MUSCLE SHOALS ELECTRIC BOARD

APPLICATION FOR INTERCONNECTION OF DISTRIBUTED GENERATION

Tier 2 (Greater than 50 kW)

This Application is considered complete when it provides all applicable and correct information required below.

Participant Information

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Location of Proposed Generation (if different): _____

Telephone (Day): _____ (Evening): _____

E-Mail Address: _____

Electric Service Account Number: _____

PROJECT DESIGN/ENGINEERING (as applicable)

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____ Representative: _____

Email Address: _____

PE License: _____ State: _____

ELECTRICAL CONTRACTOR (Licensed Electrical Contractor is Required)

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____ Representative: _____

Email Address: _____

Contractor's License #: _____ City/County/State: _____

GENERATING FACILITY INFORMATION

Photovoltaic: _____ Wind: _____ Other _____

System Rating: _____ (kW) Annual Estimated Generation: _____ (kWh)

(Copy this page as required for additional generators)

SYNCHRONOUS GENERATOR DATA (if applicable)

Identification per Single Line Drawing: _____

Total number of units with listed specifications on site: _____

Manufacturer: _____

Type: _____ Date of Manufacture: _____

Serial Number (each):

Phases: Single _____ Three _____ R.P.M.: _____ Frequency (Hz): _____

Rated Output (for one unit): _____ Kilowatt _____ Kilovolt-Ampere

Rated Power Factor (%): _____ Rated Voltage (Volts): _____ Rated Amperes: _____

Field Volts: _____ Field Amps: _____ Motoring power (kW): _____

Synchronous Reactance (Xd): _____ % on _____ KVA base

Transient Reactance (X'd): _____ % on _____ KVA base

Negative Sequence Reactance (Xs): _____ % on _____ KVA base

Sequence Reactance (Xo): _____ % on _____ KVA base

Neutral Grounding Resistor Size (if applicable): _____

I_2^2t or K (heating time constant): _____

Additional information: _____

INDUCTION GENERATOR DATA (if applicable)

Rotor Resistance (Rr): _____ ohms Stator Resistance (Rs): _____ ohms

Rotor Reactance (Xr): _____ ohms Stator Reactance (Xs): _____ ohms

Magnetizing Reactance (Xm): _____ ohms Short Circuit Reactance (Xd"): _____ ohms

Design letter: _____ Frame Size: _____

Exciting Current: _____ Temp Rise (deg C^o): _____

Reactive Power Required: _____ VARS (no load): _____

VARS (full load) Additional information: _____

PRIME MOVER (if applicable)

Identification per Single Line Diagram _____ Unit Number: _____

Type: _____

Manufacturer: _____

Serial Number: _____ Date of manufacture: _____

H.P. Rated: _____ H.P. Max.: _____ Inertia Constant: _____ lb.-ft.^{2}

Energy Source (hydro, wind, etc.) _____

_____

INVERTER DATA (if applicable)

Manufacturer: _____ Model: _____

Rated Power Factor (%): _____ Rated Voltage (Volts): _____ Rated Amperes: _____

Inverter Type (ferroresonant, step, pulse-width modulation, etc): _____

Single or Three Phase _____ Type commutation: _____ forced line _____

Harmonic Distortion: Maximum Single Harmonic (%) _____ Maximum Total Harmonic (%) _____

POWER CIRCUIT BREAKER (if applicable)

Manufacturer: _____ Model: _____

Rated Voltage (*kilovolts):* _____ Rated ampacity *(Amperes):* _____

Interrupting rating *(Amperes)*: _____ BIL Rating: _____

Interrupting medium / insulating medium (ex. Vacuum, gas, oil _____ / _____

Control Voltage (Closing): _____ (Volts) AC DC

Control Voltage (Tripping): _____ (Volts) AC DC Battery Charged Capacitor

Close energy: Spring Motor Hydraulic Pneumatic Other: _____

Trip energy: Spring Motor Hydraulic Pneumatic Other: _____

Bushing Current Transformers: _____ (Max. ratio) Relay Accuracy Class: _____

Multi ratio? No Yes: (Available taps) _____

Description of Control System _____

_____

_____

ATTACHMENT 3

Attach support information to show testing and listing by a Nationally Recognized Laboratory for compliance with the codes and standards outlined in 1.4.1 – 1.4.6 for the proposed system.

Estimated Installation Date: _____Estimated In-Service Date: _____
List components of the Generating Facility equipment package that are currently certified:

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

ADDITIONAL INFORMATION – Single Line Diagram

In addition to the items listed above, attach a detailed single-line diagram of the proposed facility, all applicable elementary diagrams, major equipment, (generators, transformers, inverters, circuit breakers, protective relays, batteries, number and location of PV Panels, meter, disconnect switch, etc.) specifications, test reports, etc., and any other applicable drawings or documents necessary for the proper design of the interconnection. Also provide the address or grid coordinates of the facility.

PERMISSION TO INTERCONNECT

Participant must not operate its generating facility in parallel with MSEB's system until Participant receives authorization for parallel operation from MSEB. Unauthorized parallel operation could result in injury to persons and /or damage to equipment and/or property for which the Participant shall be liable.

INTERCONNECTION PARTICIPANT SIGNATURE

I hereby certify that, to the best of my knowledge, the information provided in this Application is true.

Signed: _____

Title: _____ Date: _____