the Area EPS Operator. Failure to include all items will deem the Interconnection Application incomplete.	
	Included
One-line diagram • Please see Area EPS Operator's Technical Requirement for more details.	☐ Yes
Site Diagram showing DER system layout (See Technical Requirements for more details)	☐ Yes

Interconnection Customer/Owner *	
Full Name (match name of electric service account, if applicable)**:**	
Account Number:	**Meter Number:**
Mailing Address:	
Email:	**Phone:**

Application Agent *	
Is the Customer using an Application Agent for this application? ☐ Yes ☐ No	
If Interconnection Customer is not using an Applicant Agent, please continue to next section.	
Application Agent:	
Company Name:	
Email:	Phone:

DER Location *

Is the proposed DER system to be located at the Interconnection Customer's mailing address: ☐ Yes ☐ No
If Yes, please continue to the next section.
If No, will the proposed DER system be interconnected to an existing electric service? ☐ Yes ☐ No
Please provide the address or GPS coordinates:
If not an existing service, please state the proposed service entrance size (amps):

Distributed Energy Resource Information *

Type of Generator (check all that apply):		☐ Inverter	☐ Induction or Synchronous
Phase configuration of Distributed Energy Resource(s): ☐ Single-Phase ☐ Three-Phase			
DER Type (Check all that apply and list aggregate capacity of each type):			
☐ Electric Vehicle	Size (kW AC):	☐ Fuel Oil	Size (kW AC):
☐ Battery Storage	Size (kW AC):	☐ Diesel	Size (kW AC):
☐ Natural Gas	Size (kW AC):	☐ Other	Size (kW AC):
Please specify other:			

Interconnection Facilities Information *

What type of DER Interconnection/Transfer Method is Proposed?

☐ None (DER is never operating parallel with the distribution system)

☐ Limited (DER operated parallel with the distribution system for a short time). Please specify what type of Limited.

☐ Quick Closed (100msec parallel or less) ☐ Limited Parallel (2 minutes or less)

Will a transfer switch be used with the DER? ☐ Yes ☐ No		
Manufacturer:	Model:	Load Rating (in Amps):
Will a transformer, owned by the Interconnection Customer, be used between the DER and the Point of Common Coupling?		☐ Yes ☐ No
Please show proposed location of protective interface equipment on property on the submitted site diagram.		

Fill out all following sections which pertain to the proposed DER installation

Energy Storage System Information (if applicable)	
ESS Inverter Energy Rating (kWh AC):	**ESS Inverter Capacity Rating (kW AC):**
How will the ESS be used? Select all Use Cases that apply. ☐ Outage Protection/Backup Power ☐ Demand Reduction ☐ No Export ☐ Time-of-Use Energy Management ☐ Increased Self-Consumption ☐ Other	
Please specify other:	
What Operating Modes will be used? Select only one Operating Mode. ☐ Import Only ☐ Export Only ☐ No Exchange ☐ Unrestricted Exchanged	
If Export Only is Checked, select all that apply. ☐ ESS Export is Allowed ☐ Solar Export is Allowed ☐ Limited Export is Allowed (please specify export limit amount in kW):	
Is the ESS recharging limited to certain times of the day and/or after a power outage? ☐ Yes ☐ No If Yes, please explain:	
If the ESS shares an inverter that is listed in the previous section, please skip the rest of this section.	
Aggregate ESS Inverter Rating (kW AC):	**Number of Total ESS Inverters:**
Phase configuration of ESS inverter(s): ☐ Single-Phase ☐ Three-Phase	
Voltage of ESS Inverter(s):	
ESS Inverter Manufacturer:	
1. Model No.	**Certification** ☐ UL 1741 ☐ UL 1741-SA ☐ UL 1741-SB
Inverter Rating (kW AC):	**Number of Units of this Model:**
2. Model No.	Certification ☐ UL 1741 ☐ UL 1741-SA ☐ UL 1741-SB
Inverter Rating (kW AC):	Number of Units of this Model:
3. Model No.	Certification ☐ UL 1741 ☐ UL 1741-SA ☐ UL 1741-SB
Inverter Rating (kW AC):	Number of Units of this Model:
4. Model No.	Certification ☐ UL 1741 ☐ UL 1741-SA ☐ UL 1741-SB
Inverter Rating (kW AC):	Number of Units of this Model:

Rotating Generation System Information (if applicable)
Prime Mover Information

Please indicate the prime mover:

☐ Microturbine ☐ Reciprocating Engine ☐ Hydro ☐ Wind ☐ Other (please specify)

Generator type ☐ Induction ☐ Synchronous

Manufacturer:	Model Name & Number:	Version:

Summer Name Plate Rating:	kW_{ac}	Summer Name Plate Rating:	kW_{ac}
Winter Name Plate Rating:	kVA_{ac}	Winter Name Plate Rating:	kVA_{ac}

Rated Power Factor:	Leading:	Lagging:

Distributed Energy Resource Characteristic Data (for Synchronous machines)

RPM Frequency:	Neutral Grounding Resistor:
Direct Axis Synchronous Reactance, X_d:	Zero Sequence Reactance, X_0:
Direct Axis Transient Reactance, X'_d:	KVA Base:
Direct Axis Subtransient Reactance, X''_d:	Field Volts:
Negative Sequence Reactance, X_2:	Field Amperes:

For Synchronous Generators 1 MW or larger, please provide the appropriate IEEE model block diagram of excitation system, governing system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be submitted.

Distributed Energy Resource Characteristic Data (for Induction machines)

RPM Frequency:	Neutral Grounding Resistor:
Motoring Power (kW):	Exciting Current:
Heating Time Constant:	Temperature Rise:
Rotor Resistance, R_r:	Frame Size:
Stator Resistance, R_s:	Design Letter:
Stator Reactance, X_s:	Reactive Power Required In Vars (No Load):
Rotor Reactance, X_r:	Reactive Power Required In Vars (Full Load):
Magnetizing Reactance, X_m:	Total Rotating Inertia, H:
Short Circuit Reactance, X''_d:	

Electric Vehicle System Information (if applicable)

Can the Electric Vehicle provide backup power to the electrical service? ☐ Yes ☐ No	
If Yes, please fill out the transfer switch information section under Interconnection Facilities Information	
Number of Chargers:	**Are All Charges Identical:** ☐ Yes ☐ No ☐ N/A
If Yes, please only fill out the first section of EV Charger information	
1. EV Charger Manufacturer:	
Model No.:	**Charger Total Power (kW AC):**
Phase configuration of Charger: ☐ Single-Phase ☐ Three-Phase	
EV Charger Level: ☐ Level 1 ☐ Level 2 ☐ Level 3 (DC Fast Charging)	
Voltage of Charger: ☐ 120 V ☐ 208 V ☐ 240 V ☐ Other - Please List:	
Charger Amps (A):	**Circuit Amps (A):**
2. EV Charger Manufacturer:	
Model No.:	**Charger Total Power (kW AC):**
Phase configuration of Charger: ☐ Single-Phase ☐ Three-Phase	
EV Charger Level: ☐ Level 1 ☐ Level 2 ☐ Level 3 (DC Fast Charging)	
Voltage of Charger: ☐ 120 V ☐ 208 V ☐ 240 V ☐ Other - Please List:	
Charger Amps (A):	**Circuit Amps (A):**
3. EV Charger Manufacturer:	
Model No.:	**Charger Total Power (kW AC):**
Phase configuration of Charger: ☐ Single-Phase ☐ Three-Phase	
EV Charger Level: ☐ Level 1 ☐ Level 2 ☐ Level 3 (DC Fast Charging)	
Voltage of Charger: ☐ 120 V ☐ 208 V ☐ 240 V ☐ Other - Please List:	
Charger Amps (A):	**Circuit Amps (A):**

*Application Signature – Must be completed by Interconnection Customer **

I designate the individual or company listed as my Application Agent to serve as my agent for the purpose of coordinating with the Area EPS Operator on my behalf throughout the interconnection process.

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Initials

I hereby certify that, to the best of my knowledge, the information provided in this Interconnection Application is true and correct. I agree to abide by the Area EPS Operator's Interconnection Process and Technical Requirements.

_____ _____

Applicant Signature: Date: