

ATTACHMENT I INTERCONNECTION REQUEST

EDC: _____

Designated Contact Person: _____

Address: _____

Telephone Number: _____

Fax: _____

E-Mail Address: _____

An Interconnection Request is considered complete when it provides all applicable and correct information required below. Documentation of site control must be submitted with the Interconnection Request.

Preamble and Instructions

A Generator which requests Interconnection must submit this Interconnection Request by hand delivery, mail, e-mail, or fax to the EDC.

Processing Fee or Payment:

Table 1 Fees			
Process	Generator Applicability*	Application Fee	Each Study Fee
Fast Track	0-2MW	\$500	Actual Cost Based
Study	(1) is larger than 2 MW but no larger than 20 MW, (2) is 2 MW or less and is not certified, or (3) is 2 MW or less and is certified but did not pass the Fast Track Process or the 10 kW Inverter Process.	\$1000	Actual Cost Based

ATTACHMENT I INTERCONNECTION REQUEST

Each Generating Facility will have a One Line Diagram submitted and secured as an Attachment to the Interconnection Request (Attachment I). A one line electrical schematic is a diagram, drawing, or sketch that details the elements of a generating system, such as the elements of an electrical or electronic circuit or the elements of a logic diagram for a generator.

Generating Facility Information

Legal Name of the Generator (or, if an individual, individual's name)

Name: _____

Contact Person: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Facility Location (if different from above): _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

Alternative Contact Information (if different from the Generator)

Contact Name: _____

Title: _____

Address: _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

APPLICATION IS FOR:

New Generating Facility? Yes ___ No ___

Capacity addition to or Material Modification of an existing Generating Facility:

Yes ___ No ___

Commencement of participation in the wholesale markets by an existing Generating Facility:

Yes ___ No ___

ATTACHMENT I

INTERCONNECTION REQUEST

If capacity addition to or Material Modification of an existing facility, please describe: _____

Will the Generating Facility be used for any of the following?

To Net Meter? Yes ____ No ____

To Supply Power to the Generating Facility? Yes ____ No ____

To Supply Power to Others? Yes ____ No ____

Is the Interconnection Request for::

A retail customer interconnecting a new Generating Facility that will produce electric energy to be consumed only on the retail customer's site? Yes ____ No ____

If onsite use of power, describe the mode of operation: (Please Check all that Apply)

- ☐ Peak Shaving
- ☐ Demand Management
- ☐ Primary Power/Base Load
- ☐ Combined Heat and Power or Cogeneration
- ☐ Stand By/Emergency/Back-up

Paralleling:

Will the Generating Facility operate in parallel with the EDC for any amount of time?

Yes ____ No ____

If No: Then Generator is operating as Open Transition

If Yes: Will the Generating Facility operate in parallel with EDC for longer than 100 milliseconds

Yes ____ No ____

If No: Then Generator is operating as Closed Transition

If Yes: Then Generator is operating as Parallel Operation

Will it vary by season? (please describe) _____

A Qualifying Facility where 100% of the output will be sold to its host utility?

Yes ____ No ____

A Generator interconnecting a new Generating Facility that plans to participate in the wholesale markets? Yes ____ No ____

An existing Generating Facility commencing participation in the wholesale markets?

Yes ____ No ____

ATTACHMENT I

INTERCONNECTION REQUEST

For installations at locations with existing electric service to which the proposed Generating Facility will interconnect, provide:

(Local Electric Service Provider) _____

(Existing Account Number) _____

Contact Name: _____

Title: _____

Address: _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

Requested Point of Interconnection: _____

Generating Facility's Requested In-Service Date: _____

EDC Account # _____

EDC Meter # _____

Will there be a new service request / or new construction associated with this generation project?

Generating Facility Information (For each Generator if there are than one)

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 ___ Micro-turbine ___ PV ___ Other

Type of Generator: ___ Synchronous ___ Induction ___ Inverter _____

Generator Nameplate Rating: _____ kW (Typical)

ATTACHMENT I

INTERCONNECTION REQUEST

Generator Nameplate kVAR: _____

Generator Nameplate BIL Rating: _____ kV

Generating Facility or Customer-Site 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:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Is the prime mover compatible with the certified protective relay package?

____ Yes ____ No

Generator _____

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 in wind farm to be interconnected pursuant to this
Interconnection Request: _____ Elevation: _____ ____ Single phase ____ Three phase

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

ATTACHMENT I

INTERCONNECTION REQUEST

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 Request.

Generating Facility Characteristic Data (for inverter-based machines)

Max design fault contribution current: _____ Instantaneous ____ or RMS? ____

Harmonics Characteristics: _____

Start-up requirements: _____

Available fault current: _____

Generating Facility Characteristic Data (for rotating machines)

RPM Frequency: _____

Neutral Grounding Resistor (If Applicable): _____

Synchronous Generators:

Direct Axis Synchronous Reactance, X_d : _____ Per Unit

Direct Axis Transient Reactance, X_d' : _____ Per Unit

Direct Axis Sub transient Reactance, X_d'' : _____ Per Unit

Negative Sequence Reactance, X_2 : _____ Per Unit

Zero Sequence Reactance, X_0 : _____ Per Unit

KVA Base: _____

Field Volts: _____

Field Amperes: _____

Induction Generators:

Motoring Power (kW): _____

I_2^2t or K (Heating Time Constant): _____

Rotor Resistance, R_r : _____ Per Unit

Stator Resistance, R_s : _____ Per Unit

Stator Reactance, X_s : _____ Per Unit

Rotor Reactance, X_r : _____ Per Unit

Magnetizing Reactance, X_m : _____ Per Unit

ATTACHMENT I

INTERCONNECTION REQUEST

Short Circuit Reactance, X_d'' : _____ Per Unit
Exciting Current: _____ Amps
Temperature Rise: _____
Frame Size: _____
Design Letter: _____
Reactive Power Required In Vars (No Load): _____
Reactive Power Required In Vars (Full Load): _____
Total Rotating Inertia, H: _____ Per Unit on kVA Base

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 be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

Interconnection Facilities Information

An Interconnection transformer is required unless waived by the Interconnecting EDC.

Transformer Data (If Applicable, for Generating Facility-Owned Transformer):

Is the transformer: ____ single phase ____ three phase? Size: _____ kVA
Transformer Impedance: _____ % on _____ kVA Base
Transformer Positive-Sequence Short Circuit Impedances (pu): Z_{ps} = _____, Z_{pt} = _____, Z_{st} = _____
Transformer Zero-Sequence Impedances (pu): Z_{pm0} = _____, Z_{sm0} = _____, Z_{mg0} = _____
Transformer Neutral Grounding Reactor/Resistor Impedance (Ohms): _____
Transformer BIL Rating _____ kV
If Three Phase:
Transformer Primary: _____ Volts _____ Delta _____ Wye _____ Wye Grounded
Transformer Secondary: _____ Volts _____ Delta _____ Wye _____ Wye Grounded
Transformer Tertiary: _____ Volts _____ Delta _____ Wye _____ Wye Grounded

Transformer Fuse Data (If Applicable, for Generating Facility-Owned Fuse):

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

Manufacturer: _____ Type: _____ Size: _____ Speed: _____

ATTACHMENT I

INTERCONNECTION REQUEST

Interconnecting Circuit Breaker (if applicable):

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

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

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

Set point Function	Minimum	Maximum
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: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Current Transformer Data (If Applicable):

ATTACHMENT I

INTERCONNECTION REQUEST

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

Manufacturer: _____

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

Manufacturer: _____

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

Potential Transformer Data (If Applicable):

Manufacturer: _____

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

Manufacturer: _____

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

General Information

Enclose two D-sized (24" x 36") copies of site electrical one-line diagram showing the configuration of all Generating Facility equipment (unless waived by the EDC), current and potential circuits, and protection and control schemes. This D-sized one-line diagram must be signed and stamped by a licensed Professional Engineer if the Generating Facility is larger than 50 kW. Are two copies of One-Line Diagram Enclosed? ____Yes ____No

Enclose 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 Generating Facility'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 including CT's wiring connection and their ratios, relay potential circuits including Potential Transformer's (PT's) wiring connection and their ratios, any alarm/monitoring circuits (if applicable).

Are Schematic Drawings Enclosed? ____Yes ____No

ATTACHMENT I

INTERCONNECTION REQUEST

Applicant Signature

I have read the Guidelines for Generator Interconnection – Fast Track and Study Processes and agree to abide by all terms and conditions as provided for in these Guidelines. I understand that my Interconnection Request may be rejected by the Interconnecting EDC or there may be a delay in processing my Interconnection Request if the Interconnecting EDC determines that I have not complied with these Guidelines.

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

For Generator: _____ Date: _____