

**INTERCONNECTION AGREEMENT BETWEEN  
MATANUSKA ELECTRIC ASSOCIATION, INC.  
AND**

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**for**

**Eligible Consumer Generation Systems at or Under 25 kW**

WHEREAS, Consumer has installed its own eligible generation, with a total nameplate rating at or under 25 kW, and wishes to interconnect with Matanuska Electric Association, Inc. (MEA) under MEA's net metering program, and

WHEREAS, MEA wishes to interconnect with Consumer in a manner not detrimental to its other members.

IT IS HEREBY AGREED:

1. Equipment. Consumer warrants that its equipment is as described on its interconnection application. Consumer will give MEA thirty (30) days notice of modifications in the equipment so that MEA may determine whether the modification meets Tariff requirements or requires modifications in MEA equipment.
2. Liability. Consumer agrees to hold MEA harmless for any claim or damage to person or property of others caused by operation of consumer's equipment, or consumer's failure to maintain the equipment. Consumer will compensate MEA for any such damage to MEA's equipment,
3. Rates. The rates paid by Consumer to MEA and by MEA to Consumer shall be as specified in MEA's Tariff on file with the Regulatory Commission of Alaska.
4. Payment. When Consumer's net metering for a month results in the Customer supplying MEA with power, MEA will credit the payment against Consumer's account with MEA at the nonfirm power purchase rate defined in MEA's Tariff. Credit balances of over \$15.00 will be paid to Consumer annually, and upon termination of this agreement.
5. Interconnection Equipment. Consumer agrees to pay the interconnection charges which includes, but are not limited to, all labor and equipment necessary to interconnect Consumer. Payment in full of the total estimated cost as detailed on the attached form, "Interconnection Cost Estimate for Eligible Consumer Generation Systems at or under 25 kW", must be made prior to MEA proceeding with interconnection. Upon completion of the interconnection, Consumer shall be responsible for the actual cost of the interconnection per MEA's Tariff.
6. Service. MEA will supply service to Consumer as required by its Tariff. Consumer is not under any obligation to supply power to MEA, but may do so if it chooses.

7. Termination. MEA may terminate this contract immediately, pursuant to the Tariff, where the interconnection presents a danger to MEA's system. Consumer may terminate this contract on thirty (30) days' notice, or on presenting to MEA a qualified Consumer to assume this contract. Either party may terminate the contract upon a material breach of this contract by the other, but only if notice of the breach has been given, and no cure of the breach has been made after expiration of thirty (30) days from date of notice.
  
8. Notice. Notice shall be given in writing to the parties at the following addresses:

MATANUSKA ELECTRIC ASSOCIATION, INC.  
PO Box 2929  
Palmer, AK 99645

CONSUMER

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AGREED:

Name:

By: \_\_\_\_\_

\_\_\_\_\_ Title

Date: \_\_\_\_\_

AGREED:

MATANUSKA ELECTRIC ASSOCIATION, INC.

By: \_\_\_\_\_

\_\_\_\_\_ Title

Date: \_\_\_\_\_

**Matanuska Electric Association, Inc.**  
**Addendum to**  
**Interconnection Agreement for Eligible Consumer Generation**  
**Systems at or Under 25 kW**

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**Purpose and Scope**

This document establishes the technical standards and rules under which an eligible customer-owned generating facility is interconnected with MEA's distribution system under MEA's net metering program. These standards are applicable only to eligible generation systems which include, but are not limited to, wind or photovoltaic, inverter-based, systems that are at or under a nameplate rating of 25 kW.

**General**

All generating facilities must comply with these guidelines to be eligible for interconnection and parallel operation with MEA's system regardless of whether the applicant intends to generate energy to serve all or part of the applicant's load or to sell the entire output to MEA.

As part of the application, applicant shall submit the following documentation:

1. Site plan showing the physical location of the generating equipment, inverter, disconnect switch, and meter location.
2. 1-line drawing showing the electrical arrangement including the generator, inverter, disconnect switch(es), panels, breakers, meter, conductor sizes, and voltages.
3. Equipment data sheets for the generator and inverter including documentation that demonstrates UL 1741 listing.

Prior to operation of the generation facility, the applicant must execute an Interconnection Agreement with MEA.

Applicant shall furnish and install labeling on meter bases and switches in accordance with the NEC that informs working personnel that generation is located on the premises.

The applicant has sole responsibility to protect its personnel, facilities, loads, and equipment and to comply with all applicable standards, codes, and statutes.

MEA reserves the right to inspect the generating facility prior to initial operation and any time thereafter upon reasonable notice.

The applicant shall maintain the generating facility in good working order and assumes full responsibility for all maintenance of the generator and all associated equipment.

Applicant may not operate the generating facility as a backup generator to produce power during an outage on MEA's system. Backup power must be provided by a separate generator that is isolated from the cogeneration generator. In addition, the

applicant's entire electrical system must be isolated from MEA's system by a double-pole double-throw transfer switch during backup operation.

All costs associated with installation of MEA facilities to interconnect with customer-owned generation facilities shall be as specified in MEA's Tariff.

If the generating facility is comprised of multiple individual generating units, the outputs must be combined and connected to the system at one location. The size of the facility will be considered as the aggregate of the individual units.

### **Technical Standards**

Applicant's generating facility shall comply with the NEC Article 705, and Article 690 as applicable; IEEE Standard 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems; and UL Standard 1741, Inverters, Converters, and Controllers for Use in Independent Power Systems. All equipment must be UL listed.

The nominal voltage and phase configuration shall be compatible with MEA's system at the point of interconnection.

The generating facility shall maintain adequate power quality such that voltage, current, or frequency distortions and harmonics do not affect other customers. If the facility is found to be negatively affecting other customers or the MEA system as a whole or exceeds IEEE recommended specifications, the applicant will be required to install additional equipment necessary to bring these effects to acceptable levels. If acceptable levels cannot be achieved, the facility will be disconnected. The applicant is responsible for all costs associated with voltage regulation on MEA's system in the event that such regulation is required as a result of the customer's generating facility.

The generating facility shall be designed to automatically disconnect and lockout when MEA's service is faulted or interrupted for any reason.

Applicant shall furnish and install a UL listed disconnect switch that allows the generator to be fully disconnected from the system. This switch shall provide a visible disconnect, shall be located adjacent to the service entrance in order to be accessible to MEA personnel at all times, and shall have the capability of being locked in the open position by MEA.

MEA reserves the right to disconnect the applicant's generator under the following circumstances:

1. If necessary to maintain safe operating conditions;
2. If necessary to facilitate maintenance, testing, or repair of MEA's system.
3. If the generating facility does not meet the required standards;
4. If the generating facility adversely affects or endangers persons, property, or the operation of MEA's system;
5. If the generating facility affects the quality of service to other customers.

In accordance with paragraph 7 of the Interconnection Agreement, the generating facility may be disconnected, and the agreement terminated if the interconnection presents a danger to MEA's system.

**Interconnection Arrangements**

There are two types of interconnections:

Type 1 - Customer uses the generator output for their own needs and sells the excess, if any, to MEA. The excess energy, if any, shall be calculated by taking the total energy provided to MEA's system minus the total energy consumed by the Customer in a one-month period. With this arrangement, the generator is connected to the distribution panel so that the output acts as a source for the customer's loads. If the output is greater than the current load, the excess feeds MEA's system. A special bi-directional meter with separate registers for recording both received and delivered energy is required. The rate received by customer for energy delivered to MEA is the nonfirm power purchase rate specified in MEA's Tariff.

Type 2 - Customer interconnects the generator directly to the MEA system so that its entire output is delivered to the MEA system. With this arrangement, a separate meter base is installed by the customer so that the delivered energy is metered separately. The energy rate is the nonfirm power purchase rate specified in MEA's Tariff.

These arrangements are depicted in the attached drawings.

AGREED:

AGREED:

Name:

MATANUSKA ELECTRIC ASSOCIATION, INC.

By: \_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Date: \_\_\_\_\_

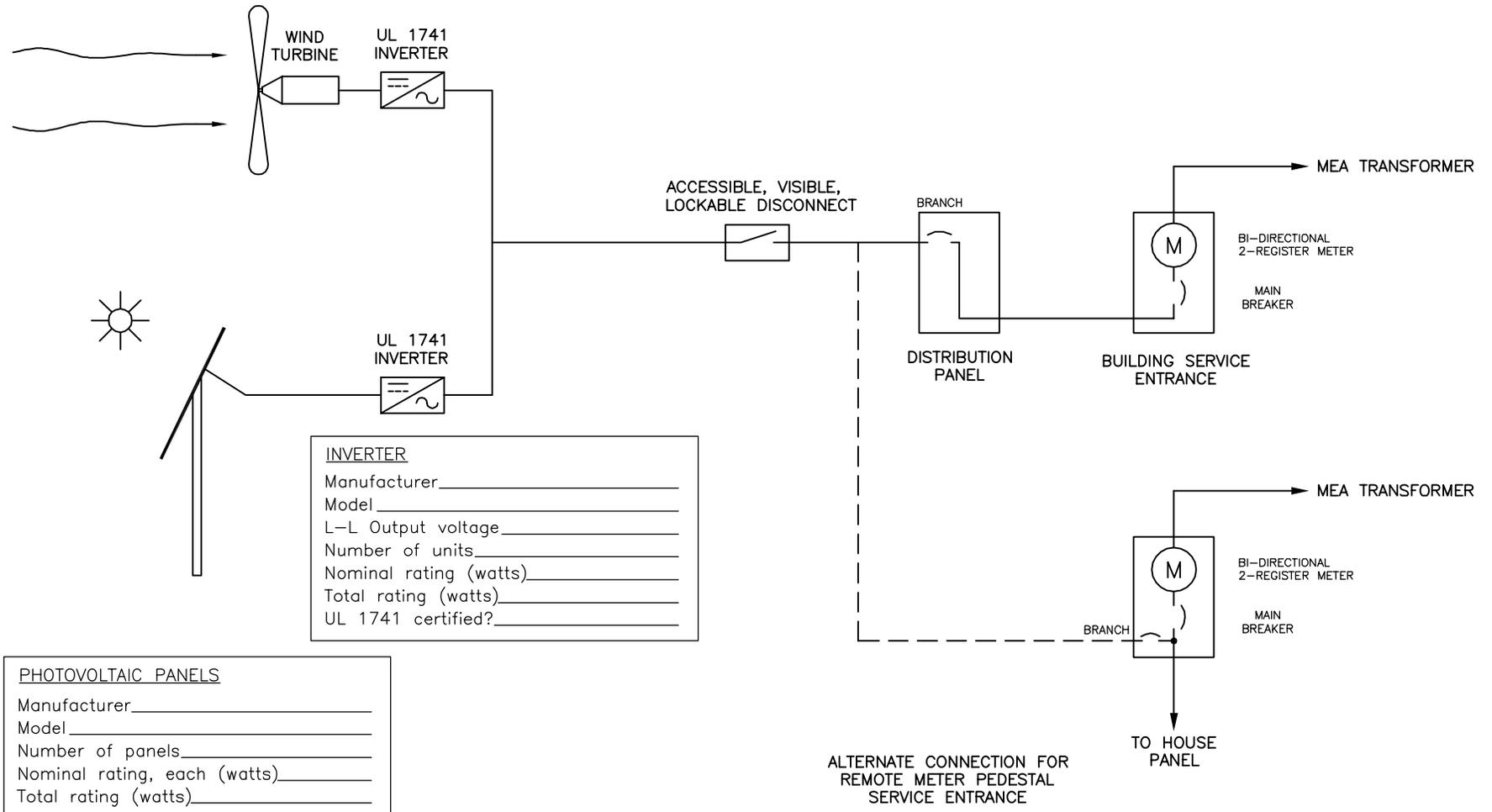
Date: \_\_\_\_\_

WIND TURBINE  
 Manufacturer \_\_\_\_\_  
 Model \_\_\_\_\_  
 Number of units \_\_\_\_\_  
 Nominal rating, each (watts) \_\_\_\_\_  
 Total rating (watts) \_\_\_\_\_

INVERTER  
 Manufacturer \_\_\_\_\_  
 Model \_\_\_\_\_  
 L-L Output voltage \_\_\_\_\_  
 Number of units \_\_\_\_\_  
 Nominal rating (watts) \_\_\_\_\_  
 Total rating (watts) \_\_\_\_\_  
 UL 1741 certified? \_\_\_\_\_

Customer Name \_\_\_\_\_  
 Work Order Num. \_\_\_\_\_  
 Date \_\_\_\_\_

PLEASE PROVIDE ALL APPLICABLE INFORMATION

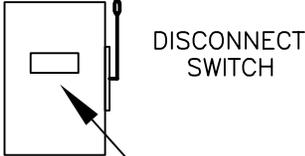
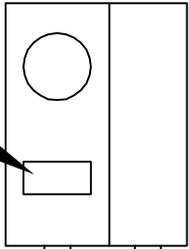


INVERTER  
 Manufacturer \_\_\_\_\_  
 Model \_\_\_\_\_  
 L-L Output voltage \_\_\_\_\_  
 Number of units \_\_\_\_\_  
 Nominal rating (watts) \_\_\_\_\_  
 Total rating (watts) \_\_\_\_\_  
 UL 1741 certified? \_\_\_\_\_

PHOTOVOLTAIC PANELS  
 Manufacturer \_\_\_\_\_  
 Model \_\_\_\_\_  
 Number of panels \_\_\_\_\_  
 Nominal rating, each (watts) \_\_\_\_\_  
 Total rating (watts) \_\_\_\_\_



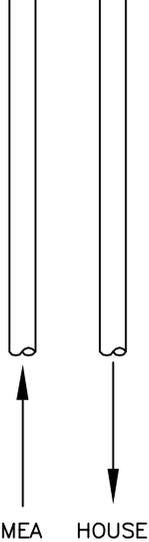
GRID-CONNECTED  
GENERATION EXISTS AT  
THIS LOCATION



DISCONNECT  
SWITCH

COGENERATION  
DISCONNECT

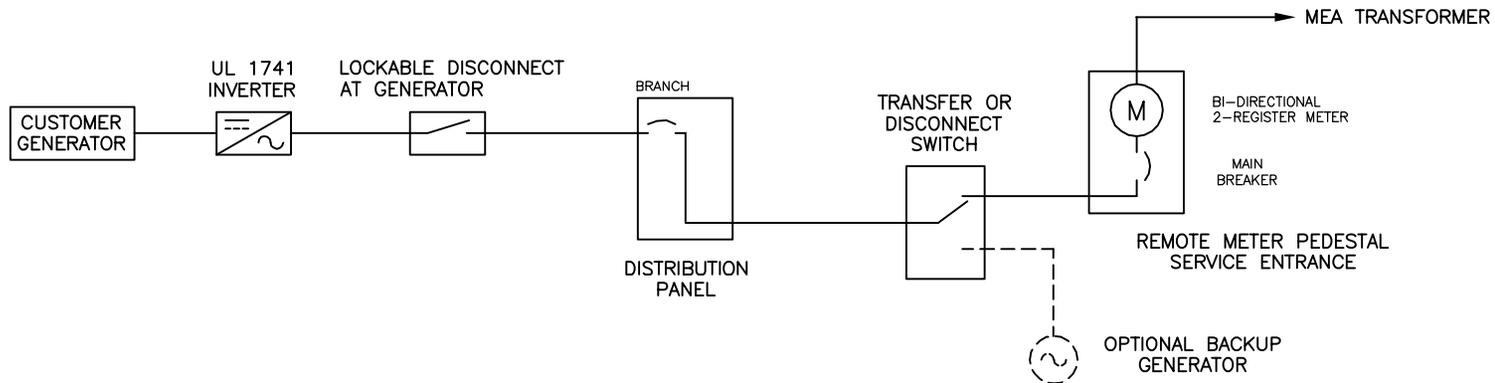
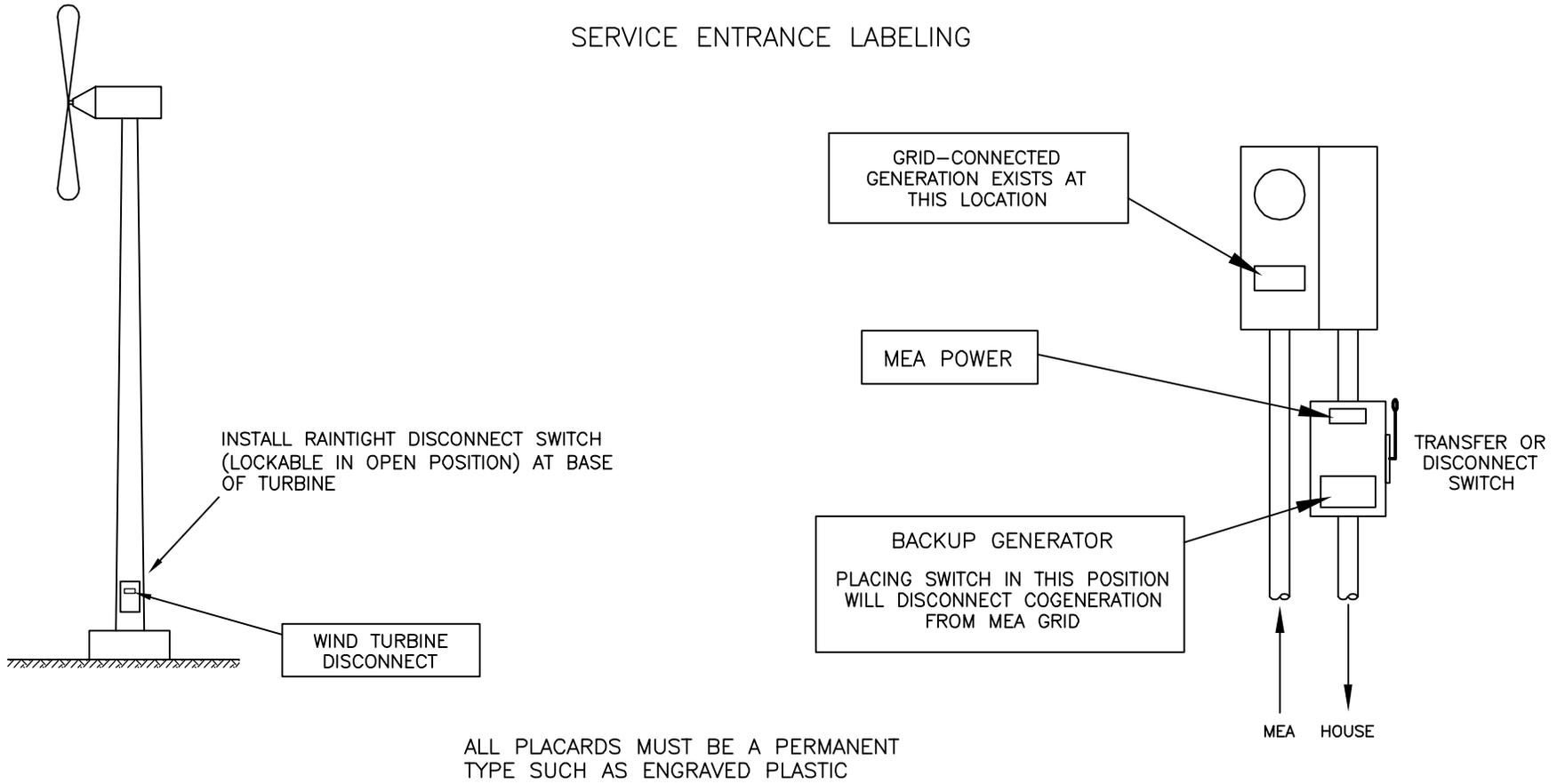
ALL PLACARDS MUST BE OF A  
PERMANENT TYPE SUCH AS ENGRAVED  
PLASTIC OR PRINTED STICKERS



SERVICE ENTRANCE LABELING



# SERVICE ENTRANCE LABELING

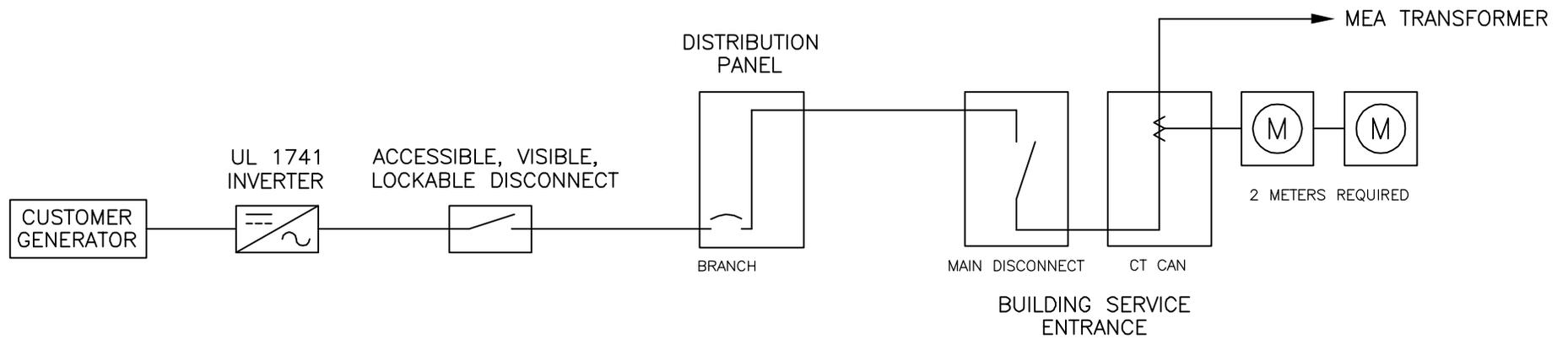


MATANUSKA ELECTRIC ASSOCIATION, INC.

ALTERNATE CONNECTION FOR REMOTE METER PEDESTALS

4/13/12

3 OF 4



CONNECTION TO CT SERVICE

