Customer-Owned Generating
FACILITIES INTERCONNECTION AGREEMENT

This Agreement, (**"Agreement"**) is entered into by and between the City of Metropolis, (**"Utility"**) 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 _____ date) consistent with the interconnection [Request Application Form] completed by interconnection Customer on _____,

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 Utility's Customer Self-Generation Interconnection 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 (Utility).

1.3 **Request.** A Customer desiring to interconnect a qualifying generating facility must complete and return to the Utility an *Interconnection* Request Application Form with payment of the applicable processing fee. The processing fee for systems sized 25 kW_{AC} and under is $200. The processing fee for systems sized greater than 25 kW_{AC} is $400. 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.

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 10% (ten percent). 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

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.

2.4 **Fault Current Contribution.** The generating facility shall be equipped with protective equipment designed to automatically disconnect during fault current conditions and remain disconnected until the voltage and frequency have stabilized.

2.5 **Reclosing Coordination.** The generating facility shall be coordinated with the distribution system reclosing devices by disconnecting from the system during the initial de-energized operation and shall remain disconnected until the voltage and frequency have stabilized.

2.6 **Disconnect Device.** A safety manual 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 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, 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 City of Metropolis' electric department representative. 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 City of Metropolis' electric department representative demonstrating that the generating facility passed inspection.

3.3 **Witness Test.**

a) The Utility shall perform a witness test after construction of the 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 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 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 10 business day of the original scheduled date. For systems sized less than 25 kW_{AC} the 30 business days' notice shall be waived.

b) If the witness test is not acceptable to the Utility, the interconnection Customer has 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 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.

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 Metropolis as well as the laws of the State of Illinois without regard to its choice of law principals. 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.

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 30 calendar days after notice, or such other date as may be mutually agreed to prior to the expiration of the 30 calendar day remedy period. The termination date may be no less than 30 calendar days after the interconnection Customer receives notice of its violation from the Utility.

c) Upon termination of this Agreement, the 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.

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; or
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.

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.

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.

Article V Cost Responsibility for Interconnection Facilities and Distribution Upgrades

5.1 **Interconnection Facilities.**

a) The interconnection Customer is responsible for the cost of additional interconnection facilities necessary to interconnect the generating facility with the distribution system.
b) The interconnection Customer is responsible for its expenses, including overheads, associated with owning, operation, maintaining, repairing, and replacing its interconnection equipment

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.

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.

6.2 **Limitation of Liability.** Each Party's liability to the other Party 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.

6.3 **Indemnification.** The interconnection Customer shall indemnify and defend the city, Utility and the elected officials, directors, officers, employees, 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 grossly negligent 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 a third party claim arising out of or based upon the Utility's (a) negligence or willful misconduct or (b) 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 business day. 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 business day. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the force majeure event unit 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. 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 name the Utility as an additional insured on its homeowner's insurance or commercial building insurance policy, or similar policy covering general liability and shall cause the insurance company to issue a Certificate of Insurance to the Utility. 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 includes the following documents, which are attached and 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:

Natalie Harris, Director of Public Works

Mailing Address:

106 W. 5th Street

City: Metropolis State: Illinois Zip Code: 62960

Telephone (Daytime): 618-638-7051 (Evening): 618-638-7051

Fax Number: _____ E-Mail Address: nharris@metropolis.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: