O-20-54

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE NORTH LITTLE ROCK ELECTRIC DEPARTMENT NET METERING AND DISTRIBUTED GENERATION RULES; DECLARING AN EMERGENCY; AND FOR OTHER PURPOSES.

WHEREAS, the City of North Little Rock previously adopted net metering and distributed generation rules through Ordinance No. 8307 adopted December 12, 2010, Ordinance No. 8524 adopted April 8, 2013, and Ordinance No. 8991 adopted March 12, 2018; and

WHEREAS, through the adoption of Act 464 of 2019, the Arkansas legislature significantly amended the Arkansas Renewable Energy Development Act ("AREDA") and granted local governing bodies greater authority in the regulation of net metering; and

WHEREAS, pursuant to A.C.A. §§ 14-54-701, 14-200-112, 14-201-201, et seq., 23-18-601, et seq., and other statutes, the North Little Rock City Council ("City Council") is the appropriate governing body to implement AREDA in the municipal electric service territory of the North Little Rock Electric Department ("NLRED"); and

WHEREAS, NLRED has examined the attached net metering rules and recommends their adoption to ensure sound operation of the city's municipal electric utility and to minimize the effects of net metering and distributed generation facilities on customers.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF NORTH LITTLE ROCK, ARKANSAS:

SECTION 1: That the Net Metering and Distributed Generation Rules (attached hereto as Exhibit "A" and incorporated by reference) for the North Little Rock Electric Department, establishing net metering and distributed generation requirements and providing for the interconnection of net metering and distributed generation facilities to the city's electric distribution systems, are hereby approved and adopted.

SECTION 2: That all ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of the conflict. This ordinance specifically repeals and replaces Ordinance Nos. 8307, 8524 and 8991.

SECTION 3: That the provisions of this Ordinance are hereby declared to be severable and if any section, phrase or provision shall be declared or held invalid, such invalidity shall not affect the remainder of the sections, phrases or provisions.

SECTION 4: It is hereby found and determined that the adoption of this Ordinance is immediately necessary to insure the proper and orderly growth of the City

of North Little Rock, Arkansas and is necessary for the immediate preservation of the public health, safety and welfare; THEREFORE, an emergency is hereby declared to exist, and this Ordinance shall be in full force and effect from and after its passage and approval.

PASSED:

APPROVED:

Mayor Joe A. Smith

SPONSOR:

Mayor Joe A. Smith

ATTEST:

Diane Whitbey, City Clerk

APPROVED AS TO FORM:

Amy Beckman Fields, City Attorney

PREPARED BY C. JASON CARTER, ATTORNEY AT LAW

FILED 10:55 A.M. _____ P.M.
BY City Atty Amy Fields
DATE 6-2-2020
Diane Whitbey, City Clerk and Collector
North Little Rock, Arkansas
RECEIVED by K. Thomas

NLRED NET-METERING AND DISTRIBUTED GENERATION RULES

NORTH LITTLE ROCK ELECTRIC DEPARTMENT

ORDINANCE NO. _____, <DATE>

EXHIBIT

A

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INTRODUCTION

These Net-Metering and Distributed Generation Rules ("Rules") are intended to assist customers who desire to construct their own renewable energy facilities while protecting customers who wish to avoid cost increases that may result from renewable energy subsidies. In addition to balancing affordability and renewable energy, these Rules support and reaffirm NLRED's longstanding commitment to the safe and reliable operation of our local electric distribution system.

These Rules were prompted by changes in law applicable to net-metering applicable to all utilities in Arkansas. In many ways, they are similar to regulations approved by the Arkansas Public Service Commission ("APSC") after extensive public hearings and argument. While the APSC lacks jurisdiction over NLRED, many of the arguments that were raised during hearings before the APSC were considered in the development of these Rules.

Please note that, even though the term "distributed generation" is often generically associated with all electric generators that are interconnected with the distribution system of a utility, that term has a specific meaning in these Rules. It refers to a customer-owned electric generator that is powered by a renewable fuel source but does not qualify for net-metering. Even though these Rules do not provide for the interconnection of electric generators that fail to qualify as Net-Metering Facilities or Distributed Generation Facilities, interconnection may be allowed through a purchase power agreement (PPA) when beneficial to NLRED.

SECTION 1. GENERAL PROVISIONS

Rule 1.01 Definitions

The following definitions shall apply throughout these Rules except as otherwise required by the context, and any references to these Rules shall include these definitions:

A. *Annual Billing Cycle* means the normal annual fiscal accounting period used by NLRED which begins on January 1st and ends on December 31st each year.

B. *Avoided Costs* means the costs to NLRED of electric energy or capacity, or both, that, but for the purchase from the qualifying facility or qualifying facilities, NLRED would generate itself or purchase from another source.

C. *Billing Period* means, for net-metering purposes, the same billing period under the customer's applicable standard rate schedule.

D. *Biomass Resource* means a resource that may use one or more organic fuel sources that can either be processed into synthetic fuels or burned directly to produce steam or electricity, provided that the resources are renewable, environmentally sustainable in their production and use, and the process of conversion to electricity results in a net environmental benefit. This includes, but is not limited to, dedicated energy crops and trees, agricultural food and feed crops, agricultural crop wastes and residues, wood wastes and residues, aquatic plants, animal wastes, and other accepted organic, renewable waste materials.

E. *Council* means the North Little Rock City Council, empowered to own, manage, operate, and regulate NLRED under the authority of Ark. Code Ann. §§ 14-54-701, et seq., and 14-200-112.

F. *Distributed Generation Facility* means the real and personal property comprising an electric generation resource that:

1. Uses solar, wind, hydroelectric, geothermal, or biomass resources to generate electricity, including, but not limited to, fuel cells and micro turbines that generate electricity if the fuel source is entirely derived from renewable resources;

2. Does not qualify for Net-Metering;

3. Has a generating capacity (kW) that does not exceed the Distributed Generation Customer's annual peak load;

4. Will not generate more energy (kWh) than is consumed by the Distributed Generation Customer during a Billing Period;

5. Is located in the NLRED service territory;

6. Can operate in parallel with NLRED's existing transmission and distribution facilities; and

7. Is primarily intended to advance the Distributed Generation Customer's renewable energy goals and offset the Distributed Generation Customer's cost of electricity.

G. *Distributed Generation Customer* means the owner of a Distributed Generation Facility.

H. *Fuel Cell Resource* means a resource that converts the chemical energy of a fuel directly to direct current electricity without intermediate combustion or thermal cycles.

I. *Geothermal Resource* means a resource in which the prime mover is a steam turbine. The steam is generated in the earth by heat from the earth's magma.

J. *Hydroelectric Resource* means a resource in which the prime mover is a water wheel. The water wheel is driven by falling water.

K. *Interconnecting Customer* means either a Net Metering Customer or a Distributed Generation Customer.

L. *Interconnecting Facility* means either a Net-Metering Facility or a Distributed Generation Facility.

M. *Micro Turbine Resource* means a resource that uses a small combustion turbine to produce electricity.

N. *Net Excess Generation* means the amount of electricity that a Net-Metering Customer has fed back to NLRED that exceeds the amount of electricity used by that customer during the applicable period.

O. *Net Excess Generation Credits* means uncredited customer generated kilowatt hours remaining in a Net-Metering Customer's account at the close of a Billing Period to be credited, or, purchased by NLRED in a future Billing Period in accordance with this regulation.

P. *Net-Metering* means measuring the difference between electricity supplied by NLRED and the electricity generated by a Net-Metering Customer and fed back to NLRED over the applicable Billing Period.

Q. *Net-Metering Customer* means an owner of a Net-Metering Facility.

R. *Net-Metering Facility* means the real and personal property comprising an electric generation resource that:

1. Uses solar, wind, hydroelectric, geothermal, or biomass resources to generate electricity, including, but not limited to, fuel cells and micro turbines that generate electricity if the fuel source is entirely derived from renewable resources;

2. Has a generating capacity of not more than:

a. Twenty five kilowatts (25 kW) for residential use; or

b. Three hundred kilowatts (300 kW) for any other use.

3. Is located at a Net Metering Customer's service location within the NLRED service territory;

4. Can operate in parallel with NLRED's existing transmission and distribution facilities; and

5. Is primarily intended to advance the Net-Metering Customer's renewable energy goals and offset the Net-Metering Customer's requirements for electricity.

S. *NLRED* means the North Little Rock Electric Department.

T. *Parallel Operation* means the operation of on-site generation by a customer while the customer is connected to NLRED's distribution system.

U. *Qualifying Facility* means a cogeneration facility or a small power production facility which meets qualifying status under the cogeneration rules adopted by the Arkansas Public Service Commission pursuant to the Public Utility Regulatory Policies Act of 1978 ("PURPA") and the rules and regulations of the Federal Energy Regulatory Commission promulgated under that act.

V. *Renewable Energy Credit* means the environmental, economic, and social attributes of a unit of electricity, such as a megawatt hour, generated from renewable fuels that can be sold or traded separately.

W. *Residential Use* means service provided under NLRED's standard rate schedules applicable to residential service.

X. *Solar Resource* means a resource in which electricity is generated through the collection, transfer and/or storage of the sun's heat or light.

Y. *Wind Resource* means a resource in which an electric generator is powered by a wind-driven turbine.

Rule 1.02 Purpose
The purposes of these Net-Metering and Distributed Generation Rules ("Rules") are to regulate the interconnection, metering, and financial consideration given to Interconnecting Facilities by NLRED.

Rule 1.03 Statutory Provisions
A. These Rules are developed pursuant to the Arkansas Renewable Energy Development Act of 2001 (Ark. Code Ann. § 23-18-601, et seq., as amended.)

B. These Rules are promulgated pursuant to the Council's authority under Ark. Code Ann. §§ 14-54-701, et seq., 14-200-112, and 23-18-605.

C. Nothing in these Rules shall govern, limit, or restrict the Council's authority under Ark. Code Ann. §§ 23-18-601, et seq.

Rule 1.04 Other Provisions
A. These Net-Metering and Distributed Generation Rules apply to the North Little Rock Electric Department.

B. These Net-Metering and Distributed Generation Rules are not intended to, and do not affect or replace any Council-approved general service regulation, policy, procedure, rule, or service application which addresses items other than those covered in these Rules.

SECTION 2. NET-METERING REQUIREMENTS

Rule 2.01 NLRED Requirements
NLRED shall allow Net-Metering Facilities to be interconnected using a standard meter capable of registering the flow of electricity in two (2) directions.

Rule 2.02 Metering Requirements
A. Metering equipment shall be installed to both accurately measure the electricity supplied by NLRED to each Net-Metering Customer and also to accurately measure the electricity generated by each Net-Metering Customer that is fed back to NLRED over the applicable Billing Period. If nonstandard metering equipment is required, the Net-Metering Customer is responsible for the cost differential between the required metering equipment and NLRED's standard metering equipment for the Net-Metering Customer's current rate schedule.

B. Accuracy requirements for a meter operating in both forward and reverse registration modes shall be as defined in NLRED's General Rules and Regulations. A test to determine compliance with this accuracy requirement shall be made either before or at the time the Net-Metering Facility is placed in operation.

Rule 2.03 New or Additional Charges
Any new or additional charge shall not reduce the value of electric energy from a net-metering facility below the avoided cost of the municipal utility.

Rule 2.04 Billing for Net-Metering

A. On a monthly basis, the Net-Metering Customer shall be billed the charges applicable under the currently effective standard rate schedule and any appropriate rider schedules. Under Net-Metering, only the kilowatt hour (kWh) units of a customer's bill are netted.

B. If the kWhs supplied by NLRED exceeds the kWhs generated by the Net-Metering Facility and fed back to NLRED during the Billing Period, the Net-Metering Customer shall be billed for the net kWhs supplied by NLRED in accordance with the rates and charges under the customer's standard rate schedule.

C. If the kWhs generated by the Net-Metering Facility and fed back to NLRED exceed the kWhs supplied by NLRED to the Net-Metering Customer during the applicable Billing Period, NLRED shall credit the Net- Metering Customer with any accumulated Net Excess Generation in the next applicable Billing Period. At the time an account is closed, NLRED shall purchase any remaining Net Excess Generation Credits at NLRED's then-current estimated annual average Avoided Cost rate for wholesale energy.

Rule 2.05 Renewable Energy Credits

Any Renewable Energy Credit created as a result of electricity supplied by a Net-Metering Customer is the property of the Net-Metering Customer that generated the Renewable Energy Credit.

Rule 2.06 Generation above Net Metering Limits

Net-Metering shall not be used in conjunction with generation facilities having a cumulative generating capacity that is greater than the limits defined for Net-Metering Facilities in Section 1.01(R)(2). Any customer who desires to install solar, wind, hydroelectric, geothermal, or biomass resources to generate electricity (including, but not limited to, fuel cells and micro turbines that generate electricity entirely from renewable resources) that have a cumulative generating capacity greater than the limits of Net-Metering Facilities, may apply to install a Distributed Generation Facility.

SECTION 3. DISTRIBUTED GENERATION REQUIREMENTS

Rule 3.01 NLRED Requirements

NLRED may allow Distributed Generation Facilities to be interconnected using separate meters for load and generation.

Rule 3.02 Metering Requirements

A. Metering equipment shall be installed to both accurately measure the electricity supplied by NLRED to each Distributed Generation Customer and also to accurately measure the electricity generated by each Distributed Generation Customer that is fed to NLRED. The customer is responsible for the cost of the additional meter used to measure generation.

B. Accuracy requirements for meters shall be as defined in NLRED's General Rules and Regulations. A test to determine compliance with this accuracy requirement shall be made either before or at the time the Distributed Generation Facility is placed in operation.

Rule 3.03 Distributed Generation Application

A. A customer may file an application with NLRED to install a Distributed Generation Facility so long as the proposed Distributed Generation Facility: (1) will have a generating capacity (kW) that does not exceed the Distributed Generation Customer's annual peak load; and (2) will not generate more electricity (kWh) than is consumed by the Distributed Generation Customer during any Billing Period.

B. The application shall, at a minimum, include:

1. A description of the proposed Distributed Generation Facility including:

   a. Project narrative;

   b. Project location (street address);

   c. Generator type (wind, solar, hydro, etc.);

   d. Generator rating in kW (DC or AC);

   e. Capacity factor;

   f. Point of interconnection with NLRED;

   g. Single Phase or Three Phase interconnection;

   h. Planned method of interconnection consistent with Rule 4.01.B.;

   i. Expected facility performance calculated using an industry recognized simulation model (PVWatts, etc.);

2. Evidence that the Distributed Generation Facility: (1) will have a generating capacity (kW) that does not exceed the Distributed Generation Customer's annual peak load; and (2) will not generate more electricity (kWh) than is consumed by the Distributed Generation Customer during any Billing Period. Evidence will be in the form of:

   a. The monthly electric bills for the 12 months prior to filing the Distributed Generation application, or

   b. In the absence of historical data, reasonable estimates for the class and character of service may be made;

3. A copy of the Preliminary Interconnection Review Request, with applicable fees, submitted to NLRED and the results of NLRED's interconnection site review.

Rule 3.04 Billing for Distributed Generation – (Buy-all / Sell-all)

A. On a monthly basis, each Distributed Generation Customer shall be billed all charges applicable under the currently effective standard rate schedule and any appropriate rider schedules.

B. On a monthly basis, NLRED shall purchase at NLRED's estimated annual average Avoided Cost rate, all kWhs supplied to NLRED by a Distributed Generation Customer, provided that NLRED shall not, during any Billing Period, purchase more kWhs of electricity than is consumed by the Distributed Generation Customer.

C. NLRED shall not make payments to any Distributed Generation Customer with a delinquent account or that ceases to consume electricity.

Rule 3.05 Use of Distribution System

Customers that own Distributed Generation Facilities that are not collocated with the customer's load must pay applicable wheeling charges to NLRED.

Rule 3.06 Renewable Energy Credits

Any Renewable Energy Credit created as a result of electricity supplied by a Distributed Generation Customer is the property of the Distributed Generation Customer that generated the Renewable Energy Credit.

SECTION 4. INTERCONNECTION OF FACILITIES TO THE NLRED DISTRIBUTION SYSTEM

Rule 4.01 Requirements for Preliminary Interconnection Review Request

A. An Interconnecting Customer shall execute a Preliminary Interconnection Review Request (Appendix A) and pay the designated application fee at least sixty (60) days prior to the date the customer intends to commence construction of the Interconnecting Facilities, and construction shall not commence until approved. The customer shall submit a separate Preliminary Interconnection Review Request for each point of interconnection if information about multiple points of interconnection is requested. Part A, Standard Information, Sections 1 through 3 of the Preliminary Interconnection Review Request must be completed for the notification to be valid. If mailed, the date of notification shall be the third day following the mailing of the Preliminary Interconnection Review Request. NLRED shall provide a copy of the Preliminary Interconnection Review Request to the customer upon request.

B. Following notification by the customer as specified in Rule 4.01.A., NLRED will seek to review the plans of the facility interconnection and provide the results of its review to the customer, in writing, within 30 calendar days. If the customer requests that multiple interconnection site reviews be conducted NLRED shall make reasonable efforts to provide the customer with the results of the review within 30 calendar days. Any items that would prevent Parallel Operation due to violation of safety standards and/or power generation limits shall be explained along with a description of the modifications necessary to remedy the violations.

C. Approval of a preliminary interconnection review is valid for one calendar year. Approval does not relieve a customer from other regulations governing permitting, construction, operation,

lawful uses of property, and the like. Preliminary interconnection review is only performed on existing data and does not require NLRED to conduct a study or other analysis of the proposed interconnection site in the event that data is not readily available. Additional data or changes in data may invalidate approval of a preliminary interconnection review.

D. The preliminary interconnection review does not relieve the customer of the requirement to execute a Standard Interconnection Agreement prior to interconnection of the facility.

Rule 4.02 Requirements for Initial Interconnection

A. An Interconnecting Facility shall be capable of operating in parallel and safely commencing the delivery of power to the NLRED Distribution System at a single point of interconnection. To prevent an Interconnecting Customer from back-feeding a de-energized line, each Interconnecting Facility shall have a visibly open, lockable, manual disconnect switch which is accessible by NLRED and clearly labeled.

B. The customer shall submit a Standard Interconnection Agreement (Appendix B) to NLRED at least sixty (60) days prior to the date the customer intends to interconnect the Interconnecting Facilities to the NLRED Distribution System. Part A, Standard Information, Sections 1 through 3 of the Standard Interconnection Agreement must be completed for the notification to be valid. The customer shall have all equipment necessary to complete the interconnection prior to such notification. If mailed, the date of notification shall be the third day following the mailing of the Standard Interconnection Agreement. NLRED shall provide a copy of the Standard Interconnection Agreement to the customer upon request.

C. Following notification by the customer as specified in Rule 4.02.B., NLRED will seek to review the plans of the facility and provide the results of its review to the customer, in writing, within 30 calendar days. Any items that would prevent Parallel Operation due to violation of safety standards and/or power generation limits shall be explained along with a description of the modifications necessary to remedy the violations.

D. The Interconnecting Facility, at the Interconnecting Customer's expense, shall meet safety and performance standards established by local and national electrical codes including the National Electrical Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), the National Electrical Safety Code (NESC), and Underwriters Laboratories (UL).

E. The Interconnecting Facility, at the Interconnecting Customer's expense, shall meet all NLRED safety and performance standards approved by the Council.

F. If NLRED's existing facilities are not adequate for interconnection, the Interconnecting Customer shall pay the cost of additional or reconfigured facilities prior to the installation or reconfiguration of the facilities.

G. The Interconnecting Customer shall execute a Standard Interconnection Agreement (Appendix B) and pay the designated interconnection fee prior to connecting to the NLRED Distribution System.

Rule 4.03 Requirements for Commissioning Test and Report.

A. A commissioning test and report shall be performed by the installation contractor of the Interconnecting Facility. The tests described in this Rule 4.03 must be documented and performed by using written test procedures established by the manufacturer(s) of the interconnecting equipment. At a minimum the following tests and their results must be documented in a report and submitted to NLRED prior to NLRED's final inspection.

1. *Visual Inspection.* A visual inspection shall be made to ensure that the grounding scheme of the interconnection shall not cause overvoltages that exceed the rating of the equipment connected to NLRED's Distribution System and shall not disrupt the coordination of the ground fault protection on NLRED's Distribution System. The visual inspection must confirm the presence of the isolation device if required in 4.01 B.

2. *Performance Tests.* The following commissioning tests shall be performed on the installed Interconnecting Facility and interconnection system equipment prior to the initial parallel operation of the Interconnecting Facility. The following are required:

a. Operability test on the isolation device mentioned in 4.01B.

b. Unintentional Islanding functionality as specified in IEEE 1547 Clause 5.4.1.

c. Cease to energize functionality as specified in IEEE 1547 Clause 5.4.2.

d. Any tests of IEEE 1547 Section 5.1 that have not been previously performed on a representative sample and formally documented. These are tests that should be completed by the manufacturer of the Interconnecting Facility equipment and submitted as part of the report for the Commissioning test to NLRED. For reference these include Clauses 5.1.1 thru 5.1.6 in the IEEE Standard 1547:

(i) Response to abnormal voltage and frequency;

(ii) Synchronization;

(iii) Interconnect Integrity test;

(iv) Unintentional islanding;

(v) Limitation of DC injection; and

(vi) Harmonics.

e. Any tests of IEEE 1547 Section 5.2 that have not been previously performed on the interconnection systems. These tests are the same response to abnormal voltage and frequency and synchronization tests listed previously covered in IEEE Standard 1547 Clause 5.1.1 and 5.1.2.

Rule 4.04 Requirements for Modifications or Changes to a Net-Metering Facility

A. Prior to being made, the Interconnecting Customer shall notify NLRED of, and NLRED shall evaluate, any modifications or changes to the Interconnecting Facility described in Part A, Standard Information, Section 2 of the Standard Interconnection Agreement. The notice provided by the Interconnecting Customer shall provide detailed information describing the modifications or changes to NLRED in writing, including a revised Standard Interconnection Agreement that clearly identifies the changes to be made. NLRED will seek to review the proposed changes to the facility and provide the results of its evaluation to the customer, in writing, within thirty (30) days of receipt of the customer's proposal. Any items that would prevent Parallel Operation due to violation of applicable safety standards and/or power generation limits shall be explained along with a description of the modifications necessary to remedy the violations.

B. If the Interconnecting Customer makes such modification without NLRED's prior written authorization and the execution of a new Standard Interconnection Agreement, NLRED shall have the right to suspend service pursuant to the procedures found in NLRED General Service Rules and Regulations applicable to unsafe conditions.

Rule 4.05 Requirements for Periodic testing.

The customer shall complete a visual inspectional of the Interconnecting Facility and conduct a Cease to Energize functionality test every year on or before the anniversary of the Interconnecting Facility's initial approval by NLRED. The customer shall also perform any other periodic tests as recommended by the manufacturer(s) of the Interconnecting equipment. The customer shall have these tests performed by a qualified individual, keep a log of the inspection and the results, and submit this log to NLRED upon completion every year. NLRED may elect to witness these tests at its own discretion to ensure that the tests are being completed. NLRED may perform an inspection or test of any Interconnecting Facility at intervals of no less than three (3) years, or upon the reasonable belief of a safety or operational risk, at the expense of the Interconnecting Facility Owner.

SECTION 5. STANDARD INTERCONNECTION AGREEMENT AND PRELIMINARY INTERCONNECTION SITE REVIEW REQUEST

Rule 5.01 Standard Interconnection Agreement and Preliminary Interconnection Site Review Request

Typical standard agreements used by NLRED for interconnection are attached as annexes to these Rules as the Preliminary Interconnection Site Review Request (Appendix A) and the Standard Interconnection Agreement (Appendix B). The NLRED General Manager may administratively update or improve these forms from time-to-time, in a manner consistent with this regulation.

Rule 5.02 Filing and Reporting Requirements

The NLRED General Manager shall periodically report to Council the number of facilities interconnected with the NLRED distribution system.

APPENDIX A

PRELIMINARY INTERCONNECTION REVIEW REQUEST

A. Standard Information

1. Customer Information:

Name:_____

Mailing Address:_____

City:_____ State:_____ Zip Code:_____

Phone Number:_____ Email:_____

Project Manager/Contractor:_____

Phone Number:_____ Email:_____

2. Generation Facility Information:

Location (if different from above):_____

Expected Point of Interconnection:_____

System Type (select one): ☐ Solar ☐ Wind ☐ Hydro ☐ Biomass ☐ Fuel Cell ☐ Micro Turbine ☐ Geothermal

Generator Type: ☐ Single Phase -or- ☐ Three Phase

Report data below in Alternating Current (AC).

Expected Generator Power Rating (kW):_____

Expected Annual Energy Production (kWh):_____

3. Interconnection Information

Attach a detailed electrical diagram showing the configuration of all generating facility equipment, including protection and control schemes.

Requested Point of Interconnection: _____

Customer-Site Load (kW) at Net-Metering Facility location (if none, so state): _____

_____

Interconnection Request: ☐ Single Phase -or- ☐ Three Phase

NOTICE TO DISTRIBUTED GENERATION OWNERS

NLRED PROHIBITS CUSTOMERS FROM CONSTRUCTING DISTRIBUTED GENERATION FACILITIES THAT HAVE A GENERATING CAPACITY (KW) THAT IS GREATER THAN THE CUSTOMER'S PEAK ELECTRICAL LOAD, *OR* WITH ELECTRIC PRODUCTION (KWH) THAT EXCEEDS THE CUSTOMER'S USAGE DURING ANY BILLING PERIOD. NLRED IS PROHIBITED FROM COMPENSATING A DISTRIBUTED GENERATION OWNER FOR ELECTRIC PRODUCTION (KWH) THAT EXCEEDS THE CUSTOMER'S USAGE DURING ANY BILLING PERIOD.

B. Preliminary Interconnection Terms & Conditions

1. *Requirements for Request.* For the purpose of requesting that NLRED conduct a preliminary interconnection site review for a proposed Interconnecting Facility, or as otherwise requested by the customer, the customer shall notify NLRED by submitting a completed Preliminary Interconnection Site Review Request. The customer shall submit a separate Preliminary Interconnection Site Review Request for each point of interconnection if information about multiple points of interconnection is requested. Part A, Standard Information, Sections 1 through 3 of the Preliminary Interconnection Site Review Request must be completed for the notification to be valid. If mailed, the date of notification shall be the third day following the mailing of the Preliminary Interconnection Site Review Request. NLRED shall provide a copy of the Preliminary Interconnection Site Review Request to the customer upon request.

2. *Review by NLRED.* Following submission of the Preliminary Interconnection Site Review Request by the customer, NLRED will seek to review the plans of the facility interconnection and provide the results of its review to the customer, in writing, within 30 calendar days. If the customer requests that multiple interconnection site reviews be conducted NLRED will make reasonable efforts to provide the customer with the results of the review within a timely fashion. If NLRED cannot provide results within 90 days, NLRED will provide the customer with an estimated date by which it will complete the review. Any items that would prevent Parallel Operation due to violation of safety standards and/or power generation limits shall be explained along with a description of the modifications necessary to remedy the violations.

3. *Nonbinding Report.* The preliminary interconnection site review is non-binding and need only include existing data and does not require NLRED to conduct a study or other analysis of the proposed interconnection site in the event that data is not readily available. NLRED shall notify the customer if additional site screening may be required prior to interconnection of the facility. The customer shall be responsible for the actual costs for conducting the preliminary interconnection site review and any subsequent costs associated with site screening that may be required.

4. *Standard Interconnection Agreement.* The preliminary interconnection site review does not relieve the customer of the requirement to execute a Standard Interconnection Agreement prior to interconnection of the facility.

I hereby certify that, to the best of my knowledge, all of the information provided in this Preliminary Interconnection Site Review is true and correct and that I am authorized to execute this document on behalf of the Customer identified in Part A, Section 1.

CUSTOMER

Signature: _____

Printed Name: _____

Date: _____

FOR NLRED USE ONLY

☐ **APPROVED**

☐ **DISAPPROVED**

Signature_____ **Date:** _____

APPENDIX B

STANDARD INTERCONNECTION AGREEMENT

A. Standard Information

1. Customer Information:

Name:_____

Mailing Address:_____

City:_____ State:_____ Zip Code:_____

Phone Number:_____ Email:_____

Electric Account Number to which the Net-Metering Facility is attached:_____

2. Generation Facility Information:

Location (if different from above):_____

System Type (select one): ☐ Solar ☐ Wind ☐ Hydro ☐ Biomass ☐ Fuel Cell ☐ Micro Turbine ☐ Geothermal

Generation Type: ☐ Single Phase -or- ☐ Three Phase

Report data below in Alternating Current (AC).

Generation Power Rating (kW):_____ Capacity Factor:_____

Inverter Manufacturer:_____ Inverter Model:_____

Inverter Power Rating (kW)_____

Inverter Location:_____

Manual Disconnect Location:_____

Attach a detailed electrical diagram of the Net-Metering Facility

3. Installation Information

Electrical Contractor:_____ License Number:_____

Installed by:_____ Qualifications/Credentials:_____

Mailing Address:_____

City:_____ State:_____ Zip Code:_____

Phone Number:_____ Email:_____

4. Certification & Approval

This system has been installed in compliance with the local Building/Electrical Code of:

☐ North Little Rock ☐ Sherwood

Inspector Signature:_____ Date:_____

(In lieu of signature of inspector, a copy of the final inspection certificate may be attached)

Facility Interconnection Approved:_____ Date:_____

Metering Facility Verified:_____ Date:_____

B. Interconnection Agreement Terms & Conditions

1. *Customer Assurances*. By executing this document below, Customer assures NLRED that the system has been installed in accordance with NLRED Net Metering and Distributed Generation Rules, that the Customer has been given system warranty information and operation manual, and that Customer has been instructed in the safe operation of the system.

2. *Interruption or Reduction of Deliveries*. NLRED shall not be obligated to accept and may require Customer to interrupt or reduce deliveries when necessary to construct, install, repair, replace, remove, investigate, or inspect any of its equipment or part of its system; or if it reasonably determines that curtailment, interruption, or reduction is necessary because of emergencies, forced outages, force majeure, or compliance with prudent electrical practices. Whenever possible, NLRED shall give Customer reasonable notice of the possibility that interruption or reduction of deliveries may be required. Notwithstanding any other provision of this Agreement, if at any time NLRED reasonably determines that either the facility may endanger the NLRED's personnel or other persons or property, or the continued operation of the Customer's facility may endanger the integrity or safety of NLRED's electric system, NLRED shall have the right to disconnect and lock out Customer's facility from the NLRED's electric system. Customer's facility shall remain disconnected until NLRED is reasonably satisfied that the conditions referenced in this Section have been corrected.

3. *Interconnection*. Customer shall deliver the as-available energy to NLRED at NLRED's meter. NLRED shall furnish and install one standard kilowatt hour meter. Customer shall provide and install a suitable meter socket for NLRED's meter and any related interconnection equipment per NLRED's technical requirements, including safety and performance standards. Distributed Generation Customers are responsible for the cost of the meter to measure generation. Customer shall submit a Standard Interconnection Agreement to NLRED at least sixty (60) days prior to the date the customer intends to interconnect to NLRED's facilities. Part A, Standard Information, Sections 1 through 3 of the Standard Interconnection Agreement must be completed and valid. Customer must have all equipment necessary to complete the interconnection prior to such notification. If mailed, the date of notification shall be the third day following the mailing of the Standard Interconnection Agreement.

4. *Timely Review*. Following submission of the Standard Interconnection Agreement by Customer, NLRED will seek to review the facility plans and provide the results of its review to Customer, in writing, within thirty (30) calendar days. Any items that would prevent Parallel Operation due to violation of applicable safety standards and/or power generation limits will be explained along with a description of the modifications necessary to remedy the violations.

5. *Required Upgrades*. If NLRED's existing facilities are not adequate for interconnection, the Customer shall pay the cost of additional or reconfigured facilities prior to the installation or reconfiguration of the facilities.

6. *Manual Disconnect*. To prevent an Interconnecting Customer from back-feeding a de-energized line, Customer must install a manual disconnect switch with lockout capability that is accessible to NLRED personnel at all hours.

7. *National Safety Standards*. Customer, at his own expense, shall meet all safety and performance standards established by local and national electrical codes including the National Electrical Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), the National Electrical Safety Code (NESC), and Underwriters Laboratories (UL).

8. *Local Safety Standards*. Customer, at his own expense, shall meet all safety and performance standards adopted by NLRED that are necessary to assure safe and reliable

operation of the Interconnecting Facility to NLRED's system.

9. *Operation Contingent on Inspection and Approval.* Customer shall not commence Parallel Operation of an Interconnecting Facility until the Facility has been inspected and approved by NLRED. Such approval shall not be unreasonably withheld or delayed. Notwithstanding the foregoing, NLRED's approval to operate the Customer's Interconnecting Facility in parallel with the NLRED's electrical system should not be construed as an endorsement, confirmation, warranty, guarantee, or representation concerning the safety, operating characteristics, durability, or reliability of Customer's Net-Metering Facility.

10. *Modifications or Changes.* Prior to being made, Customer shall notify NLRED of, and NLRED shall evaluate, any modifications or changes to the Interconnecting Facility described in Part A, Standard Information, Section 2 of the Standard Interconnection Agreement. The notice provided by Customer shall provide detailed information describing the modifications or changes to NLRED in writing, including a revised Standard Interconnection Agreement that clearly identifies the changes to be made. NLRED will seek to review the proposed changes to the facility and provide the results of its evaluation to Customer, in writing, within thirty (30) calendar days of receipt of Customer's proposal. Any items that would prevent Parallel Operation due to violation of applicable safety standards and/or power generation limits shall be explained along with a description of the modifications necessary to remedy the violations. If Customer makes such modification without NLRED's prior written authorization and the execution of a new Standard Interconnection Agreement, NLRED shall have the right to suspend all services.

11. *Maintenance and Permits.* Customer shall obtain any governmental authorizations and permits required for the construction and operation of the Interconnecting Facility and related equipment. Customer shall maintain the Interconnecting Facility and related equipment in a safe and reliable manner and in conformance with all applicable laws and regulations.

12. *Access to Premises.* NLRED may enter the Customer's premises to inspect the Customer's protective devices and read or test the meter. NLRED may disconnect the Interconnecting Facilities without notice if NLRED reasonably believes a hazardous condition exists and such immediate action is necessary to protect persons, or NLRED's facilities, or property of others from damage or interference caused by Customer's facilities, or lack of properly operating protective devices.

13. *Liability and Indemnity.* Neither NLRED, its officers, agents or employees shall be liable for any claims, demands, costs, losses, causes of action, or any other liability of any nature or kind, arising out of the engineering, design, construction, ownership, maintenance or operation of, or the making of replacements, additions or betterment to, or by failure of, Customer's facilities by Customer or any other person or entity. **CUSTOMER SHALL INDEMNIFY THE CITY OF NORTH LITTLE ROCK, ARKANSAS ("CITY"), ITS DIRECTORS, OFFICERS, AGENTS, AND EMPLOYEES AGAINST ALL LOSS, DAMAGES, EXPENSE AND LIABILITY TO THIRD PERSONS FOR INJURY TO OR DEATH OF PERSONS OR INJURY TO PROPERTY CAUSED BY CUSTOMER'S ENGINEERING, DESIGN, CONSTRUCTION, OWNERSHIP, MAINTENANCE OR OPERATIONS OF, OR THE MAKING OF REPLACEMENTS, ADDITIONS OR BETTERMENT TO, OR BY FAILURE OF, ANY OF CUSTOMER'S WORKS OR FACILITIES USED IN CONNECTION WITH THIS AGREEMENT BY REASON OF OMISSION OR NEGLIGENCE, WHETHER ACTIVE OR PASSIVE.** Customer shall, on City's request, defend any suit asserting a claim covered by this indemnity. Customer shall pay all costs that may be incurred by the City in enforcing this indemnity.

14. *Term of Agreement.* This Agreement shall be until modified or terminated in accordance with its terms or applicable ordinances, regulations or other laws.

15. *Assignment.* This Agreement and all provisions hereof shall inure to and be binding upon the respective Parties hereto, their personal representatives, heirs, successors, and assigns. Customer shall not assign this Agreement or any part hereof without the prior written consent of NLRED, and such unauthorized assignment may result in termination of this Agreement.

16. *WARNING*. POSSIBLE RULES OR RATE CHANGES, OR BOTH, THAT AFFECT THE OPERATION OR FINANCIAL FEASIBILITY OF AN INTERCONNECTING FACILITY COULD OCCUR IN THE FUTURE. INTERCONNECTING FACILITY OWNERS ARE ADVISED THAT THEY MUST REMAIN AWARE OF AND COMPLIANT WITH ALL LAWS AND REGULATIONS.

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17. *NOTICE TO DISTRIBUTED GENERATION OWNERS*

NLRED PROHIBITS CUSTOMERS FROM CONSTRUCTING DISTRIBUTED GENERATION FACILITIES THAT HAVE A GENERATING CAPACITY (KW) THAT IS GREATER THAN THE CUSTOMER'S PEAK ELECTRICAL LOAD, *OR* WITH ELECTRIC PRODUCTION (KWH) THAT EXCEEDS THE CUSTOMER'S USAGE DURING ANY BILLING PERIOD. NLRED IS PROHIBITED FROM COMPENSATING A DISTRIBUTED GENERATION OWNER FOR ELECTRIC PRODUCTION (KWH) THAT EXCEEDS THE CUSTOMER'S USAGE DURING ANY BILLING PERIOD.

Customer Certification

I hereby certify that all information provided is true and correct, to the best of my knowledge, and that I have read and understand the Terms and Conditions of this Agreement.

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

Date:_____

Print:_____

Signed:_____

NLRED Certification

I hereby certify that: (1) I am a duly authorized NLRED representative; (2) I have examined the documents and generating facility proposed for interconnection described in Part A, Sections 1-3; and (3) I have determined that interconnection is authorized in accordance with NLRED regulations.

Date:_____

Print:_____

Signed:_____

APPENDIX C

NET-METERING AND DISTRIBUTED GENERATION FEES

1. Net Metering Preliminary Review Fee..... $100.00

2. Distributed Generation Preliminary Review Fee $250.00

3. Net Metering Interconnection Fee..... $250.00

4. Distributed Generation Interconnection Fee $1,000.00

5. Net-Metering Periodic Inspection Fee $100.00

6. Distributed Generation Periodic Inspection Fee $250.00

Note: Wheeling charges applicable to distributed generators that are separated from load will be based on the cost-share of facilities used to route electricity between the customer's generation and load.

INTERCONNECTION TIMELINE

	60 DAYS PRIOR TO CONSTRUCTION	60 DAYS PRIOR TO INTERCONNECTION	EVERY YEAR	EVERY 3 YEARS
CUSTOMER ACTION	SUBMIT PRELIMINARY INTERCONNECTION REVIEW REQUEST	SUBMIT STANDARD INTERCONNECTION AGREEMENT	SAFETY TEST	
FORM	APPENDIX A	APPENDIX B		
NLRED ACTION	REVIEW REQUEST FOR COMPLIANCE WITH ORDINANCE	REVIEW REQUEST FOR COMPLIANCE WITH ORDINANCE	MAY EXAMINE DOCUMENTS	SAFETY TEST
APPROVAL	ESTABLISHES UPGRADE COSTS	AUTHORIZES INTERCONNECTION	CONTINUES CONNECTION	CONTINUES CONNECTION