

ORDINANCE NO. _____

**ORDINANCE REPEALING AND REPLACING CHAPTER 78 – UTILITIES, ARTICLE II,
ELECTRIC SERVICE REGULATIONS, DIVISION 6. – NET METERING AND
INTERCONNECTION POLICY**

WHEREAS, the City of Highland, Madison County, Illinois (hereinafter “City”), is a non-home rule municipality duly established, existing and operating in accordance with the provisions of the Illinois Municipal Code (Section 5/1-1-1 et seq. of Chapter 65 of the Illinois Compiled Statutes); and

WHEREAS, the Climate and Equitable Jobs Act, 220 ILCS 5/17-900 *et seq.* (“Act”), became law on September 15, 2021; and

WHEREAS, the Act addresses customer rights for self-generation who are serviced by municipal systems, including City’s electrical system; and

WHEREAS, the Act mandates that each municipal electrical system is required to update its policies for the interconnection and fair crediting of customer self-generation and storage; and

WHEREAS, the Act mandates the following objectives for municipal electrical system self-generation policies:

1. Provide the opportunity for residential and small commercial customers to install renewable generating facilities and to self-generate electricity;
2. Create consistent, fair policies that are accessible to all customers;
3. Post policies publicly on websites;
4. Avoid discriminatory fees or charges;
5. Avoid discriminatory treatment;
6. Avoid excessive compliance requirements;

and

WHEREAS, the Act provides the following for municipal electric system customers:

1. Right to interconnect renewable generating facilities in a timely manner;
2. Right to store such energy at customer’s residence;
3. Right to consume such energy;
4. Right to deliver excess renewable energy to the municipal distribution system;

and

WHEREAS, City has determined that it is in the best interests of public health, safety, general welfare, and economic welfare to repeal the current Net Metering Policy and replace it with the policy stated herein; and

WHEREAS, the City Council finds that the City Manager and/or Mayor should be authorized and directed, on behalf of the City, to execute whatever documents are necessary to repeal and replace the current Net Metering Policy and replace it with the policy stated herein.

NOW, THEREFORE, BE IT ORDAINED, by the City Council of the City of Highland, Illinois, as follows:

Section 1. The foregoing recitals are incorporated herein as findings of the City Council of the City of Highland, Illinois.

Section 2. Chapter 78 – Utilities, Article II, Electric Service Regulations, Division 6. – Net Metering and Interconnection Policy, shall be repealed and replaced as follows:

DIVISION 6. – NET METERING AND INTERCONNECTION POLICIES

Sec. 78 – 185 - Customer Self-Generation Net Metering Policy

(a) The City of Highland Department of Light & Power shall make available, upon request, net metering service to any customer taking service from them and who meets the requirements set forth in this policy. For purposes of this policy “net metering” means service to an electric customer under which electric energy generated by that electric customer from an eligible on-site generating facility owned by that customer and, under some circumstances, delivered to the local distribution facilities, may be used to offset electric energy provided by the electric utility to the electric customer as provided for in this policy. The term “net metering” is not used as a limiting term, but rather is used in its general sense to include the full range of methods for valuing customer self-generation and implementing fair credits for excess energy delivered to the municipal distribution system by the customer. For multi-unit residential and commercial buildings, if all units are on the same account, it qualifies as a single customer for purposes of this policy. If individual units are separately metered and individual tenants have individual accounts, then the term “Customer” only refers to the building owner and any usage by the owner. The utility cannot be responsible to allocate renewable generation facilities to individual accounts in a multi-unit residential or commercial building. The following documents must be executed and returned to the Director of Light & Power:

1. Before the project starts construction, customer must complete the attached application form (See **Exhibit A**) and receive approval from the Director of Light & Power to proceed.
2. Before the project starts construction, customer must complete the attached Interconnection Agreement (See **Exhibit B**) and receive approval from the Director of Light & Power to proceed.
3. Once installation is complete and before the project in service date, the contractor must complete and deliver the attached Certificate of Completion to the Director of Light & Power (See **Exhibit C**).

- (b) For purposes of this policy, an eligible on-site generating facility shall be defined as a renewable generating facility, such as a photovoltaic facility and small wind turbines and may include technology to store renewable energy at the customer's premise. Other forms of renewable generation shall be considered on a case-by-case basis. In all cases, facilities interconnected must be deemed by the utility to be renewable to qualify for this policy.
- (c) The electric generating facility must also abide by The City of Highland, Department of Light & Power Interconnection Standards currently in place at the time of installation to be an eligible on-site generating facility.
- (d) Subject to the limitations set forth herein, City of Highland shall make net metering service available upon request to any City of Highland residential or small commercial electric customer with an eligible on-site generating facility owned by the customer. The determination whether the customer is a residential or small commercial customer is based on the rate classification under which the customer takes electric service. The eligible on-site generating facility shall be located on the customer's premises and on the customer's side of the billing meter and be sized to primarily produce only enough electricity to offset the customer's own electrical requirements. Proper sizing of eligible on-site generating facilities shall be determined as set forth in Section (m) below.
- (e) Any request for net metering service by a customer that is not a residential or small commercial customer shall be considered on a case by case basis. The decision with respect to such facilities shall be made by the City of Highland Director of Light & Power based on the potential impact to the distribution system, or portions thereof, and to the property of other customers of City of Highland Light & Power. Customers that do not qualify for net metering service under this policy shall be permitted to interconnect and self-generate as required by and in accordance with the Federal Energy Regulatory Commission's rules under the Public Utility Regulatory Policies Act (PURPA) on a case by case basis.
- (f) Notwithstanding the provisions in Section (d), the City of Highland reserves the authority to withhold, deny or delay approval of the interconnection of proposed on-site generating facilities and of net metering service hereunder if the operation of the facility would be unsafe or pose a risk of adverse impacts to the distribution system or portions thereof, or to the property of other customers of City of Highland Light & Power. City of Highland Light & Power shall withhold approval for only so long as is reasonably necessary to remedy the risk of adverse impact, if possible. City of Highland Light & Power shall only deny approval if the adverse impact cannot reasonably be remedied or if the customer refuses to meet all applicable State and local safety and electrical code requirements, or refuses to provide for payment of the costs of the improvements to the facility or the system that are required to accommodate the otherwise eligible on-site generating facility. City of Highland Light & Power shall not be required to make unscheduled improvements to its distribution system or portions thereof to remedy the situation causing the delayed or withheld approval unless the customer agrees to pay for the costs thereof. Likewise, City of Highland Light & Power may require a customer with an approved on-site generating facility that has been installed and operating to suspend operations of the facility if it becomes unsafe or causes adverse impacts to the distribution system or portions thereof, or to the property of other customers of City of Highland Light & Power, and such suspension shall be in place only so long as is reasonably necessary to remedy the adverse impact. City of Highland Light & Power may require the customer to disconnect the on-site generating facility from the distribution system if deemed necessary for the health and safety of the City distribution system.
- (g) Guidelines for interconnecting to the utility system are as follows:
 1. Only generating facilities that have been approved by the Director of Electric shall be interconnected with the City of Highland's electric distribution system.

2. All interconnections shall comply with codes established by National Electrical Code (NEC), National Electrical Safety Code (NESC), Institute of Electrical and Electronics Engineers (IEEE), and Underwriters Laboratories (UL) as they may be amended from time to time.
3. Construction and development of generating facilities is required to follow all applicable building codes, permitting processes, and zoning rules.
4. The City of Highland is under no obligation to purchase energy supplied to the utility under this standard. This does not preclude the customer meeting applicable standards that would allow the customer to supply power onto the utility's system and receive credit for such energy under the utility's Customer Self-Generation Net Metering Policy or the Public Utility Regulatory Policies Act (PURPA).
5. The City of Highland may require periodic testing of systems. All test reports shall be submitted to the City of Highland Engineering Department after completion of the testing.
6. The City of Highland may charge reasonable fees associated with the implementation and application of this policy.

(h) Energy generated, energy delivered, energy credits, and energy generally:

1. Energy generated by the customer-owned generator during the billing period may supply all or a portion of the energy required by the customer's load. The customer shall be credited for excess energy delivered by the customer to the City of Highland at the meter from the approved on-site generating facility.
2. Energy delivered by the utility to the customer at the meter, as reflected in the meter reading, shall be billed at the appropriate utility full retail energy rate. For any excess energy generated by the customer from an approved on-site generating facility and delivered by the customer to the utility at the meter, as reflected in the meter reading, a credit shall be created and applied to the customer's bill based upon the lesser of the full retail energy rate for the customer class and the avoided cost of energy. Avoided cost shall be determined as set forth in Section (I) below. The City of Highland shall install an appropriate meter to measure both the energy delivered by the utility to the customer at the meter and the energy delivered by the customer to the utility at the meter from the approved on-site generating facility.
3. Credits from electric energy delivered to the municipal distribution system by the customer shall be used to offset usage based electric energy (kWh) charges only. No such credits shall be applied to, and the customer shall remain responsible for:
 - (i) taxes, fees, and other charges that would otherwise be applicable to the net amount of electric energy (kWh) purchased by the customer from the City of Highland or consumed by the customer;
 - (ii) other charges to the customer under any other rules, regulations or rates that are not based on per kilowatt-hour (kWh) charges, including but not limited to, basic service charges, customer service charges, facilities charges, demand charges, kVAR charges, transformation charges, taxes and assessments billed on other than kWh basis, rental fees, and late fees, or any additional fees assessed.

4. The City of Highland shall carry over any unused credits earned and apply those credits to subsequent billing periods to offset usage based electric energy (kWh) charges only for electric energy supplied to the customer by the City of Highland until all credits are used or until the end of the annual period. The annual period shall end each year on April 30; provided however for new net metering customers with generating facilities installed during an annual period, the annual period shall end on April 30 of the following year. At the end of the annual period or in the event that the customer terminates service at the service location with the City of Highland prior to the end of annual period, any remaining credits in the customer's account shall expire and no credit or payment shall be due to the customer for such expired credits. In the event of termination of an account qualifying for net metering under this policy, any outstanding credits are surrendered. No credit or payment shall be due to the customer for such surrendered credits. Under no circumstance will credits for excess energy transfer to a new customer at the service location after the customer's service with the City of Highland terminates, including if the Agreement is transferred to a new owner of the generating facility.
 - (i) Any costs the City of Highland incurs associated with the interconnection of generating facilities by a customer, including but not limited to changes in metering (to include installation of a bi-directional meter), or other physical facilities, whether on the customer's premises or a reasonably necessary upgrade to the municipal distribution system, or a portion thereof that is not on the customer's premises, shall be paid for by the customer seeking to install or for whom the generating facility was installed; provided however that such costs shall be capped at \$1,500.00 to each qualifying customer interconnecting facilities of 10 kW or less. For those generating facilities greater than 10 kW that are deemed to qualify under this policy, all costs associated with the interconnection of the generating facility shall be paid for by the customer seeking to install or for whom the generating facility was installed; there is no cap for generating facilities of more than 10 kW and all costs shall be paid by the Customer. Costs assessed under this section shall be demonstrable and cost-based. Such costs shall not include or be based on reduced sales by or lost revenues to The City of Highland associated with net metering service.
 - (j) The terms and conditions for any and all such interconnections are set forth in the attached model Interconnection Agreement, which may be reasonably adapted by the City of Highland staff from time to time in implementing this policy and the Customer Self-Generation Net Metering Policy.
 - (k) The City of Highland shall develop such documents as needed to implement this policy and any customer applying for or taking service hereunder shall execute all appropriate documents. Failure by any potential Customer or transfer Customer to agree to all terms and conditions of the City of Highland, Department of Light & Power, Customer Self-Generation Net Metering Policy ("Policy"), and execute the Policy prior to operating a generating facility, shall be a violation of the City Code and shall be punishable by any legal means available to City to enforce the Policy.
 - (l) For all approved on-site generating facilities, including currently existing facilities, "avoided cost" shall be determined based on the sum of 1 and 2 below:
 1. The rate in cents per kWh as published and approved annually by the governing body of the City of Highland based on the calculations and recommendation from the City of Highlands electric wholesale supplier. Such rate shall be approved annually in a public meeting. The rate shall take into consideration the following:
 - a. Historic real time pricing of prior calendar year of energy in the wholesale market as valued at the locational marginal pricing ("LMP") for that location as defined by the appropriately located Regional Transmission Organization ("RTO"),
 - b. Solar-weighted LMP: The simple average of the LMP weighted using

Solar Weighting. Solar weighting is the expected production of each hour of a typical solar installation as determined using the National Renewable Energy Laboratory (“NREL”) System Advisory Model (“SAM”) as may be amended from time to time.

- c. Capacity value: Appropriate RTO capacity price with solar factors applied for average system peak times
 - d. Transmission Value: Appropriate RTO transmission cost recovery with solar factor applied for average peak times
2. The rate in cents per kWh as calculated by the City of Highland for the avoidance of distribution system losses.
- (m) The maximum size in kilowatts AC of the eligible on-site generating facility for an individual customer service location in the rate categories identified in Section (d) shall be determined as follows:
1. The installation of a renewable generating facility under this Policy is intended to supply all or a portion of the customer’s own usage of electricity. Therefore, in order to be approved, a renewable generating facility must be properly sized so as not to exceed the customer’s expected annual usage based on the customer’s current energy needs. It is also important to the customer that the generating facilities are properly sized because the credits under this Policy for excess energy delivered to the distribution system expire if not used within the time period established in this Policy. As part of the interconnection application, customer’s energy usage will be analyzed using 36-months of historical energy usage (if available) in order to calculate the customer’s expected annual usage. If a customer provides documentation specifying why the usage has increased over that time, such as home renovation/addition or installation of electric heating or an electric vehicle charging station on the premises, then the previous 12-month period shall be used to determine the average for the expected annual usage. If the applicable months of data are not available for an individual customer, the average usage amounts by other similar customers of the City of Highland, as determined solely by the City of Highland, shall be used to set the expected annual usage. If generating facilities are allowed for customers in other rate classes, the right-sizing shall be determined on a case by case basis.
 2. In addition to the foregoing historic usage, City of Highland Light & Power shall consider potential adverse impacts to the City of Highland distribution system and to other customers of City of Highland Light & Power that will be caused by or expected to be caused by the installation of the new renewable generating facility at the particular customer service location as part of the interconnection application review. The maximum size of the eligible on-site generating facility for an individual customer service location shall be reduced below the expected annual usage of the customer to mitigate the potential adverse impacts to the distribution system, or portions thereof, and to the other customers of City of Highland Light & Power unless the customer pays for any necessary upgrade to the system or portion thereof to avoid the potential adverse impact. These determinations made in this Section (m) shall be made at the sole discretion of the City of Highland Director of Light & Power.
- (n) City of Highland Light & Power reserves the right to interpret, amend, or rescind this policy. Nothing herein is intended to, nor shall it, create a right for a customer to rely on any particular netting or crediting methodology contained in the policy from time to time, and all rates for excess credits are subject to change in accordance with the laws of the State of Illinois governing municipalities.
- (o) Citizen and customer concerns generally with this Net Metering Policy may be raised in the public comment portion of any City of Highland City Council Meeting and will be considered by the

governing body in accordance with its normal processes. Individual customer complaints, disputes or concerns shall be raised in the first instance with the Director of Light & Power. If the matter cannot be resolved at the utility staff level, this issue shall be reduced to writing and forwarded to the Director of Light & Power who shall schedule a meeting in person or by telephone or other communications media (i.e., Zoom call) with the customer. The customer may invite its contractor or other consultant to participate in the meeting. If the matter cannot be resolved at this stage, the process will escalate to a meeting with the City Manager. If this process fails to resolve the matter, the customer may appeal it to the Madison County Circuit Court and exercise whatever rights and remedies the customer may have in law or equity. This policy shall be posted on the City of Highland website along with appropriate contact information.

EXHIBIT A – APPLICATION

City of Highland Standard Distributed Generation Interconnection Request Application Form (Lab-Certified) Inverter-Based Distributed Generation Facilities 25KW_{AC} and Smaller

Interconnection Applicant Contact Information

Customer Name: _____

Primary Contact: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

Additional Contact Information (if different from primary contact)

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

Equipment Contractor

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

Electrical Contractor (if Different from Equipment Contractor):

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

Contractor License number: _____

Active License? Yes No

Registered with Municipality? Yes No

Is the Interconnection Customer requesting Net Metering?

Yes No

Distributed Generation Facility (“Facility”) Information

Facility Address: _____

City: _____ State: _____ Zip Code: _____

Account Number of Facility site: _____

Inverter Manufacturer: _____ Model: _____

Is the inverter lab-certified as that term is defined in the Illinois Distributed Generation Interconnection Standard? Yes No

(If yes, attach manufacturer’s technical specifications and label information from a nationally recognized testing laboratory.)

Generation Facility Nameplate Rating: _____ (kW) _____ (kVA) _____ (AC Volts)

Prime Mover: Photovoltaic Turbine

Energy Source: Solar Wind

In-Service Date: _____

(If the In-Service Date changes, the interconnection customer must inform the utility as soon as it is aware of the changed date.)

Insurance Disclosure

The attached terms and conditions contain provisions related to liability and indemnification, and should be carefully considered by the interconnection customer. The interconnection customer shall carry general liability insurance coverage of \$1,000,000.00, such as, but not limited to, homeowner’s insurance.

Permitting

The interconnection customer is responsible to obtain the appropriate permits from the local Building & Zoning authority for both Electrical and Building construction and inspections (where applicable).

Copies of permits must be provided prior to start of construction.

Structural Certification

After the Conditional Agreement to Interconnect has been signed by the City of Highland and PRIOR to the start of construction, a stamped copy of structural building drawings (reviewed by a structural engineer licensed in the State of Illinois) for the facility to be interconnected shall be submitted to the City of Highland, Building and Zoning Department certifying that the structure can bear the load along with being safe from wind lift.

Additional Documentation

This application shall be accompanied by the following:

1. Copy of Customers current City of Highland Electric Bill;
2. Last 36 months electric consumption data, provided by month;
3. Details of proposed systems generation capability including monthly comparisons to past consumption;
4. NREL or similar calculator output report including copy of all input parameters;
5. Any additional documentation that may be requested to facilitate City of Highland review and approval.

Customer Signature

I hereby certify that: (1) I have read and understand the terms and conditions which are attached hereto by reference; (2) I hereby agree to comply with the attached terms and conditions; and (3) to the best of my knowledge, all of the information provided in this application request form is complete and true.

Applicant Signature: _____ Date: _____

Name: _____ Title: _____

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Conditional Agreement to Interconnect Distributed Generation Facility

By its signature below, the City of Highland has determined the interconnection request is complete. Interconnection of the distributed generation facility is conditionally approved contingent upon the attached terms and conditions of this Agreement, the return of the attached Certificate of Completion, the return of the Interconnection Agreement, and duly executed verification of electrical inspection and successful witness test.

Utility Representative Signature: _____ Date: _____

Name: _____ Title: _____

Interconnection Request Application Form
(Greater than 25kW_{AC})

Interconnection Applicant Contact Information

Customer Name: _____

Primary Contact: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

Alternative Contact Information (if different from Primary Contact Information)

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

Facility Address (if different from above): _____

City: _____ State: _____ Zip Code: _____

Account Number of Facility site: _____

Inverter Manufacturer: _____ Model: _____

Equipment Contractor

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

Electrical Contractor (if different from Equipment Contractor)

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Fax Number: _____ E-Mail Address: _____

License number: _____

Electric Service Information for Customer Facility Where Generator Will Be Interconnected

Capacity: _____ (Amps) Voltage: _____ (Volts)

Type of Service: Single Phase Three Phase

If 3 Phase Transformer, Indicate Type:

Primary Winding Wye Delta

Secondary Winding Wye Delta

Transformer Size: _____ Impedance: _____

Generator & Prime Mover Information

ENERGY SOURCE (Wind and Solar):

ENERGY CONVERTER TYPE (Wind Turbine, Photovoltaic Cell,):

GENERATOR SIZE: kW or kVA	NUMBER OF UNITS:	TOTAL CAPACITY: kW or kVA
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GENERATOR TYPE (Check one):
Induction Inverter Synchronous Other

Distributed Generation Facility Information

In-Service Date: _____

List interconnection components/systems to be used in the distributed generation facility that are lab-certified.

Component/System	NRTL Providing Label & Listing
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Please provide copies of manufacturer brochures or technical specifications.

Energy Production Equipment/Inverter Information:

Synchronous Induction Inverter Other _____

Rating: _____ kW Rating: _____ kVA

Rated Voltage: _____ Volts

Rated Current: _____ Amps

System Type Tested (Total System):
Yes No; attach product literature

Additional Information For Inverter-Based Facilities

Inverter Information:

Manufacturer: _____ Model: _____

Type: Forced Commutated Line Commutated

Rated Output: _____ Watts _____ Volts

Efficiency: _____ % Power Factor: _____ %

Inverter UL 1741 Listed: Yes No

DC Source / Prime Mover:

Rating: _____ kW Rating: _____ kVA

Rated Voltage: _____ Volts

Open Circuit Voltage (if applicable): _____ Volts

Rated Current: _____ Amps

Short Circuit Current (if applicable): _____ Amps

Other Facility Information:

One Line Diagram attached: Yes

Plot Plan attached: Yes

Insurance Disclosure

The attached terms and conditions contain provisions related to liability and indemnification, and should be carefully considered by the interconnection customer. The interconnection customer shall carry general liability insurance coverage of \$1,000,000.00, such as, but not limited to, homeowner's insurance.

Permitting

The interconnection customer is responsible to obtain the appropriate permits from the local Building & Zoning authority for both Electrical and Building construction and inspections (where applicable).

Copies of permits must be provided prior to start of construction.

Structural Certification

After the Conditional Agreement to Interconnect has been signed by the City of Highland and PRIOR to the start of construction, a stamped copy of structural building drawings (reviewed by a structural engineer licensed in the State of Illinois) for the facility to be interconnected shall be submitted to the City of Highland, Building and Zoning Department certifying that the structure can bear the load along with being safe from wind lift.

Additional Documentation

This application shall be accompanied by the following:

1. Copy of Customers current City of Highland Electric Bill;
2. Last 36 months electric consumption data, provided by month;
3. Details of proposed systems generation capability including monthly comparisons to past consumption;
4. NREL or similar calculator output report including copy of all input parameters;
5. Any additional documentation that may be requested to facilitate City of Highland review and approval

Customer Signature

I hereby certify that: (1) I have read and understand the terms and conditions which are attached hereto by reference; (2) I hereby agree to comply with the attached terms and conditions; and (3) to the best of my knowledge, all of the information provided in this application request form is complete and true.

Applicant Signature: _____ Date: _____

Name: _____ Title: _____

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Conditional Agreement to Interconnect Distributed Generation Facility

By its signature below, the City of Highland has determined the interconnection request is complete. Interconnection of the distributed generation facility is conditionally approved contingent upon the attached terms and conditions of this Agreement, the return of the attached Certificate of Completion, the return of the Interconnection Agreement, and duly executed verification of electrical inspection and successful witness test.

Utility Representative Signature: _____ Date: _____

Name: _____ Title: _____

EXHIBIT B – INTERCONNECTION AGREEMENT

**Customer-Owned Generating
Facilities Interconnection Agreement**

This Agreement, (“**Agreement**”) is entered into by and between the City of Highland, (“**Utility**” or “**City**”) and _____ (“**Customer**”). Customer and Utility are referenced in this Agreement collectively as “**Parties**” and individually as “**Party**.”

Recitals

WHEREAS, Utility is a municipality-owned electric utility engaged in the retail sale of electricity in the state of Illinois.

WHEREAS, interconnection Customer is proposing to install, own, and operate an electric generating facility, or is proposing a generating capacity addition to an existing generating facility that qualifies under the Utility’s Customer Self-Generation Interconnection Policy (adopted March 21, 2022) consistent with the City of Highland Standard Distributed Generation Interconnection Request Application Form completed by interconnection Customer.

Agreement

NOW, THEREFORE, in consideration of the covenants and promises herein, the Parties mutually agree as follows:

Article I **Scope and Limitation of Agreement**

- 1.1 **Scope of Agreement.** This Agreement governs the terms and conditions under which the Customer's generating facility will interconnect with, and operate in parallel with, the distribution system. Terms used in this Agreement and not otherwise defined shall have the respective meaning given to them in the City of Highland, Department of Light & Power, Customer Self-Generation Net Metering Policy.
- 1.2 **Eligibility.** Interconnection to the electric system shall be granted only to new or existing Customers in good standing under the Utility's terms, conditions, rules, regulations and provisions for electric service. The Interconnection Agreement shall be between the Customer who owns a generating facility and the Utility.
- 1.3 **Request.** A Customer desiring to interconnect a qualifying generating facility must complete and return to the Utility a City of Highland Standard Distributed Generation Interconnection Request Application Form with payment of the applicable processing fee. The processing fee for systems sized 25 kW_{AC} and under is \$150.00. The processing fee for systems sized greater than 25 kW_{AC} is \$300.00. The Utility may require additional details or clarifications as needed to properly evaluate the application.
- 1.4 **System Effects.** The Utility will analyze the overall impact of the proposed generating facility on the distribution system. Such analyses will be based on Good Utility Practice to determine thermal effects, voltage fluctuations, power quality, system stability, and other parameters.
- 1.5 **System Upgrades.** As a result of the analysis described in section 1.4, the Utility will provide the Customer with a cost estimate and projected timeframe for any distribution system upgrades that may be necessary to accommodate the generating facility. Customer shall be responsible for necessary upgrades to Customer's generating facility.
- 1.6 **Metering.** The interconnection Customer shall be responsible for the cost to purchase and install appropriate metering. **Appendix A** illustrates the sample of interconnection and metering requirement, ownership and responsibilities of the Parties.
- 1.7 **Codes and Permits.**
 - a) The interconnection 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, if any.
 - b) The equipment shall meet the standards listed in Section 2.7.
 - c) The construction and facilities shall meet all applicable building and electrical codes.

Article II **Technical Requirements**

- 2.1 **Character of Service.** The electrical service shall be 60 cycles per second (60 Hertz) alternating current (AC) at supply voltages and number of phases that apply under the

Utility's terms, conditions, rules, regulations and provisions for electric service, including metering requirements.

- 2.2 **Codes Requirements.** Once the generating facility has been authorized to commence parallel operation, the interconnection Customer shall abide by all operating procedures 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. Specific codes are listed in Section 2.7 below as "National Certification Codes and Standards". In addition, Manufacturer's Ownership, Operating and Maintenance Manuals shall be reviewed and accepted by both Parties prior to beginning operation.
- 2.3 **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 distribution system upon loss of Utility voltage and not reconnect until Utility voltage has been restored and stabilized by the Utility.
 - b) Power output control system shall ride through voltage fluctuations but shall automatically disconnect from distribution system if Utility or Customer-owned generation voltage fluctuates beyond plus or minus ten percent (10%). The interconnection Customer shall provide adequate protection to prevent damage to the distribution system from inadvertent over/under voltage conditions originating in Customer's generating facility and to protect the Customer's generating facility from inadvertent over/under voltage conditions originating from the distribution system. Customer shall be responsible for damage to the Utility distribution system if the cause of the damage originated from Customer's generating facility.
 - c) Power output control system shall ride through frequency fluctuations but shall automatically disconnect from Utility if frequency fluctuates beyond plus or minus 2 cycles per second from 60 cycles per second (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.
 - f) The voltage produced by the Customer's generating facility must be balanced if it is a three-phase installation. The interconnection Customer is responsible for protecting the generating facility from an inadvertent phase imbalance in the Utility's service voltage. Utility shall not be responsible for damage to the Customer's generating facility in the event of an inadvertent phase imbalance in the Utility's service voltage.
- 2.4 **Fault Current Contribution.** The Customer's 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.
- 2.5 **Reclosing Coordination.** The Customer's 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.

- 2.6 **Disconnect Device.** A manual safety disconnect switch of the visible load break type shall be installed by the Customer. The disconnect switch shall be 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.
- 2.7 **Standards for Interconnection, Safety, and Operating Reliability.** The interconnection of a Customer's generating facility and associated interconnection equipment to the Utility's distribution System shall meet the applicable provisions of the following publications:
- a) ANSI/IEEE1547-2018 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1-2020 testing protocols to establish conformity) as they may be amended from time to time. The following standards shall be used as guidance in applying IEEE 1547:
 - b) IEEE Std 519-2014, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems
 - c) IEEE1453, IEEE Recommended Practice for the Analysis of Fluctuating Installation on Power Systems
 - d) UL1741 requirement for inverter based generation
 - e) NESC Electric Safety Code
 - f) ANSI/NFPA 70, National Electrical Code
 - g) OSHA (29 CFR § 1910.269)

Article III

Inspection, Testing, Authorization, and Right to Access

- 3.1 **Equipment Testing and Inspection.**
- a) Upon completing construction of the Customer's generating facility, the interconnection Customer shall test and inspect its generating facility including the interconnection equipment prior to interconnection in accordance with updated IEEE standards 1547 and IEEE standard 1547.1 by the local electrical inspection authority. The interconnection Customer shall not operate its generating facility in parallel with distribution system without prior written authorization by the Utility.
 - b) All interconnection related protective functions and associated direct current supplies shall be tested prior to commencement of commercial service, and (if nameplate rating of Customer's generating facilities is greater than 25 kW_{AC}) periodically tested thereafter no less than every three (3) years.
- 3.2 **Certification of Completion.** The interconnection Customer shall provide the Utility with a copy of the Certificate of Completion with all relevant and necessary information fully completed by the interconnection Customer, as well as an inspection form from the local electrical inspection authority demonstrating that the generating facility passed inspection.
- 3.3 **Witness Test.**
- a) The Utility shall perform a witness test after construction of the Customer's generating facility is completed but before parallel operation, unless the Utility specifically waives the witness test. The interconnection

Customer shall provide the Utility at least thirty (30) business days' notice of the planned commissioning test for the generating facility. If the Utility performs a witness test at a time that is not concurrent with the commissioning test, it shall contact the interconnection Customer to schedule the witness test at a mutually agreeable time within ten (10) business days after the commissioning test, the witness test is deemed waived unless the Parties mutually agree to extend the date for scheduling the witness test, or unless the Utility cannot do so for good cause, in which case, the Parties shall agree to another date for scheduling the test within ten (10) business days of the original scheduled date. For systems sized less than 25 kW_{AC}, the thirty (30) business days' notice shall be waived.

- b) If the witness test is not acceptable to the Utility, the interconnection Customer has thirty (30) business days to address and resolve any deficiencies. This time period may be extended upon agreement between the Utility and interconnection Customer. If the interconnection Customer fails to address and resolve the deficiencies to the satisfaction of the Utility, this Agreement shall be terminated. The interconnection Customer shall, if requested by the Utility, provide a copy of all documentation in its possession regarding testing conducted pursuant to IEEE standard 1547.1.
- c) After the Customer's generating facility passes the witness testing, the Utility shall affix an authorized signature to the Certificate of Completion and return it to the interconnection Customer approving the interconnection and authorization parallel operation.

- 3.4 **Right of Access.** The Utility must have access to the disconnect switch and metering equipment of the generating facility at all times without notice. When practical, the Utility shall provide notice to the Customer prior to using its right of access. Customer waives all objections or causes of action related in any way to City or Utility's entrance on Customer's property.

Article IV Effective Date, Term, Termination, and Disconnection

- 4.1 **Effective Date.** This Agreement shall become effective upon execution by all Parties.
- 4.2 **Term of Agreement.** This Agreement shall become effective on the effective date and shall remain in effect unless terminated earlier in accordance with Article 4.4 of this Agreement.
- 4.3 **Governing Law, Regulatory Authority, and Rules.** The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the Codes and Regulations of the City of Highland as well as the laws of the State of Illinois without regard to its choice of law principals. Any dispute between the Parties shall be adjudicated in Madison County, Illinois, Circuit Court, or the Southern District of Illinois, District Court. Nothing in this Agreement is intended to affect any other agreement between the Utility and the interconnection Customer.
- 4.4 **Termination.** This Agreement may be terminated under the following conditions:
- a) By interconnection Customer - The interconnection Customer may terminate this Agreement by providing written notice to the Utility. If the interconnection Customer ceases operation of the generating facility, the

interconnection Customer must notify the Utility. Any cost associated with disconnection of Customer's generating facility shall be paid by Customer.

- b) By the Utility - The Utility may terminate this Agreement if the interconnection Customer fails to remedy a violation of the terms of this Agreement within thirty (30) calendar days after notice, or such other date as may be mutually agreed to prior to the expiration of the thirty (30) calendar day remedy period. The termination date may be no less than thirty (30) calendar days after the interconnection Customer receives notice of its violation from the Utility. Notice shall be deemed received beginning on the date of any written correspondence sent to Customer from Utility. Any cost associated with disconnection of Customer's generating facility shall be paid by Customer.
- c) Upon termination of this Agreement, the Customer's generating facility will be permanently disconnected from the distribution system. Terminating this Agreement does not relieve either party of its liabilities and obligations that are owed or continuing when the Agreement is terminated.
- d) Upon termination of this Agreement, the Utility shall open and padlock the manual disconnect switch on Customer's premises, and take any other steps necessary to protect the City distribution system. Customer waives all objections or causes of action associated in any way with City entering Customer's property.

4.5 **Disconnection.** The Utility may temporarily disconnect the generating facility upon any of the following conditions, but must reconnect the generating facility once the condition is cured:

- a) For scheduled outages, provided that the generating facility is treated in the same manner as Utility's load Customers;
- b) For unscheduled outages or emergency conditions;
- c) If the generating facility does not operate in the manner consistent with this Agreement;
- d) Improper installation or failure to pass the witness test;
- e) If the generating facility is creating a safety, reliability or a power quality problem;
- f) The interconnection equipment used by the generating facility is de-listed by the nationally recognized testing Laboratory that provided the listing at the time the interconnection was approved;
- g) Failure of the customer to obtain or maintain the insurance coverage set forth in Article 7 of this Agreement.

4.6 **Modification of Generating Facility.** The interconnection Customer must receive written authorization from the Utility before making any changes to the generating facility that could affect the distribution system. If the interconnection Customer makes such modifications without the Utility's prior written authorization, the Utility shall have the right to disconnect the generating facility immediately. Customer waives all

objections or causes of action associated in any way with City entering Customer's property for this purpose.

- 4.7 **Permanent Disconnection.** In the event the Agreement is terminated, the Utility shall have the right to disconnect its distribution system or direct the interconnection Customer to disconnect its generating facility. Customer waives all objections or causes of action associated in any way with City entering Customer's property for this purpose.
- 4.8 **Lost Opportunity.** The Utility is not responsible for any lost opportunity or other costs incurred by the interconnection Customer as a result of an interruption of service under this Article 4. Customer waives all economic damage causes of action against City as a result of any interruption of service.

Article V Cost Responsibility for Interconnection Facilities and Distribution Upgrades

- 5.1 **Interconnection Facilities.**
- a) Customer is responsible for the cost of additional interconnection facilities necessary to interconnect the generating facility with the Customer's distribution system.
 - b) Customer is responsible for its expenses, including overhead, associated with owning, operation, maintaining, repairing, and replacing Customer's interconnection equipment associated with Customer's distribution system.
 - c) **Distribution System Upgrades.** The Utility shall design, procure, construct, install, and own any distribution system upgrades. The cost of the distribution system upgrades shall be directly assigned to the interconnection Customer whose generating facility caused the need for the distribution system upgrades.
- 5.2 **Cost for Small Systems.** For qualifying systems sized 10 kW_{AC} or less the cost in section 5.1 shall be capped at \$1500.00.

Article VI Assignment, Limitation on Damages, Indemnity, Force Majeure

- 6.1 **Assignment/Transfer of Ownership of the Generating Facility.** This Agreement shall terminate upon the transfer of ownership of the generating facility to a new owner unless the transferring owner assigns the Agreement to the new owner, the new owner agrees in writing to the terms of this Agreement, and the transferring owner so notifies the Utility in writing prior to the transfer of ownership. Customer shall be responsible for facilitating any transfer of ownership of the generating facility and shall be responsible for putting Utility on notice of the proposed transfer. Utility reserves the right to prohibit the transfer of ownership of the generating facility if it is deemed to be in the best interests of the health, safety, and welfare of Utility.
- 6.2 **Limitation of Liability.** Each Party's liability to the other Party, where available, for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever. The direct damage actually incurred must be shown through the actual cost to remedy any alleged damage.

- 6.3 **Indemnification.** The interconnection Customer shall indemnify and defend the City, Utility, and the elected officials, directors, officers, employees, lawyers, and agents from all damages and expenses resulting from any third party claim arising out of or based upon the interconnection Customer's (a) negligence or willful misconduct; (b) breach of this Agreement; or (c) the operation of the Customer's generating facility, regardless of Customer's negligence or willful misconduct, except when and to the extent the loss occurs due to the willful and wanton actions of the Utility. The Utility shall indemnify and defend the interconnection Customer and the interconnection Customer's directors, officers, employees, and agents from all damages and expenses resulting from breach of this Agreement.
- 6.4 **Force Majeure.** If a force majeure event prevents a Party from fulfilling any obligations under this Agreement, the Party effected by the force majeure event ("Affected Party") shall notify the other Party of the existence of the force majeure event within one (1) business day where possible. The notification must specify the circumstances of the force majeure event, the expected duration, and the steps that the Affected Party is taking and will take to mitigate the effects of the event on its performance. If the initial notification is verbal, it must be followed up with a written notification within one (1) business day where possible. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the force majeure event until the event ends. The Affected Party may suspend or modify its obligations under this Agreement. The term "force majeure" shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, epidemic, pandemic, breakage or accident to machinery or equipment, an order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's reasonable control. A Force Majeure event does not include an act of negligence or intentional wrongdoing by the Party claiming Force Majeure.

Article VII Insurance

- 7.1 **Insurance.** The interconnection customer shall carry general liability insurance coverage, such as, but not limited to, homeowner's insurance or commercial building insurance in the amount of \$1,000,000.00. The interconnection Customer shall provide the Utility with proof that it has a current homeowner's insurance or commercial building insurance policy, or other general liability policy. The interconnection customer shall notify the Utility immediately if such insurance policy is terminated or cancelled prior to the end of its term and if the insurance company has communicated an intent not to renew the policy.

Article VIII Documents and Notices

- 8.1 **Documents.** The Agreement shall include the following documents, which are incorporated by reference:
- a) One-line drawing
 - b) Interconnection Request Application Form
 - c) System Upgrade Estimated Costs
 - d) Certificate of Completion

8.2 **Notice.** The Parties may mutually agree to provide notices, demands, comments, or requests by electronic means such as e-mail. Absent Agreement to electronic communication, or unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

If to Interconnection Customer:

Use the contact information provided in the interconnection Customer's application. The interconnection Customer is responsible for notifying the Utility of any change in the contact party information, including change of ownership.

If to Utility:

Use the contact information provided below. The Utility is responsible for notifying the interconnection Customer of any change in the contact party information.

Name: City of Highland, Attn: Director of Light & Power

Mailing Address: P.O. Box 218

City: Highland State: IL Zip Code: 62249

Telephone (Daytime): 618-654-9891 (Evening): 618-654-9891

E-Mail Address: dcook@highlandil.gov

Article IX Signatures

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Interconnection Customer:

Name:

Title:

Date:

For Utility

Name:

Title:

Date:

APPENDIX A
Sample One-line Interconnection Diagram

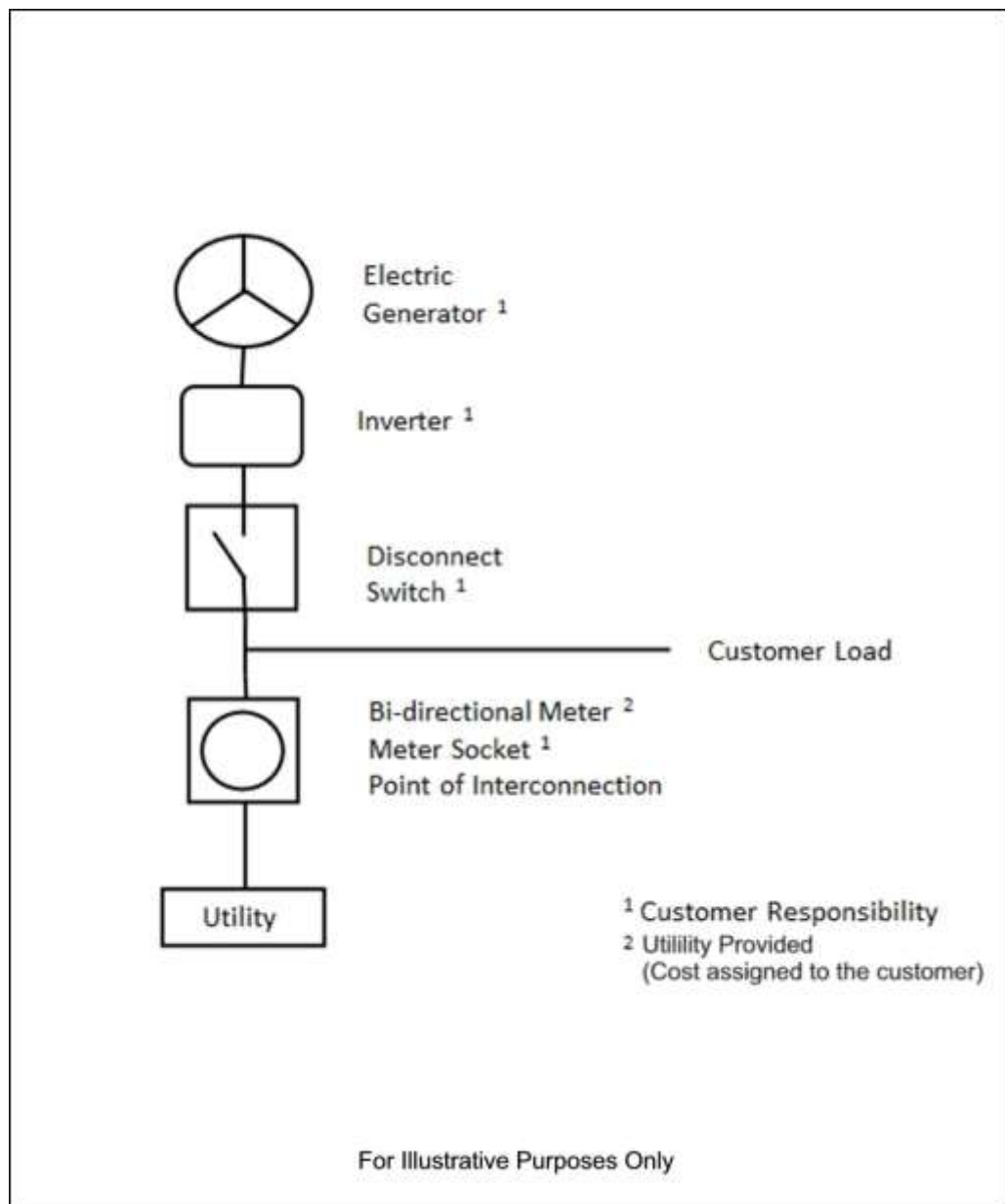


EXHIBIT C – CERTIFICATE OF COMPLETION

Certificate of Completion

To be completed and returned to the Director of Light & Power when installation is complete and final electric inspector approval has been obtained.

Interconnection Customer Information

Customer Name: _____
Primary Contact: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Telephone (Daytime): _____ (Evening): _____
Fax Number: _____ E-Mail Address: _____

Installer

Check if owner-installed

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Telephone (Daytime): _____ (Evening): _____
Fax Number: _____ E-Mail Address: _____

Final Electric Inspection and Interconnection Customer Signature

The distributed generation facility is complete and has been approved by the local electric inspector having jurisdiction. A signed copy of the electric inspector's form indicating final approval is attached. The interconnection customer acknowledges that it shall not operate the distributed generation facility until receipt of the final acceptance and approval by the utility as provided below.

Signed: _____ Date: _____
(Signature of interconnection customer)

Printed Name: _____

Check if copy of signed electric inspection form is attached

Check if copy of as built documents is attached (projects larger than 10 kVA only)

.....
Acceptance and Final Approval for Interconnection (for utility use only)

The interconnection agreement is approved and the distributed generation facility is approved for interconnected operation upon the signing and return of this Certificate of Completion by utility:

Utility waives Witness Test? (Initial) Yes (___) No (___)

If not waived, date of successful Witness Test: _____ Passed: (Initial) _____

Utility Signature: _____ Date: _____

Printed Name: _____ Title: _____

* Prior to interconnected operation, the interconnection customer is required to complete this form and return it to the utility.

Section 3. This ordinance shall be effective upon its passage, approval, and publication in pamphlet form in accordance with law.

Passed by the City Council of the City of Highland, Illinois, approved by the Mayor, and deposited and filed in the Office of the City Clerk, on the _____ of _____, 2022, the vote being taken by ayes and noes, and entered upon the legislative records, as follows:

AYES: _____

NOES: _____

APPROVED:

Kevin B. Hemann
Mayor
City of Highland
Madison County, Illinois

ATTEST:

Barbara Bellm
City Clerk
City of Highland
Madison County, Illinois