# **Interconnection Application**

Persons interested in applying for the interconnection of a distributed energy resource to the Utility's distribution system through the **Fast Track or Study Processes** are to fill out this Interconnection Application. The Interconnection Application is to be filled out completely by the applicant or as noted in each section of the application. The Utility will contact the applicant within 10 business days once the Interconnection Application and the corresponding processing fee is submitted to the Utility. The Utility will then notify the applicant of the completeness of their application. If the application is deemed incomplete by the Utility, the Utility will provide the applicant with a list of missing material. The applicant will then have 10 business days to provide the Utility with this information or request an extension, otherwise the application will be deemed incomplete and the applicant will lose their place in the queue. Section that are noted with \* are required to be filled out.

## **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	
Fast Track	
<ul> <li>\$100 + \$1/kW for Certified Systems</li> </ul>	
<ul> <li>\$100 + \$2/kW for Non-Certified Systems</li> </ul>	□ Yes
Study Process	
<ul> <li>\$1,000 + \$2/kW down payment. Additional study fees may apply.</li> </ul>	
One-line diagram	
<ul> <li>Please see Area EPS Operator's Technical Specification Manual (TSM) for more details.</li> </ul>	□ Yes
Documentation showing site control.	🗆 Yes
Site Diagram showing DER system layout (See TSM for more details)	🗆 Yes
Possible Additional Documentation (See TSM for more details)	

- If requesting the DER export capacity to be limited, include information material explaining the limiting capabilities.
- Schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).
- Documentation that describes and details the operation of protection and control schemes (if applicable).
- Inverter Specification Sheet(s) (if applicable).

Full Name (match name of electric service account, if applicable):				
Meter Number:	:			
	Phone:			

## Application Agent \*

Is the Customer using an Application Agent for this application?

*If Interconnection Customer is not using an Applicant Agent, please continue to next section.* 

🗆 No

Phone:

Application Agent: Company Name:

Email:

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):

General *					
Select Review Process:	□ Fast Track Pro	cess 🗆 S	Study Process		
Choose one of the following and pro	vide applicable da	ta:			
□ Application is for a new DER					
Aggregate DER nameplate ra	iting of all generati	on and storage types (k	W AC):		
Application is for a Capacity A	Addition to an exis	ting DER			
Capacity of existing DER (kW	AC):	Capacity proposed to	be added (kW AC):		
Application is for a Material I	Modification to an	existing DER			
If Material Modification to existing facility, please describe:					
Distributed Energy Resource will be	used for what reas	on? (Check all that app	ly):		
□ Net Metering	□ To only supply	power to Interconnecti	on Customer		
□ To only supply power to Area EPS					
Type of Generator (check all that app	oly): 🗆 lı	nverter	Induction or Synchronous		
Installed DER System Cost (before in	centives): \$				

Distributed Energy Resource Information *					
Phase configuration of Distributed Energy Resource(s):  Single-Phase  Three-Phase					
DER Type (Check all that apply and list aggregate capacity of each type):					
Solar Photovoltaics	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:					

## **Export Capacity Limitation \***

Is the Maximum Physical Export Capacity request the same as the nameplate capacity: 
U Yes 
No

*If Yes, please continue to the next section.* 

If No, what is the Maximum Physical Export Capacity Requested ( $kW_{ac}$ ):

Is the Export Capacity Limited (e.g. though the use of a control system, power relay(s), or other similar devices setting of adjustment?): Yes No

*If Yes, please attach detailed information describing the method of limiting export capacity.* 

Inte	Interconnection Facilities Information *						
Wha	t type of DER Interconnection/	Transfer Method is Proposed?					
	□ 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 (100msec parallel or less) □ Limited Parallel (2 minutes or less)							
Will	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          □ Yes         □ No          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.							

Transformer Data (For Inte (Ex. Transformers used for					••	-	ns)	
What is the phase configuration of the transformer?				□ Single Phase □ Three Phase			۲hree Phase	
Size (kVA):			Transform (%):	er Impedance	On kVA	Base:		
Transformer Volts: (Primary)	Delta:		Wye:			Wye Gro	ound	ed:
Transformer Volts: (Secondary)	Delta:		Wye:			Wye Gro	ound	ed:
Transformer Volts: (Tertiary)	Delta:		Wye:			Wye Gro	ound	ed:
Transformer Fuse Data (Fo	r Interconr	nection Cu	ıstomer-Owi	ned Fuse)		I		
Manufacturer:	Type:		Size:			Speed:		
Interconnecting Circuit E applicable)	Breaker (F	or Interc	onnection	Customer-Ow	ned Circu	uit Break	er) (	if
Manufacturer:			Type:					
Load Rating (in Amps):		Interrup	ting Rating (I	In Amps):	Trip Spe	rip Speed (Cycles):		
Interconnection Protection the one-line diagram.	ive Relays	s: Please	show prote	ective relay m	anufactu	rer, mod	el ar	nd type on
Current and Potential Tr	ansforme	er Data:	Please show	w CT ratios an	d CT/PT l	ocations	on	one-line
Fill out all fo	ollowing	sections v	which perta	in to the prop	oosed DEI	R installa	ition	I
Inverter Interconne	cted Sy	stem Ir	nformatio	on – non ES	S (if ap	plicabl	e)	
Aggregate Inverter Rating	(kW AC):			Number of To	otal Invert	ers:		
Phase configuration of inv	erter(s):		□ Single-P	Phase □ Thr	ee-Phase			
Voltage of Inverter(s):								
Inverter Manufacturer:								
1. Model No.				Certification	🗆 UL1	741-SA		UL 1741-SB
Inverter Rating (kW AC):				Number of U	nits of this	Model:		
2. Model No.				Certification	UL1	741-SA		UL 1741-SB
Inverter Rating (kW AC):				Number of U	nits of this	Model:		
3. Model No.				Certification	UL1	741-SA		UL 1741-SB
Inverter Rating (kW AC):				Number of U	nits of this	Model:		
4. Model No.				Certification	UL1	741-SA		UL 1741-SB
Inverter Rating (kW AC):				Number of U	nits 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 Reduction         Time-of-Use Energy Management       Increased Self-Consumption					
Please specify other:					
	rating Mode. Io Exchange				
If Export Only is Checked, select all that apply.         ESS Export is Allowed         Limited Export is Allowed (please specify export limit a					
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):					
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)						
<b>Prime Mover Informa</b>	ation					
Please indicate the prime more	ver:					
□ Microturbine □ Recipro	□ Microturbine □ Reciprocating Engine □ Hydro □ Wind □ Other (please specify)					
Generator type 🛛 Inductio	on 🛛 Synchronous					
Manufacturer:	Model Name	e & Number:	Version:			
Summer Name Plate Rating:	kW <sub>ac</sub>	Summer Name Plate	Rating:	kW <sub>ac</sub>		
Winter Name Plate Rating:	Winter Name Plate F	Rating:	kVA <sub>ac</sub>			
Rated Power Factor: Lea	ading:	Lagging	;:			

Distributed Energy Resource Characteristic Data (for Synchronous machines)				
RPM Frequency:	Neutral Grounding Resistor:			
Direct Axis Synchronous Reactance, $X_d$ :	Zero Sequence Reactance, X <sub>0</sub> :			
Direct Axis Transient Reactance, $X'_d$ :	KVA Base:			
Direct Axis Subtransient Reactance, $X_d''$ :	Field Volts:			
Negative Sequence Reactance, X <sub>2</sub> :	Field Amperes:			
<b>For Synchronous Generators 1 MW or larger</b> , 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, <i>R<sub>s</sub></i> :	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, $X''_d$ :				

#### **Additional Documentation**

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

Please see the Area EPS Operator's Technical Specification Manual (TSM) for requirements that need to be on the one-line and site diagram and for example application documentation.

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

### Interconnection Agreement \*

Propose DER interconnections that are also deemed Qualifying Facilities less than 40 kW AC under are eligible to sign the Utility's Uniform Contract for Cogeneration and Small Power Production Facilities. Included in this agreement are payment terms for excess power generated by the proposed DER system the Utility may purchase. In lieu of the Utility's Uniform Contract for Cogeneration and Small Power Production Facilities, the Interconnection Customer may choose to instead signed the Utility's Distribution Interconnection Agreement.

The Interconnection Customer request an Interconnection Agreement to be	
executed in lieu of the Utility's Uniform Contract for Cogeneration and Small	🗆 Yes
Power Production Facilities.	

🗆 No

## 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 as for a timeline outlined in the Interconnection	
Process could result in a withdrawn queue position and the need to re-apply.	
Propose DER interconnection to the Utility's distribution submitted under the Fast	
Track Process may be moved into the Study Process if engineering screens are failed	
during the Interconnection Application review. Interconnection Customer will be	
contacted to approve being moved into the Study Process.	

## 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.

Initials

I hereby certify that, to the best of my knowledge, the information provided in this Interconnection Application is true, and that I have appropriate Site Control in conformance with the Interconnection Process. I agree to abide by the Terms and Conditions of the Interconnection Process and will inform the Utility if the proposed DER system changes from the details listed in this Interconnection Application.

Applicant Signature:

Date:

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