

**NORTH LITTLE ROCK ELECTRIC DEPARTMENT**

**NET METERING RULES**

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## DEFINITIONS

### **Billing period**

The billing period for net metering will be the same as the billing period under the customer's applicable standard rate schedule.

### **Biomass facility**

A facility 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.

### **Commercial customer**

A customer served under Utility's standard rate schedule applicable to commercial service.

### **Commission**

The Arkansas Public Service Commission.

### **Electric utility**

North Little Rock Electric Department (NLRED) engaged in the business of supplying electric energy to the ultimate customer. Utility is an interchangeable term.

### **Fuel cell facility**

A facility that converts the chemical energy of a fuel directly to direct current electricity without intermediate combustion or thermal cycles.

### **Geothermal facility**

An electric generating facility in which the prime mover is a steam turbine. The steam is generated in the earth by heat from the earth's magma.

### **Hydroelectric facility**

An electric generating facility in which the prime mover is a water wheel. The waterwheel is driven by falling water.

### **Micro turbine facility**

A facility that uses a small combustion turbine to produce electricity.

### **Net Excess Generation**

The amount of electricity that a net metering customer has fed back to the utility that exceeds the amount of electricity used by that customer during the billing process.

**Net metering**

Measuring the difference between electricity supplied by the electric utility and the electricity generated by a net metering customer and fed back to the electric utility over the applicable billing period.

**Net metering facility**

A facility for the production of electrical energy that:

- (A) 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; and,
- (B) Has a generating capacity of not more than twenty-five (25) kilowatts for residential or three hundred (300) kilowatts for non-residential use; and,
- (C) Is located in NLRED's service territory; and,
- (D) Can operate in parallel with NLRED's existing transmission and distribution facilities; and,
- (E) Is intended primarily to offset part or all of the net-metering customer requirements for electricity; or,
- (F) Is designated as eligible for net metering service pursuant to Ark. Code Ann. §23-18-604(B)(4).

**Parallel operation**

The operation of on-site generation by a customer while the customer is connected to NLRED's distribution system.

**Renewable energy credit**

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.

**Residential customer**

A customer served under the NLRED's standard rate schedules applicable to residential service.

**Solar facility**

A facility in which electricity is generated through the collection, transfer and or storage of the sun's heat or light.

**Wind facility**

A facility in which an electric generator is powered by a wind-driven turbine.

## **SECTION 1. GENERAL PROVISIONS**

### **Rule 1.01. Purpose**

The purpose of these Rules is to establish rules for net energy metering and interconnection.

### **Rule 1.02. Other Provisions**

Net metering customers taking service under the provisions of the Net Metering Tariff may not simultaneously take service under the provisions of any other alternative source generation or cogeneration tariffs except as provided herein.

## **SECTION 2. NET METERING REQUIREMENTS**

### **Rule 2.01. Electric Utility Requirements**

NLRED allows net metering facilities to be interconnected using an approved 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 the utility to each net-metering customer and also to accurately measure the electricity generated by each net-metering customer that is fed back to the utility over the applicable billing period. If nonstandard metering equipment is required, the customer is responsible for the cost differential between the required metering equipment and the utility's standard metering equipment for the customer's current rate schedule.
- B. Accuracy requirements for both forward and reverse registration modes shall be as defined in the Public Service Commissions Special Rules - Electric. A test to determine compliance with this accuracy requirement shall be made by the utility either before or at the time the net metering facility is placed in operation in accordance with these Rules.

### **Rule 2.03 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 affected.
- B. If the kWhs supplied by the utility exceeds the kWhs generated by the net metering facility and fed back to the utility during the billing period, the net metering customer shall be billed for the net kWhs supplied by the utility in accordance with the rates and charges under the customer's standard rate schedule.
- C. If the kWhs generated by the metering facility and fed back to the utility exceeds the kWhs supplied by the utility to the net metering customer during the applicable billing period, the customer shall not receive any compensation from the utility for such net metering excess delivered kWhs during the billing period but shall be credited with any excess net accumulation in the next billing period. Any net excess credit remaining at the end of the calendar year shall expire.
- D. 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 credit.

**SECTION 3. INTERCONNECTION OF NET METERING FACILITIES  
TO EXISTING ELECTRIC POWER SYSTEMS**

**Rule 3.01. Requirements for Initial Interconnection of a Net Metering Facility**

- A. A net metering customer shall execute a Standard Interconnection Agreement for Net Metering Facilities (Appendix A) prior to interconnection with the utility's facilities.
- B. A net metering facility shall be capable of operating in parallel and safely commencing the delivery of power into the utility system at a single point of interconnection. The end conversion of the connection to the utility's system must be into 60 Hz alternating current. Any equipment connected to the utility's system shall meet IEEE Std. 1547 IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems. To prevent a net metering customer from back-feeding a de-energized line, a net metering facility shall have a visibly open, lockable, manual disconnect switch which is accessible by the electric utility and clearly labeled.
- C. The customer shall submit a Standard Interconnection Agreement to the utility at least thirty (30) days prior to the date the customer intends to interconnect the net metering facilities to the utility's facilities. Part I, Standard Information, Sections 1 through 4 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. The customer shall present a detailed electrical diagram of the proposed interconnection with the utility's system with the Standard Interconnection Agreement. If mailed, the date of notification shall be the third day following the mailing of the Standard Interconnection Agreement. The utility will provide a copy of the Standard Interconnection Agreement to the customer upon request.
- D. Following notification by the customer as specified in Rule 3.01.C, the utility shall review the plans of the facility and provide the results of its review to the customer within 30 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.
- E. The net metering facility, at the net metering 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).
- F. The net metering facility, at the net metering customer's expense, shall meet all

safety and performance standards adopted by the City of North Little Rock pursuant to these Rules that are necessary to assure safe and reliable operation of the net metering facility to the utility's system. This includes but is not limited to the satisfactory completion of the annual inspection and filing of that inspection with NLRED.

- G. If the utility's existing facilities are not adequate to interconnect with the net metering facility, any changes will be performed in accordance with the North Little Rock Electric Department's Line Extension Policy.

**Rule 3.02. Requirements for Modifications or Changes to a Net Metering Facility**

Modifications or changes made to a net metering facility shall be evaluated by the electric utility prior to being made. The net metering customer shall provide detailed information describing the modifications or changes to the electric utility in writing prior to making the modifications to the net metering facility. The utility shall review the proposed changes to the facility and provide the results of its evaluation to the customer 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.

**Rule 3.03. Requirement for new customer at location to comply with regulation**

When an existing net metering customer leaves NLRED's service, the new customer at that address will be required to comply with the rules as a new customer and new service.

# STANDARD INTERCONNECTION AGREEMENT FOR NET METERING FACILITIES

## **I. STANDARD INFORMATION**

### **Section 1. Customer Information**

Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Facility Location (if different from above): \_\_\_\_\_  
Daytime Phone: \_\_\_\_\_ Evening Phone: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_ Utility Customer Account No (from electric bill): \_\_\_\_\_

### **Section 2. Generation Facility Information**

System Type:(Circle One)Solar-Wind-Hydro-Geothermal-Biomass-Fuel Cell-Micro turbine  
Generator Rating (kW): \_\_\_\_\_ AC or DC (circle one)  
Describe Location of Accessible and Lockable Disconnect: \_\_\_\_\_  
Inverter Manufacturer: \_\_\_\_\_ Inverter Model: \_\_\_\_\_  
Inverter Location: \_\_\_\_\_ Inverter Power Rating: \_\_\_\_\_

### **Section 3. Installation Information**

*(Attach a detailed electrical diagram of the net metering facility.)*

Master Electrician: \_\_\_\_\_ License Number: \_\_\_\_\_  
Installed by: \_\_\_\_\_ Qualifications/credentials: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Daytime Phone: \_\_\_\_\_ Installation Date: \_\_\_\_\_

### **Section 4. Certification**

1. The system has been installed in compliance with the local Building/Electrical Code of (City/County) -- \_\_\_\_\_  
Signed (Inspector): \_\_\_\_\_ Date: \_\_\_\_\_  
*(In lieu of signature of inspector, a copy of the final inspection certificate may be attached.)*
2. The system has been installed to my satisfaction and I have been given system warranty information and operation manual, and have been instructed in the operation of the system.  
Signed (Owner): \_\_\_\_\_ Date: \_\_\_\_\_

### **Section 5. Utility Verification and Approval**

Facility Interconnection Approved: \_\_\_\_\_ Date: \_\_\_\_\_  
Metering Facility Verification by: \_\_\_\_\_ Verification Date: \_\_\_\_\_

## **INTERCONNECTION AGREEMENT TERMS AND CONDITIONS**

This Interconnection Agreement for Net Metering Facilities ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by NLRED ("Utility") and \_\_\_\_\_ ("Customer"), a \_\_\_\_\_ (specify whether corporation or other), each hereinafter sometimes referred to individually as "Party" or collectively as the "Parties". In consideration of the mutual covenants set forth herein, the Parties agree as follows:

### **Section 1. The Net Metering Facility**

The Net Metering Facility meets the requirements of Ark. Code Ann. §23-18-603(5) and the electric Utility's Net Metering Rules.

### **Section 2. Governing Provisions**

The parties shall be subject to the provisions of Ark. Code Ann. §23-18-604 and the terms and conditions set forth in this Agreement, the Net Metering Rules, and the Utility's applicable rates.

### **Section 3. Interruption or Reduction of Deliveries**

The Utility shall not be obligated to accept and may require Customer to interrupt or reduce deliveries when necessary in order 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, the Utility shall give the 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 the Utility reasonably determines that either the facility may endanger the Utility's personnel or other persons or property, or the continued operation of the Customer's facility may endanger the integrity or safety of the Utility's electric system, the Utility shall have the right to disconnect and lock out the Customer's facility from the Utility's electric system. The Customer's facility shall remain disconnected until such time as the Utility is reasonably satisfied that the conditions referenced in this Section have been corrected. The utility will not assume any responsibility for protection of any of the customer's electrical equipment. The customer is fully responsible for protecting his equipment in such a manner that faults or other disturbances on the utility's system does not cause damage to the customer's equipment, or adversely affect the customer in any way.

### **Section 4. Interconnection**

Customer shall deliver the as-available energy to the Utility at the Utility's meter.

Utility shall furnish and install a standard kilowatt hour meter. Customer shall install a Utility approved meter socket for the Utility's meter and any related interconnection equipment per the Utility's technical requirements, including safety and performance

standards.

The customer shall submit a Standard Interconnection Agreement to the electric utility at least thirty (30) days prior to the date the customer intends to interconnect the net metering facilities to the utility's facilities. Part I, Standard Information, Sections 1 through 4 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. The electric utility shall provide a copy of the Standard Interconnection Agreement to the customer upon request.

Following notification by the customer as specified in Rule 3.01.C, the utility shall review the plans of the facility and provide the results of its review to the customer within 30 calendar days. 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.

To prevent a net metering customer from back-feeding a de-energized line, the customer shall install a manual disconnect switch with lockout capability that is accessible to utility personnel at all hours.

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).

Customer shall not commence parallel operation of the net metering facility until the net metering facility has been inspected and approved by the Utility. Such approval shall not be unreasonably withheld or delayed. Notwithstanding the foregoing, the Utility's approval to operate the Customer's net metering facility in parallel with the Utility's electrical system should not be construed as an endorsement, confirmation, warranty, guarantee, or representation concerning the safety, operating characteristics, durability, or reliability of the Customer's net metering facility.

Modifications or changes made to a net metering facility shall be evaluated by the Utility prior to being made. The Customer shall provide detailed information describing the modifications or changes to the Utility in writing prior to making the modifications to the net metering facility. The Utility shall review the proposed changes to the facility and provide the results of its evaluation to the Customer within thirty (30) calendar 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.

### **Section 5. Maintenance and Permits**

The customer shall obtain any governmental authorizations and permits required for the construction and operation of the net metering facility and interconnection facilities. The Customer shall maintain the net metering facility and interconnection facilities in a safe and reliable manner and in conformance with all applicable laws and regulations. The Customer will be required to test his equipment annually to verify compliance with IEEE Std. 1547. The test results shall be filed with NLRED on the anniversary date of the metering facility verification date of this Standard Interconnection Agreement. The test results must be signed by the testing entity and the customer who owns the net metering facility. NLRED, in its sole discretion, may disconnect the interconnection facility if the annual inspection is not filed as stipulated above or if that annual inspection identifies deficiencies.

### **Section 6. Access to Premises**

The utility may enter the Customer's premises to inspect the Customer's protective devices and read or test the meter. The Utility may disconnect the interconnection facilities without notice if the Utility reasonably believes a hazardous condition exists and such immediate action is necessary to protect persons, or the Utility's facilities, or property of the others from damage or interference caused by the Customer's facilities, or lack of properly protective devices.

### **Section 7. Indemnity and Liability**

Each party shall indemnify the other party, 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 the indemnifying party's engineering design, construction ownership or operations of, or the making of replacements, additions or betterment to, or by failure of, any of such party's works or facilities used in connection with this Agreement by reason of omission or negligence, whether active or passive. The indemnifying party shall, on the other party's request, defend any suit asserting a claim covered by this indemnity. The indemnifying party shall pay all costs that may be incurred by the other party in enforcing this indemnity. It is the intent of the parties hereto that, where negligence is determined to be contributory, principles of comparative negligence will be followed and each party shall bear the proportionate cost of any loss, damage, expense and liability attributable that party's negligence.

Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to or any liability to any person not a party to this Agreement. Neither the Utility, 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 making replacements, additions or betterment to, the Customer's facilities by the Customer or any other person or entity.

**Section 8. Notices**

All written notices shall be directed as follows:

North Little Rock Electric Department  
Attention: Jonathan Caudle  
P.O. Box 159  
North Little Rock, AR 72115

Customer notices to Utility shall refer to the Customer’s electric service account number set forth in Section 1 of this Agreement.

**Section 9. Term of Agreement**

The term of this Agreement shall be the same as the term of the otherwise applicable standard rate schedule. This Agreement shall remain in effect until modified or terminated in accordance with its terms or applicable regulations or laws.

**Section 10. 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. The Customer shall not assign this Agreement or any part hereof without the prior written consent of the Utility, and such unauthorized assignment may result in termination of this Agreement.

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

Dated this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Customer:

North Little Rock Electric Department:

\_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_

By: Jonathan Caudle

Title: \_\_\_\_\_

Title: Distribution Design Engineer

Mailing Address:

Mailing Address:

\_\_\_\_\_

P.O. Box 159

\_\_\_\_\_

North Little Rock, AR 72115