## **Tier III Interconnection Application**

This form is for Distributed Energy Resources (DERs) that meets the eligibility of a Tier III track.

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			
Non-Refundable Processing Fee	☐ Yes			
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			
Possible Additional Documentation (See Technical Requirements for more details)				
<ul> <li>If requesting the DER export capacity to be limited, include information mate limiting capabilities.</li> </ul>	erial explaining the			
<ul> <li>Schematic drawings for all protection and control circuits, relay current circuits, and alarm/monitoring circuits (if applicable).</li> </ul>	iits, relay potential			
<ul> <li>Documentation that describes and details the operation of protection and coapplicable).</li> </ul>	ontrol schemes (if			
<ul> <li>Inverter Specification Sheet(s) (if applicable).</li> </ul>				

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: $\square$ Yes $\square$ N			
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):			
General *			
Choose one of the following and provide applicable data:			
☐ Application is for a new DER			
Aggregate DER nameplate rating of all generation and storage types (kW AC):			
☐ Application is for a Capacity Addition to an existing DER			
Capacity of existing DER (kW AC): Capacity proposed to be added (kW AC):			
☐ Application is for a Material Modification to an existing DER			
If Material Modification to existing facility, please describe:			
Distributed Energy Resource will be used for what reason? (Check all that apply):			
☐ To only supply power to Interconnection Customer ☐ To only supply power to the Area EP			
☐ To supply power to the Interconnection Customer and the Area EPS			
Type of Generator (check all that apply):			

Distributed Energy Resource Information *					
Phase configuration of Distributed Energy Resource(s): ☐ Single-Phase ☐ Three-Phase					
DER Type (Check al	I that apply and list aggregate ca	pacity of each type):			
☐ Solar Photovolta	ics Size (kW AC):	☐ Wind	Size (kW AC):		
☐ Storage	Size (kW AC):	☐ Diesel	Size (kW AC):		
☐ Natural Gas	Size (kW AC):	☐ Fuel Oil	Size (kW AC):		
☐ Hydro Type	Size (kW AC):	☐ Other	Size (kW AC):		
Please specify other	r:				
<b>Export Capacit</b>	ty Limitation *				
Is the Maximum Ph	ysical Export Capacity request th	e same as the namer	olate capacity: 🗆 Yes 🗆 No		
	If Yes, please cont	inue to the next section	on.		
If No, what is the M	aximum Physical Export Capacity	Requested (kWac):			
	ity Limited (e.g. though the use of nt?): □ Yes □ No	a control system, po	wer relay(s), or other similar devices		
	ase attach detailed information c	lescribing the method	of limiting export capacity.		
Interconnection	on Facilities Information	*			
	nterconnection/Transfer Method				
What type of BERT	increofficetion, transfer wiethor	a is i roposcu:			
□ None (DER is	never operating parallel with the	distribution system)			
Extended Parallel/Continuous (The normal state of the DER is to operate 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 (100 msec parallel or less) ☐ Limited Parallel (2 minutes or less)					
Will a transfer swit	ch be used with the DER?	s 🗆 No			
Manufacturer:	Model:		Load Rating (in Amps):		
Will a transformer,	owned by the Interconnection C	ustomer, be used	☐ Yes ☐ No		
between the DER and the Point of Common Coupling?					
Please show prope	osed location of protective interfa	ce equipment on prop	perty on the submitted site diagram.		

Transformer Data (For Interconnection Customer-Owned Transformer) (if applicable) (Ex. Transformers used for secondary voltage conversion or primary metered interconnections)					
(Ex. Transformers usea for	r seconaar <sub>.</sub>	y voitage (	conversion or primary mete	erea inter	connections)
What is the phase configuration of the transformer?		☐ Single Phase ☐ Three Phase			
Size (kVA):			Transformer Impedance On kVA B (%):		Base:
Transformer Volts: (Primary)	Delta:		Wye:		Wye Grounded:
Transformer Volts: (Secondary)	Delta:		Wye:		Wye Grounded:
Transformer Volts: (Tertiary)	Delta:		Wye:		Wye Grounded:
Transformer Fuse Data (Fo	r Intercon	nection Cu	stomer-Owned Fuse)		
Manufacturer:	Type:		Size:		Speed:
Interconnecting Circuit Breaker (For Interconnection Customer-Owned Circuit Breaker) (if applicable)					
Manufacturer:			Type:		
Load Rating (in Amps):		Interrupting Rating (In Amps): Trip Speed (Cycles):		ed (Cycles):	
Interconnection Protect	ive Relay	s: Please	show protective relay ma	anufactu	rer, model and type on
the one-line diagram.					
Current and Potential T	ransform	er Data: I	Please show CT ratios and	d CT/PT I	ocations on one-line
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Fill out all following sections which pertain to the proposed DER installation

Inverter Interconnected System Information – non ESS (if applicable)			
Aggregate Inverter Rating (kW AC):	Number of Total Inverters:		
Phase configuration of inverter(s): ☐ Single-P	hase   Three-Phase		
Voltage of Inverter(s):			
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:		

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 Re ☐ Time-of-Use Energy Management ☐ Increased S	duction ☐ No Export elf-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 a	mount 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 previo	ous 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): ☐ Sing	gle-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 In	formatio	n (if annli	cable)		
Prime Mover Information	iorinatio	ιι (ιι αρριι	Cablej		
Please indicate the prime mover:					
☐ Microturbine ☐ Reciprocating Engine	☐ Hydro	o □ Wind	□ Ot	her (please sp	ecify)
Generator type □ Induction □ Syr	nchronous				
Manufacturer: Mo	odel Name 8	Number:		Version:	
Summer Name Plate Rating:	kW <sub>ac</sub>	Summer Na	me Plate Rati	ng:	kW <sub>ac</sub>
Winter Name Plate Rating:	kVA <sub>ac</sub>	Winter Nam	ne Plate Ratin	g:	kVA <sub>ac</sub>
Rated Power Factor: Leading:			Lagging:		
Distributed Energy Resource Character  RPM Frequency:	istic Data (		ounding Resis		
<u>.</u>	•				
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Direct Axis Synchronous Reactance, $X_d$ :		Zero Seque	nce Reactanc	e, X <sub>0</sub> :	
Direct Axis Transient Reactance, $X'_d$ :		KVA Base:			
Direct Axis Subtransient Reactance, $X_d''$ :		Field Volts:			
Negative Sequence Reactance, $X_2$ :		Field Ampe	res:		
For Synchronous Generators 1 MW or larg excitation system, governing system and por reliability council criteria. A PSS may be det manufacturer's block diagram may not be s	ower system ermined to	stabilizer (PS	S) in accorda	nce with the re	egional

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, $X_d^{\prime\prime}$ :				

## **Additional Documentation**

On the one-line diagram, show the interconnection transformer and provide the transformer winding configuration, primary and secondary transformer voltage, transformer protection information and expected impedance. Show how the transformer will be protected to meet the NEC requirements.

See the Area EPS Operator's Technical Requirement for required information that needs to be on the one-line and site diagram and for example application documentation.

See the Interconnection Process for additional requirements related to Site Control and insurance documentation.

Acknowledgements – Must be completed by Interconnection Customer *			
	Initials		
The Interconnection Customer has opportunities to request a timeline extension			
during the interconnection process. Failure by the Interconnection Customer to			
meet or request an extension for a timeline outlined in the Interconnection Process			
could result in a withdrawn queue position and the need to re-apply.			

Application Cignoture Must be completed	h. Interseprentien Custemer *
Application Signature – Must be completed I	by Interconnection Customer *
I designate the individual or company listed as my Applic	ration Agent to serve as my
agent for the purpose of coordinating with the Area EPS	,
throughout the interconnection process.	Initials
I hereby certify that, to the best of my knowledge, the in Application is true and correct and I have appropriate Sit	•
Interconnection Process. I agree to abide by the Area EP: Technical Requirements.	S Operator's Interconnection Process and
Applicant Signature:	Date:
***Please print clearly or type and return completed a	long with any additional documentation*

\*\*\*Please print clearly or type and return completed along with any additional documentation\*\*\*