## NET METERING PROGRAM

## FOR

## HILLSDALE BOARD OF PUBLIC UTILITIES HILLSDALE, MICHIGAN

September 2019

Hillsdale Board of Public Utilities 45 Monroe Street Hillsdale MI 49242 517-437-3387 customerservice@hillsdalebpu.com

## **SECTION 12**

## NET METERING PROGRAM

#### Eligibility

Customers must meet the following criteria to be eligible for net metering:

- (1) To participate in the Net Metering Program, a customer must be an HBPU electric customer.
- (2) Only qualified renewable energy sources are eligible to participate in the Net Metering Program. These sources are solar, wind, biomass, hydro, geothermal or other approved renewable resources.
- (3) The nameplate capacity of the renewable generator must be less than 30 kilowatts (kW).
- (4) The renewable generator may not be sized to exceed the customer's annual electrical energy needs.
- (5) Customers using biomass may not blend it with any type of fossil fuel.

### Enrollment

Customers who wish to participate in the Net Metering Program must meet the <u>Customer Owned</u> <u>Generation Interconnection Policy</u> as well as the <u>Electric Generator Interconnection Requirements</u> for projects with aggregate generator output less than 30 kW. The Generator Interconnection Requirements document outlines the process, requirements, and agreements used to install or modify generation projects with aggregate capacity ratings less than 30 kW and designed to operate in parallel with the utility electric system. Technical requirements (data, equipment, relaying, telemetry, metering) are defined according to type of generation and location of the interconnection. The process is designed to provide an expeditious interconnection to the utility's electric system that is both safe and reliable.

To start the Net Metering application process, the customer must request an interconnection study by completing the Interconnection Application found in the <u>Electric Generator Interconnection</u> <u>Requirements and Interconnection Study Agreement</u>. The application fee is \$100.00.

After Hillsdale BPU has completed the interconnection study and approved the proposed interconnection and net metering project, the customer will be required to enter into an "Interconnection and Operating Agreement." The customer is responsible for any costs associated with the interconnection.

#### **Generator and Generator Interconnection Requirements**

Generator Requirements – The customer's electric generator must be fueled by a qualified renewable energy source; solar, wind, biomass, hydro, geothermal or other approved renewable resources.

The generator must be located on the customer's premises and serving only the customer's premises. For non-dispatchable generators, the nameplate rating of the generator shall be less than 30 kW in aggregate and the generator's annual output may not exceed the customer's annual energy needs, measured in kWh. The customer is required to provide the company with a capacity rating in kW for the generating unit and a projected monthly kilowatt-hour output of the generator unit when completing the HBPU Interconnection Application.

Interconnection Requirements – Customers must meet approved interconnection requirements before participating in this program.

### **Metering Requirements**

Hillsdale BPU's Net Metering Program requires that the customer have an electronic bidirectional billing meter. This meter will ensure that the customer receives the proper credits for electric generation in excess of their consumption. All metering equipment must meet the HBPU standard specifications and requirements and will be furnished, installed, read, maintained, and owned by HBPU.

#### Billing

Participating customers will be billed based on the net difference between the amount of electrical energy used and electrical energy generated. If the amount of electrical energy generated exceeds the amount consumed the bill will include a generation credit. Net Excess Generation (NEG) Credits for the electrical energy generated above the current month's consumption will be carried over to the next billing period.

The Net-Metering Program applies to customers on Rate R-1, R-2, B-1, B-3, C-1, C-2, C-3, D(1), E-2 (IED) or F.

No refunds will be made for any customer contribution under this tariff or for any other costs incurred by the customer in connection with the Net Metering Program.

#### **Net Excess Generation Credits**

Net Excess Generation (NEG) Credit is the amount of electrical energy generated by a Net Metering participant using a renewable energy source, in excess of the customer's own electric metered use in any billing month.

One NEG Credit equals the Energy Charge for one kilowatt-hour of electrical energy as shown on the customer's rate schedule.

Any negative credits that exist at the end of each program year will be forfeited. NEG Credits are nontransferable.

If a customer terminates participation in the Net Metering Program, NEG Credits will be applied to the customer's final bill. Any remaining credits will be forfeited.

### **Program Availability**

The Net Metering Program is voluntary and is available on a first-come, first-serve basis until the nameplate capacity of all participating generators is equal to the maximum program limit of 1.0% of the HBPU's system peak demand for all customers during the previous calendar year.

## **Program Termination**

Hillsdale BPU may terminate a customer's participation in the Net Metering Program if the customer's facilities are causing a safety concern or if the customer's facilities are not in compliance with the Generator Interconnection Standards.

Customers may terminate their participation in the Net Metering Program at any time for any reason on sixty days' notice.

## **Customer Owned Generation Interconnect Policy**

### Intent

It is the intent of the Hillsdale Board of Public Utilities (HBPU) to allow the electrical interconnection of qualified renewable energy sources to the HBPU distribution system in accordance with the provisions of this article.

### Guidelines

### 1. Hillsdale Board of Public Utilities

- a. Will ensure the interconnection is in compliance with Public Utility Regulatory Policies Act (PURPA) and Federal Energy Regulatory Commission (FERC) rules and regulations, as applicable.
- b. Will inform potential power producers that they have the responsibility to comply with all federal, state, and local regulations.
- c. Will, upon completion of a satisfactory Interconnection Study, provide interconnection service to any electric consumer installing a less than 30 kW generation unit. Service is evaluated and provided on a case-by-case basis and will require a separate Interconnection and Operating Agreement.
- d. Will, upon completion of a satisfactory Interconnection Study, provide interconnection service to any electric consumer installing less than a 30 kW generating unit in which the primary energy source must be solar, biomass, waste, wind, geothermal, or approved renewable energy sources.
- e. Will own the meters utilized for billing.

#### 2. The Customer

- a. Shall install and own conductors and equipment up to the service point as specified in the HBPU Overhead Extension Policy and Underground Service Connections.
- b. The Interconnection Study will be conducted at the customer's expense.
- c. Shall make application to the HBPU for the proposed installation, obtain approval of the location, equipment, and design before starting installation of the installation, and pay any HBPU construction fees for system improvements as specified in the HBPU Overhead Extension Policy and Underground Service Connections.
- d. Shall submit a plan view drawing of the installation and shop drawings of switchgear to the HBPU for approval prior to finalizing orders for service equipment to avoid delays and unnecessary expense to the customer and the HBPU.
- e. The interconnection and parallel operation of generation equipment shall be in conformance with prudent utility practices, shall maintain the integrity of the HBPU distribution system, and ensure no adverse impacts upon the quality of service to other HBPU customers.

- f. Protection, safety, and interconnect equipment must meet standards of accepted good design, engineering, electric safety practices, and all applicable local, state, and federal electrical installation and safety codes.
- g. A suitable disconnect, interconnection breaker, and interconnect relay shall be installed to automatically disconnect and isolate the generation facility from the HBPU distribution system in the event of a service interruption. The automatic disconnect equipment shall receive its voltage and frequency reference from the HBPU service lines. Such equipment must be capable of preventing the generation facility from energizing the HPBU service lines during a service interruption.
- h. Electrical parameters such as fault protection, voltage levels, synchronization, grounding, harmonics, power factor, voltage regulation, flicker, and frequency regulation shall comply with the latest edition of The Institute of Electrical and Electronic Engineers "Standard for Interconnecting Distributed Resources with Electric Power Systems" (IEEE Standard 1547-2008).
- i. Any exceptions to the above requirements must be specifically approved by HBPU.

# Hillsdale Board of Public Utilities Electric Generator Interconnection Requirements And Interconnection Study Agreement Projects with Aggregate Generator Output Less than 30 kW

Effective 9-8-09 Resolution 179

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#### **INTERCONNECTION PROCESS**

#### **The Interconnection Process**

This section outlines the process for interconnecting Projects with aggregate output less than 30 kW to the Hillsdale Board of Public Utilities (Utility) electric system. This includes both new Projects and modifications to Existing Projects. The general Process is shown in Figure 1.

The Utility is required to complete all of its obligations for Interconnection of the Project to the Utility system within 2 weeks from the time a complete Interconnection Application is received by the Utility.

A completed Interconnection application consists of an application, data, (Appendix B or C), and filing fee.

Delays that are the responsibility of the Project Developer or attributable to the time lapse while the Utility diligently seeks to secure necessary rights-of-way, governmental permitting, zoning requirements, etc, will not be counted in the time to meet the 2 week deadline. The Utility shall have no responsibility to pursue court action to obtain these items.

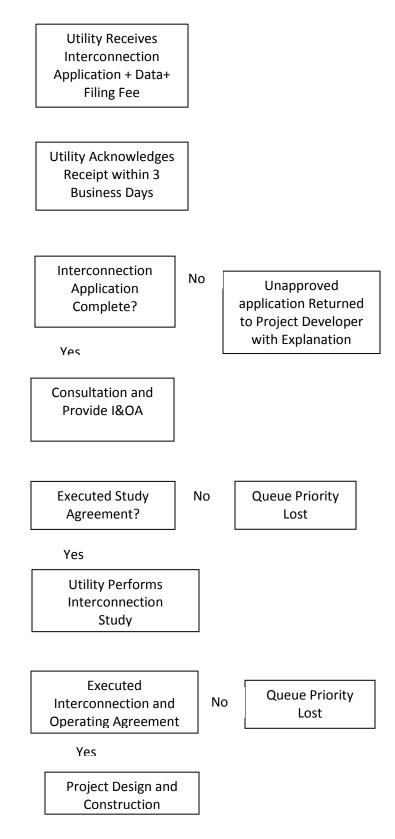
#### Interconnection Application

The Project Developer must first submit an Interconnection Application to the Utility. A separate application is required for each Project or Project site. A blank interconnection Application can be found in Appendix A. A list of the required interconnection data, depending on the capacity rating and type of generation, can be found in Appendixes B and C.

A complete submittal of required interconnection data and filing fee as noted in the Fee Schedule must accompany The Interconnection Application. The Utility will notify the Project Developer within 3 business days of receipt of an Interconnection Application. If any portion of the Interconnection Application, data submittal, or filing fee is Incomplete and/or missing, the unapproved Interconnection Application will be sent back to the Project Developer with the deficiencies clearly identified.

Once the utility has accepted an Interconnection Application, the Project is assigned a position in the Project queue maintained by the Utility. The Project position in the Project queue is determined by the date the Utility received the accepted Interconnection Application. The Utility will provide the Project Developer up to two hours of consultation related to the Project's interconnection to the Utility system and will include a good faith estimate of the Utility's charges to complete

#### Figure 1: The Interconnection Process



## **INTERCONNECTION PROCESS**

Interconnection, including the estimated study fees, based on the information available to the Utility at that time.

#### **Interconnection Study**

The Utility will perform an interconnection Study to determine the impact of the Project on the Utility's system, and the Utility system modifications required for safe and reliable interconnection of the Project to the Utility's system. The Project Developer is required to sign the Interconnection Study Agreement found in Appendix D and is encouraged to return the signed Interconnection Study Agreement to the Utility with the completed interconnection Application to avoid delays in the interconnection process. Any delay in execution of the Interconnection Study Agreement will not toll the interconnection deadlines.

The Utility will charge the Project Developer for the costs associated with completion of the Interconnection Study. The costs will not exceed the lesser of either of the following:

- 1) Five percent of the estimated total cost of the Project, or
- 2) \$10,000

Interconnection Study fees are not required if the Interconnection Study determines that the Project's aggregate export capacity is less than 15% of the line section peak load and the project does not contribute more than 25% of the maximum short circuit current at the Point of Common Coupling (PCC) as defined by IEEE 1547-2008.

It is typical for Projects less than 30 kW to be less than 15% of the line section peak load and less than 25% of the maximum short circuit current at the PCC.

#### **Interconnection and Operating Agreement**

The Utility will submit an Interconnection and Operating Agreement (I&OA) to the Project Developer, as soon as practical, after the 2 hour consultation described earlier. A sample interconnection and Operating Agreement can be found in Appendix E.

The Interconnection and Operating Agreement will cover matters customarily addressed in such agreements in accordance with Good Utility Practice, including without limitation, construction of facilities, system operation, interconnection cost and billing, defaults and remedies, insurance, and liability. All Utility costs associated with making modifications to its distribution system will be paid by the project Developer.

Any delay in execution of the interconnection and Operating Agreement will not count toward the interconnection deadlines.

#### **Project Design and Construction**

After the Interconnection and Operating Agreement is executed, the Utility will proceed to acquire necessary rights-of-way, procure required equipment, and design and construct the Interconnection Facilities.

#### **Ongoing Operations**

The project Developer and Utility will exchange contact information and update this information from time to time. A sample Contact List can be found in Appendix F.

## **TECHNICAL REQUIREMENTS**

#### **Technical Requirements**

The following discussion details the technical requirements for interconnection of Projects less than 30 kW. For projects within this capacity rating range, the Hillsdale Board of Public Utilities (Utility) has made a significant effort to simplify the technical requirements. This effort has resulted in adoption of IEEE Std. 1547-2008, Standard for interconnecting Distributed Resources with Electric Power Systems, being incorporated herein by reference.

Certain requirements, as specified by this document, must be met to provide compatibility between the project and the utility's electric system, and to assure that the safety and reliability of the electric system is not degraded by the interconnection.

Upgraded revenue metering may be required for the Project.

#### **Major Component Design Requirements**

The data requested in Appendix B or C for all major equipment and relaying proposed by the Project Developer, must be submitted as part of the initial application for review and approval by the Utility. The Utility may request additional data be submitted as necessary during the study phase to clarify the operation of the Project.

Once installed, the interconnection equipment must be reviewed and approved by the Utility prior to being connected to the Utility's electric system and before Parallel Operation is allowed.

#### Data

The data that the Utility requires to evaluate the proposed interconnection is documented on a "fill in the blank" checklist by generator type in Appendices B and C.

A site plan, one-line diagrams, and interconnection protection system details of the Project are required as part of the application data. The generator manufacturer supplied data package should also be supplied.

#### **Isolating Transformer(s)**

If a project Developer installs an isolating transformer, the transformer must comply with the current ANSI Standard C57.12.

The type of generation and electrical location of the interconnection will determine the isolating transformer connections. Allowable connections are detailed in the "Specific Requirements by Generator Type" section. Note: Some Utilities do not allow an isolation transformer to be connected to a grounded Utility system with an ungrounded secondary (Utility side) winding configuration, regardless of the Project type. Therefore, the Project Developer is encouraged to consult with the Utility prior to submitting an application.

### **Isolation Device**

After review, this device may not be required by the Utility. If required and/or installed, this device would be placed at the Point of Common Coupling (PCC) It can be a circuit breaker, circuit switcher, pole top switch, load-break disconnect, etc., depending on the electrical system configuration.

The following are required of the isolation device:

- Must be approved for use on the Utility system.
- Must comply with current relevant ANSI and/or IEEE Standards.
- Must have load break capability, unless used in series with a three-phase interrupting device
- Must be rated for the application.
- If used as part of a protective relaying scheme, it must have adequate interrupting capability. The Utility will provide maximum short circuit currents and X/R ratios available at the PCC upon request.
- Must be operable and accessible by the Utility at all times (24 hours a day, 7 days a week)
- The Utility will determine if the isolation device will be used as a protective tagging point. If the determination is so made, the device must have a visible open break, provisions for padlocking in the open position, and it must be gang operated. If the device has automatic operation, the controls must be located remote from the device.

#### **Interconnection Lines**

Any new line construction to connect the Project to the Utility's electric system will be undertaken by the Utility at the Project Developer's expense.

#### **Relaying Design Requirements**

Regardless of the technology of the interconnection, for simplicity for all projects in this capacity rating range, the interconnection relaying system must be certified by a nationally recognized testing laboratory to meet IEEE Std. 1547-2008. The date submitted for review must include information from the manufacturer indicating such certification, and the manufacturer must placard the equipment such that a field inspection can verify the certification.

A copy of this standard may be obtained (for a fee) from the Institute of Electrical and Electronics Engineers (<u>www.ieee.org</u>).

### **Momentary Paralleling**

For situations where the project will only be operated in parallel with the Utility's electric system for a short duration (100 milliseconds or less), as in make-before-break automatic transfer scheme, no additional relaying is required. Such momentary paralleling requires a modern integrated Automatic Transfer Switch (ATS) system, which is incapable of paralleling the Project with the Utility's electric system. The ATS must be tested, verified, and documented by the Project Developer for proper operation at least every 2 years. The utility may be present during the testing.

#### **Automatic Reclosing**

The Utility employs automatic multiple-shot reclosing on most of the utility's circuit breakers and circuit reclosers to increase the reliability of service to its customers. Automatic single-phase overhead reclosers are regularly installed on distribution circuits to isolate faulted segments of these circuits.

The Project Developer is advised to consider the effects of Automatic Reclosing (both single-phase and three phase) to assure that the Project's internal equipment will not be damaged. In addition to the risk of damage to the Project, and out-of-phase reclosing operation may also present a hazard to utility equipment since this equipment may not be rated or built to withstand this type of reclosing. The Utility will determine relaying and control equipment that needs to be installed to protect its own equipment from out-of-phase reclosing. Installation of this protection will be undertaken by the Utility at the Project Developer's expense.

#### **Single-Phase Sectionalizing**

The Utility also installs single-phase fuses and/or reclosers on its distribution circuits to increase the reliability of service to its customers. Three-phase generator installations may require replacement of fuses and/or single-phase reclosers with three-phase circuit breakers or circuit reclosers at the Project Developers expense.

### **Specific Requirements by Generator Type**

#### **Synchronous Projects**

An isolation transformer may be required for three-phase Synchronous Generator Facilities. Except as noted below, the isolation transformer must be incapable of producing ground fault current to the utility system; any connection except delta primary (Project side), grounded-wye secondary (Utility side) is acceptable. A grounded-wye-grounded-wye transformer connection is acceptable only if the Project's single line-to-ground fault current contribution is less than the Project's three-phase fault current contribution at the PCC. Protection must be provided for internal faults in the isolating transformer; fuses are acceptable.

For a sample one-Line Diagram of this type of facility, see Appendix B.

#### **Induction Projects**

For three-phase installations, any isolation transformer connection is acceptable except grounded-wye (Utility side), delta (Project side). Protection must be provided for internal faults in the isolating transformer; fuses are acceptable. The Utility does not require the Project Developer to provide any protection for Utility system ground faults.

For a sample One-Line Diagram of this type of facility, see Appendix B.

#### **Inverter-Type Projects**

No isolation transformer is required between the generator and the secondary distribution connection. If an isolation transformer is used for three-phase installations, any isolation transformer connection is acceptable except grounded-wye (Utility side), delta (Project side). Protection must be provided for internal faults in the isolating transformer; fuses are acceptable. The Utility does not require the Project Developer to provide any protection for Utility system ground faults.

For a sample one-Line Diagram of this type of facility, sees Appendix C.

#### **Relay Setting Criteria**

The relay settings for Projects less than 30 kW must conform to the values specified in IEEE Std. 1547-2008.

#### **Maintenance and Testing**

The Utility reserves the right to test the relaying and control equipment that involves protection of the Utility's electric system whenever the Utility determines a reasonable need for such testing exists.

The Project Developer is solely responsible for conducting and documenting proper periodic maintenance on the generating equipment and its associated control, protective equipment, interrupting devices, and main Isolation Device, per manufacturer recommendations.

Routine and maintenance checks of the relaying and control equipment must be conducted in accordance with provided written test procedures which are required by IEEE Std. 1547-2008, and test reports of such testing shall be maintained by the Project Developer and made available for Utility inspection upon request. [Note – IEEE 1547-2008 requires that testing be conducted in accordance with written test procedures, and the nationally recognized testing laboratory providing certification will require that such test procedures be available before certification of the equipment].

#### **Installation Approval**

The Project Developer must provide the Utility with 5 business days advance written notice of when the Project will be ready for inspection, testing, and approval.

### **Miscellaneous Operational Requirements**

Prior to final approval for parallel Operation, the Utility reserves the right to inspect the Project and require action to assure conformance to the requirements stated herein.

Miscellaneous requirements include synchronizing equipment for Parallel Operation, reactive requirements, and system stability limitations.

#### **Operating in Parallel**

The Project Developer will be solely responsible for the required synchronizing equipment and for properly synchronizing the Project with the Utility's electric system.

Voltage fluctuation at the PCC during synchronization is limited by IEEE Std. 1547-2008.

These requirements are directly concerned with the actual operation of the Project with the Utility:

- The Project may not commence parallel operation until approval has been given by the Utility. The completed installation is subject to inspection by the Utility prior to approval. Preceding this inspection, all contractual agreements must be executed by the Project Developer.
- The Project must be designed to prevent the Project from energizing into a de-energized Utility line. The Project's circuit breaker or contactor must be blocked from closing in on a de-energized circuit.
- The Project shall discontinue parallel operation with a particular service and perform necessary switching when requested by the Utility for any of the following reasons:

- 1. When public safety is being jeopardized.
- 2. During voltage or loading problems, system emergencies, or when abnormal sectionalizing or circuit configuration occurs on the utility system.
- 3. During scheduled shutdowns of Utility equipment that are necessary to facilitate maintenance or repairs. Such scheduled shutdowns shall be coordinated with the Project.
- 4. In the event there is demonstrated electrical interference (i.e. Voltage Flicker, Harmonic Distortion, etc.) to the Utility's customers, suspected to be caused by the Project, and such interference exceeds then current system standards, the Utility reserves the right, at the Utility's initial expense, to install special test equipment as may be required to perform a disturbance analysis and monitor the operation and control of the Project to evaluate the quality of power produced by the Project. In the event that no standards exist, then the applicable tariffs and rules governing electric service shall apply. If the Project is proven to be the source of the interference, and that interference exceeds the Utility's standards or generally accepted industry standards, then it shall be the responsibility of the Project Developer to eliminate the interference problem and to reimburse the Utility for the costs of the disturbance monitoring installation, removal, and analysis excluding the cost of the meters or other special test equipment.
- 5. When either the project or its associated synchronizing and protective equipment is demonstrated by the Utility to be improperly maintained, so as to present a hazard to the Utility system or its customers.
- 6. Whenever the project is operating isolated with other Utility customers, for whatever reason.
- 7. Whenever the Utility notifies the Project Developer in writing of a claimed non-safety related violation of the Interconnection Agreement and the Project Developer fails to remedy the claimed violation within ten working days of notification, unless within that time either the Project Developer files a complaint with the Hillsdale Board of Public Utilities seeking resolution of the dispute or the Project Developer and Utility agree in writing to a difference procedure.

If the Project has shown an unsatisfactory response to requests to separate the generation from the Utility system, the Utility reserves the right to disconnect the Project from parallel operation with the Utility electric system until all operational issues are satisfactorily resolved.

#### **Reactive Power Control**

Synchronous generators that will operate in the Flow-back Mode must be dynamically capable of providing 0.90 power factor lagging (delivering reactive power to the Utility) and 0.95 power factor leading (absorbing reactive power from the Utility) at the Point of Receipt. The Point of Receipt is the location where the Utility accepts delivery of the output of the project. The Point of Receipt can be the physical location of the billing meters or a location where the billing meters are not located, but adjusted for line and transformation losses.

Induction and Inverter-Type Projects that will operate in the Flow-back Mode must provide for their own reactive needs (steady state unity power factor at the Point of Receipt). To obtain unity power factor, the Induction or Inverter-Type Project can:

- 1. Install a switchable Vole-Ampere reactive (VAR) supply source to maintain unity power factor at the Point of Receipt; or
- 2. Provide the Utility with funds to install a VAR supply source equivalent to that required for the Project to attain unity power factor at the Point of Receipt at full output.

#### **Site Limitations**

The Project Developer is responsible for evaluating the consequences of unstable generator operation or voltage transients on the Project equipment and determining, designing, and applying *any* relaying which may be necessary to protect that equipment. This type of protection is typically applied on individual generators to protect the generator facilities.

The Utility will determine if operation of the Project will create objectionable voltage flicker and/or disturbances to other Utility customers and develop any required mitigation measures at the Project Developer's expense.

#### **Revenue Metering Requirements**

The Utility will own, operate, and maintain all required billing metering equipment at the Project Developer's expense.

#### **Non-Flow-back Projects**

Not Applicable.

#### **Flow-back Projects**

Special billing metering will be required. The Project Developer may be required to provide, at no cost to the Utility, a dedicated dial-up voice-grade circuit (POTS line) to allow remote access to the billing meter by the Utility. This circuit shall be terminated within ten feet of the meter involved.

The Project Developer shall provide the Utility access to the premises at all times to install, turn on, disconnect, inspect, test, read, repair, or remove the metering equipment. The Project Developer may, at its option, have a representative witness this work.

The metering installation shall be constructed in accordance with the practices, which normally apply to the construction of metering installations for residential, commercial, or industrial customers.

The Utility shall supply to the Project Developer all required metering equipment and the standard detailed specifications and requirements relating to the location, construction, and access of the metering installation and will provide consultation pertaining to the meter installation as required. The Utility will endeavor to coordinate the delivery of these materials with the Project Developer's installation schedule during normal scheduled business hours.

The Project Developer may be required to provide a mounting surface for the metering equipment. The mounting surface and location must meet the Utility's specifications and requirements.

The responsibility for installation of the equipment is shared between the Utility and the Project Developer. The Utility shall install the meters and communication links. The Utility will endeavor to coordinate the installation of these items with the Project Developer's schedule during normal scheduled business hours.

#### **Communication Circuits**

The Project Developer is responsible for ordering and acquiring the telephone circuits for the Project Interconnection. The Project Developer will assume all installation, operating, and maintenance costs associated with the telephone circuits, including the monthly charges for the telephone lines and any rental equipment required by the local telephone provider. However, at the Utility's discretion the Utility may select an alternative communication method, such as wireless communications. Regardless of the method, the Project Developer will be responsible for all costs associated with the material and installation, whereas the Utility will be responsible to define the specific communication requirements.

The Utility will cooperate and provide Utility information necessary for proper installation of the telephone circuits upon written request.

All telephone circuit (both voice and data) must be analog circuits.

# APPENDIX A INTERCONNECTION APPLICATION

#### **GENERATOR INTERCONNECTION APPLICATION** AGGREGATEGENERATOR OUTPUT BELOW .30 kW

- 1. The undersigned Project Developer submits this Generator Interconnection Application and appropriate filing fee to interconnect a new Project to the Hillsdale Board of Public Utilities (HBPU) Electric System or to increase the capacity of an existing Project interconnected to the HBPU Electric System.
- 2. A project Developer requesting interconnection or an increase in the capacity of an existing Project to the HBPU Electric System must provide the following information:
  - a. Completed Interconnection Application Data sheet appropriate for the capacity rating and type of generating unit(s), as found in HBPUs Generator Interconnection Requirements (Interconnection Application Data sheet, found in Appendix B or C, must be attached to this Interconnection Application).
  - b. Description of the equipment configuration and proposed interconnection one-line diagram (one-line diagram must be attached to this Interconnection Application).
  - c. Generator Information: Capacity Rating of the Generator(s) in kW: Projected monthly kWh output of the generator: \_\_\_\_\_ Solar Renewable Energy Source: \_\_\_\_\_ Wind \_\_\_\_\_ Biomass \_\_\_\_\_ Hydro \_\_\_\_\_ Other (please specify) \_\_\_\_\_ Estimate date for generator installation/operation: d. Project Developer (Single Point of contact): Name: Address: Phone Number: Fax Number: E-mail Address: Project Site Address:
- 3. This Generator Interconnection application shall be directed to the Utility representative as indicated below:

Director Hillsdale Board of Public Utilities 45 Monroe Street Hillsdale, MI 49242 4. I, the undersigned and authorized representative of the Project, submit this Generator Interconnection Application and required technical data for the HBPU. I understand that upon acceptance, the HBPU shall subsequently provide an Interconnection Study Agreement, if said Interconnection Study is determined to be necessary. The Interconnection Study Agreement will include the Scope of the Interconnection Study. I also understand that I shall be required to furnish certain required technical data as requested by the HBPU in support of this study and reimburse the HBPU for its study expenses.

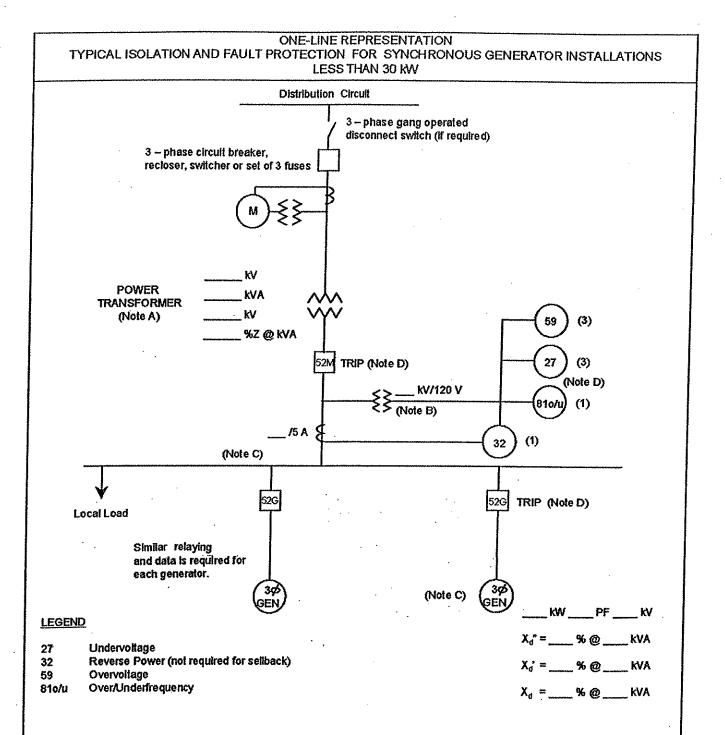
Authorized Signature:	
Printed Name:	
Title:	
Company Name:	
Date:	

# **APPENDIX B**

# SYNCHRONOUS AND INDUCTION GENERATORS AGGREGATE GENERATION LESS

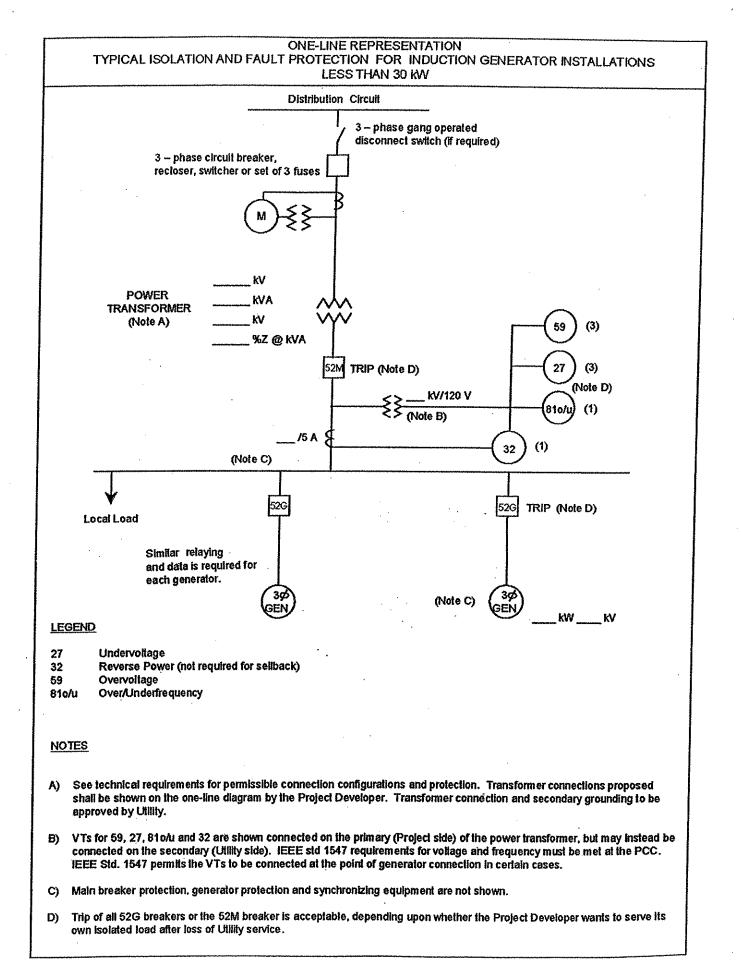
# THAN 30 kW

# **REQUIRED DATA**



#### NOTES

- A) See technical requirements for permissible connection configurations and protection. Transformer connections proposed shall be shown on the one-line diagram by the Project Developer. Transformer connection and secondary grounding to be approved by Utility.
- B) VTs for 59, 27, 81o/u and 32 are shown connected on the primary (Project side) of the power transformer, but may instead be connected on the secondary (Utility side). IEEE std 1547 requirements for voltage and frequency must be met at the PCC. IEEE Std. 1547 permits the VTs to be connected at the point of generator connection in certain cases.
- C) Main breaker protection, generator protection and synchronizing equipment are not shown.
- D) Trip of all 52G breakers or the 52M breaker is acceptable, depending upon whether the Project Developer wants to serve its own isolated load after loss of Utility service.



B-2

# SYNCHRONOUS OR INDUCTION GENERATORS – AGGREGATE < 30 kW</td> INTERCONNECTION APPLICATION DATA FOR: PROVIDED BY: DATE:

Instructions: Attach data sheets as required. Indicate in the table below the page number of the attached data on which the requested information is provided.

	General Information	
Item	Data	Attached
No	Description	Page No
1	Flow-back or Non-Flow-back	
2	Project Type (Base load, peaking, intermediate)	
3	Site Plan	
4	Simple One-Line Diagram(s) for Project and Project Load	
5	Detailed One-Line Diagram(s) for Project	
6	Energization Date for Project Interconnection Facilities	
7	First Parallel Operation Date for Testing	
8	Project Commercial Operation Date	
9	Estimated Project Cost	

The following information on these system components shall appear on the preliminary One-Line Diagram, including manufacturer make and model for the items listed below:

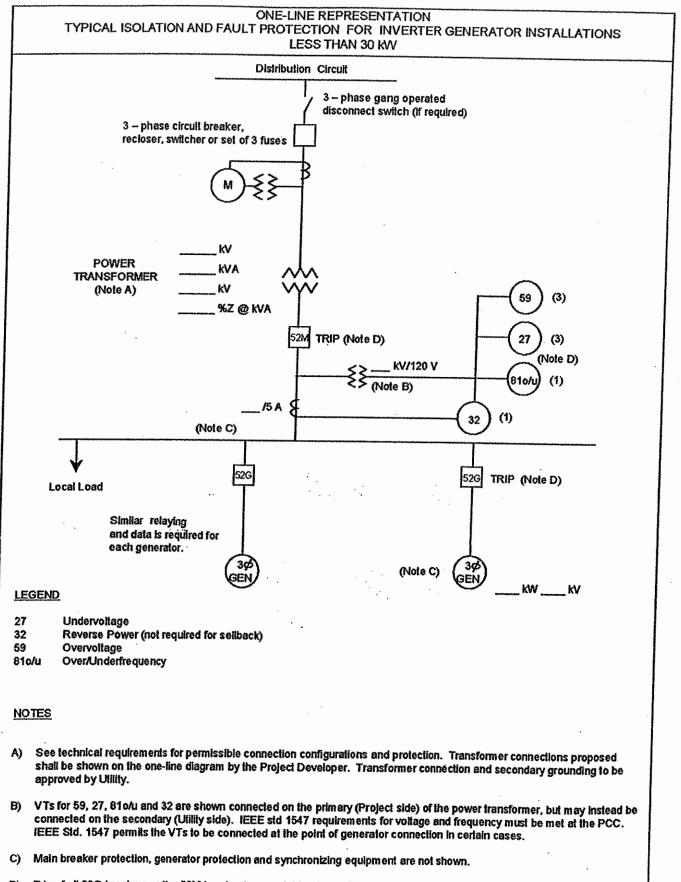
- Breakers Rating, location and normal operating status (open or Closed)
- Buses Operating voltage
- Capacitors Size of bank in kVAR
- Current Transformers Overall ratio, connected ratio
- Fuses normal operating status, rating (Amps), type
- Generators Capacity rating (kVA), location, type, method of grounding
- Grounding Resistors Size (ohms), current (Amps)
- Isolating transformers Capacity rating (kVA), location, impedance, voltage ratings, primary and secondary connections and method of grounding
- Voltage Transformers Ratio, connection
- Reactors Ohms/phase
- Relays Types, quantity, IEEE device number, operator lines indicating the device initiated by the relays.
- Switches Location and normal operating status (open or closed), type, rating
- Tagging Point Location, identification

# SYNCHRONOUS OR INDUCTION GENERATORS – AGGREGATE < 30 kW</td> NTERCONNECTION APPLICATION DATA FOR: PROVIDED BY: DATE:

Instructions: Attach data sheets as required. Indicate in the table below the page number of the attached Data (manufacturer's data where appropriate) on which the requested information is provided. Provide one table for each unique generator.

	Electric Generator(s) at the Project: Generator No:		
Item No	Data Value	Data Description	Attached Page No
1		Generator Type (Synchronous or Induction)	
2		Generator Nameplate Voltage	
3		Generator Nameplate Watts or Volt-Amperes	
4		Generator Nameplate Power Factor (pf)	
5		Short Circuit Current Contribution from Generator at the Point of Common Coupling (Single-Phase and Three-Phase)	
6		National Recognized Testing Laboratory Certification	
7		Written Commissioning Test Procedure	

# APPENDIX C INVERTER-TYPE GENERATORS AGGREGATE GENERATION LESS THAN 30 kW REQUIRED DATA



D) Trip of all 52G breakers or the 52M breaker is acceptable, depending upon whether the Project Developer wants to serve its own isolated load after loss of Utility service.

#### **INVERTER-TYPE GENERATORS – AGGREGATE < 30 kW** NTERCONNECTION APPLICATION DATA FOR:

## PROVIDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

Instructions: Attach data sheets as required. Indicate in the table below the page number of the attached data on which the requested information is provided.

#### **General Information**

Item	Data	Attached
No	Description	Page No
1	Flow-back or Non-Flow-back	
2	Project Type (Base load, peaking, intermediate, other)	
3	Site Plan	
4	Simple One-Line Diagram(s) for Project and Project Load	
5	Detailed One-Line Diagram(s) for Project	
6	Energization Date for Project Interconnection Facilities	
7	First Parallel Operation Date for Testing	
8	Project Commercial Operation Date	
9	Estimated Project Cost	

The following information on these system components shall appear on the preliminary One-Line Diagram, including manufacturer make and model for the items listed below:

- Breakers Rating, location and normal operating status (open or closed) •
- Buses Operating voltage •
- Capacitors Size of bank in kVAR •
- Current Transformers Overall ratio, connected ratio •
- Fuses normal operating status, rating (Amps), type •
- Generators Capacity rating (kVA), location, type, method of grounding •
- Grounding Resistors Size (ohms), current (Amps) •
- Isolating transformers Capacity rating (kVA), location impedance, voltage ratings, • primary and secondary connections and method of grounding
- Voltage Transformers Ratio, connection •
- Reactors Ohms/phase •
- Relays Types, quantity, IEEE device number, operator lines indicating the device • initiated by the relays.
- Switches Location and normal operating status (open or closed), type, rating Tagging • Point - Location, identification

# INVERTER-TYPE GENERATORS – AGGREGATE < 30 kW</td> INTERCONNECTION APPLICATION DATA FOR: PROVIDED BY: DATE:

Instructions: Attach data sheets as required. Indicate in the table below the page number of the attached Data (manufacturer's data where appropriate) on which the requested information is provided. Provide one table for each unique generator.

	Electric Generator(s) at the Project:       Generator No:	
Item	Data	Attached
No	Description	Page No
1	Generator Type (Inverter)	
2	Generator Nameplate Voltage	
3	Generator Nameplate Watts or Volt-Amperes	
4	Generator Nameplate Power Factor (pf)	
5	Short Circuit Current contribution from generator at the Point of Common Coupling	
	(single-phase and three-phase)	
6	National Recognized Testing Laboratory Certification	
7	Written Commissioning Test Procedure	

# **APPENDIX D**

# **INTERCONNECTION STUDY AGREEMENT**

Hillsdale Board of Public Utilities

(Project)

Interconnection Study Agreement for

Generator Interconnection

With Aggregate Project Output Below 30 kW

WHEREAS, proposals to construct or upgrade a project which will be operated in parallel with and interconnected with the Hillsdale Board of Public Utility's (HBPS) Electric System must be reviewed by the HBPU to determine how it will impact the HBPU Electric System.

WHEREAS, on	, Utility received from
	("Project Developer") a Generator Interconnection

Application.

WHEREAS, HBPU has determined that an Interconnection Study is necessary to determine whether the HBPU Electric System can accommodate the requested interconnection.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein set forth, the Utility and the Project Developer agree as follows:

- 1. The HBPU shall complete an Interconnection Study in accordance with the HBPU Generator Interconnection Requirements and this Agreement.
- 2. The HBPU will charge the project Developer for an Interconnection Study. The charges shall not exceed the lesser of either of the following:
  - a. 5% of the estimated total cost of the Project or,
  - b. \$10,000

The HBPU shall not charge the Project Developer if the Project's aggregate export capacity is less than 15% of the line section peak load and the Project does not contribute more than 25% of the maximum short circuit current at the point of interconnection. The Project Developer will be billed for the cost of the Interconnection Study at the conclusion of the Interconnection Study.

- 3. The Project Developer is to return this executed Interconnection Study Agreement to the HBPU as soon as possible. The interconnection process will not proceed until the fully executed Interconnection Study Agreement is received.
- 4. The HBPU shall supply a copy of the completed Interconnection Study to the Project Developer.
- 5. Any notice or request made to or by either Party regarding this Agreement shall be made to the representative of the other Party, or its designated agent, as indicated below.

Hillsdale Board of Public Utilities	Project Developer
45 Monroe Street	Name:
Hillsdale, Michigan 49242	Address:

IN WITNESS WEREOF, the Parties have caused this Interconnection Study Agreement to be executed by their respective authorized officials.

Signature:	Signature:
(Typewritten or Printed Name)	(Typewritten or Printed Name)
Title	Title
Date	Date

## **APPENDIX E**

# GENERATOR INTERCONNECTION & OPERATING AGREEMENT FOR PROJECTS WITH AGGREGATE GENERATOR OUTPUT LESS THAN 30 kW

## GENERATOR INTERCONNECTION & OPERATING AGREEMENT FOR PROJECTS WITH AGGREGATE GENERATOR OUTPOUT LESS THAN 30 kW

Project Developer Name:		
Project Service Address:		
Account #: City:		State:
Zip Code:		
Project Developer Contact Name:		
Telephone:	Fax:	
E-mail:		
Equipment Specifications: Make:	Model:	
Service Type: Single Phase 1 Three Phase (circle one)	Voltage Level:	
This section is to be completed by a Hillsdale Board	of Public Utilities representative.	
Work Order Number:		_
Good Faith Estimate for Interconnection: \$		-

Part II, Terms and Conditions are a part of this Agreement.

PROJECT DEVELOPER ACKNOWLEDGES HAVING READ TERMS AND CONDITIONS

#### **PROJECT DEVELOPER**

# CITY OF HILLSDALE, acting by and through its Hillsdale Board of Public Utilities

By: (Signature)	By: (Signature)
Printed Name:	Printed Name:
Title:	Title:
	Effective Date:

#### PART II TERMS AND CONDITIONS

This GENERATOR INTERCONNECTION & OPERATING AGREEMENT (hereinafter, this Agreement), is made and entered into as of the Effective Date identified in Part 1, between the CITY OF HILLSDALE, acting by and through its Hillsdale Board of Public Utilities, a Michigan Municipal corporation, 45 Monroe Street, Hillsdale, Michigan 49242, herein termed "HBPU", and the Project Developer, a (entity status) located at

, herein termed "Project Developer." HBPU and Project Developer are hereinafter sometimes referred to individually as "Party" and collectively as "Parties" where appropriate.

- 1. **Request for Service:** The Project Developer hereby requests to interconnect and operate in parallel a generation plant with aggregate generation of less than 30 kW ("Project"), as indicated in Par 1, to HBPU's distribution system. In order to provide said interconnection, it may be necessary for HBPU to install certain Interconnection Facilities of which the general location and type of facilities are depicted in Exhibit 1 Interconnection Diagram. Exhibit t shall also define the design and physical construction of all the Interconnection Facilities of which the Project Developer shall solely bear the costs. The Parties desire to enter into this Agreement for purposes, among others, of describing the Interconnection Facilities and associated appurtenances to interconnect the Project to HBPU distribution system. This Agreement does not address the sale of electricity to or from HBPU.
- 2. Deposit Requirements: Prior to construction, Project Developer shall pay 50% of the good faith estimate, indicated in Part 1. If during construction, HBPU determines that the cost of the Interconnection Facilities varies significantly from the original good faith estimate, HBPU will notify the Project Developer in writing. HBPU shall have the right to delay or suspend all construction of its Interconnection Facilities until Project Developer responds to the notice. If the Project Developer's response and acceptance of this new cost estimate is not received within 5 business days, HBPU may terminate this Agreement by written notice to the Project Developer. Upon such termination, HBPU will refund, without interest, the Project Developer's payment, less any expense incurred to provide interconnection service to the location described in Part 1 of this Agreement.

Payment	Amount Due	Milestone Description	Target Due Date(Number of Weeks from Completion of Application)
	50% or \$ figure	Execution of Generator Interconnection & Operating Agreement	0
2	50% or \$ figure	Construction Complete	2
	\$	Good Faith Estimate Total	
	True-up (invoice or refund)	Three weeks after Construction Complete	5

#### 3. Payment Schedule:

All payments shall be made payable to HBPU and shall be sent to Hillsdale Board of Public Utilities, Attention: Account Receivable, 45 Monroe Street, Hillsdale, MI 49242. When HBPU has determined that all costs and expenses are accounted for on its books, HBPU will reconcile the good faith estimate with the final work order estimate of the interconnection and issue a final invoice or credit. Any payment not made on or before the due date shall bear interest, from the date due until the date upon which payment is made at a rate of two percent (2%) a month, twenty-four percent a year (24%) of the amount in arrears. This interest due will be assessed when the next month's bill is issued. Any amount which is unpaid by the Project Developer shall be subject to all rights granted to a lien for electrical services under the Charter of the City of Hillsdale and applicable statutes.

- 4. Site Preparation/Access: At its own expense, the Project developer shall make the proposed Project site available to HBPU. Said site shall be free from hazard and shall be adequate for the operation and construction of the Interconnection Facilities necessary to connect the proposed Project. HBPU, its agents and employees, shall have full right and authority of ingress and egress at all reasonable times on and across the premises of the Project for the purpose of installing, operating, maintaining, inspecting, replacing, repairing, and removing its Interconnection Facilities located on the premises. The right of ingress and egress, however, shall not unreasonably interfere with Project Developer's use of its premises.
- 5. Easements/Permits: If necessary, prior to the installation of the Interconnection Facilities and anytime thereafter, HBPU will acquire required permits and necessary easements for its Interconnection Facilities. These easements/permits may include, but shall not be limited to, easements to clear trees, and necessary rights-of-way for installation and maintenance of its Interconnection Facilities. The Project Developer shall reimburse HBPU for its costs and expenses for acquiring such easements / permits.
- 6. **Parallel Operation:** It is understood that the Project will normally remain connected to and be operated in parallel with HBPU's distribution system. The Project Developer shall, at its expense, install and properly maintain protective equipment and devices and provide sufficiently trained personnel to protect its equipment and service, and the equipment and service of HBPU from damage, injury or interruptions during the Project's parallel operation with HBPU distribution system, and, without limiting the indemnity provided in Section 12, will assume any loss, liability or damage to the Project caused by lack of or failure of such protection. Such protective equipment specifications and design shall be consistent with the HBPU Utility Generator interconnection Requirements and any successor and/or supplemental documents, incorporated herein by reference. Prior to the Project operating in parallel with HBPU's distribution system, the Project Developer shall provide satisfactory evidence to HBPU that it has met the **HBPW Customer Owned Generation Interconnect Policy, a copy of which is attached as Exhibit 2.** These HBPU Utility Generator Interconnection Requirements include, but are not limited to, approval from the local building code inspector.
- 7. Testing: The Project Developer shall perform operational testing and inspection of the Project at least 5 days before interconnection. The Project Developer shall contact HBPU and arrange for a mutually agreeable time for performing said tests. HBPU may send qualified personnel to the Project site to inspect the Project and observe the testing. Project Developer shall provide HBPU a written test report when such testing and inspection is completed and prior to interconnection. Protective relay equipment shall be tested every two (2) years (unless an extension is agreed to by HBPU) to verify the calibration indicated on the latest relay setting document issued by HBPU. Tests shall be conducted or witnessed by HBPU at Project Developer's expense. The results of such tests shall be provided to HBPU in writing for review and approval. HBPU may, at any time and at HBPU expense, inspect and test the Project to verify that the required protective interconnection equipment is in service, properly maintained, and calibrated to provide the Intended protection. If necessary, this inspection may also include a review of Project Developer's pertinent records. Inspection, testing and / or approval by HBPU or the omission of any inspection, testing and/or approval by HBPU pursuant to this Agreement shall not relieve the Project Developer of any obligations or responsibility assumed under this Agreement.
- 8. Obligation to Connect: HBPU shall not be obligated to continue the interconnection to the Project if any one or more of the following conditions exist, including but not limited to: (a) those conditions listed in the HBPU Customer Owned Generation Interconnect Policy (Exhibit 2) (b) the electrical characteristics of the Project are not compatible with the electrical characteristics of HBPU distribution system, (c) the Project Developer is deficient in following either the voltage schedule or reactive power schedule established by HBPU, (d) an emergency, condition exists on HBPU distribution system, (e) Project Developer's protective relay equipment fails, resulting in a lack of the level of protection required by prudent utility practice, (f) the Project Developer's Project is determined to be disrupting HBPU customers or (g) HBPU requires disconnection the Project in order to construct, install, maintain, repair, replace, remove, investigate, inspect or test any part of HBPU Interconnection Facilities or any other HBPU equipment associated with the interconnection (also if a required component (example: phone line) or required modification to allow interconnection fails or becomes incapacitated and is not repaired in a timely manner). HBPU shall electrically connect or reconnect its distribution system to the Project when, in HBPU sole opinion, the conditions named above cease to exist. Under any of the conditions listed above, HBPU will follow the agreed upon procedures for disconnection and re-connecting the interconnection as outlined in Exhibit 2 (HBPU Customer Owned Interconnect Policy).

- 9. **Subcontractors:** Either Party may hire a subcontractor to perform its obligations under this Agreement. However, each Party shall require its subcontractors to abide by the terms of this Agreement. Each Party shall remain primarily liable to the other Party for the performance of such subcontractor. Hiring a subcontractor does not release either Party from any of its obligations.
- 10. Force Majeure: Neither Party shall be considered to be in Default with respect to any obligation hereunder other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give noticed and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.
- 11. Assignment: This Agreement shall not be assigned by the Project Developer except with the previous written consent of HBPU and any attempted assignment without such consent shall be void.
- 12. **Indemnity:** Each Party shall at all times assume all liability for, and shall indemnify and save the other Party harmless from, any and all damages, losses, claims, demands, suits, recoveries, costs, legal fees, and expenses for injury to or death of any person or persons whomsoever occurring on its own system, or for any loss, destruction of or damage to any property of third persons, firms, corporations or other entities, occurring on its own system, including environmental harm or damage arising out of our from, either directly or indirectly, any electric energy furnished to it hereunder after such energy has been delivered to it by such other Party, unless caused by the sole negligence or intentional wrongdoing of the other Party. The provisions of this Section 12 shall survive termination or expiration of this Agreement.
- 13. **Insurance:** Project Developer shall obtain and continuously maintain throughout the term of this Agreement liability insurance covering bodily injury and properly damage liability with a per occurrence and annual policy aggregate amount of at least:

Project Capacity	Minimum Limit
Less than 30kW	\$500,000

The Certificate of Insurance shall name the City of Hillsdale, the Hillsdale Board of Public Utilities, its officers and employees, as additional insureds.

When requested in writing by HBPU, said limit shall be increased each year that this Agreement is in force to a limit no greater than the amount arrived at by increasing the original limit by the same percentage change as the Consumer Price Index - All Urban Workers (CPI - U.S. Cities Average). Such policy shall include, but not be limited to, contractual liability for indemnification assumed by Project Developer under this Agreement.

Evidence of insurance coverage on a certificate of insurance shall be provided to HBPU upon execution of this Agreement and thereafter within ten (10) days after expiration of coverage; however, if evidence of insurance is not received by the 11<sup>th</sup> day, HBPU has the right, but not the duty, to purchase the insurance coverage required under this Section and to charge the annual premium to Project Developer. HBPU shall receive thirty (30) days advance written notice if the policy is cancelled or substantial changes are made that affect the additional insured. At HBPU request, Project Developer shall provide a copy of the policy to HBPU. All certificates and notices shall be mailed to:

Hillsdale Board of Public Utilities 45 Monroe Street, Hillsdale, MI 49242 Attention: Corporate Insurance Department.

- 14. Limitation on Liability: NEITHER PARTY SHALL IN ANY EVENT BE LIABLE TO THE OTHER FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES SUCH AS, BUT NOT LIMITED TO, LOST PROFITS, REVENUE OR GOOD WILL, INTEREST, LOSS BY REASON OF SHUTDOWN OR NON-OPERATION OF EQUIPMENT OR MACHINERY, INCREASED EXPENSE OF OPERATION OF QUIPMENT OR MACHINERY, COST OF PURCHASED OR REPLACEMENT POWER OR SERVICES OR CLAIMS BY CUSTOMERS, WHETHER SUCH LOSS IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
- 15. Governing Law: This Agreement shall be deemed to be a Michigan contract and shall be construed in accordance with and governed by the laws of Michigan, exclusive of its conflict of laws principles. In the event that any change in law or administrative rule or regulation that would materially alter the terms and conditions of this Agreement, either Party shall have the right to seek modification of this Agreement without prior written consent of the other Party.
- 16. **Effective Date, Term, and Termination:** The Effective Date of this Agreement shall be the date of execution, as identified in Part 1, and shall continue in effect until this Agreement is terminated as provided herein. The Agreement may be terminated at any time by mutual agreement of both Parties, or by either Party upon giving the other at least ninety (90) days written notice if one or more of the conditions exist as outlined in Section 8, Obligation to Connect.
- 17. **Retirement:** Upon termination of this Agreement pursuant to Section 16 or at such time after any of the Interconnection Facilities described herein are no longer required, then the need for the retirement of said Interconnection Facilities may include without limitation (i) dismantling, demolition, and removal of equipment, facilities, and structures, (ii) security, (iii) maintenance and (iv) disposing of debris. The cost of such removal shall be borne by the Party owning such Interconnection Facilities.
- 18. **Breach and Default:** A breach of this Agreement ("Breach") shall occur upon the failure of a Party to perform or observe any material term or condition of this Agreement. A default of this Agreement ("Default") shall occur upon the failure of a Party in Breach of this Agreement to cure such Breach. Examples of Default include, but are not limited to:
  - i) Failure to pay money when due;
  - ii) Failure to comply with any material term or condition of this Agreement, including but not limited to any material Breach of a representation, warranty or covenant made in this Agreement;
  - iii) A Party: (i) becomes insolvent; (b) files a voluntary petition in bankruptcy under any provision of any federal of state bankruptcy law or shall consent to the filing of any bankruptcy or reorganization petition against it under any similar law; (c) makes a general assignment for the benefit of its creditors or (d) consents to the appointment of a receiver, trustee, or liquidator;
  - iv) Assignment of this Agreement in a manner inconsistent with the terms of this Agreement;
  - v) Failure of either Party to provide such access rights, or a Party's attempt to revoke or terminate such access rights, as provided under this Agreement;
  - vi) Failure of either Party to provide information or data to the other Party as required under this Agreement, provided the Party entitled to the information or data under this Agreement requires such information or data to satisfy its obligations under this Agreement

In the event of a Breach or Default by either Party, the Parties shall continue to operate and maintain, as applicable, its Interconnection Facilities, including but not limited to: protection and Metering Equipment, transformers, communication equipment, building facilities, software, documentation, structural components and other facilities and appurtenances that are reasonably necessary for HBPU to operate and maintain its distribution system and for the Project Developer to operate and maintain its Project in a safe and reliable manner. Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. The defaulting Party then has 30 days to cure the Default. If a Default is not cured within the period provided for herein or as agreed to by the Parties, the non-defaulting Party shall have the right to terminate this Agreement by written notice and shall be relieved of any further obligations hereunder. Further, in the event of such termination, the non-defaulting party shall be entitled to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Section 18 will survive termination of this Agreement.

- 19. No Partnership: This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.
- 20. Severability: If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other governmental authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.
- 21. Entire Agreement: This Agreement and the HBPU Utility Generator Interconnection Requirements shall constitute the entire understanding between the Parties with respect to the subject matter hereof, supersede any and all previous understandings between the Parties with respect to the subject matter hereof, and binds and insures to the benefit of the Parties, their successors, and permitted assigns. No amendments or changes to this Agreement shall be binding unless made in writing and duly executed by both Parties.
- 22. No Third Party Beneficiaries: This Contract is intended for the benefit of the parties hereto and does not grant any rights to any third parties unless otherwise specifically stated herein.
- 23. **Notices:** All notices required hereunder shall be in writing and shall be sent by United States mail or delivered in person to the Parties at their respective addresses as set forth in Part 1. Either Party may at any time change the addressee or address to which notices to it are to be mailed or delivered by giving notice of such change to the other Party. All Notices shall become effective upon date of receipt.
- 24. **Project Requirements/HBPU Web Site:** The Project Developer acknowledges that the HBPU has posted on its designated web site terms and conditions relating to the net metering program, including but not limited to enrollment, metering requirements, billing, eligibility, net excess generation credits, program availability, and program termination. The Project Developer agrees that such terms and conditions are incorporated by reference under this Agreement as presently existing and as from time to time amended by the HBPU. Any amendment or modification as shown on the website relating to the above-captioned matters (including such other matters as may be addressed by the HBPU) shall be incorporated into this Agreement.

#### 25. Other:

#### EXHIBIT 1 INTERCONNECTION DIAGRAM

(Insert a One-Line Diagram (PDF file) for the size and type of generator that will be installed)

## **APPENDIX F**

# Hillsdale Board of Public Utilities Contacts

Chris McArthur	Director of Utilities	(517) 437-3387
Chad Culbert	Distribution Superintendent	(517) 437-3387