

ALGONA MUNICIPAL UTILITIES

Interconnection Standards For Parallel Installation and Operation Of Customer-Owned Distributed Generation Facilities



Adopted: August 30, 2023
Version: Version 2.0

Customer Name: _____
Account #: _____
Customer Signature: _____
Date: _____
Application Number: _____

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Part 1. OVERVIEW

1. PURPOSE:

The purpose of this document is to establish standards for the Utility to interconnect and operate in parallel with customer-owned distributed generation facilities, including but not limited to solar energy systems.

2. DEFINITIONS:

- a. **Applicable Laws and Regulations** – All duly promulgated applicable federal, state, and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.
- b. **Avoided Costs** – The incremental costs to the Utility of electric energy or capacity or both which, but for the purchase from the Customer's Generating Facility, the Utility would generate itself or purchase from another source.
- c. **Billing Period** – The period of time, typically monthly, between two Customer billing statements containing charges for retail electrical service. The Billing Period may be the same as the Measurement Period, in which case Net Consumption may be determined on a monthly basis. However, if the Utility is using a Measurement Period that is shorter than the Billing Period, then Net Consumption may be determined on a shorter basis, such as hourly, in which case a Customer billing statement may reflect an aggregation of charges and credits for Net Consumption during the Billing Period.
- d. **Customer** – Any entity interconnected to the Utility's distribution system for the purpose of receiving retail electric power service from the Utility's distribution system.
- e. **Customer Generator** – A Customer who owns or operates a Generating Facility which:
 - i. is located on a premises owned, operated, leased, or otherwise controlled by a Customer;
 - ii. is interconnected and operates in parallel phase and synchronization with the Utility and is in compliance with the standards established by the Utility;
 - iii. is intended primarily to offset part or all of the Customer's own electrical energy requirements;
 - iv. contains a mechanism, approved by the Utility, that automatically disables the unit and interrupts the flow of electricity from the Customer back onto the Distribution System in the event that service to the Customer is interrupted.
- f. **Distribution System** – The Utility's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances.
- g. **Force Majeure** – A Force Majeure event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to

machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control." A Force Majeure event does not include an act of negligence or intentional wrongdoing.

- h. **Generating Facility** – For purposes of these Standards, a device or other facility that a Customer uses to generate electricity or to convert wind or solar energy to electricity, as identified in the Customer's Interconnection Application.
- i. **Good Utility Practice** – Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.
- j. **Governmental Authority** – Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Customer or any affiliate thereof.
- k. **Interconnection Application** – A request by a Customer to interconnect a new Generating Facility to the Utility's Distribution System, or to increase the capacity of, or make a material modification to the operating characteristics of, an existing Generating Facility that is interconnected with the Utility's Distribution System.
- l. **Interconnection Standard and Interconnection Standards** – Any or all of the provisions, forms and related documents contained in the collective parts of this document, the Interconnection Standards for Parallel Installation and Operation of Customer-Owned Distributed Generation Facilities, as of the date adopted and printed on the cover page hereof.
- m. **Measurement Period** – The period of time during which the Utility measures a Customer Generator's Net Consumption of electrical energy. The Utility may measure a Customer's Net Consumption every fifteen minutes, every hour, or throughout a Billing Period, as specified in the Interconnection Agreement.
- n. **Metering and Distributed Generation Metering** - A bi-directional metering process using one or multiple meters and equipment sufficient to separately measure, or measure the difference between, the electrical energy supplied by a Customer Generator to the Utility's Distribution System and the electrical energy supplied to the Customer Generator by the Utility and over an applicable Billing Period or Measurement Period.

- o. **Negative Net Consumption** – Means a Measurement Period during which a Customer Generator supplied more electrical energy to the Utility’s Distribution System than the Utility supplied to the Customer Generator.
- p. **Net Consumption** – The difference between the amount of electrical energy supplied by a Customer Generator to the Utility’s Distribution System and the amount of electrical energy supplied to the Customer Generator by the Utility as determined during a Measurement Period by means of Metering. A Customer Generator’s Net Consumption may be either positive or negative during a Measurement Period.
- q. **Positive Net Consumption** - Means a Measurement Period during which a Customer Generator supplied less electrical energy to the Utility’s Distribution System than the Utility supplied to the Customer Generator.
- r. **Qualifying Facility** – A cogeneration facility or a small power production facility that is a qualifying facility under 18 CFR Part 292, Subpart B, used by a Customer to generate electricity that operates in parallel with the Distribution System or local electric power system. A Qualifying Facility with output rated at more than 250 kilowatts (kW) or a Qualifying Facility not covered by these Interconnection Standards may qualify for interconnection with the Utility under provisions of the Public Utilities Regulatory Policies Act (PURPA), but the terms and conditions of interconnection shall be determined on a case-by-case basis.
- s. **Reasonable Efforts** – With respect to an action required to be attempted or taken by a Party under the Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.
- t. **System Upgrades** – The additions, modifications, and upgrades to the Utility's Distribution System at or beyond the point of interconnection to facilitate interconnection of the Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

3. **ELIGIBILITY:**

- a. Interconnection to the electric system shall be granted only to new or existing customers, in good standing, under the Utility’s electric service rules and rate schedules. Interconnection will be made only upon written application, upon compliance by the applicant with the rules, regulations, and Interconnection Standards of the Utility, upon execution by the Customer of an Interconnection Agreement in the form approved by the Utility, and after approval of the application by the Utility upon inspection for compatibility with the Utility’s grid system. The Interconnection Agreement shall be between the Customer and the Utility and will only include third parties with the consent of the Utility.
- b. The Interconnection Standards apply to a customer-owned Generating Facility with a rated output of 250 kilowatts (kW) or fewer.

- c. Proposals to interconnect a customer-owned distributed generation facility with output rated at more than 250 kW or a Qualifying Facility not covered by these Interconnection Standards will be subject to a review process that may take into account factors including, but not limited to, the impact of the interconnection on reliability, rates, power supply agreements, and local and regional system planning. If approved, such facilities shall be subject to the terms and provisions of the Interconnection Standards, with such modifications or additional terms and conditions as determined by the Utility on a case by case basis. The form of Interconnection Agreement for any such facility, if otherwise determined by the Utility to be eligible for interconnection, may be modified by the Utility to reflect such modified or additional terms and conditions for interconnection.

4. REQUEST:

The Customer shall make a request by completing the attached document entitled “Application for Interconnection and Operation of Customer-Owned Generation.” The Utility may require additional details or clarifications as needed to properly evaluate the application.

5. SYSTEM EFFECTS:

The Utility will analyze the overall impact of the proposed Generating Facility on the transmission and distribution system. Such analyses will be based on Good Utility Practice to determine thermal effects, voltage ranges, power quality, system stability, etc.

6. SYSTEM UPGRADES:

As a result of the above analysis, the Utility will provide the Customer with a cost estimate and projected timeframe for any system upgrades that may be necessary to accommodate the generating facility.

7. AGREEMENT:

Once the Customer and the Utility have identified and mutually agreed on the scope of the overall project including the Generating Facility, system upgrades and estimated costs, the Customer and the Utility shall execute an Interconnection Agreement in the form attached to these Interconnection Standards. Notwithstanding the foregoing, the terms and conditions for interconnection and the form and content of the Interconnection Agreement shall be determined by the Utility on a case by case basis with respect to a customer-owned generation facility with output rated at more than 250 kW or a Qualifying Facility not covered by these Interconnection Standards.

8. CODES AND PERMITS:

- a. The Customer shall be responsible for procuring all building, operating and environmental permits that are required by any Governmental Authority having jurisdiction for the type of generating facility and for the necessary ancillary structures to be installed.
- b. The equipment shall meet the standards listed in Part 2, Sections 2 and 7, of these Interconnection Standards.
- c. The construction and facilities shall meet all applicable building and electrical codes.

9. METERING:

The Customer shall cooperate with all metering installation and servicing to permit the bi-directional flow of electricity and the financial treatment of the deliveries.

10. CERTIFICATE OF COMPLETION:

Upon completion of the generating facility and prior to normal operation, the Customer shall provide a signed copy of the attached document entitled "Certificate of Completion."

11. INITIATION OF NORMAL OPERATION:

The Customer may begin normal operation of the generating facility upon completion of all documentation and receipt of written approval from the Utility in the form of the attached document entitled "Approval to Energize Generating Facility."

Part 2. TECHNICAL REQUIREMENTS

1. CHARACTER OF SERVICE:

The electrical service shall be 60 cycle per second alternating current (AC) at supply voltages and number of phases that apply under the Utility's rate schedules.

2. CODE REQUIREMENTS:

The Generating Facility shall meet all requirements established by the National Electrical Code (NEC), National Electrical Safety Code (NESC), Institute of Electrical and Electronics Engineers (IEEE), Underwriters Laboratories (UL), and Occupational Safety and Health Administration, including but not limited to the specific codes listed in Section 7 of this Part 2, below. In addition, all of the manufacturer's ownership, operating and maintenance manuals shall be reviewed by both parties prior to beginning operation and Customer shall follow and comply with such manuals.

3. GENERATING FACILITY CONTROL AND OPERATION:

The control system of the Generating Facility shall comply with the IEEE specifications and standards for parallel operation with the Utility and in particular as follows:

- a. Power output control system shall automatically disconnect from Utility source upon loss of Utility voltage and not reconnect until Utility voltage has been restored by the Utility.
- b. Power output control system shall automatically disconnect from Utility source if Utility voltage fluctuates beyond plus or minus 10% (ten percent).
- c. Power output control system shall automatically disconnect from Utility if frequency fluctuates plus or minus 2 cycles (Hertz).
- d. Inverter output distortion shall meet IEEE requirements.
- e. The Generating Facility shall meet the applicable IEEE standards concerning impacts to the Distribution System with regard to harmonic distortion, voltage flicker, power factor, direct current injection and electromagnetic interference.

4. FAULT CURRENT CONTRIBUTION

The Generating Facility shall be equipped with protective equipment designed to automatically disconnect during fault current conditions and remain disconnected until the voltage and frequency have stabilized.

5. RECLOSING COORDINATION

The Generating Facility shall be coordinated with the Distribution System reclosing devices by disconnecting from the system during the initial de-energized operation and shall remain disconnected until the voltage and frequency have stabilized.

6. DISCONNECT DEVICE:

A safety disconnect switch shall be installed that is visible to and readily accessible by Utility personnel. The switch shall be capable of being locked in the open position and shall prevent the generator from supplying power to the distribution system.

7. STANDARDS FOR INTERCONNECTION, SAFETY, AND OPERATING RELIABILITY

The interconnection of a Customer-Owned Generating Facility and associated interconnection equipment to the Utility's Distribution Facilities shall comply with all applicable laws and regulations, including but not limited to the applicable provisions of the following publications and regulations:

- a. ANSI/IEEE1547-2003 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity). The following standards shall be used as guidance in applying IEEE 1574:
 - i. IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems
 - ii. IEC/TR3 61000-3-7 Assessment of emission limits for fluctuating loads in MV and HV power systems
- b. Iowa Electric Safety Code, as defined in 199 IAC Chapter 25
- c. ANSI/NFPA 70 (2011), National Electrical Code
- d. OSHA (29 CFR § 1910.269)
- e. 199 IAC Section 15.10 Standards for Interconnection, Safety, and Operating Reliability

Part 3. METERING FOR CUSTOMERS' DISTRIBUTED GENERATION

1. PURPOSE:

The provisions of this policy set forth the terms and conditions under which a customer may be compensated for Negative Net Consumption, or, in other words, whenever there are net deliveries of energy and/or capacity to the Utility from a Customer Generator during a Measurement Period.

2. DEFINITIONS:

The definitions used in this Part are those found in Part 1, Section 2 of these Interconnection Standards.

3. METERING GENERAL PROVISIONS:

- a. Subject to the terms and conditions of the Interconnection Standards, the Utility shall offer Metering to its Customers that wish to generate electricity on the Customer's side of the meter using distributed generation facilities.
- b. A Customer Generator shall be equipped with proper Metering equipment approved by the Utility that can measure the flow of electricity in both directions at the same rate. Metering will be supplied and installed by the Utility. The Customer shall pay all costs associated with such Metering, except in the case of separate metering, in which case the Utility shall pay the costs of metering the sale and delivery of energy to Customer, and Customer shall pay all costs of metering the sale and delivery of energy generated by the Generating Facility to the Utility.
- c. Whenever there is Negative Net Consumption during a Measurement Period, the Utility will credit the Customer Generator for the excess kilowatt-hours (kWh) delivered to the Utility, in accordance with the billing practices described in these Interconnection Standards and the Interconnection Agreement between the Utility and the Customer.
- d. Whenever there is Positive Net Consumption during a Measurement Period, the Utility will charge the Customer Generator for the amount of kilowatt-hours (kWh) supplied by the Utility to the Customer, in accordance with the billing practice described in these Interconnection Standards and the Interconnection Agreement between the Utility and the Customer.
- e. Each Billing Period, the Utility will provide the Customer with a billing statement that reflects the total amount of credits and charges for Net Consumption determined during each Measurement Period of that Billing Period. If the total amount of Customer charges exceeds the total amount of Customer credits during a Billing Period, the Customer shall pay the difference to the Utility. If the total amount of Customer credits exceeds the total amount of Customer charges, then the Utility will carry over such a credit from one Billing Period to the next. However, all credits accrued during the prior calendar year will be paid to the customer in the first Billing Period of the following calendar year.
- f. If a Customer Generator formally terminates operation of its Generating Facility, the Utility shall treat the end of the service period as if it were the end of the billing period and, if applicable, settle with the Customer Generator according to the appropriate billing practices.
- g. The Utility shall provide electric service to a Customer Generator at fair, reasonable, just, uniform, and non-discriminatory rates, as required by Iowa Code § 388.6 or any other applicable laws, regulations, or rules of a Governmental Authority. The Utility will provide electric service at the same rate to every Customer in a rate classification.

- h. The Utility shall not charge a Customer Generator any fee or charge, or require additional equipment or any other requirement, except when the fee, charge, or other requirement is specifically authorized under the terms of the Interconnection Agreement or these Interconnection Standards or when the fee, charge or other requirement would apply to all Customers in a rate classification. Any insurance coverage that may be required is specifically exempted from this paragraph.
- i. Nothing in this Policy shall abrogate any Customer's obligation to comply with all applicable Federal, State, and local laws, codes, regulations and ordinances, and the Service Rules and Policies of the Utility.

4. INTERCONNECTION STANDARDS

To qualify for interconnection and Metering, a Customer Generator must comply with the Utility's Interconnection Standards for Parallel Installation and Operation of Customer-Owned Distributed Generation Facilities.

5. REQUEST

The Customer Generator shall make a request for interconnection and Metering by completing the Utility's Application for Interconnection and Operation of Customer-Owned Generation. The Utility may require additional details or clarifications as needed to properly evaluate the application.

6. BILLING PRACTICES AND RATES

The following billing provisions shall apply to a Customer whose Generating Facility is eligible for Interconnection under Part 1, Section 3 of these Standards and has received Approval to Energize under Part 7 of these Standards.

- a. **Charges for Positive Net Consumption.** Whenever the amount of electricity delivered by an eligible Customer Generator during a Measurement Period is less than the electricity delivered by the Utility to the Customer during that Measurement Period, the charges for the net amount of electrical energy supplied by the Utility will be billed in accordance with the rate schedule applicable to the Customer's assigned rate classification, and all applicable riders in effect on the last day of the applicable billing cycle.
- b. **Credits for Negative Net Consumption.** Whenever the amount of electricity delivered by an eligible Customer Generator during a Measurement Period is more than the electricity supplied by the Utility to the Customer during that Measurement Period, the Utility shall credit the Customer for the net amount of electrical energy delivered by the Generating Facility. The Utility shall credit the Customer for such net amount of electrical energy at the Utility's Avoided Costs rate in effect on the last day of the applicable Billing Period. The Utility may revise its Avoided Costs rate at any time and from time to time.
- c. **Obligation for Other Charges.** Regardless of whether the Customer Generator is entitled to receive financial credit for excess electrical energy delivered to the Utility, each Customer Generator is still responsible for all other applicable charges during each Billing Period including, but not limited to: customer charges, facilities charges, demand charges, environmental charges, transmission charges, any late payment charges, and any requirements for deposits or special charges or fees that may be applied.
- d. **Charges and Credits Applied Each Billing Period.** Regardless of the number of Measurement Periods during a Billing Period, and their associated charges and credits, the Utility will produce a billing statement each Billing Period that reflects all charges for Positive Net Consumption, all

credits for Negative Net Consumption, and all other applicable fees or charges for the Customer's rate classification.

Part 4. INTERCONNECTION APPLICATION

ALGONA MUNICIPAL ELECTRIC UTILITY

Application for Interconnection and Operation of Customer-Owned Generation

This Application for Interconnection and Metering of customer-owned distributed generation is considered complete when it provides all applicable and correct information required below. Additional information or clarification to evaluate the Application may be requested by the Utility.

Processing Fee

☐ For systems with a rated output of 150 kW or fewer, a non-refundable processing fee of \$250.00 must accompany this Application.

☐ For all other systems, a non-refundable processing fee of \$400.00 must accompany this Application.

PART 1

CUSTOMER

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

CONTACT (if different from Customer)

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Owner of the facility: _____

PROJECT DESIGN/ENGINEERING (ARCHITECT) (as applicable)

Company: _____

Mailing Address: _____

City: _____ County: _____ State: _____ Zip Code: _____

Phone Number: _____ Representative: _____

Email Address: _____ Fax Number: _____

ELECTRICAL CONTRACTOR (as applicable)

Company: _____

Mailing Address: _____

City: _____ County: _____ State: _____ Zip Code: _____

Phone Number: _____ Representative: _____

Email Address: _____ Fax Number: _____

Generating Facility Information

Location (if different from above): _____

Inverter Manufacturer: _____

Model _____

Nameplate Rating: (kW) _____ (kVA) _____

System Design Capacity: _____ (kW) _____ (kVA)

Energy Source: Photovoltaic ☐ Wind ☐ Micro turbine ☐

Diesel Engine ☐

Gas Engine ☐

Combustion Turbine ☐

Other (describe) _____

Is the equipment UL1741 Listed? ☐ Yes ☐ No

If yes, attach manufacturer's cut-sheet showing UL1741 listing

Estimated Installation Date: _____ Estimated In-Service Date: _____

List components of the Small Generating Facility equipment package that are currently certified:

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

ESTIMATED LOAD, GENERATOR RATING AND MODE OF OPERATION INFORMATION

The following information is necessary to help properly design the Utility customer interconnection.

This information is not intended as a commitment or contract for billing purposes.

Total Site Load _____ (kW)

Residential _____ Commercial _____ Industrial _____

Generator Rating _____ (kW) Annual Estimated Generation _____ (kWh)

Mode of Operation

Isolated _____ Paralleling _____ Power Export _____

DESCRIPTION OF PROPOSED INSTALLATION AND OPERATION

Give a general description of the proposed installation, including a detailed description of its planned location, the date you plan to operate the generator, the frequency with which you plan to operate it and whether you plan to operate it during on or off-peak hours.

PART 2

(Complete all applicable items. Copy this PART 2 as necessary for 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): _____
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 (X_d): _____ % on _____ KVA base
Transient Reactance (X'_d): _____ % on _____ KVA base
Subtransient Reactance (X''_d): _____ % on _____ KVA base
Negative Sequence Reactance (X_s): _____ % on _____ KVA base
Zero Sequence Reactance (X_o): _____ % on _____ KVA base
Neutral Grounding Resistor (if applicable): _____

I22t or K (heating time constant): _____
Additional information: _____

INDUCTION GENERATOR DATA

Rotor Resistance (R_r): _____ ohms Stator Resistance (R_s): _____ ohms
Rotor Reactance (X_r): _____ ohms Stator Reactance (X_s): _____ ohms
Magnetizing Reactance (X_m): _____ ohms Short Circuit Reactance (X_d''): _____ ohms
Design letter: _____ Frame Size: _____
Exciting Current: _____ Temp Rise (deg Co): _____
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 manufacture: _____

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? _____

Low Voltage: _____ KV, Connection: _____ delta _____ wye, Neutral solidly grounded? _____

Transformer Impedance (Z): _____ % on _____ KVA base.

Transformer Resistance (R): _____ % on _____ KVA base.

Transformer Reactance (X): _____ % on _____ KVA base.

Neutral Grounding Resistor (if applicable): _____

INVERTER DATA (if applicable)

Manufacturer: _____ Model: _____

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

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

Type 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 provide the following information:

1. 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 interconnection.
2. Describe the project's planned operating mode (e.g., combined heat and power, peak shaving, etc.), and its address or grid coordinates.

END OF PART 2

Customer Signature

I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to provide the Utility with any additional information which may be requested or required to complete the interconnection. I agree to abide by the terms and conditions of the Utility's Interconnection Standard and will return the Certificate of Completion when the Generating Facility has been installed.

Signature: _____ Date: _____

----- Utility Use -----

Contingent Approval to Interconnect the Generating Facility

Interconnection of the Generating Facility is approved contingent upon the terms and conditions of the Utility's Interconnection Standard and upon return of the Certificate of Completion.

Utility Signature: _____

Title: _____ Date: _____

Application Number: _____

Utility waives inspection/witness test? ☐ Yes ☐ No Initial _____

Part 5. INTERCONNECTION AND METERING AGREEMENT

Once the Customer and the Utility have identified and mutually agreed on the scope of the overall project including the Generating Facility, system upgrades and estimated costs, the Customer and the Utility shall execute the **Interconnection Agreement** in the form attached hereto. Notwithstanding the foregoing, the form and content of the Interconnection Agreement may be modified by the Utility on a case-by-case basis with respect to a customer-owned generation facility with output rated at more than 250 kW or a Qualifying Facility not covered by these Interconnection Standards.

Part 6. CERTIFICATE OF COMPLETION

ALGONA MUNICIPAL ELECTRIC UTILITY

Is the Generating Facility installed, tested and ready for operation? Yes _____ No _____

Customer: _____

Address: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Location of the Generating Facility (if different from above):

Electrician/Service Company:

Name: _____

Address: _____

City/State/ZIP: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

License number: _____

Application number: _____

Inspection:

The Generating Facility has been installed and inspected in compliance with applicable electrical codes.

A copy of the signed electrical inspection form is attached.

Customer Signature

I hereby certify that, to the best of my knowledge, the information provided in this Certificate of Completion is true. I agree to provide the Utility with any additional information which may be requested. I agree to abide by the terms and conditions of the Utility's Interconnection Standard.

Signature: _____ Date: _____

Part 7. APPROVAL TO ENERGIZE GENERATING FACILITY

ALGONA MUNICIPAL ELECTRIC UTILITY

The Utility, having entered into an Interconnection Agreement for the facility described in the Application noted by number above and having received a Certificate of Completion with proper documentation of the electrical inspection hereby authorizes the Generating Facility to be energized:

Utility Signature: _____

Title: _____ Date: _____