

**Standard Interconnection Application
For Generating Facilities With Rated Capacities Greater Than 10 kW and Up To 100 kW AC**

X

A Customer-Generator applicant ("Applicant") hereby makes application to El Paso Electric Company ("EPE") to install and operate a generating facility with rated capacities greater than 10 kW and less than 100 kW AC and interconnected with the EPE utility system.

Written Applications should be submitted by mail, e-mail, or fax to El Paso Electric Company, as follows:

El Paso Electric Company
Attention: Renewables Development
El Paso Electric Company (Loc. 131)
P.O. Box 982
El Paso, Texas 79960
Fax Number: (915) 521-4418
E-Mail Address: smallrenewables@epelectric.com
El Paso Electric Contact Department: Renewables Development

An application is a Complete Application when it provides all applicable information required below. (Additional information to evaluate a request for interconnection may be required and will be so requested from the Interconnection Applicant by El Paso Electric Company after the application is deemed complete).

Application Fee Must Accompany this Application

System >10 kW: \$100.00

SECTION 1. APPLICANT INFORMATION

Legal Name of Interconnecting Applicant (or, if an Individual, Individuals Name)

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Facility Location (if different from above):

Telephone (Day): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

EPE Account Number: _____
(Existing Account Number, if generator is to be interconnected on the Customer side of EPE's revenue meter)

Type of Interconnect Service Applied for (choose one):

Network Resource Energy Only Load Response (no export) Net Metering

SECTION 2. GENERATOR QUALIFICATIONS

Data apply only to the Generating Facility, not the Interconnection Facilities.

Energy Source: Solar Wind Hydro Hydro Type (e.g., Run-of-River) _____
 Diesel Natural Gas Fuel Oil Other (state type) _____

Prime Mover: Fuel Cell Reciprocating Engine Gas Turbine Steam Turbine
 Microturbine PV Other (describe)

Type of Generator: Synchronous Induction Inverter

Generator Nameplate Rating: _____ kW (Typical); Generator Nameplate KVA: _____

Interconnection Customer or Customer-Side Load: _____ kW (if none, so state)

Typical Reactive Load (if known): _____

Maximum Physical Export Capability Requested: _____ kW

List components of the Generating Facility Equipment Package that are currently certified:

	<u>Equipment Type</u>	<u>Certifying Entity</u>
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

Is the prime mover compatible with the certified protective relay package? _____ Yes _____ No

Generator (or solar collector)

Manufacturer, Model Name & Number: _____
Version Number: _____
Nameplate Output Power Rating in kW: _____ (Summer) _____ (Winter)
Nameplate Output Power Rating in kVa: _____ (Summer) _____ (Winter)

Individual Generator Power Factor

Rated Power Factor: _____ Leading: _____ Lagging: _____

Total number of Generators to be interconnected pursuant to this Interconnection Application: _____

Elevation: _____ Single Phase: _____ Three Phase: _____

Inverter Manufacturer, Model Name & Number (if used): _____

List of adjustable set points for the protective equipment or software: _____

Note: A completed Power Systems Load Flow data sheet must be supplied with the Interconnection Application.

Generating Facility Characteristic Data (for inverter-based machines)

Max design fault contribution current: _____ Instantaneous or RMS? _____
Harmonics Characteristics: _____
Start-up Requirements: _____

Generating Facility Characteristic Data (for rotating machines)

RPM Frequency: _____ Neutral Grounding Resistor (if applicable): _____

Synchronous Generators

Direct Axis Synchronous Reactance, Xd: _____ P.U.
Direct Axis Transient Reactance, X'd: _____ P.U.
Direct Axis Subtransient Reactance, X''d: _____ P.U.
Negative Sequence Reactance, X2: _____ P.U.
Zero Sequence Reactance, X0: _____ P.U.
KVA Base: _____ Field Volts: _____ Field Amperes: _____

Induction Generators*

Motoring Power (kW): _____	12t or K (Heating Time Constant): _____
Rotor Resistance, Rr: _____	Stator Resistance, Rs: _____
Stator Reactance, Xs: _____	Rotor Reactance, Xr: _____
Magnetizing Reactance, Xm: _____	Short Circuit Reactance, Xd'': _____
Exciting Current: _____	Temperature Rise: _____
Frame Size: _____	Design Letter: _____
Reactive Power Required (Vars-No Load) _____	Reactive Power Required (Vars-Full Load) _____
Total Rotating Inertia, H: _____	Per Unit kVa Base _____

*Note: Please contact El Paso Electric Company prior to submitting the interconnection Application to determine if the specified information above is required.

Excitation and governor system Data for Synchronous Generators Only)

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may not be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

SECTION 3. INTERCONNECTION FACILITIES INFORMATION

Will a transformer be used between the generator and the Point of Common Coupling? _____ Yes _____ No

Transformer Data (If Applicable for Interconnection Customer-Owned Transformer)

Is the transformer: _____ single phase _____ three phase?
 Transformer Impedance: _____ percent on _____ kVA Base _____
 If Three Phase: _____
 Transformer Primary: _____
 Transformer Secondary: _____
 Transformer Tertiary: _____ Volts _____ Delta _____ Wye _____ Wye Grounded

Transformer Fuse Data (If Applicable for Interconnection Customer-Owned Fuse)

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: _____ Type _____ Size: _____ Speed: _____

Interconnecting Circuit Breaker (If Applicable)

Manufacturer: _____ Type: _____
 Load Rating (Amps): _____ Interrupt Rating (Amps): _____ Trip Speed (Cycles): _____

Interconnection Protective Relays (If Applicable)

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

	<u>Setpoint Function</u>	<u>Minimum</u>	<u>Maximum</u>
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
 Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
 Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Current Transformer Data (If Applicable)

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____
 Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____
 Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Potential Transformer Data (If Applicable)

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____
 Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____
 Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

SECTION 4. GENERAL INFORMATION

Enclose copy of site electrical one-line diagram showing the configuration of all Generating Facility equipment, current and potential circuits, and protection and control schemes.

This one-line diagram must be signed and stamped by a licensed Professional Engineer if the Generating Facility is larger than 50 kW. Is One-Line Diagram enclosed? _____ Yes _____ No

Enclose a copy of any site documentation that indicates the precise physical location of the proposed Generating Facility (e.g. USGS topographic map or other diagram or documentation).

Proposed location of protective interface equipment on property (include address if different from the Interconnection Customer's address): _____

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes Is available documentation enclosed? _____ Yes _____ No

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable). Are schematic drawings enclosed? _____ Yes _____ No

Customer-Applicant shall install wiring and REC meter socket for a REC meter to measure the output of the medium renewable distributed generation facility. The REC meter socket shall be identified and labeled "REC Meter" and accessible and located near EPE's retail electric service billing metering. X
X
X

Should the Customer-Applicant modify the approved qualifying facility to either expand or reduce the facility's maximum rated capacity, the Customer-Applicant must submit a *Standard Expansion Application* for review and approval by EPE. X
A *Standard Expansion Application* executed by the Customer and Company amends the Customer's Interconnection Agreement. X
X
X

SECTION 5. APPLICANT SIGNATURE

I hereby certify that, to the best of my knowledge, the information provided in the Interconnection Application is true and correct. I also agree to install a Warning Label provided by El Paso Electric Company on or near my service meter location. Generating systems must be compliant with IEEE, NEC, ANSI, and UL standards, where applicable. By signing below, the Applicant also certifies that the installed generating equipment meets the appropriate preceding requirement(s) and can supply documentation that confirms compliance.

Signature of Applicant: _____

Title: _____

Date: _____

SECTION 6. INFORMATION REQUIRED PRIOR TO PHYSICAL INTERCONNECTION

(Not required as a part of the application, unless available at time of application)

Installing Electrician: _____

Firm: _____

License Number: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone: _____

Installation Date: _____

Interconnection Date: _____

Signed (Inspector - If required): _____

Date: _____

(In lieu of signature of Inspector, a copy of the final inspection certificate may be attached.)

**Standard Expansion Application
For Certified Inverter-Based Generating Facilities
With A Rated Capacity Greater Than 10 kW and Up To 100 kW AC**

Processing Fee: \$100.00 plus \$1.00 for each additional kW above 100 kW

Interconnection Customer

Name: _____ Contact Person: _____

Mailing Address: _____ City: _____ State: _____ Zip: _____

Telephone (Day): _____ E-Mail Address: _____

Account Number: _____

Engineering Firm

Firm: _____ Contact Person: _____

Telephone (Day): _____ E-Mail Address: _____

Generating Facility Information

Service Address: _____ City: _____ State: _____ Zip: _____

Prime Mover: Photovoltaic Reciprocating Engine Fuel Cell Turbine Other (describe) _____

Energy Source: Solar Wind Hydro Diesel Natural Gas Fuel Oil Other (describe) _____

Estimated Installation Date: _____ Estimated In-Service Date: _____

Additional Generator Nameplate Rating (kW AC): _____

Additional Inverter Nameplate Rating (kW) (kVa) (AC Volts): _____

Single Phase: _____ Three Phase: _____ **Total New System Design Capacity (AC):** _____ (kW) _____ (kVA)

Expected first year output : _____ (kWh)

Is equipment UL1741 Listed? Yes _____ No _____ If Yes, attach manufacturer's cut-sheet showing UL certification.

List all certified components of the Generating Facility equipment:

<u>Equipment Type (Manufacturer, Model)</u>	<u>Certifying Entity</u>
1. _____	_____
2. _____	_____

Enclose a copy of the site's electrical one-line diagram showing the configuration of all Generating Facility equipment including the proposed location of the meters and the AC disconnect.

Interconnection Customer Signature

I hereby certify that, to the best of my knowledge, the information provided in this Expansion Application is true and correct. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Generating Facility No Larger than 10 kW pursuant to the description contained in the New Mexico Interconnection Manual, Exhibit 3A, and further agree to notify EPE of the expansion completion when the additional equipment has been installed.

Name: _____ Signature: _____ Date: _____

Utility Signature

The undersigned Utility agrees to abide by the Terms and Conditions contained in the New Mexico Interconnection Manual, Exhibit 3A, and that optional paragraph 6.0 indemnification _____ does apply _____ does not apply.

Name: _____ Signature: _____ Date: _____