

MOON LAKE ELECTRIC ASSOCIATION, INC.

**Application for Operation of  
Customer-Owned Generation**

**This application should be completed as soon as possible and returned to the Moon Lake Electric Association, Inc. (the “Cooperative”) Customer Service representative in order to begin processing the request. See Customer Guidelines for Electric Power Generator Installation and Interconnection for additional information.**

*INFORMATION: This application is used by the Cooperative to help determine the required equipment configuration for the Customer interfaced interconnection. Every effort should be made to supply as much information as possible.*

**PART 1**

**OWNER/APPLICANT INFORMATION**

Company or Individual who will own the generation: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Representative: \_\_\_\_\_ Phone Number: \_\_\_\_\_

**PROJECT DESIGN/ENGINEERING (ARCHITECT) INFORMATION**

Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Representative: \_\_\_\_\_ Phone Number: \_\_\_\_\_

**ELECTRICAL CONTRACTOR**

Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Representative: \_\_\_\_\_ Phone Number: \_\_\_\_\_

**PROVIDE PLANNED DATES AS FOLLOWS:**

**TESTING:** \_\_\_\_\_

**START-UP:** \_\_\_\_\_

**FULL OPERATION:** \_\_\_\_\_

**TYPE OF GENERATOR AND GENERATOR RATING**

Photovoltaic: \_\_\_\_\_ Wind: \_\_\_\_\_ Microturbine: \_\_\_\_\_

Diesel Engine: \_\_\_\_\_ Gas Engine: \_\_\_\_\_ Turbine: \_\_\_\_\_

Other: \_\_\_\_\_

Generator Rating: \_\_\_\_\_ (kW) Annual estimated Generation : \_\_\_\_\_ (kWh)

**DESCRIPTION OF PROPOSED INSTALLATION AND OPERATION**

Give a general description of the proposed installation, including a detailed description of its planned location and when you plan to install the generator.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Provide a description of the planned operation) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

(Provide information as to how much power and energy will be injected into the distribution system as well as daily, monthly, and season injection patterns) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Mode of Operation**

Isolated: \_\_\_\_\_ Paralleling: \_\_\_\_\_ Power Export: \_\_\_\_\_

**ESTIMATED SITE ELECTRICAL LOAD**

Location of Site: \_\_\_\_\_

Total Site Electrical Load: \_\_\_\_\_ (kW)

Residential: \_\_\_\_\_ Commercial: \_\_\_\_\_ Industrial: \_\_\_\_\_

**Please furnish a one-line electrical drawing of your proposed installation.**

**END OF PART 1 (Please complete the sign-off area at the end of this document)**

## PART 2

(Complete all applicable items. Copy this page as required for each additional generators)

### SYNCHRONOUS GENERATOR DATA

Unit Number: \_\_\_\_\_ 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): \_\_\_\_\_  
Rate 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  
Subtransient Reactance (X''d): \_\_\_\_\_ % on \_\_\_\_\_ KVA base  
Negative Sequence Reactance (Xs): \_\_\_\_\_ % on \_\_\_\_\_ KVA base  
Zero Sequence Reactance (Xo): \_\_\_\_\_ % on \_\_\_\_\_ KVA base  
Neutral Grounding Resistor (if applicable): \_\_\_\_\_  
\_\_\_\_\_  
I2 2t or K (heating time constant): \_\_\_\_\_  
Additional information: \_\_\_\_\_  
\_\_\_\_\_

### INDUCTION GENERATOR DATA

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°): \_\_\_\_\_  
Reactive Power Required: \_\_\_\_\_ Vars (no load), \_\_\_\_\_ Vars (full load)  
Additional information: \_\_\_\_\_  
\_\_\_\_\_

### PRIME MOVER (Complete all applicable items)

Unit Number : \_\_\_\_\_ Type: \_\_\_\_\_ Manufacturer: \_\_\_\_\_  
Serial Number : \_\_\_\_\_ Date of manufacturer: \_\_\_\_\_  
H.P. Rated: \_\_\_\_\_ H.P. Max.: \_\_\_\_\_ Inertia Constant: \_\_\_\_\_ Lb.-ft.2  
Energy Source (hydro, steam, wind, etc.): \_\_\_\_\_  
\_\_\_\_\_

### GENERATOR TRANSFORMER (Complete all applicable items)

TRANSFORMER between generator and utility system

Generator unit number : \_\_\_\_\_ Date of manufacturer: \_\_\_\_\_

Manufacturer: \_\_\_\_\_  
 Serial Number: \_\_\_\_\_  
 High Voltage: \_\_\_\_\_ kV, Connection: Delta WYE, Neutral solidly grounded ? \_\_\_\_\_  
 High Voltage: \_\_\_\_\_ kV, Connection: Delta WYE, Neutral solidly grounded ? \_\_\_\_\_  
 Transformer Impedance (Z): \_\_\_\_\_ % on \_\_\_\_\_ kVa base  
 Transformer Resistance @: \_\_\_\_\_ % on \_\_\_\_\_ kVa base  
 Transformer Reactance (X): \_\_\_\_\_ % on \_\_\_\_\_ kVa base  
 Neutral Grounding Resistor (if applicable): \_\_\_\_\_

**INVERTER DATA (if applicable)**

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_  
 Rated Power Factor (5): \_\_\_\_\_ Rate Voltage (Volts): \_\_\_\_\_ Rated Amperes: \_\_\_\_\_  
 Inverter Type (ferroresonant, step, pulse-width modulation, etc.): \_\_\_\_\_  
 Type of commutation: forced line  
 Harmonic Distortion: Maximum Single Harmonic (%): \_\_\_\_\_ Maximum Total Harmonic (%): \_\_\_\_\_  
 Note: Attach all available calculations, test reports, and oscillographic prints showing inverter output voltage and current waveforms.

**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) \_\_\_\_\_

**ADDITIONAL INFORMATION**

*In addition to the items listed above, please attach a detailed one-line diagram of the proposed facility, all applicable elementary diagrams, major equipment, (generators, transformers, inverters, circuit breakers, protective relays, etc.) specifications, test reports, etc, and any other applicable drawings or documents necessary for the proper design of the interface/interconnection.*

**END OF PART 2**

## SIGN OFF AREA

The customer agrees to provide the Cooperative with any additional information required to complete the interconnection. The customer shall operate his equipment within the guidelines set forth by the cooperative. Applicant agrees to adhere to terms of Net Metering rate schedule or negotiated rates contract as applicable\*. Applicant shall provide a \$385.00 application fee to cover expenses of the new meter, installation and Engineering review.

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**Applicant**

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**Date**

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**Mailing Address**

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**City**

**State**

**Zip**

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**Telephone**

**Cellular Phone**

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**E-Mail Address**

### **ELECTRIC COOPERATIVE CONTACT FOR APPLICATION SUBMISSION AND FOR MORE INFORMATION:**

**Cooperative contact:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Address:** \_\_\_\_\_

\_\_\_\_\_

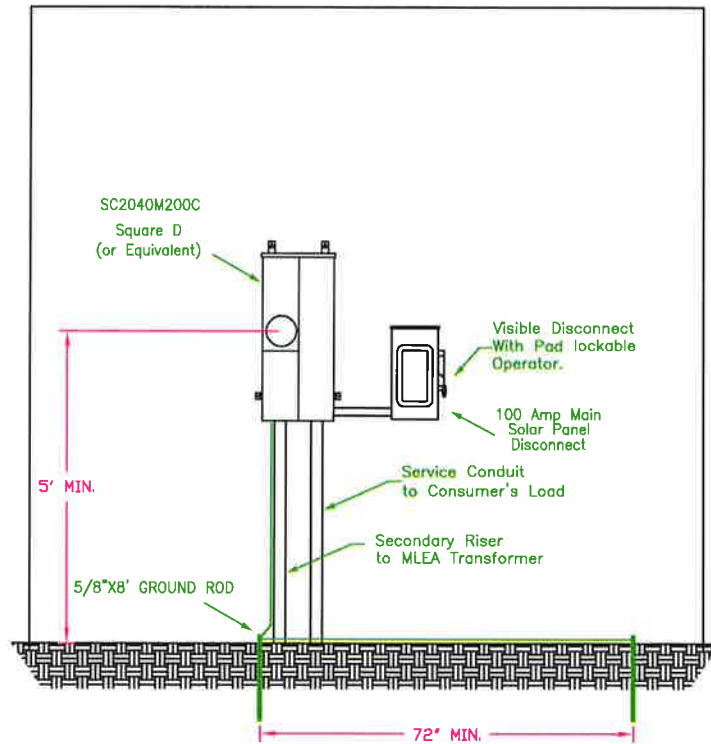
**Phone:** \_\_\_\_\_

**Fax:** \_\_\_\_\_

**E-Mail:** \_\_\_\_\_

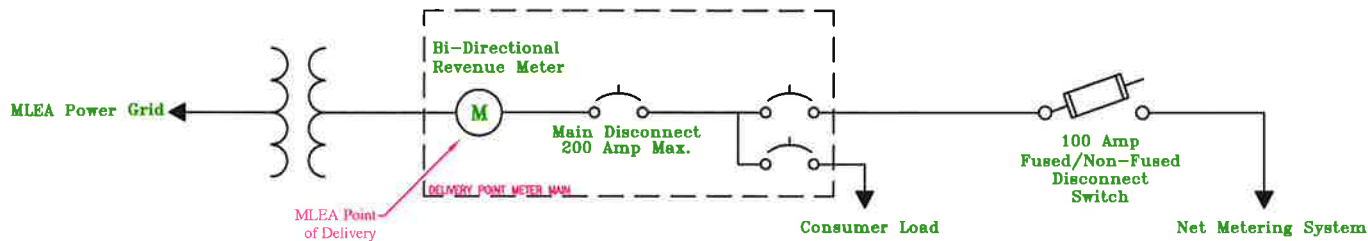
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\* Negotiated rate contract applies to generation facilities which cannot be categorized as Net Metered installations.



**Installation Note.**  
 If a building is not available near delivery point then a pedestal installation shall be accepted PROVIDED that the design and installation is approved by MLEA prior to constructing such pedestal.

**GENERAL ARRANGEMENT VIEWS**



**GENERAL ONE-LINE DIAGRAM**

**NET METERING PROJECT**

Applicant/Owner:

Contact:

Address:

Phone:

Electrician:

Phone:

Notes:

Existing Transformer needs to be upgraded and the meter loop relocated to either a building or to a MLEA approved pedestal located adjacent to the MLEA service pole.

**Engineering Data**

General 1 Ph, 240 Volt, 100 Amp Max.

Requested Size: 20 kW Solar, Parallel.

**LOCATION DATA**

Pole No.:

TRANS. NO.:

KVA:

VOLTAGE:

Installation shall comply with NEC and any other applicable codes and standards.



**MOON LAKE  
 ELECTRIC ASSOC., INC.**  
 Roosevelt, Utah 84066

NET METERING INSTALLATION  
 TYPICAL INSTALLATION DIAGRAM

DATE BY -	P.CORUN	DATE	09/18/2014	SCALE	N.T.S.	DRAWING #
APPV -	P.CORUN	APPV -	P.CORUN			