APPALACHIAN POWER
An AEP Company
BOUNDLESS ENERGY

LEVELS 2 AND 3 INTERCONNECTION REQUEST FORM FOR SMALL GENERATING FACILITY

Section 1. Interconnection Customer Information

Name:_____
Contact person:_____
Mailing address:_____
City, State, Zip:_____
Telephone (Day):_____(Evening):_____
Fax:_____Email:_____
Alternative contact information
Contact Name:_____
Title:_____
Mailing Address:_____
City, State, Zip:_____
Telephone (Day):_____(Evening):_____
Fax:_____Email:_____

Application is for: New Small Generating Facility_____Capacity addition_____
If capacity addition to existing facility, please describe:
_____

The Small Generating Facility will supply: Interconnection Customer__ Others ___
Point of Interconnection:_____
Interconnection Customer's requested in-service date:_____

This Interconnection Request Form is considered complete when the Interconnection Customer provides all applicable and correct information required in this Schedule 6 and complies with the processing fee in Section 2 of this Schedule.

An Interconnection Customer who requests a commission jurisdictional interconnection must submit this Interconnection Request Form by hand delivery, mail, email, or fax to the utility.

Request for:

Level 2 Process _____
Level 3 Process _____
Standby Generator / Closed Transition _____

Section 2. Processing Fee and Deposit

If the interconnection request is submitted as Level 2, the nonrefundable processing fee payable to the utility is $1,000.

If the interconnection request is submitted as Level 3, the IC shall submit to the utility a nonrefundable processing fee of $1,000. Upon being designated by the Utility as a Project A or if the IC elects to proceed with the Project B, Level 3 Interconnection Customers shall also be obligated to submit an interconnection request study deposit of $10,000 plus $1.00 per kW_{AC}.

An IC transferring from the Level 1 process shall pay the nonrefundable processing fee of $1,000 minus any previously paid Level 1 processing fee.

An IC transferring from the Level 2 to the Level 3 process shall not be required to pay an additional $1,000 processing fee.

If the SGF is a standby generating facility, the interconnection request shall be designated a Project A and the IC shall be obligated to submit an interconnection request study deposit of $5,000 in conjunction with the initial study agreement as provided for in 20VAC5-314-38 and 20VAC5-314-70.

If the interconnection request is submitted solely due to a transfer of ownership or change of control of the SGF, the nonrefundable processing fee is $500.

Section 3. Small Generating Facility Information

Data apply only to the small generating facility, not the interconnection facilities.

SGF Location (if different from information listed in Section 1 of this Schedule):

Site Address: _____

City, State, Zip: _____

Utility and Account Number: _____

Energy Service Provider and Account Number: _____

If not available prior to the completion of the Interconnection Request Form, the Interconnection Customer must provide an address for SGF that has been issued conforming to the 911 emergency response group for the area to the utility within 15 business days of issuance.

Primary energy source

Choose one:

Renewable	**Nonrenewable**
☐ Solar – Photovoltaic ☐ Solar – Thermal ☐ Biomass – Landfill Gas ☐ Biomass – Manure DigesterGas ☐ Biomass – Directed Biogas ☐ Biomass – Solid Waste ☐ Biomass – Sewage Digester Gas ☐ Biomass – Wood ☐ Biomass – Other (please specify) ☐ Hydro Power – Run of River ☐ Hydro Power – Storage ☐ HydroPower – Tidal ☐ Hydro Power – Wave ☐ Wind ☐ Geothermal☐ Battery ☐ Other (please specify)	☐ Fossil Fuel – Diesel ☐ Fossil Fuel – Natural Gas (not waste) ☐ Fossil Fuel – Oil ☐ Fossil Fuel – Coal ☐ Fossil Fuel – Other (please specify) ☐ Other (please specify)

Prime mover

Choose one:

☐ Photovoltaic (PV) ☐ Fuel Cell ☐ Reciprocating Engine ☐ Gas Turbine	☐ Steam Turbine ☐ Micro-Turbine ☐ Other, including Combined Heat and Power (please specify)

Type of generator

Choose one:

☐ Inverter-Based Machine ☐ Induction ☐ Synchronous ☐ Other (please specify)	

Additional comments

_____
_____
_____

Is the SGF located in utility's service area? Yes __No __

If no, please provide name of local provider:_____

Generator nameplate rating:_____ kW _____ kVAR

Interconnection customer or customer-site load:_____kW

Typical reactive load:_____

Maximum generating capacity requested:_____kW_{AC}

List components of the small generating facility equipment package that are currently certified:

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

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

Yes: ____ No: ____

Generator (or solar collector)

Manufacturer, Model Name, and 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, and Number:_____

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.

Small Generating Facility Characteristic Data (for inverter-based machines)

Max design fault contribution current:_____Instantaneous_____or RMS____

Harmonics characteristics:_____
Start-up requirements:_____

Small Generating Facility Characteristic Data (for rotating machines)

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

Synchronous Generators:

Direct Axis Synchronous Reactance, X_d:_____P.U.
Direct Axis Transient Reactance, X_d:_____P.U.
Direct Axis Subtransient Reactance, X_d:_____P.U.
Negative Sequence Reactance, X_2:_____P.U.
Zero Sequence Reactance, X_0:_____P.U.
KVA Base:_____
Field Volts:_____
Field Amperes:_____

Induction Generators:

Motoring Power (kW):_____

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

Rotor Resistance, R_r:_____

Stator Resistance, R_S:_____

Stator Reactance, X_S:_____

Rotor Reactance, X_r:_____

Magnetizing Reactance, X_m:_____

Short Circuit Reactance, X_d:_____

Exciting Current:_____

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.

Section 4. Customer's Interconnection Facilities Information

Will a transformer be used between the generator and the point of interconnection?

Yes_____No _____

Will the transformer be provided by the IC? Yes_____No _____

Transformer Data (If applicable, for IC-owned transformer):

Is the transformer: Single Phase__Three Phase_____Size: kVA_____

Transformer Impedance:_____% on_____kVA base

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 IC-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):____Interrupting Rating (amps):_____Trip Speed (cycles):_____

Interconnection Protective Relays (if applicable):

If Microprocessor-Controlled:

Manufacturer:_____Type:_____

Model No._____Firmware ID:_____Instruction Book No. _____

List of functions and adjustable setpoints for the protective equipment or software:

	Setpoint 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: _____

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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:_____

Potential Transformer Data (if applicable):

Manufacturer:_____

Type:_____Accuracy Class:_____Proposed Ratio Connection:_____

Manufacturer:_____

Type:_____Accuracy Class:_____Proposed Ratio Connection:_____

Section 5. General Information

Enclose a copy of the site electrical one-line diagram showing the configuration of the small generating facility equipment, current and potential circuits, and protection and control schemes.

Enclose a copy of any site documentation that indicates the precise physical location of the proposed SGF (e.g., United States Geological Survey topographic map or other diagram or documentation).

Describe the proposed location of the protective interface equipment on the property:_____

Enclose a 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 or monitoring circuits (if applicable).

Are schematic drawings enclosed? Yes_____No_____

Section 6. Site Control

Enclose a copy of the site control documentation. Any information appearing in public records may not be labeled confidential. (Confidential information is discussed in 20VAC5-314-110.) Site control may be demonstrated through:

1. Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the SGF;

2. An option to purchase or acquire a leasehold interest in a site for such purpose;

3. An exclusive or other business relationship between the IC and the entity having the right to sell, lease, or grant the IC the right to possess or occupy a site for such purpose; or

4. An existing permanent service metered account with the utility at the site and in the name of the IC.

Section 7. Interconnection Customer Signature

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

Signature:_____Date:_____

Section 8. Utility Acknowledgment of Receipt

Signed:_____
Title:_____
Utility:_____
Date:_____

Utility signature signifies only receipt of this form, in compliance with 20VAC5-314-50.