



## **BEUD NET METERING REQUIREMENTS**

**ELECTRIC DEPARTMENT  
CONSTRUCTION OFFICE  
608 Southeast Third Street  
Bentonville, AR 72712**

**REVISED  
7/8/14**

ORDINANCE NO. 2014-80

**AN ORDINANCE TO ADOPT CERTAIN REVISIONS TO THE BENTONVILLE ELECTRIC UTILITY DEPARTMENT NET METERING ORDINANCE.**

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL FOR THE CITY OF BENTONVILLE, ARKANSAS,**

**Section 1.** That the following code, 3 copies of which are on file with the City Clerk and which have been advertised and made available for public review and inspection for 30 days prior, are hereby adopted by reference as though they were copied herein fully:

Bentonville Electric Utility Revised Net Metering Ordinance

**Section 2.** That any matters in said codes which are contrary to existing ordinances of the City of Bentonville, Arkansas shall prevail, and that any ordinances or parts of ordinances in conflict herewith are hereby repealed.

**PASSED and APPROVED this 8th day of July, 2014.**

APPROVED:

Bob McMaslin  
MAYOR

ATTEST:

Linda Spence  
CITY CLERK

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## **BEUD NET METERING REQUIREMENTS**

### **SECTION 1            DEFINITIONS**

- 1.1    **BILLING PERIOD:** The billing period for net metering will be the same as the billing period under the customer's applicable standard rate schedule.
- 1.2    **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.
- 1.3    **COMMERCIAL CUSTOMER:** A customer served under utility's standard rate schedule applicable to commercial service.
- 1.4    **ELECTRIC UTILITY:** Bentonville Electric Utility Department (BEUD) engaged in the business of supplying electric energy to the ultimate customer. Utility is an interchangeable term.
- 1.5    **FUEL CELL FACILITY:** A facility that converts the chemical energy of a fuel directly to direct current electricity without intermediate combustion or thermal cycles.
- 1.6    **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.
- 1.7    **HYDROELECTRIC FACILITY:** An electric generating facility in which the prime mover is a water wheel. The waterwheel is driven by falling water.
- 1.8    **MICRO TURBINE FACILITY:** A facility that uses a small combustion turbine to produce electricity.
- 1.9    **NET METERING:** Measuring the difference between electricity supplied by an electric utility and the electricity generated by a net metering customer and fed back to the electric utility over the applicable billing period.



## **BEUD NET METERING REQUIREMENTS**

- 1.10 **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 Bentonville; and,
  - (D) Can operate in parallel with an electric utility'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)(3).
- 1.11 **NET EXCESS GENERATION:** The amount of electricity that a net metering customer has fed back to the Electric Utility that exceeds the amount of electricity used by that customer during the billing process.
- 1.12 **PARALLEL OPERATION:** The operation of on-site generation by a customer while the customer is connected to BEUD's distribution system.
- 1.13 **RESIDENTIAL CUSTOMER:** A customer served under BEUD's standard rate schedules applicable to residential service.
- 1.14 **SOLAR FACILITY:** A facility in which electricity is generated through the collection, transfer and or storage of the sun's heat or light.
- 1.15 **WIND FACILITY:** A facility in which an electric generator is powered by a wind-driven turbine.

### **SECTION 2                    GENERAL PROVISIONS**

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

### **SECTION 3                    NET METERING REQUIREMENTS**

- 3.1     BEUD shall allow net metering facilities to be interconnected using an approved meter capable of registering the flow of electricity in two (2) directions. BEUD shall supply the electric meter.



## **BEUD NET METERING REQUIREMENTS**

- 3.2 Metering equipment shall be installed to both accurately measure the electricity supplied by the electric 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 electric utility over the applicable billing period.
- 3.3 On a monthly basis, the net metering customer shall be billed the charges applicable under the currently effective standard rate schedule. Under net metering, only the kilowatt-hour (kWh) units of a customer's bill are affected.
- 3.4 If the kWhs supplied by the BEUD exceeds the kWhs generated by the net metering facility and fed back to BEUD during the billing period, the net metering customer shall be billed for the net kWhs supplied by BEUD in accordance with the rates and charges under the customer's standard rate schedule.
- 3.5 If the kWhs generated by the metering facility and fed back to BEUD exceeds the kWhs supplied by BEUD to the net metering customer during the applicable billing period, the customer shall **NOT** receive any compensation from UTILITY BILLING 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.

### **SECTION 4 INTERCONNECTION OF NET METERING FACILITIES TO EXISTING ELECTRIC POWER SYSTEMS**

- 4.1 The customer shall submit a completed Standard Interconnection Agreement and a plan showing all interconnection diagrams and total system component data sheets with ratings to the New Service Coordinator (479-271-3139) at least thirty (30) days prior to the date the customer intends to interconnect the net metering facilities to BEUD's facilities.
- 4.2 The net metering facility shall have an automatic disconnect method that will isolate the net metering facility from the BEUD system in the event of a power outage and, there shall also be a visibly open, and, lockable manual disconnect switch which is controlled by the BEUD and clearly labeled.
- 4.3 Any items that would prevent parallel operation due to violation of safety standards and/or power generation limits shall be explained along with a



## **BEUD NET METERING REQUIREMENTS**

description of the modifications necessary to remedy the violations.

- 4.4 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), all applicable BEUD standards, and shall be inspected annually by the customer's professional installer. **(approved inspection form is attached in Appendix B)**
- 4.5 Modifications or changes made to a net metering facility shall be evaluated by BEUD prior to being made.
- 4.6 When an existing net-metering customer leaves BEUD's service, the new customer at that address will be required to re-apply and comply with the rules, as a new customer and new service.
- 4.7 BEUD allows for meter aggregation. (i.e. If there are multiple meters on 1 account and 1 of the meters has been set up as net metering, any excess generation will be applied to the overall customer account)

### **SECTION 5 BEUD INSPECTION PROCEDURES**

- 5.1 The following is the testing procedure that BEUD shall follow to ensure the net metering facility does not back-feed into the BEUD system:
  1. The customer shall be present during the testing procedure.
  2. Customer will disconnect main breaker for residence and the net metering facility from customer side.
  3. BEUD will verify no load and remove electric meter.
  4. Customer will then re-energize main breaker for residence and net metering facility.
  5. BEUD will then check load side of meter to ensure there is no voltage present.
  6. Customer will then disconnect the main breaker for residence and net metering facility to allow BEUD to replace the meter.
- 5.2 If there is voltage present during the testing, the meter will not be replaced and the customer is responsible for any repairs to the net metering facility.



## BEUD NET METERING REQUIREMENTS

### APPENDIX A

#### INTERCONNECTION AGREEMENT TERMS AND CONDITIONS

This Interconnection Agreement for Net Metering Facilities ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by BEUD 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:

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

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

#### **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 BEUD's applicable rates.

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

BEUD 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, BEUD 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 BEUD reasonably determines that either the facility may endanger BEUD's personnel or other persons or property, or the continued operation of the Customer's facility may endanger the integrity or safety of BEUD's electric system, BEUD shall have the right to disconnect and lock out the Customer's facility from BEUD's electric system. The Customer's facility shall remain disconnected until such time as BEUD is reasonably satisfied that the conditions referenced in this Section have been corrected.

#### **4. Interconnection**

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

BEUD shall furnish and install a meter capable of net metering. Customer shall install an approved meter socket for BEUD's meter and any related interconnection equipment per BEUD's technical requirements (automatic transfer switch and manual disconnect), including safety and performance standards.





## **BEUD NET METERING REQUIREMENTS**

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

The customer shall obtain any and all 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 shall provide an annual inspection of his net-metering facility by a professional installer and the inspection shall be filed with BEUD on the anniversary date of the permit. The inspection must be signed by the inspector and the customer who owns the net-metering facility. BEUD, 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. **(see Appendix B)**

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

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

### **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 BEUD, its officers, agents nor 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.



**BEUD NET METERING REQUIREMENTS**

**8. Notices**

All written notices shall be directed as follows:

Bentonville Electric Utility Department  
Attention: Travis Matlock, PE  
117 W. Central Ave  
Bentonville, AR 72712

Customer notices to Utility shall refer to the Customer’s electric service account number as listed on Customer’s bill.

**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.

**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 BEUD, 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:

BEUD

\_\_\_\_\_

\_\_\_\_\_

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

By: Travis Matlock, P.E.

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

Title: Engineering Director

Mailing Address:

Mailing Address:

\_\_\_\_\_

117 W. Central Ave

\_\_\_\_\_

Bentonville, AR 72712



## BEUD NET METERING REQUIREMENTS

### GENERAL INFORMATION

#### 1. Customer Information

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Facility Location: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

Company Customer Account: \_\_\_\_\_

#### 2. Generation Facility Information

System Type: Solar, Wind, Hydro, Geothermal, Biomass, Fuel Cell, Micro Turbine  
(Circle Type)

Generator Rating (KW): AC or DC (Circle One) Size \_\_\_\_\_

Inverter Manufacturer: \_\_\_\_\_

Inverter Model: \_\_\_\_\_

Inverter Location: \_\_\_\_\_

Inverter Power Rating: \_\_\_\_\_

#### 3. Installation Information

Attach a detailed electrical diagram of the net metering facility.

Installed by: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: State: Zip Code: \_\_\_\_\_

Daytime Phone: \_\_\_\_\_

Installation Date: \_\_\_\_\_

#### 4. Certification

1. The system has been installed in compliance with the local Building/Electrical Code of **Bentonville**. Signed (Inspector): \_\_\_\_\_  
Date: \_\_\_\_\_.
2. The system has been installed to my satisfaction and I have been given system warranty information and an operation manual, and have been instructed in the operation of the system.  
Signed (Owner): \_\_\_\_\_ Date: \_\_\_\_\_
3. The system has been installed in compliance with **BEUD**.  
Signed (New Service Coordinator): \_\_\_\_\_ Date: \_\_\_\_\_



## **BEUD NET METERING REQUIREMENTS**

### **APPENDIX B**

#### **BEUD NET METERING INSPECTION FORM**

##### **Who needs to complete this Inspection Report?**

A customer:

- Who is an existing BEUD customer and plans to install new generating facility and will complete a new net metering agreement, and
- Who becomes a BEUD customer at a home, office or other facility having an existing solar (PV) or wind electrical generating facility with plans to remain interconnected with BEUD, and
- Whose electrical generating facility and meter have not been installed or inspected within the previous three years, and
- Who must arrange to have their generating facility inspected and the Contractor section of this report completed by an Arkansas licensed electrician who is **NOT** the owner or operator of the facility and meter.

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#### **INSTRUCTIONS**

1. The Customer shall complete all of Part I and complete Part A of Part II. The Customer information in Part A should match that in Part I.
2. The Customer should arrange to have the Inspector (Arkansas Licensed Electrician) inspect their Generating Facility and complete the remainder of Part II of this form and sign it.
3. The Customer shall then submit the fully completed form to BEUD.
4. BEUD shall be on site to witness customer's inspector test Generating Facility and sign Section H, Part II. Call 479-271-3135 48 hrs. in advance of inspection to schedule with BEUD personnel.

If this form is not submitted within 10 business days of the Customer becoming the customer of record for this account, Customer agrees to disconnect their Generation Facility and inform BEUD it no longer will take service.

For the safety of the Customer and BEUD employees, under no circumstances shall the Generating Facility be operated while interconnected with BEUD if it does not pass the Operational Test in Part II, Section F.



**BEUD NET METERING REQUIREMENTS**

**PART I NET ENERGY METERING CUSTOMER SECTION**

**(to be completed by Customer)**

**A. Customer Generation Facility Information – Who is the BEUD Customer for this Facility**

<b>Generating Facility BEUD account holder name (must match customer name on BEUD bill for generator)</b>	<b>BEUD Account number for Generating Facility</b>	<b>Meter Number</b>
<b>Account Holder Street Address</b>		
<b>Account Holder City</b>	<b>Account Holder State</b>	<b>Account Holder Zip</b>
<b>Account Holder Billing Address</b>		
<b>Billing City</b>	<b>Billing State</b>	<b>Billing Zip</b>
<b>Business Phone</b>	<b>Cell Phone</b>	<b>Email</b>

**B. Generator Location – Where is the Generation Facility Located?**

<b>Contact at Generator Location</b>		
<b>Generator Address</b>		
<b>Generator City</b>	<b>Generator State</b>	<b>Generator Zip</b>
<b>Generator Contact Phone</b>	<b>Generator Contact Fax</b>	<b>Generator Contact Email</b>
This contact person is to be used as BEUD contact and is authorized by Customer to receive confidential Customer information and act on behalf of Customer with respect to this agreement.		



## **BEUD NET METERING REQUIREMENTS**

### **C. Modifications**

To your knowledge, has the system been modified in any way?            No            Yes

If yes, how? \_\_\_\_\_

### **D. Installation Date**

Do you know when this Generation Facility was installed?

No

Yes, Installation Date \_\_\_\_\_

### **E. Last Inspection Date**

Do you know if this Generating Facility had a prior BEUD inspection?

No

Yes, Date of Last Inspection \_\_\_\_\_

**F.** By the Customer signing the attached Interconnection Agreement Terms and Conditions, this report is hereby incorporated into that Interconnection Agreement.

A copy of this signed report should be retained on site to confirm successful Generation Facility Inspection.



**BEUD NET METERING REQUIREMENTS**

**PART II – ELECTRICAL INSPECTOR SECTION**

**A. Inspection Information** (to be filled in by Customer – must match Part I)

<b>Generating Facility BEUD account holder name (must match customer name on BEUD bill for generator)</b>	<b>BEUD Account number for Generating Facility</b>	<b>Meter Number</b>
<b>Account Holder Street Address</b>		

-----To be completed by Inspector-----

**B. Inspector Information**

<b>Arkansas Licensed Electrician Name</b>	<b>Company Name</b>	
<b>Current Valid Arkansas Electrician License Number</b>		
<b>Electrician Billing Address</b>		
<b>Billing City</b>	<b>Billing State</b>	<b>Billing Zip</b>
<b>Business Phone</b>	<b>Cell Phone</b>	<b>Email</b>



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**C. Inverters interconnected with BEUD**

List all the inverters that are currently interconnected to BEUD at this Facility.

No.	Inverter Manufacturer	Inverter Model Number	Inverter Nameplate Rating <sup>1</sup> kW (per Unit)	Inverter CEC Rating kW (per Unit)	Quantity of Inverters	Inverter Output Voltage	Single or Three Phase
1.							
2.							

<sup>1</sup> The inverter rating equals the nameplate rating in kW. If there are more than one inverter of one type being installed, the inverter rating equals the nameplate rating of one unit of the model being installed.

**D. Photovoltaic Generator Equipment**

List the photovoltaic (PV) panel information requested below. If the panels are not all identical modules, list the total capacity connected to each inverter you listed above. (Please attach additional sheets if more space is needed.)

No.	PV Panel Manufacturer	PV Panel Model	PV Nameplate Rating <sup>2</sup> kW (per Unit)	PV Panel CEC Rating kW (per Unit)	Quantity of PV Panels	Total Capacity <sup>3</sup> (kW)	Single or Three Phase
1.							
2.							

<sup>2</sup>For all generation equipment ratings, please use the nameplate rating found on the equipment or in the equipment specifications.

<sup>3</sup>The total capacity is the photovoltaic (PV) panel rating times the quantity.

**E. Other Interconnected Generators**

Are there other generators interconnected on this account at this location?

- No
- Yes

If Yes, list generator technology and capacity for all generators

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**BEUD NET METERING REQUIREMENTS**

Are there any backup generators?      Yes                  No  
If yes, is the backup generator open or close transition?      Open                  Closed

**F. Operational Test**

**1. Anti-Islanding Test**

Verify the Generating Facility ceases to output **within two seconds** of operating the disconnect switch or otherwise disconnecting the Generating Facility from the BEUD electrical system.

Pass Test:      Yes  
                            No

**2. Reclose and return to service**

Verify that the time-delay function reconnects to the Generating Facility with BEUD’s electrical system after at least **60 seconds**.

Pass Test:      Yes  
                            No

**G. Governing Authority**

The terms and conditions of this report shall at all times be subject to such changes or modifications by BEUD.

**H. Inspector Signature**

I certify that I am currently an Arkansas licensed electrician, that the responses given in Part II of this report for the Generating Facility are true and accurate to the best of my knowledge, and that the Generating Facility satisfies the Operational Tests in Part II.

Name Arkansas Licensed Electrical Contractor (Please Print): \_\_\_\_\_

Name Arkansas Licensed Electrical Contractor Signature: \_\_\_\_\_

Arkansas Licensed Electrician License No. \_\_\_\_\_

Date: \_\_\_\_\_

BEUD Witness \_\_\_\_\_

Date: \_\_\_\_\_