

BEFORE THE ARKANSAS PUBLIC SERVICE COMMISSION

IN THE MATTER OF NET METERING AND THE) DOCKET NO. 16-027-R
IMPLEMENTATION OF ACT 827 OF 2015)

ATTACHMENTS TO THE INITIAL COMMENTS
OF
THE GENERAL STAFF OF THE
ARKANSAS PUBLIC SERVICE COMMISSION

JULY 22, 2016

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ATTACHMENT 1
TO THE
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ARKANSAS PUBLIC SERVICE COMMISSION

JULY 22, 2016

ARKANSAS PUBLIC SERVICE COMMISSION



NET-METERING RULES

Revised September 2013 STAFF STRAWMAN JULY 22, 2016

NET-METERING RULES
 ADMINISTRATIVE HISTORY

<u>Docket</u>	<u>Date</u>	<u>Order No.</u>	<u>Subject Matter of Docket/ Order</u>
02-046-R	07/26/02	4	Adopted rules relating to the terms and conditions of Net-Metering .
06-105-U	11/27/07	8	Amended definitions; Rules 1.02, 2.01, and 2.04; Section 1 of the Standard Interconnection Agreement, Appendix A; and X.1.1, X.2.3, and X.2.4 of the Net-Metering Tariff, Appendix B.
	11/29/07	10	Amended Rule 4.02 to delete reference to Docket No. 86-033-A.
	11/30/07	11	Amended the Standard Interconnection Agreement, Appendix A to add e-mail address lines to the signature block.
	12/19/07	12	Errata order correcting clerical errors in the amendments adopted in Order No. 8.
12-001-R	06/15/12	6	Amended Section 7 of the Standard Interconnection Agreement, Appendix A to exempt state governmental agencies and entities, local governmental entities, and federal entities from the indemnity requirement.
12-060-R	09/03/13	7	Amended Rule 2.04 to provide for meter aggregation, incorporated the provisions of Act 1221 of 2013 concerning the carryover of net-metering credits, and added a definition of Net-Metering Customer to track the definition in Ark. Code Ann. § 23-18-603.
	10/11/13	10	Updated the Net-Metering Tariff to reflect the amendments adopted in Order No. 7.

NET-METERING RULES

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DEFINITIONS

Additional Meter

A meter associated with the Net-Metering Customer's account that the Net-Metering Customer may credit with Net Excess Generation from the Designated Meter. Additional Meter(s): 1) shall be under common ownership within a single Electric Utility's service area; 2) shall be used to measure the Net-Metering Customer's requirements for electricity; 3) may be in a different class of service than the Designated Meter; 4) shall be assigned to one, and only one, Designated Meter; 5) shall not be a Designated Meter; and 6) shall not be associated with unmetered service.

Annual ~~b~~Billing ~~e~~Cycle

The normal annual fiscal accounting period used by the utility.

Avoided Cost

The costs to an Electric Utility of electric energy or capacity, or both, that, but for the purchase from the qualifying facility or qualifying facilities, the utility would generate itself or purchase from another source. Avoided Costs shall be determined under Ark. Code Ann. § 23-3-704. 23-18-604(c)(1).

Billing ~~p~~Period

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

Biomass Resource ~~facility~~

A facility-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.

Commission

The Arkansas Public Service Commission.

Designated Meter

The meter associated with the Net-Metering Customer's account to which the Net-Metering Facility is physically attached.

Electric ~~u~~Utility

A public or investor-owned utility, an electric cooperative, municipal utility, or any private power supplier or marketer that is engaged in the business of supplying electric energy to the ultimate customer or any customer class within the state.

Fuel ~~e~~Cell ~~Resource~~~~facility~~

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

Geothermal ~~Resource~~~~facility~~

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

Hydroelectric ~~Resource~~~~facility~~

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

Micro ~~t~~Turbine ~~Resource~~~~facility~~

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

Net ~~e~~Excess ~~g~~Generation

The amount of electricity that a ~~n~~Net-~~m~~Metering ~~e~~Customer has fed back to the ~~e~~Electric ~~u~~Utility that exceeds the amount of electricity used by that customer during the applicable period.

Net Excess Generation Credits

Uncredited customer generated kilowatt hours remaining in a Net-Metering Customer's account at the close of a Billing Period to be credited, or pursuant to Rule 2.05, purchased by the utility in a future billing period.

Net-~~m~~Metering

Measuring the difference between electricity supplied by an ~~e~~Electric ~~u~~Utility and the electricity generated by a ~~n~~Net-~~m~~Metering customer and fed back to the ~~e~~Electric ~~u~~Utility over the applicable ~~b~~Billing ~~p~~Period.

Net-~~m~~Metering ~~e~~Customer

An owner of a ~~n~~Net-~~m~~Metering ~~f~~Facility.

Net-Metering Facility

A facility for the production of electrical energy that:

- A. Uses ~~s~~Solar, ~~w~~Wind, ~~h~~Hydroelectric, ~~g~~Geothermal, or ~~b~~Biomass resources to generate electricity including, but not limited to, ~~f~~Fuel ~~e~~Cells and ~~m~~Micro ~~t~~Turbines that generate electricity if the fuel source is entirely derived from renewable resources, or as otherwise allowed by the Commission under Ark. Code Ann. § 23-18-604(b)(4); and,
- B. Has a generating capacity of not more than: ~~twenty five (25) kilowatts for residential use or three hundred (300) kilowatts for any other use; and,~~
 - 1. the greater of twenty-five kilowatts (25 kW) or one hundred percent (100%) of the Net-Metering Customer's highest monthly usage in the previous twelve (12) months for Residential Use;
 - or
 - 2. three hundred kilowatts (300 kW) for any other use unless otherwise allowed by a Commission under Ark. Code Ann. § 23-18-604(b)(5) and (7); and,
- C. Is located in Arkansas; and,
- D. Can operate in parallel with an ~~e~~Electric ~~u~~Utility's existing transmission and distribution facilities; and,
- E. Is intended primarily to offset part or all of the ~~n~~Net-~~m~~Metering ~~e~~Customer requirements for electricity;~~;~~~~or~~;
- ~~F. Is designated by the Commission as eligible for net metering service pursuant to Ark. Code Ann. 23-18-604(b)(4).~~

Parallel ~~e~~Operation

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

Renewable ~~e~~Energy ~~e~~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 Use customer

~~A customer s~~Serviceed provided under a utility's standard rate schedules applicable to residential service.

Solar Resourcefacility

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

Wind ~~Resource~~**facility**

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

SECTION 1. GENERAL PROVISIONS

Rule 1.01. Purpose

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

Rule 1.02. Statutory Provisions

- A. These Rules are developed pursuant to the Arkansas Renewable Energy Development Act of 2001 (~~A.C.A.~~Ark. Code Ann. § 23-18-603 and § 23-18-604 as amended by Act 1024 of 2007 and Act 827 of 2015.)
- B. These Rules are promulgated pursuant to the Commission's authority under Ark. Code Ann. §§ 23-2-301, 23-2-304-(3), and 23-2-305.
- C. Nothing in these Rules shall govern, limit, or restrict the Commission's authority under Ark. Code Ann. § 23-18-604.

Rule 1.03. Other Provisions

- A. These Rules apply to all ~~e~~Electric ~~u~~Utilities, as defined in these Rules, ~~that~~which are jurisdictional to the Commission.
- B. The ~~Net-~~Net-Metering Rules are not intended to, and do not affect or replace any Commission approved general service regulation, policy, procedure, rule, or service application of any utility which addresses items other than those covered in these Rules.
- C. ~~Net-~~Net-~~m~~metering ~~e~~eCustomers taking service under the provisions of the ~~Net-~~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

An ~~e~~Electric ~~u~~Utility shall allow ~~n~~Net-~~m~~Metering ~~f~~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 the ~~e~~Electric ~~u~~Utility to each ~~n~~Net-~~m~~Metering ~~e~~Customer and also to accurately measure the electricity generated by each ~~n~~Net-~~m~~Metering ~~e~~Customer that is fed back to the ~~E~~electric ~~u~~Utility over the applicable ~~b~~Billing ~~p~~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 a meter operating in both forward and reverse registration modes shall be as defined in the Commission's Special Rules - Electric. A test to determine compliance with this accuracy requirement shall be made by the ~~E~~lectric ~~u~~Utility either before or at the time the ~~n~~Net-~~m~~Metering ~~f~~Facility is placed in operation in accordance with these Rules.

Rule 2.03. Cost to Provide Service

Following notice and opportunity for public comment, the Commission shall establish appropriate rates, terms, and conditions for Net-Metering contracts including the requirement that the rates charged to each Net-Metering Customer recover the Electric Utility's entire cost of providing service to each Net-Metering Customer within each of the Electric Utility's class of customers. The Electric Utility's entire cost of providing service to each Net-Metering Customer within each of the Electric Utility's class of customers:

1. includes without limitation any quantifiable additional cost associated with the Net-Metering Customer's use of the Electric Utility's capacity, distribution system, or transmission system and any effect on the Electric Utility's reliability; and
2. is net of any quantifiable benefits associated with the interconnection with and providing service to the Net-Metering Customer, including without limitation benefits to the Electric Utility's capacity, reliability, distribution system, or transmission system.

Rule 2.034. New or Additional Charges

- A. Any new or additional charge that would increase a ~~n~~Net-~~m~~Metering ~~e~~Customer's costs beyond those of other customers in the rate class shall be filed by the ~~e~~Electric ~~u~~Utility with the Commission for approval. The filing shall be supported by the cost/benefit analysis described in Rule 2.034.B.
- B. Following notice and opportunity for public comment, the Commission may authorize an ~~e~~Electric ~~u~~Utility to assess a ~~n~~Net-~~m~~Metering ~~e~~Customer a greater fee or charge, of any type, if the ~~e~~Electric ~~u~~Utility's direct costs of interconnection and administration of ~~n~~Net-~~m~~Metering outweigh the distribution system, environmental and public policy benefits of allocating the costs among the ~~e~~Electric ~~u~~Utility's entire customer base.

Rule 2.045. Billing for Net-~~Metering~~

- A. The Electric Utility shall separately meter, bill, and credit each Net-Metering Facility even if one (1) or more Net-Metering Facilities are under common ownership.
- ~~A.B.~~ On a monthly basis, the ~~n~~Net-~~m~~Metering ~~e~~Customer shall be billed the charges applicable under the currently effective standard rate schedule and any appropriate rider schedules. Under ~~n~~Net-~~m~~Metering, only the kilowatt hour (kWh) units of a customer's bill are ~~affected~~netted.
- ~~B.C.~~ If the kWhs supplied by the ~~e~~Electric ~~u~~Utility exceeds the kWhs generated by the ~~n~~Net-~~m~~Metering ~~f~~Facility and fed back to the ~~e~~Electric ~~u~~Utility during the ~~b~~Billing ~~p~~Period, the ~~n~~Net-~~m~~Metering ~~e~~Customer shall be billed for the net kWhs supplied by the ~~e~~Electric ~~u~~Utility in accordance with the rates and charges under the customer's standard rate schedule.
- ~~C.D.~~ If the kWhs generated by the ~~n~~Net-~~m~~Metering ~~f~~Facility and fed back to the ~~e~~Electric ~~u~~Utility exceed the kWhs supplied by the ~~e~~Electric ~~u~~Utility to the ~~n~~Net-~~m~~Metering ~~e~~Customer during the applicable ~~b~~Billing ~~p~~Period, the utility shall credit the ~~n~~Net-~~m~~Metering ~~e~~Customer with any accumulated ~~n~~Net ~~e~~Excess ~~g~~Generation in the next applicable ~~b~~Billing ~~p~~Period.
1. Net ~~e~~Excess ~~g~~Generation shall first be credited to the ~~n~~Net-~~m~~Metering ~~e~~Customer's ~~meter to which the net-metering facility is physically attached (d~~Designated ~~m~~Meter).
 2. After application of subdivision ~~(C.D.)(1.)~~ and upon request of the ~~n~~Net-~~m~~Metering ~~e~~Customer pursuant to subsection ~~(D.E.)~~, any remaining ~~n~~Net ~~e~~Excess ~~g~~Generation shall be credited to one or more of the ~~n~~Net-~~m~~Metering ~~e~~Customer's ~~meters~~ ~~(a~~Additional ~~m~~Meters~~)~~ in the rank order provided by the customer.
 3. Net ~~e~~Excess ~~g~~Generation shall be credited as described in subdivisions ~~(C.D)~~(1) and ~~(C.D)~~(2) during subsequent ~~b~~Billing ~~p~~Periods, ~~net excess generation credit remaining in a net-metering customer's account at the close of an annual billing cycle, up to an~~

- ~~amount equal to four (4) months' average usage during the annual billing cycle that is closing, shall be credited to the net-metering customer's account for use during the next annual billing cycle. Net Excess Generation credit remaining in a Net-Metering Customer's account at the close of a Billing Period shall not expire and shall be carried forward to subsequent Billing Periods indefinitely.~~
- a. ~~For Net Excess Generation credits older than 24 months, a Net-Metering Customer may elect to have the Electric Utility purchase the Net Excess Generation credits in the Net-Metering Customer's account at the Electric Utility's estimated annual average Avoided Cost rate for wholesale energy if the sum to be paid to the Net-Metering Customer is at least \$100~~
 - b. ~~An Electric Utility shall purchase at the Electric Utility's estimated annual average Avoided Cost rate for wholesale energy any Net Excess Generation credit remaining in a Net-Metering Customer's account when the Net-Metering Customer:
 - i. ceases to be a customer of the Electric Utility;
 - ii. ceases to operate the Net-Metering Facility; or
 - iii. transfers the Net-Metering Facility to another person.~~
4. ~~Except as provided in subsection (C)(3) of this section, any net excess generation credit remaining in a net-metering customer's account at the close of an annual billing cycle shall expire.~~
- E. Upon request from a ~~n~~Net-~~m~~Metering ~~e~~Customer an ~~e~~Electric ~~u~~Utility must apply ~~n~~Net ~~e~~Excess ~~g~~Generation credits to the ~~n~~Net-~~m~~Metering ~~e~~Customer's ~~a~~Additional ~~m~~Meters provided that:
1. The ~~n~~Net-~~m~~Metering ~~e~~Customer must give at least 30 days' notice to the Electric ~~u~~Utility of its request to apply Net Excess Generation to the Additional Meter(s).
 2. The ~~a~~Additional ~~m~~Meter(s) must be identified at the time of the request. ~~and must be in the net-metering customer's name, in the same utility service territory, and be used to measure only electricity used for the net-metering customer's requirements~~
 3. In the event that more than one of the ~~n~~Net-~~m~~Metering ~~e~~Customer's Additional ~~m~~Meters is identified, the ~~n~~Net-~~m~~Metering ~~e~~Customer must designate the rank order for the ~~a~~Additional ~~m~~Meters to which Net ~~e~~Excess ~~g~~Generation kWhs are is to be applied. The ~~n~~Net-~~m~~Metering ~~e~~Customer cannot designate the rank order more than once during the ~~a~~Annual ~~b~~Billing ~~e~~Cycle.
 4. ~~The net-metering customer's identified additional meters do not have to be used for the same class of service.~~

- F. Any ~~r~~Renewable ~~e~~Energy ~~e~~Credit created as a result of electricity supplied by a ~~n~~Net-~~m~~Metering ~~e~~Customer is the property of the ~~n~~Net-~~m~~Metering ~~e~~Customer that generated the ~~r~~Renewable Energy eCredit.

Rule 2.06.– Application to Exceed Generating Capacity Limit

- A. A non-residential Net-Metering Customer shall file an application with the Commission for approval to install a Net-Metering Facility with a generating capacity of more than 300 kW under Ark. Code Ann. §§ 23-18-604(b) (5) and (7).
- B. The application shall be filed in conformance with Section 3 of the Commission’s Rules of Practice and Procedure and shall, at a minimum, include supporting testimony, exhibits, or other documentation including:
1. Evidence supporting and substantiating how the Net-Metering Facility in excess of 300 kW satisfies the requirements of Ark. Code Ann. §§ 23-18-604(b)(5) and (7).
 2. A description of the proposed Net-Metering Facility including:
 - a. Project proposal;
 - b. Project location (street address, town, utility service area);
 - c. Generator type (wind, solar, hydro, etc.);
 - d. Generator rating in kW (DC or AC);
 - e. Capacity factor;
 - f. Point of interconnection with the Electric Utility;
 - g. Single Phase or Three Phase interconnection;
 - h. Planned method of interconnection consistent with Rule 3.01.B.;
 - i. Expected system output and performance of the facility calculated using industry recognized simulation model (PVWatts, etc.);
 3. The monthly electric bills for the 12 months prior to the application for the Designated Meter and Additional Meter(s), if any, to be credited with Net Excess Generation to substantiate that the electrical energy produced by the Net-Metering Facility will not exceed the amount necessary to offset part or all of the Net-Metering Customer requirements for electricity. In the absence of historical data reasonable estimates for the class and character of service may be made; and

4. A copy of the Preliminary Interconnection Review Request submitted to the Electric Utility and the results of the utility's interconnection site review conducted pursuant to Rule 3.03.

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. 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. This requirement for a manual disconnect switch shall be waived if the following three conditions are met: 1) The inverter equipment must be designed to shut down or disconnect and cannot be manually overridden by the customer upon loss of utility service; 2) The inverter must be warranted by the manufacturer to shut down or disconnect upon loss of utility service; and 3) The inverter must be properly installed and operated, and inspected and/or tested by utility personnel.
- C. The customer shall submit a Standard Interconnection Agreement to the Electric Utility at least thirty (30) day 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.
- 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, 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.
- 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 ~~n~~Net-~~m~~Metering ~~f~~Facility, at the ~~n~~Net-~~m~~Metering ~~e~~Customer's expense, shall meet all safety and performance standards adopted by the Electric ~~u~~Utility and filed with and approved by the Commission pursuant to these Rules that are necessary to assure safe and reliable operation of the ~~n~~Net-~~m~~Metering ~~f~~Facility to the Electric ~~u~~Utility's system.
- G. If the Electric ~~u~~Utility's existing facilities are not adequate to interconnect with the ~~n~~Net-~~m~~Metering ~~f~~Facility, the Net-Metering Customer shall pay the cost of additional or reconfigured facilities prior to the installation or reconfiguration of the facilities. any changes will be performed in accordance with the Utility's Extension of Facilities Tariff.

Rule 3.02. Requirements for Modifications or Changes to a Net-~~m~~Metering Facility

A. Prior to being made, the Net-Metering Customer shall notify the Electric Utility of, and the Electric Utility shall evaluate, any modifications or changes to the Net-Metering Facility described in Part I, Standard Information, Section 2 of the Standard Interconnection Agreement for Net-Metering Facilities. Modifications or changes made to a net metering facility shall be evaluated by the electric utility prior to being made. The notice provided by the ~~n~~Net-~~m~~Metering ~~e~~Customer shall provide detailed information describing the modifications or changes to the ~~e~~Electric ~~u~~Utility in writing, including a revised Standard Interconnection Agreement for Net-Metering Facilities that clearly identifies the changes to be made. 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, in writing, within thirty (30) days of receipt of the customer's proposal. Any items that would prevent ~~p~~Parallel ~~e~~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.

A.B. If the Net-Metering Customer makes such modification without the Electric Utility's prior written authorization and the execution of a new Standard Interconnection Agreement, the Electric Utility shall have the right to suspend service pursuant to Section 6 of the Commission's General Service Rules.

B.C. A Net-Metering Facility shall not be modified or changed to generate electrical energy in excess of the amount necessary to offset part or all of the Net-Metering Customer requirements for electricity.

Rule 3.03. Requirements for Preliminary Interconnection Site Review Request

- A. For the purpose of requesting that the Electric Utility conduct a preliminary interconnection site review for a proposed Net-Metering Facility pursuant to Rule 2.06.B.4, or as otherwise requested by the customer, the customer shall notify the Electric Utility 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 1, Standard Information, Sections 1 through 4 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. The Electric Utility shall provide a copy of the Preliminary Interconnection Site Review Request to the customer upon request.
- B. Following notification by the customer as specified in Rule 3.03.A, the Electric Utility shall 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 the Electric Utility shall make reasonable efforts to provide the customer with the results of the review within 30 calendar days. If the Electric Utility cannot meet the deadline it 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.
- C. The preliminary interconnection site review is non-binding and need only include existing data and does not require the Electric Utility to conduct a study or other analysis of the proposed interconnection site in the event that data is not readily available. The utility 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 of conducting the preliminary interconnection site review and any subsequent costs associated with site screening that may be required.

D. 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.

SECTION 4. STANDARD INTERCONNECTION AGREEMENT, PRELIMINARY INTERCONNECTION SITE REVIEW REQUEST, AND STANDARD NET-METERING TARIFF FOR NET-METERING FACILITIES

Rule 4.01. Standard Interconnection Agreement, Preliminary Interconnection Site Review Request, and Standard Net-Metering Tariff

Each eElectric uUtility shall file, for approval by the Commission, a Standard Interconnection Agreement for Net-Metering Facilities (Appendix A), Preliminary Interconnection Site Review Request (Appendix A-1) and a Net-Metering Tariff in standard tariff format (Appendix B).

Rule 4.02. Filing and Reporting Requirements

Each eElectric uUtility shall file in Docket No. 06-105-U by March 15 of each year, a report listing all existing nNet-mMetering fFacilities and the generator rating and, where applicable, the inverter power rating of each nNet-mMetering fFacility as of the end of the previous calendar year.

APPENDIX A

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: _____
Utility Customer Account (from electric bill) to which the Net-Metering Facility is physically attached: _____

Section 2. Generation Facility Information

System Type: Solar Wind Hydro Geothermal Biomass Fuel Cell Micro turbine (circle one)
Generator Rating (kW): _____ AC or DC (circle one)
Describe Location of Accessible and Lockable Disconnect: _____
Inverter Manufacturer: _____ Inverter Model: _____
Inverter Location: _____ Inverter Power Rating: _____
Expected Capacity Factor: _____
Expected annual production of electrical energy (kWh) calculated using industry recognized simulation model (PVWatts, etc.): _____

Section 3. Installation Information

Attach a detailed electrical diagram of the ~~n~~Net-~~m~~Metering ~~f~~Facility.
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 an operation manual, and have been instructed in the operation of the system.
Signed (Owner): _____ Date: _____

Section 5. E-mail Addresses for parties

~~1.~~ Customer's e-mail address:

~~2.~~ Utility's e-mail address: _____ (To be provided by utility.)

Section 6. Utility Verification and Approval

~~1.~~ Facility Interconnection Approved: _____ Date: _____

Metering Facility Verification by: _____ Verification Date: _____

II. INTERCONNECTION AGREEMENT TERMS AND CONDITIONS

This Interconnection Agreement for Net-Metering Facilities ("Agreement") is made and entered into this _____ day of _____, 20_____, by _____ ("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(6) and the Arkansas Public Service Commission's Net-Metering Rules.

Section 2. Governing Provisions

The ~~p~~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 Commission's Net-Metering Rules, the Commission's General Service Rules, and the Utility's applicable tariffs.

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.

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 provide and install a 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 ~~e~~Electric ~~u~~Utility at least thirty (30) days prior to the date the customer intends to interconnect the ~~n~~Net-~~m~~Metering ~~f~~Facilities to the utility's facilities. Part I, Standard Information, Sections 1 through 4 of the Standard Interconnection Agreement must be completed 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 ~~e~~Electric ~~u~~Utility shall provide a copy of the Standard Interconnection Agreement to the customer upon request.

Following ~~submission of the Standard Interconnection Agreement~~~~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, in writing, within 30 calendar days. Any items that would prevent ~~p~~Parallel ~~o~~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 the Utility's existing facilities are not adequate to interconnect with the Net-Metering Facility, the Customer shall pay the cost of additional or reconfigured facilities prior to the installation or reconfiguration of the facilities.

To prevent a ~~n~~Net-~~m~~Metering ~~e~~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. This requirement for a manual disconnect switch will be waived if the following three conditions are met: 1) The inverter equipment must be designed to shut down or disconnect and cannot be manually overridden by the customer upon loss of utility service; 2) The inverter must be warranted by the manufacturer to shut down or disconnect upon loss of utility service; and 3) The inverter must be properly installed and operated, and inspected and/or tested by utility personnel.

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, at his own expense, shall meet all safety and performance standards adopted by the utility and filed with and approved by the Commission ~~pursuant to Rule 3.01.F~~ that are necessary to assure safe and reliable operation of the ~~n~~Net ~~m~~Metering ~~f~~Facility to the utility's system.

Customer shall not commence ~~p~~Parallel ~~o~~Operation of the ~~n~~Net-~~m~~Metering ~~f~~Facility until the ~~n~~Net ~~m~~Metering ~~f~~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 ~~n~~Net-~~m~~Metering ~~f~~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 ~~n~~Net-

| mMetering fFacility.

Section 5. Modifications or Changes to the Net-Metering Facility Described in Part 1, Section 2

~~Prior to being made, the Customer shall notify the Utility of, and the Utility shall evaluate, any modifications or changes to the Net-Metering Facility described in Part 1, Standard Information, Section 2 of the Standard Interconnection Agreement for Net-Metering Facilities. Modifications or changes made to a net metering facility shall be evaluated by the Utility prior to being made.~~ The notice provided by the Customer shall provide detailed information describing the modifications or changes to the Utility in writing, including a revised Standard Interconnection Agreement for Net-Metering Facilities that clearly identifies the changes to be made. ~~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, in writing, within thirty (30) calendar days of receipt of the Customer's proposal. Any items that would prevent ~~p~~Parallel ~~e~~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 the Customer makes such modification without the Utility's prior written authorization and the execution of a new Standard Interconnection Agreement, the Utility shall have the right to suspend service pursuant to Section 6 of the Commission's General Service Rules.

A Net-Metering Facility shall not be modified or changed to generate electrical energy in excess of the amount necessary to offset part or all of the Net-Metering Customer requirements for electricity.

Section 56. Maintenance and Permits

The customer shall obtain any governmental authorizations and permits required for the construction and operation of the ~~n~~Net-~~m~~Metering ~~f~~Facility and interconnection facilities. The Customer shall maintain the ~~n~~Net-~~m~~Metering ~~f~~Facility and interconnection facilities in a safe and reliable manner and in conformance with all applicable laws and regulations.

Section 67. 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 others from damage or interference caused by the Customer's facilities, or lack of properly operating protective devices.

Section 78. Indemnity and Liability

The following is Applicable to Agreements between the Utility and to all Customers except the State of Arkansas and any entities thereof, local governments and federal agencies:

Each ~~p~~Party shall indemnify the other ~~p~~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, maintenance or operations of, or the making of replacements, additions or betterment to, or by failure of, any of such ~~p~~Party's works or facilities used in connection with this

Agreement by reason of omission or negligence, whether active or passive. The indemnifying pParty shall, on the other pParty's request, defend any suit asserting a claim covered by this indemnity. The indemnifying Pparty shall pay all costs that may be incurred by the other pParty in enforcing this indemnity. It is the intent of the pParties hereto that, where negligence is determined to be contributory, principles of comparative negligence will be followed and each pParty shall bear the proportionate cost of any loss, damage, expense and liability attributable to that pParty's negligence. Nothing in this paragraph shall be applicable to the pParties in any agreement entered into with the State of Arkansas or any entities thereof, or with local governmental entities or federal agencies. Furthermore, nothing in this Agreement shall be construed to waive the sovereign immunity of the State of Arkansas or any entities thereof. The Arkansas State Claims Commission has exclusive jurisdiction over claims against the state.

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 pParty 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 the making of replacements, additions or betterment to, or by failure of, the Customer's facilities by the Customer or any other person or entity.

Section 89. Notices

The Net-Metering Customer shall notify the Electric Utility of any changes in the information provided herein.

All written notices shall be directed as follows:

Attention:

[Utility Agent or Representative]

[Utility Name and Address]

Attention:

[Customer]

Name: _____

Address: _____

City: _____

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

Section 10. 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 11. Assignment

This Agreement and all provisions hereof shall inure to and be binding upon the respective pParties 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.

Section 12. Net-Metering Customer Certification

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

Signature: _____ Date: _____

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

Dated this _____ day of _____, 20__.

Customer:

Utility:

By: _____

By: _____

Title: _____

Title: _____

Mailing Address:

Mailing Address:

E-mail Address:

E-mail Address:

APPENDIX A-1

PRELIMINARY INTERCONNECTION SITE REVIEW REQUEST

I. STANDARD INFORMATION

Section 1. Customer Information

Name: _____

Contact Person: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Facility Location (if different from above): _____

Daytime Phone: _____ Evening Phone: _____

E-Mail Address: _____ Fax: _____

If the requested point of interconnection is the same as an existing electric service, provide the electric service account number: _____

Additional Customer Accounts (from electric bill) to be credited with Net Excess Generation (in rank order): _____

Annual Energy Requirements (kWh) in the previous twelve (12) months for the account physically attached to the Net-Metering Facility and for any additional accounts listed (in the absence of historical data reasonable estimates for the class and character of service may be made): _____

Section 2. Generation Facility Information

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

Generator Rating (kW): _____ AC or DC (circle one)

Expected Capacity Factor: _____

Expected annual production of electrical energy (kWh) of the facility calculated using industry recognized simulation model (PVWatts, etc): _____

Section 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: _____ Three Phase: _____

Planned method of interconnection consistent with Rule 3.01.B. _____

Section 4. Signature

I hereby certify that, to the best of my knowledge, all the information provided in this Preliminary Interconnection Site Review is true and correct.

Signature: _____ Date: _____

II. TERMS AND CONDITIONS

Section 1. Requirements for Request

For the purpose of requesting that the Electric Utility conduct a preliminary interconnection site review for a proposed Net-Metering Facility pursuant to the requirement of Rule 2.06.B.4, or as otherwise requested by the customer, the customer shall notify the Electric Utility 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 1, Standard Information, Sections 1 through 4 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. The Electric Utility shall provide a copy of the Preliminary Interconnection Site Review Request to the customer upon request.

Section 2. Utility Review

Following submission of the Preliminary Interconnection Site Review Request by the customer the Electric Utility shall 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 the Electric Utility shall make reasonable efforts to provide the customer with the results of the review within 30 calendar days. If the Electric Utility cannot meet the deadline it 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.

The preliminary interconnection site review is non-binding and need only include existing data and does not require the Electric Utility to conduct a study or other analysis of the proposed interconnection site in the event that data is not readily available. The utility 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.

Section 3. Application to Exceed 300 kW Net-Metering Facility Size Limit

This Preliminary Interconnection Site Review Request and the results of the Electric Utility's review of the facility interconnection shall be filed with the Commission with the customer's application to exceed the 300 kW facility size limit pursuant to 2.06.B.4.

Section 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.

Appendix B

ARKANSAS PUBLIC SERVICE COMMISSION

Original	Sheet No.	PSC File Mark Only
Replacing:	Sheet No.	
Name of Company		
Kind of Service: <u>Electric</u>	Class of Service: All	
Part III. Rate Schedule No. <u>X</u>		
Title: <u>NET-METERING</u>		

X. NET-METERING

X.1. AVAILABILITY

X.1.1. To any residential or any other customer who takes service under standard rate schedule(s) _____ (list schedules) who ~~has installed~~ owns a Net-Metering Facility and signed a Standard Interconnection Agreement for Net-Metering Facilities with the Utility. The generating capacity of Net-Metering Facilities may not exceed the greater of: 1) twenty-five kilowatts (25 kW) or 2) one hundred percent (100%) of the Net-Metering Customer's highest monthly usage in the previous twelve (12) months for Residential Use. The generating capacity of Net-Metering Facilities may not exceed three hundred kilowatts (300kW) for non-residential use unless otherwise allowed by the Commission. Such facilities must be located on the customer's premise and Net-Metering is intended primarily to offset some or all of the customer's energy use.

The provisions of the customer's standard rate schedule are modified as specified herein.

X.1.2. Net-Metering ~~e~~Ccustomers taking service under the provisions of this tariff may not simultaneously take service under the provisions of any other alternative source generation or co-generation tariff except as provided in the Net-Metering Rules.

X.2. MONTHLY BILLING

X.2.1. The Electric Utility shall separately meter, bill, and credit each Net-Metering Facility even if one (1) or more Net-Metering Facilities are under common ownership.

X.2.42. On a monthly basis, the ~~n~~Net-Metering ~~e~~Ccustomer shall be billed the charges applicable under the currently effective standard rate schedule and any appropriate rider

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Part III. Rate Schedule No. <u>X</u>		
Title: NET-METERING		

schedules. Under ~~a~~Net-~~m~~Metering, only the kilowatt hour (kWh) units of a customer's bill are ~~affected~~ netted.

X.2.23. If the kWhs supplied by the ~~e~~Electric ~~u~~Utility exceeds the kWhs generated by the ~~a~~Net-~~m~~Metering ~~f~~Facility and fed back to the ~~e~~Electric ~~u~~Utility during the ~~b~~Billing ~~p~~Period, the ~~a~~Net-~~m~~Metering ~~e~~Customer shall be billed for the net billable kWhs supplied by the ~~e~~Electric ~~u~~Utility in accordance with the rates and charges under the customer's standard rate schedule.

X.2.34. If the kWhs generated by the ~~a~~Net-~~m~~Metering ~~f~~Facility and fed back to the ~~e~~Electric ~~u~~Utility during the ~~b~~Billing ~~p~~Period exceed the kWhs supplied by the ~~e~~Electric ~~u~~Utility to the ~~a~~Net-~~m~~Metering ~~e~~Customer during the applicable ~~b~~Billing ~~p~~Period, the utility shall credit the ~~a~~Net-~~m~~Metering ~~e~~Customer with any accumulated ~~a~~Net ~~e~~Excess ~~g~~Generation in the next applicable ~~b~~Billing ~~p~~Period.

X.2.45. Net ~~e~~Excess ~~g~~Generation shall first be credited to the ~~a~~Net-~~m~~Metering ~~e~~Customer's meter to which the ~~a~~Net-~~m~~Metering ~~f~~Facility is physically attached (~~d~~Designated ~~m~~Meter).

X.2.56. After application of X.2.45 and upon request of the ~~a~~Net-~~m~~Metering ~~e~~Customer pursuant to X.2.98, any remaining ~~a~~Net ~~e~~Excess ~~g~~Generation shall be credited to one or more of the ~~a~~Net-~~m~~Metering ~~e~~Customer's meters (~~a~~Additional ~~m~~Meters) in the rank order provided by the customer.

X.2.67. Net ~~e~~Excess ~~g~~Generation shall be credited as described in X.2.45 and X.2.56 during subsequent ~~b~~Billing ~~p~~Periods; the ~~a~~Net ~~e~~Excess ~~g~~Generation credit remaining in a ~~a~~Net-~~m~~Metering ~~e~~Customer's account at the close of an ~~an annual~~ billing cycle shall not expire and shall be carried forward to subsequent billing cycles indefinitely. For Net Excess Generation credits older than twenty-four (24) months, a Net-Metering Customer may elect to have the Electric Utility purchase the Net Excess Generation credits in the Net-Metering Customer's account at the Electric Utility's estimated annual average cost rate for wholesale energy if the sum to be paid to the Net-Metering Customer is at least one hundred dollars (\$100). An Electric Utility shall purchase at the Electric Utility's estimated

Appendix B

ARKANSAS PUBLIC SERVICE COMMISSION

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Title: <u>NET-METERING</u>		

~~annual average Avoided Cost rate for wholesale energy any Net Excess Generation credit remaining in a Net-Metering Customer's account when the Net-Metering Customer: 1) ceases to be a customer of the Electric Utility; 2) ceases to operate the Net-Metering Facility; or transfers the Net-Metering Facility to another person. , up to an amount equal to four (4) months' average usage during the annual billing cycle that is closing, shall be credited to the net-metering customer's account for use during the next annual billing cycle.~~

~~X.2.7. Except as provided in X.2.6, any net excess generation credit remaining in a net-metering customer's account at the close of an annual billing cycle shall expire.~~

X.2.8. Upon request from a ~~n~~Net-~~m~~Metering ~~e~~Customer an ~~e~~Electric ~~u~~Utility ~~may~~ust apply ~~n~~Net ~~e~~Excess ~~g~~Generation to the ~~n~~Net-~~m~~Metering ~~e~~Customer's ~~a~~Additional ~~m~~Meters provided that:

- (a) The ~~n~~Net-~~m~~Metering ~~e~~Customer must give at least 30 days' notice to the utility.
- (b) The ~~a~~Additional ~~m~~Meter(s) must be identified at the time of the request. ~~Additional Meter(s) and must shall be under common ownership in the net-metering customer's name, within the same utility service territory a single Electric Utility's service area; and shall be used to measure only electricity used for the nNet-mMetering eCustomer's requirements for electricity; may be in a different class of service than the Designated Meter; shall be assigned to one, and only one, Designated Meter; shall not be a Designated Meter; and shall not be associated with unmetered service.~~
- (c) In the event that more than one of the ~~n~~Net-~~m~~Metering ~~e~~Customer's meters is identified, the ~~n~~Net-~~m~~Metering ~~e~~Customer must designate the rank order for the ~~a~~Additional ~~m~~Meters to which excess kWhs are to be applied. The ~~n~~Net-~~m~~Metering ~~e~~Customer cannot designate the rank order more than once during the ~~A~~annual ~~b~~Billing ~~e~~Cycle.

~~(d) The nNet-mMetering eCustomer's identified aAdditional mMeters do not have to be used for the same class of service.~~

Appendix B

ARKANSAS PUBLIC SERVICE COMMISSION

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Title: NET-METERING		PSC File Mark Only

X.2.9. Any ~~r~~Renewable ~~e~~Energy ~~e~~Credit created as the result of electricity supplied by a ~~n~~Net-~~m~~Metering ~~e~~Customer is the property of the ~~n~~Net-~~m~~Metering ~~e~~Customer that generated the ~~r~~Renewable Energy eCredit.

|

BEFORE THE
ARKANSAS PUBLIC SERVICE COMMISSION

IN THE MATTER OF NET METERING AND THE)
IMPLEMENTATION OF ACT 827 OF 2015)

DOCKET NO. 16-027-R

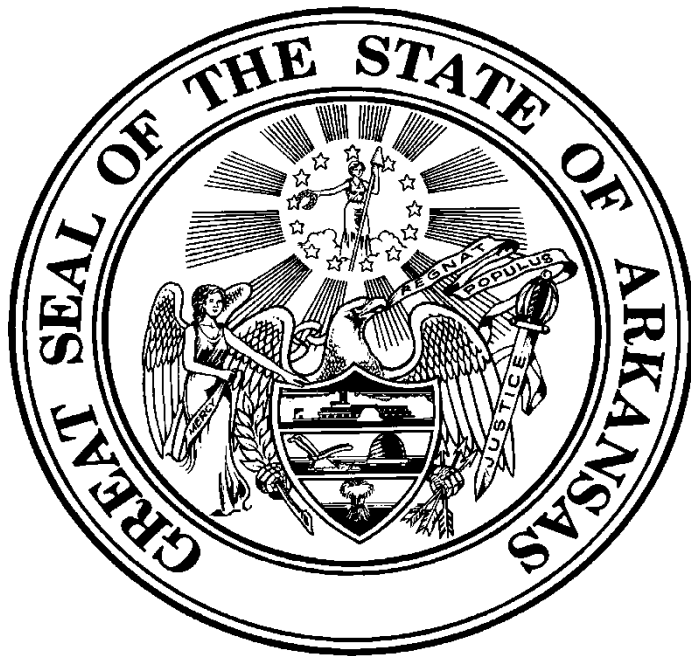
ATTACHMENT 2

TO THE

INITIAL COMMENTS OF THE GENERAL STAFF OF THE
ARKANSAS PUBLIC SERVICE COMMISSION

JULY 22, 2016

ARKANSAS PUBLIC SERVICE COMMISSION



NET-METERING RULES

STAFF STRAWMAN JULY 22, 2016

NET-METERING RULES ADMINISTRATIVE HISTORY

<u>Docket</u>	<u>Date</u>	<u>Order No.</u>	<u>Subject Matter of Docket/ Order</u>
02-046-R	07/26/02	4	Adopted rules relating to the terms and conditions of – Net-Metering.
06-105-U	11/27/07	8	Amended definitions; Rules 1.02, 2.01, and 2.04; Section 1 of the Standard Interconnection Agreement, Appendix A; and X.1.1, X.2.3, and X.2.4 of the Net-Metering Tariff, Appendix B.
	11/29/07	10	Amended Rule 4.02 to delete reference to Docket No. 86-033-A.
	11/30/07	11	Amended the Standard Interconnection Agreement, Appendix A to add e-mail address lines to the signature block.
	12/19/07	12	Errata order correcting clerical errors in the amendments adopted in Order No. 8.
12-001-R	06/15/12	6	Amended Section 7 of the Standard Interconnection Agreement, Appendix A to exempt state governmental agencies and entities, local governmental entities, and federal entities from the indemnity requirement.
12-060-R	09/03/13	7	Amended Rule 2.04 to provide for meter aggregation, incorporated the provisions of Act 1221 of 2013 concerning the carryover of net-metering credits, and added a definition of Net-Metering Customer to track the definition in Ark. Code Ann. § 23-18-603.
	10/11/13	10	Updated the Net-Metering Tariff to reflect the amendments adopted in Order No. 7.

NET-METERING RULES

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APPENDIX A

STANDARD INTERCONNECTION AGREEMENT FOR NET-METERING FACILITIESA-1

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DEFINITIONS

Additional Meter

A meter associated with the Net-Metering Customer's account that the Net-Metering Customer may credit with Net Excess Generation from the Designated Meter. Additional Meter(s): 1) shall be under common ownership within a single Electric Utility's service area; 2) shall be used to measure the Net-Metering Customer's requirements for electricity; 3) may be in a different class of service than the Designated Meter; 4) shall be assigned to one, and only one, Designated Meter; 5) shall not be a Designated Meter; and 6) shall not be associated with unmetered service.

Annual Billing Cycle

The normal annual fiscal accounting period used by the utility.

Avoided Cost

The costs to an Electric Utility of electric energy or capacity, or both, that, but for the purchase from the qualifying facility or qualifying facilities, the utility would generate itself or purchase from another source. Avoided Costs shall be determined under Ark. Code Ann. § 23-3-704. 23-18-604(c)(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.

Biomass Resource

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.

Commission

The Arkansas Public Service Commission.

Designated Meter

The meter associated with the Net-Metering Customer's account to which the Net-Metering Facility is physically attached.

Electric Utility

A public or investor-owned utility, an electric cooperative, municipal utility, or any private power supplier or marketer that is engaged in the business of supplying electric energy to the ultimate customer or any customer class within the state.

Fuel Cell Resource

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

Geothermal Resource

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.

Hydroelectric Resource

A resource in which the prime mover is a water wheel. The water wheel is driven by falling water.

Micro Turbine Resource

A resource 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 Electric Utility that exceeds the amount of electricity used by that customer during the applicable period.

Net Excess Generation Credits

Uncredited customer generated kilowatt hours remaining in a Net-Metering Customer's account at the close of a Billing Period to be credited, or pursuant to Rule 2.05, purchased by the utility in a future billing period.

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.

Net-Metering Customer

An owner of a Net-Metering Facility.

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, or as otherwise allowed by the Commission under Ark. Code Ann. § 23-18-604(b)(4); and,
- B. Has a generating capacity of not more than: ,
 - 1. the greater of twenty-five kilowatts (25 kW) or one hundred percent (100%) of the Net-Metering Customer's highest monthly usage in the previous twelve (12) months for Residential Use;
 - or
 - 2. three hundred kilowatts (300 kW) for any other use unless otherwise allowed by a Commission under Ark. Code Ann. § 23-18-604(b)(5) and (7); and,
- C. Is located in Arkansas; 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.

Parallel Operation

The operation of on-site generation by a customer while the customer is connected to the Electric Utility'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 Use

Service provided under a utility's standard rate schedules applicable to residential service.

Solar Resource

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

Wind Resource

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

SECTION 1. GENERAL PROVISIONS

Rule 1.01. Purpose

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

Rule 1.02. Statutory Provisions

- A. These Rules are developed pursuant to the Arkansas Renewable Energy Development Act of 2001 (Ark. Code Ann. § 23-18-603 and § 23-18-604 as amended by Act 1024 of 2007 and Act 827 of 2015.)
- B. These Rules are promulgated pursuant to the Commission's authority under Ark. Code Ann. §§ 23-2-301, 23-2-304(3), and 23-2-305.
- C. Nothing in these Rules shall govern, limit, or restrict the Commission's authority under Ark. Code Ann. § 23-18-604.

Rule 1.03. Other Provisions

- A. These Rules apply to all Electric Utilities, as defined in these Rules, which are jurisdictional to the Commission.
- B. The Net-Metering Rules are not intended to, and do not affect or replace any Commission approved general service regulation, policy, procedure, rule, or service application of any utility which addresses items other than those covered in these Rules.
- C. 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

An Electric Utility 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 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. 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 a meter operating in both forward and reverse registration modes shall be as defined in the Commission's Special Rules - Electric. A test to determine compliance with this accuracy requirement shall be made by the Electric Utility either before or at the time the Net-Metering Facility is placed in operation in accordance with these Rules.

Rule 2.03. Cost to Provide Service

Following notice and opportunity for public comment, the Commission shall establish appropriate rates, terms, and conditions for Net-Metering contracts including the requirement that the rates charged to each Net-Metering Customer recover the Electric Utility's entire cost of providing service to each Net-Metering Customer within each of the Electric Utility's class of customers. The Electric Utility's entire cost of providing service to each Net-Metering Customer within each of the Electric Utility's class of customers:

1. includes without limitation any quantifiable additional cost associated with the Net-Metering Customer's use of the Electric Utility's capacity, distribution system, or transmission system and any effect on the Electric Utility's reliability; and
2. is net of any quantifiable benefits associated with the interconnection with and providing service to the Net-Metering Customer, including without limitation benefits to the Electric Utility's capacity, reliability, distribution system, or transmission system.

Rule 2.04. New or Additional Charges

- A. Any new or additional charge that would increase a Net-Metering Customer's costs beyond those of other customers in the rate class shall be filed by the Electric Utility with the Commission for approval. The filing shall be supported by the cost/benefit analysis described in Rule 2.04.B.
- B. Following notice and opportunity for public comment, the Commission may authorize an Electric Utility to assess a Net-Metering Customer a greater fee or charge, of any type, if the Electric Utility's direct costs of interconnection and administration of Net-Metering outweigh the distribution system, environmental and public policy benefits of allocating the costs among the Electric Utility's entire customer base.

Rule 2.05. Billing for Net-Metering

- A. The Electric Utility shall separately meter, bill, and credit each Net-Metering Facility even if one (1) or more Net-Metering Facilities are under common ownership.
- B. 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.
- C. If the kWhs supplied by the Electric Utility exceeds the kWhs generated by the Net-Metering Facility and fed back to the Electric Utility during the Billing Period, the Net-Metering Customer shall be billed for the net kWhs supplied by the Electric Utility in accordance with the rates and charges under the customer's standard rate schedule.
- D. If the kWhs generated by the Net-Metering Facility and fed back to the Electric Utility exceed the kWhs supplied by the Electric Utility to the Net-Metering Customer during the applicable Billing Period, the utility shall credit the Net-Metering Customer with any accumulated Net Excess Generation in the next applicable Billing Period.
 - 1. Net Excess Generation shall first be credited to the Net-Metering Customer's Designated Meter.
 - 2. After application of subdivision D.1. and upon request of the Net-Metering Customer pursuant to subsection E., any remaining Net Excess Generation shall be credited to one or more of the Net-Metering Customer's Additional Meters in the rank order provided by the customer.
 - 3. Net Excess Generation shall be credited as described in subdivisions (D)(1) and (D)(2) during subsequent Billing Periods. Net Excess Generation credit remaining in a Net-Metering Customer's account at the close of a Billing Period shall not expire and shall be carried forward to subsequent Billing Periods indefinitely.

- a. For Net Excess Generation credits older than 24 months, a Net-Metering Customer may elect to have the Electric Utility purchase the Net Excess Generation credits in the Net-Metering Customer's account at the Electric Utility's estimated annual average Avoided Cost rate for wholesale energy if the sum to be paid to the Net-Metering Customer is at least \$100
 - b. An Electric Utility shall purchase at the Electric Utility's estimated annual average Avoided Cost rate for wholesale energy any Net Excess Generation credit remaining in a Net-Metering Customer's account when the Net-Metering Customer:
 - i. ceases to be a customer of the Electric Utility;
 - ii. ceases to operate the Net-Metering Facility; or
 - iii. transfers the Net-Metering Facility to another person.
- E. Upon request from a Net-Metering Customer an Electric Utility must apply Net Excess Generation credits to the Net-Metering Customer's Additional Meters provided that:
1. The Net-Metering Customer must give at least 30 days' notice to the Electric Utility of its request to apply Net Excess Generation to the Additional Meter(s).
 2. The Additional Meter(s) must be identified at the time of the request.
 3. In the event that more than one of the Net-Metering Customer's Additional Meters is identified, the Net-Metering Customer must designate the rank order for the Additional Meters to which Net Excess Generation is to be applied. The Net-Metering Customer cannot designate the rank order more than once during the Annual Billing Cycle.
- F. 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. Application to Exceed Generating Capacity Limit

- A. A non-residential Net-Metering Customer shall file an application with the Commission for approval to install a Net-Metering Facility with a generating capacity of more than 300 kW under Ark. Code Ann. §§ 23-18-604(b) (5) and (7).
- B. The application shall be filed in conformance with Section 3 of the Commission's Rules of Practice and Procedure and shall, at a minimum, include supporting testimony, exhibits, or other documentation including:

1. Evidence supporting and substantiating how the Net-Metering Facility in excess of 300 kW satisfies the requirements of Ark. Code Ann. §§ 23-18-604(b)(5) and (7).
2. A description of the proposed Net-Metering Facility including:
 - a. Project proposal;
 - b. Project location (street address, town, utility service area);
 - c. Generator type (wind, solar, hydro, etc.);
 - d. Generator rating in kW (DC or AC);
 - e. Capacity factor;
 - f. Point of interconnection with the Electric Utility;
 - g. Single Phase or Three Phase interconnection;
 - h. Planned method of interconnection consistent with Rule 3.01.B.;
 - i. Expected system output and performance of the facility calculated using industry recognized simulation model (PVWatts, etc.);
3. The monthly electric bills for the 12 months prior to the application for the Designated Meter and Additional Meter(s), if any, to be credited with Net Excess Generation to substantiate that the electrical energy produced by the Net-Metering Facility will not exceed the amount necessary to offset part or all of the Net-Metering Customer requirements for electricity. In the absence of historical data reasonable estimates for the class and character of service may be made; and
4. A copy of the Preliminary Interconnection Review Request submitted to the Electric Utility and the results of the utility's interconnection site review conducted pursuant to Rule 3.03.

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. 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. This requirement for a manual disconnect switch shall be waived if the following three conditions are met: 1) The inverter equipment must be designed to shut down or disconnect and cannot be manually overridden by the customer upon loss of utility service; 2) The inverter must be warranted by the manufacturer to shut down or disconnect upon loss of utility service; and 3) The inverter must be properly installed and operated, and inspected and/or tested by utility personnel.
- C. The customer shall submit a Standard Interconnection Agreement to the Electric Utility at least thirty (30) day 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.
- 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, 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.
- 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 Electric Utility and filed with and approved by the Commission pursuant to these Rules that are necessary to assure safe and reliable operation of the Net-Metering Facility to the Electric Utility's system.
- G. If the Electric Utility's existing facilities are not adequate to interconnect with the Net-Metering Facility, the Net-Metering Customer shall pay the cost of additional or reconfigured facilities prior to the installation or reconfiguration of the facilities.

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

- A. Prior to being made, the Net-Metering Customer shall notify the Electric Utility of, and the Electric Utility shall evaluate, any modifications or changes to the Net-Metering Facility described in Part I, Standard Information, Section 2 of the Standard Interconnection Agreement for Net-Metering Facilities. The notice provided by the Net-Metering Customer shall provide detailed information describing the modifications or changes to the Electric Utility in writing, including a revised Standard Interconnection Agreement for Net-Metering Facilities that clearly identifies the changes to be made. The utility shall 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 Net-Metering Customer makes such modification without the Electric Utility's prior written authorization and the execution of a new Standard Interconnection Agreement, the Electric Utility shall have the right to suspend service pursuant to Section 6 of the Commission's General Service Rules.
- C. A Net-Metering Facility shall not be modified or changed to generate electrical energy in excess of the amount necessary to offset part or all of the Net-Metering Customer requirements for electricity.

Rule 3.03. Requirements for Preliminary Interconnection Site Review Request

- A. For the purpose of requesting that the Electric Utility conduct a preliminary interconnection site review for a proposed Net-Metering Facility pursuant to Rule 2.06.B.4, or as otherwise requested by the customer, the customer shall notify the Electric Utility 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 1, Standard Information, Sections 1 through 4 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. The Electric Utility shall provide a copy of the Preliminary Interconnection Site Review Request to the customer upon request.

- B. Following notification by the customer as specified in Rule 3.03.A, the Electric Utility shall 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 the Electric Utility shall make reasonable efforts to provide the customer with the results of the review within 30 calendar days. If the Electric Utility cannot meet the deadline it 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.

- C. The preliminary interconnection site review is non-binding and need only include existing data and does not require the Electric Utility to conduct a study or other analysis of the proposed interconnection site in the event that data is not readily available. The utility 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 of conducting the preliminary interconnection site review and any subsequent costs associated with site screening that may be required.

- D. 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.

SECTION 4. STANDARD INTERCONNECTION AGREEMENT, PRELIMINARY INTERCONNECTION SITE REVIEW REQUEST, AND STANDARD NET-METERING TARIFF FOR NET-METERING FACILITIES

Rule 4.01. Standard Interconnection Agreement, Preliminary Interconnection Site Review Request, and Standard Net-Metering Tariff

Each Electric Utility shall file, for approval by the Commission, a Standard Interconnection Agreement for Net-Metering Facilities (Appendix A), Preliminary Interconnection Site Review Request (Appendix A-1) and a Net-Metering Tariff in standard tariff format (Appendix B).

Rule 4.02. Filing and Reporting Requirements

Each Electric Utility shall file in Docket No. 06-105-U by March 15 of each year, a report listing all existing Net-Metering Facilities and the generator rating and, where applicable, the inverter power rating of each Net-Metering Facility as of the end of the previous calendar year.

APPENDIX A

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: _____
Utility Customer Account (from electric bill) to which the Net-Metering Facility is physically attached: _____

Section 2. Generation Facility Information

System Type: Solar Wind Hydro Geothermal Biomass Fuel Cell Micro turbine (circle one)
Generator Rating (kW): _____ AC or DC (circle one)
Describe Location of Accessible and Lockable Disconnect: _____
Inverter Manufacturer: _____ Inverter Model: _____
Inverter Location: _____ Inverter Power Rating: _____
Expected Capacity Factor: _____
Expected annual production of electrical energy (kWh) calculated using industry recognized simulation model (PVWatts, etc.): _____

Section 3. Installation Information

Attach a detailed electrical diagram of the Net-Metering Facility.
Installed by: _____ Qualifications/Credentials: _____
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Daytime Phone: _____ Installation Date: _____

Section 4. Certification

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.)

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: _____

Section 5. E-mail Addresses for parties

Customer's e-mail address: _____

Utility's e-mail address: _____ (To be provided by utility.)

Section 6. Utility Verification and Approval

Facility Interconnection Approved: _____ Date: _____

Metering Facility Verification by: _____ Verification Date: _____

II. INTERCONNECTION AGREEMENT TERMS AND CONDITIONS

This Interconnection Agreement for Net-Metering Facilities ("Agreement") is made and entered into this _____ day of _____, 20_____, by _____ ("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(6) and the Arkansas Public Service Commission'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 Commission's Net-Metering Rules, the Commission's General Service Rules, and the Utility's applicable tariffs.

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.

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 provide and install a 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 and 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 submission of the Standard Interconnection Agreement by the customer, the utility shall 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 applicable safety standards and/or power generation limits shall be explained along with a description of the modifications necessary to remedy the violations.

If the Utility's existing facilities are not adequate to interconnect with the Net-Metering Facility, the Customer shall pay the cost of additional or reconfigured facilities prior to the installation or reconfiguration of the facilities.

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. This requirement for a manual disconnect switch will be waived if the following three conditions are met: 1) The inverter equipment must be designed to shut down or disconnect and cannot be manually overridden by the customer upon loss of utility service; 2) The inverter must be warranted by the manufacturer to shut down or disconnect upon loss of utility service; and 3) The inverter must be properly installed and operated, and inspected and/or tested by utility personnel.

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, at his own expense, shall meet all safety and performance standards adopted by the utility and filed with and approved by the Commission that are necessary to assure safe and reliable operation of the Net Metering Facility to the utility's system.

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.

Section 5. Modifications or Changes to the Net-Metering Facility Described in Part 1, Section 2

Prior to being made, the Customer shall notify the Utility of, and the Utility shall evaluate, any modifications or changes to the Net-Metering Facility described in Part 1, Standard Information, Section 2 of the Standard Interconnection Agreement for Net-Metering Facilities. The notice provided by the Customer shall provide detailed information describing the modifications or changes to the Utility in writing, including a revised Standard Interconnection Agreement for Net-Metering Facilities that clearly identifies the changes to be made. The Utility shall review the proposed changes to the facility and provide the results of its evaluation to the Customer, in writing, 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.

If the Customer makes such modification without the Utility's prior written authorization and the execution of a new Standard Interconnection Agreement, the Utility shall have the right to suspend service pursuant to Section 6 of the Commission's General Service Rules.

A Net-Metering Facility shall not be modified or changed to generate electrical energy in excess of the amount necessary to offset part or all of the Net-Metering Customer requirements for electricity.

Section 6. 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.

Section 7. 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 others from damage or interference caused by the Customer's facilities, or lack of properly operating protective devices.

Section 8. Indemnity and Liability

The following is Applicable to Agreements between the Utility and to all Customers except the State of Arkansas and any entities thereof, local governments and federal agencies:

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, maintenance 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 to that Party's negligence. Nothing in this paragraph shall be applicable to the Parties in any agreement entered into with the State of Arkansas or any entities thereof, or with local governmental entities or federal agencies. Furthermore, nothing in this Agreement shall be construed to waive the sovereign immunity of the State of Arkansas or any entities thereof. The Arkansas State Claims Commission has exclusive jurisdiction over claims against the state.

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 the making of replacements, additions or betterment to, or by failure of, the Customer's facilities by the Customer or any other person or entity.

Section 9. Notices

The Net-Metering Customer shall notify the Electric Utility of any changes in the information provided herein.

All written notices shall be directed as follows:

Attention:

[Utility Agent or Representative]

[Utility Name and Address]

Attention:

[Customer]

Name: _____

Address: _____

City: _____

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

Section 10. 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 11. 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.

Section 12. Net-Metering Customer Certification

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

Signature: _____ Date: _____

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

Dated this _____ day of _____, 20__.

Customer:

Utility:

By: _____

By: _____

Title: _____

Title: _____

Mailing Address:

Mailing Address:

E-mail Address:

E-mail Address:

APPENDIX A-1

PRELIMINARY INTERCONNECTION SITE REVIEW REQUEST

I. STANDARD INFORMATION

Section 1. Customer Information

Name: _____

Contact Person: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Facility Location (if different from above): _____

Daytime Phone: _____ Evening Phone: _____

E-Mail Address: _____ Fax: _____

If the requested point of interconnection is the same as an existing electric service, provide the electric service account number: _____

Additional Customer Accounts (from electric bill) to be credited with Net Excess Generation (in rank order): _____

Annual Energy Requirements (kWh) in the previous twelve (12) months for the account physically attached to the Net-Metering Facility and for any additional accounts listed (in the absence of historical data reasonable estimates for the class and character of service may be made): _____

Section 2. Generation Facility Information

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

Generator Rating (kW): _____ AC or DC (circle one) _____

Expected Capacity Factor: _____

Expected annual production of electrical energy (kWh) of the facility calculated using industry recognized simulation model (PVWatts, etc): _____

Section 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: _____ Three Phase: _____

Planned method of interconnection consistent with Rule 3.01.B. _____

Section 4. Signature

I hereby certify that, to the best of my knowledge, all the information provided in this Preliminary Interconnection Site Review is true and correct.

Signature: _____ Date: _____

II. TERMS AND CONDITIONS

Section 1. Requirements for Request

For the purpose of requesting that the Electric Utility conduct a preliminary interconnection site review for a proposed Net-Metering Facility pursuant to the requirement of Rule 2.06.B.4, or as otherwise requested by the customer, the customer shall notify the Electric Utility 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 1, Standard Information, Sections 1 through 4 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. The Electric Utility shall provide a copy of the Preliminary Interconnection Site Review Request to the customer upon request.

Section 2. Utility Review

Following submission of the Preliminary Interconnection Site Review Request by the customer the Electric Utility shall 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 the Electric Utility shall make reasonable efforts to provide the customer with the results of the review within 30 calendar days. If the Electric Utility cannot meet the deadline it 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.

The preliminary interconnection site review is non-binding and need only include existing data and does not require the Electric Utility to conduct a study or other analysis of the proposed interconnection site in the event that data is not readily available. The utility 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.

Section 3. Application to Exceed 300 kW Net-Metering Facility Size Limit

This Preliminary Interconnection Site Review Request and the results of the Electric Utility's review of the facility interconnection shall be filed with the Commission with the customer's application to exceed the 300 kW facility size limit pursuant to 2.06.B.4.

Section 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.

Appendix B

ARKANSAS PUBLIC SERVICE COMMISSION

Original	Sheet No.	PSC File Mark Only
Replacing:	Sheet No.	
Name of Company		
Kind of Service: <u>Electric</u>	Class of Service: All	
Part III. Rate Schedule No. <u>X</u>		
Title: NET-METERING		

X. NET-METERING

X.1. AVAILABILITY

X.1.1. To any residential or any other customer who takes service under standard rate schedule(s) _____ (list schedules) who owns a Net-Metering Facility and signed a Standard Interconnection Agreement for Net-Metering Facilities with the Utility. The generating capacity of Net-Metering Facilities may not exceed the greater of: 1) twenty-five kilowatts (25 kW) or 2) one hundred percent (100%) of the Net-Metering Customer's highest monthly usage in the previous twelve (12) months for Residential Use. The generating capacity of Net-Metering Facilities may not exceed three hundred kilowatts (300kW) for non-residential use unless otherwise allowed by the Commission. Net-Metering is intended primarily to offset some or all of the customer's energy use.

The provisions of the customer's standard rate schedule are modified as specified herein.

X.1.2. Net-Metering Customers taking service under the provisions of this tariff may not simultaneously take service under the provisions of any other alternative source generation or co-generation tariff except as provided in the Net-Metering Rules.

X.2. MONTHLY BILLING

X.2.1. The Electric Utility shall separately meter, bill, and credit each Net-Metering Facility even if one (1) or more Net-Metering Facilities are under common ownership.

X.2.2. 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

Appendix B

ARKANSAS PUBLIC SERVICE COMMISSION

Original	Sheet No.	PSC File Mark Only
Replacing:	Sheet No.	
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Name of Company		
Kind of Service: <u>Electric</u>	Class of Service: All	
Part III. Rate Schedule No. <u>X</u>		
Title: NET-METERING		

schedules. Under Net-Metering, only the kilowatt hour (kWh) units of a customer's bill are netted.

- X.2.3. If the kWhs supplied by the Electric Utility exceeds the kWhs generated by the Net-Metering Facility and fed back to the Electric Utility during the Billing Period, the Net-Metering Customer shall be billed for the net billable kWhs supplied by the Electric Utility in accordance with the rates and charges under the customer's standard rate schedule.
- X.2.4. If the kWhs generated by the Net-Metering Facility and fed back to the Electric Utility during the Billing Period exceed the kWhs supplied by the Electric Utility to the Net-Metering Customer during the applicable Billing Period, the utility shall credit the Net-Metering Customer with any accumulated Net Excess Generation in the next applicable Billing Period.
- X.2.5. Net Excess Generation shall first be credited to the Net-Metering Customer's meter to which the Net-Metering Facility is physically attached (Designated Meter).
- X.2.6. After application of X.2.5 and upon request of the Net-Metering Customer pursuant to X.2.8, any remaining Net Excess Generation shall be credited to one or more of the Net-Metering Customer's meters (Additional Meters) in the rank order provided by the customer.
- X.2.7. Net Excess Generation shall be credited as described in X.2.5 and X.2.6 during subsequent Billing Periods; the Net Excess Generation credit remaining in a Net-Metering Customer's account at the close of a billing cycle shall not expire and shall be carried forward to subsequent billing cycles indefinitely. For Net Excess Generation credits older than twenty-four (24) months, a Net-Metering Customer may elect to have the Electric Utility purchase the Net Excess Generation credits in the Net-Metering Customer's account at the Electric Utility's estimated annual average cost rate for wholesale energy if the sum to be paid to the Net-Metering Customer is at least one hundred dollars (\$100). An Electric Utility shall purchase at the Electric Utility's estimated annual average Avoided Cost rate for wholesale energy any Net Excess Generation credit remaining in a Net-Metering Customer's account when the Net-Metering

Appendix B

ARKANSAS PUBLIC SERVICE COMMISSION

Original	Sheet No.	PSC File Mark Only
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Name of Company		
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Part III. Rate Schedule No. <u>X</u>		
Title: NET-METERING		

Customer: 1) ceases to be a customer of the Electric Utility; 2) ceases to operate the Net-Metering Facility; or transfers the Net-Metering Facility to another person.

X.2.8. Upon request from a Net-Metering Customer an Electric Utility may apply Net Excess Generation to the Net-Metering Customer's Additional Meters provided that:

- (a) The Net-Metering Customer must give at least 30 days' notice to the utility.
- (b) The Additional Meter(s) must be identified at the time of the request. Additional Meter(s) shall be under common ownership within a single Electric Utility's service area; shall be used to measure the Net-Metering Customer's requirements for electricity; may be in a different class of service than the Designated Meter; shall be assigned to one, and only one, Designated Meter; shall not be a Designated Meter; and shall not be associated with unmetered service.
- (c) In the event that more than one of the Net-Metering Customer's meters is identified, the Net-Metering Customer must designate the rank order for the Additional Meters to which excess kWhs are to be applied. The Net-Metering Customer cannot designate the rank order more than once during the Annual Billing Cycle.

X.2.9. Any Renewable Energy Credit created as the result of electricity supplied by a Net-Metering Customer is the property of the Net-Metering Customer that generated the Renewable Energy Credit.

BEFORE THE
ARKANSAS PUBLIC SERVICE COMMISSION

IN THE MATTER OF NET METERING AND THE
IMPLEMENTATION OF ACT 827 OF 2015

)
)

DOCKET NO. 16-027-R

ATTACHMENT 3

TO THE

INITIAL COMMENTS OF THE GENERAL STAFF OF THE
ARKANSAS PUBLIC SERVICE COMMISSION

JULY 22, 2016

Staff Response to Questions in Order No. 1 in Docket No. 16-027-R

As described in Staff's Initial Comments filed concurrently with this Response, Staff recommends that a Net-Metering Working Group (NM Working Group) be established to address the issues raised in Questions A.1 through 8 related to establishing appropriate rates, terms, and conditions for Net-metering contracts under the provisions of Ark. Code Annotated §23-18-604(b)(1) as amended by Act 827 of 2015. In anticipation of addressing the issues related to the proposed rates, terms, and conditions for net-metering contracts with the NM Working Group, Staff proposes that its responses to Questions A.1 through 8 be deferred until such time as the NM Working Group files its net-metering proposal with the Commission. Staff's responses to Questions B.1 through 3 are as follows:

1. Do projects exceeding 300 kW present significant opportunities or concerns that make them different from smaller non-residential facilities?

RESPONSE: A net-metering facility in excess of 300 kW may present greater interconnection, operational, and other issues depending upon the size, location, and operating characteristics of the facility than smaller non-residential facilities. While exceeding the 300 kW limit may provide opportunities to expand net-metering to certain qualifying net-metering customers, the limit does not appear to be a significant impediment to net-metering. The primary limit on the size of a net-metering facility is tied to the statutory criteria for qualifying as a net-metering facility, i.e., that the size of the facility is limited to offsetting all or part of the net-metering customer's load in the utility's service area. As such, net-metering is not considered a resource to the utility and its generation is not a sale of energy to the utility. Net-metering only allows a customer to net kWh's generated against the customer's requirements for electricity.

- a. Do such systems provide distribution system, environmental, or public policy benefits, as referenced in Ark. Code Annotated § 23-18-604(b)(5)?

RESPONSE: Each net-metering system is unique and may provide differing distribution system, environmental, or public policy benefits. Those benefits will be affected by the size, location, and operating characteristics of each facility.

- b. How should the Commission assess whether such systems increase the state's ability to attract businesses to Arkansas, as referenced in Ark. Code Annotated § 23-18-604(b)(7)?

RESPONSE: Each net-metering system is unique and may uniquely affect the state's ability to attract businesses to Arkansas. Those effects will be affected by the size, location, and operating characteristics of each facility.

2. California, Colorado, Connecticut, Delaware, the District of Columbia, Florida, Indiana, Maryland, Massachusetts, North Carolina, New Hampshire, Oregon, Rhode Island, Utah, Vermont, and West Virginia appear to have net-metering facility size limits ranging between 1 MW and 5 MW, while Arizona and Ohio appear to have no upper limit:

- a. Are there reasons based on the physics, engineering, or transmission and distribution characteristics of the grid that reasonably dictate an upper limit to the size of net-metering projects?

RESPONSE: As a threshold matter, the statutory definition of a net-metering facility limits the size of a net-metering facility to the customer's kWh's eligible for netting within the utility's service territory. Limiting factors associated with grid characteristics would depend on the size, location, and operating characteristics of the net-metering facility and the willingness of the net-metering customer to pay for any interconnection or system upgrades necessary to provide service.

- b. Are there reasonable size ranges of net-metering projects (such as 300 kW to 1 MW, or 1 MW to 5 MW, for instance) that merit similar or uniform regulatory treatment?

RESPONSE: See the response to Question 2.a. Staff does not recommend establishing varying size categories at this time.

- c. Are there model rules or policies that the Commission should adopt or pursue to facilitate the development and grid integration of such facilities?

RESPONSE: Staff recommends that the Commission adopt its proposed Rule 2.06 addressing the guidelines for an application with the Commission to exceed the 300 kW generating capacity limit.

3. Are there other factors that the Commission should consider in establishing guidelines for the approval of net-metering facilities in excess of 300 kW?

RESPONSE: Staff proposed Rule 2.06 includes a list of items that, at a minimum, should be filed in support of an application to exceed the 300 kW generating capacity limit. Additional factors may be appropriate to consider given the unique characteristics of the net-metering facility.

1 guiding principles for the development of net-metering tariffs. The current
2 procedural schedule associated with adoption of the revised NMRs would not be
3 affected by Staff's proposal to establish a NM Working Group. Staff envisions
4 that revisions to the NMRs and the Appendices would be adopted consistent with
5 the procedural schedule established in this proceeding. However, given Staff's
6 proposed NM Working Group, the Net-Metering Tariff (Appendix B to the NMRs)
7 would incorporate changes pursuant to Act 827 primarily focused on the
8 treatment of net excess generation and the modifications proposed herein¹, and
9 would not be revised to include a new net-metering rate structure proposal. The
10 proposed Net-Metering Tariff would continue to be used for the purpose of
11 modifying the electric utilities' standard rate schedules. Any changes to the Net-
12 Metering Tariff to implement a new net-metering rate structure for each class that
13 will differ from the standard rate schedules for each class will be proposed after
14 the NM Working Group completes its work. Once the Commission establishes a
15 new rate structure for net-metering customers, service to net-metering customers
16 under the standard rate schedules would be limited to the net-metering
17 customers' existing at that time. Net-metering customers subscribing to service
18 after that time would be served under the new rate structure for net-metering
19 customers approved by the Commission.

¹ In 2015, each electric utility filed a revised Net-Metering Tariff with the Commission to reflect the statutory provisions of Act 827 with the exception of the rate structure for net-metering contracts which was to be determined in a future rulemaking. The Net-Metering Tariff included as Appendix B includes the billing and administrative practices previously incorporated in the utilities Net-Metering Tariffs and approved by the Commission, including additions and changes proposed herein. See Docket Nos.15-054-TF through 15-062-TF and 15-064-TF through 15-075-TF.

1 The NM Working Group would identify and begin collecting the data
2 necessary to explore a range of rate options and to ultimately inform the
3 development of a new net-metering rate structure consistent with Act 827. A
4 similar regulatory process has been successfully employed in the Commission’s
5 energy efficiency dockets. Such a process provides an opportunity for Parties
6 with divergent points of view to work cooperatively toward finding common
7 ground while still maintaining the Parties’ ability to address their issues before the
8 Commission if the NM Working Group participants are unable to reach a
9 unanimous agreement. The NM Working Group process will take some time,
10 particularly with regard to collecting informative data associated with net-
11 metering loads and their underlying costs and benefits. However, the time
12 required to develop a sound framework for establishing net-metering rates should
13 not have a substantial impact on the deployment of net-metering or on the costs
14 that may be borne by other electric customers in the interim and should, in the
15 long-run, have a positive impact on the development of net-metering.

16 Act 827 modified Ark. Code Ann. § 23-18-604 to include new
17 considerations in determining net-metering rate structures when the Commission
18 is “establishing appropriate rates, terms, and conditions for net-metering
19 contracts.” The General Assembly did not prescribe new rate structures, but
20 instead established criteria for the Commission to follow when establishing the
21 rates, terms, and conditions for net-metering contracts. Since no provision of Act
22 827 modifies or impacts the Standard Interconnection Agreement for Net-
23 Metering Facilities (Interconnection Agreement) entered into pursuant to the

1 existing NMRs, the Interconnection Agreement should not be impacted or
2 modified. In other words, until the Commission approves alternative rate
3 structures for net-metering customers independent from the standard rate
4 schedule for each class, net-metering customers will continue to be served under
5 the terms of the net-metering Interconnection Agreement and the current
6 standard rate schedule for their applicable class.

7 Staff anticipates that any proposal to establish a new rate structure for net-
8 metering contracts will consider the property interests that existing net-metering
9 customers obtained after having expended material expense and taken
10 substantial steps to install his or her net-metering system in reliance upon the
11 terms of the net-metering Interconnection Agreement and the current standard
12 rate schedule. Staff has not identified any justification or public necessity that
13 exists for disturbing those existing customers' substantial interests. As such, net-
14 metering customers executing Interconnection Agreements and taking service
15 prior to the Commission's adoption of a new rate structure should continue to
16 take service under the standard rate schedule for their class and not under the
17 newly developed rate structure for net-metering customers.^{2,3} This regulatory
18 treatment will not impair the continued growth and development of net-metering
19 in Arkansas while a new rate structure for the net-metering contracts in each rate

² See *Tankersley Bros. Indus., Inc. v. City of Fayetteville*, 227 Ark. 130, 296 S.W.2d 412 (1956) and *Smith v. City of Arkadelphia*, 336 Ark. 42, 984 S.W.2d 392 (1999). See also, *Arkansas Riverview Development, LLC v. City of Little Rock*, 2006 WL 2661158 (2006).

³ If a new Interconnection Agreement is required to be executed by a customer taking service under a standard rate schedule after the Commission adopts a new net-metering rate structure, the new net-metering rate structure will apply to net-metering service provided thereafter.

1 class is developed and approved by the Commission for each utility. To provide
2 certainty and clarity to existing and prospective net-metering customers prior to
3 the Commission adopting a new rate structure for net metering contracts, Staff
4 recommends that the Commission confirm the status of net-metering customers
5 in accordance with Staff's recommendation as described above.

6 Staff recommends that it be designated to lead the NM Working Group
7 and that the NM Working Group include the Parties to this docket and other
8 interested persons or groups who are not Parties. In that capacity, Staff would
9 be responsible for coordinating communication among the Parties, establishing
10 meeting schedules and agendas with the input of the Parties, and coordinating
11 filings with the Commission. The objective of the NM Working Group would be to
12 develop consistent rates, terms, and conditions for net-metering contracts across
13 all electric utilities pursuant to Ark. Code Ann. § 23-18-604(b)(1) to be adopted by
14 the Commission. The issues to be addressed by the NM Working Group would
15 be guided by the questions related to Ark. Code Ann. § 23-18-604(b)(1) posed by
16 the Commission in Order No. 1 (Questions Part A,1 through 8). The NM Working
17 Group would aim to reach consensus on each issue addressed, make a record of
18 its decisions for reporting to the Commission and provide for minority/dissenting
19 reports to the Commission on issues not resolved by the Parties. Unresolved or
20 contentious issues would be brought before the Commission for a decision with
21 the opportunity for all Parties to object or propose alternative solutions. This
22 process may take a year or more to allow for the collection of cost and benefit
23 data associated with net-metering loads that accurately reflect their annual

1 impact on the utilities electric systems during both peak- and off-peak periods,
2 and to develop a balanced approach to establishing net-metering tariffs. To keep
3 the Commission informed of the NM Working Group's progress, Staff
4 recommends that the NM Working Group file a progress report with the
5 Commission six months from the date of the Commission's order in this
6 proceeding with a target date for making its recommendations to the Commission
7 within eighteen months.

8 Staff's proposed NMRs include proposed rules to address the filing
9 requirements associated with requests for Commission approval of facilities
10 larger than 300 kW (Rule 2.06), requirements for preliminary interconnection site
11 review requests (Rule 3.03), and a Preliminary Interconnection Site Review
12 Request Form (Appendix A-1). These requirements are intended to identify the
13 information to be filed with the Commission in order to facilitate the review and
14 disposition of requests to install net-metering facilities in excess of 300 kW.

15 Staff's Proposed NMR "Strawman"

16 Attachment 1 includes the mark-up of the Net-Metering Rules that reflects
17 Staff's proposed NMR "strawman". A discussion of Staff's proposed NMRs
18 follows.

19 **DEFINITIONS**

20 Staff modified the Definition section to include terms and their definitions
21 pursuant to Act 827 and to provide clarity in the interpretation of the NMRs.
22 Defined terms were capitalized in this section and throughout the document.
23 Staff removed the term "facility" from the various types of renewable resource

1 definitions and replaced the term with “resource” in both the header and the
2 definition as this is the term modified within the statute.

3 Additional Meter – Staff added this definition to clarify the characteristics of an
4 additional meter. Elements of this definition were moved from Rule 2.05.E. Staff
5 added the provisions that an additional meter shall be assigned to one, and only
6 one, designated meter and shall not be a designated meter for administrative
7 simplicity and efficiency associated with billing. Staff is aware from discussions
8 with the utilities that designated meters and additional meters are difficult to bill
9 because of the complexities of the billing interrelationships. It makes the monthly
10 billing for one account dependent on the monthly billings for an unrelated account
11 or accounts that could normally bill at different times of the month. If additional
12 meters were permitted to be assigned to more than one designated meter, the
13 number of dependencies would increase. If designated meters were also
14 additional meters, billing would be a virtual maze of dependencies. Staff also
15 added the provision that an additional meter shall not be associated with
16 unmetered service. This provision is consistent with Ark. Code Ann. § 23-18-
17 604(b)(2) which describes the application of net-metering credits to metered
18 locations or meters.

19 Avoided Cost – Staff added this definition to include the statutory definition, and
20 the basis for avoided cost determination, referenced in Ark. Code Ann. § 23-18-
21 604(c)(1) and (2).

22 Designated Meter – Staff moved this definition to this section from Rule 2.05.D.1.

1 Net Excess Generation Credits – Staff added this definition to clarify the intent of
2 the term in Rule 2.05.D.

3 Net-Metering Facility – Staff revised this definition to incorporate the statutory
4 provisions under Ark. Code Ann. § 23-18-603(6)(B)(i) and (ii) regarding the size
5 of a net-metering facility and Ark. Code Ann. § 23-18-604(b)(7) regarding the
6 Commission’s consideration of generating capacity in excess of 300 kW. The
7 statement in part F. was moved to part A. for clarity.

8 Residential Use – Staff revised this term because the term “Residential
9 Customer” is not used in the NMRs. Residential Use is used in the definition of
10 net-metering facility and in the net-metering tariff that incorporates that definition.

11 **SECTION 1. GENERAL PROVISIONS**

12 **Rule 1.01. Purpose**

13 Staff clarified this rule to reference the Net-Metering Rules.

14 **Rule 1.02. Statutory Provisions**

15 Staff revised Rule 1.02. A. to include a reference to Act 827 of 2015.

16 Staff revised Rule 1.02. B. and C. to insert statutory section symbols.

17 **Rule 1.03. Other Provisions**

18 Staff revised Rule 1.03. A. to remove the word “that” and insert the word “which”.

19 **SECTION 2. NET-METERING REQUIREMENTS**

20 **Rule 2.03. Cost to Provide Service**

21 Staff added Rule 2.03 to incorporate the provisions of Ark. Code Ann. § 23-18-
22 604(b)(1) addressing the development of appropriate rates, terms, and conditions
23 for net-metering contracts.

1 **Rule 2.05. Billing for Net-Metering**

2 Staff added Rule 2.05.A. to include the provisions of Ark. Code Ann. § 23-18-
3 604(d)(1) regarding separately metering, billing, and crediting each net-metering
4 facility.

5 Staff revised Rule 2.05.B. to remove the word “affected” and to insert the word
6 “netted” for clarification.

7 Staff revised Rule 2.05.D.1. to remove the definition of “designated meter”. This
8 definition is included in the Definition section of the Rules.

9 Staff revised Rule 2.05.D.2. to incorporate correct references to the applicable
10 rule numbers.

11 Staff revised Rule 2.05.D.3. to incorporate correct references to the applicable
12 rule numbers and to incorporate the provisions of Ark. Code Ann. § 23-18-
13 604(b)(6) regarding the purchase of net excess generation.

14 Staff deleted Rule 2.05.D.4. because under Act 827 net excess generation no
15 longer expires at the close of an annual billing cycle.

16 Staff revised Rule 2.05. E.1. to clarify that the purpose of the notice is to request
17 that net excess generation be applied to additional meters.

18 Staff revised Rule 2.05.E.2. to remove language that has been included in the
19 definition of additional meter.

20 Staff revised Rule 2.05.E.3. to incorporate the appropriate defined terms for
21 additional meter and net excess generation.

22 Staff deleted Rule 2.05.E.4. because the language is included in the definition of
23 additional meter.

1 Staff revised Rule 2.05.F. to include the word “Energy” consistent with Ark. Code
2 Ann. § 23-18-604(b)(6)(B).

3 **Rule 2.06. Application to Exceed Generating Capacity Limit**

4 Staff added Rule 2.06.A. to require that a net-metering customer file an
5 application with the Commission for approval to install a net-metering facility with
6 a generating capacity of more than 300 kW pursuant to Ark. Code Ann. § 23-18-
7 604(b)(5) and (7).

8 Staff added Rule 2.06.B. to define the information to be filed with the
9 Commission in support of an application for approval to install a net-metering
10 facility with a generating capacity of more than 300 kW including information
11 regarding the project, its eligibility to be a net-metering facility, and details
12 regarding the requested interconnection.

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

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

17 Staff added a provision to Rule 3.01.D. that the utility shall provide results of its
18 review of the requested interconnection to the customer “in writing”.

19 Staff revised Rule 3.01.G. to remove the reference to the utility’s Extension of
20 Facilities Tariff and added language that the net-metering customer shall pay the
21 cost of additional or reconfigured facilities prior to the installation or
22 reconfiguration of the facilities. The intent of this rule has not changed in that
23 net-metering customers are responsible for the cost of any additional or

1 reconfigured facilities necessary for interconnection. The utilities' Extension of
2 Facilities Tariffs are not uniform across all utilities, may not be applicable to the
3 nature of the facilities that are added or reconfigured, and are not the appropriate
4 recovery mechanism in all cases for all utilities. The modified Rule more
5 accurately reflects the costs for which the net-metering customer will be
6 responsible.

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

9 Staff added clarifying language to Rule 3.02.A. to define the types of
10 modifications or changes to a net-metering facility that should be evaluated by the
11 electric utility prior to being made. Staff added new language to the notice
12 provision to require the inclusion of a revised Standard Interconnection
13 Agreement identifying the changes to be made. Staff added a requirement that
14 the utility provide the results of its evaluation of the interconnection "in writing".

15 Staff added Rule 3.02.B. to clarify that modifications to the net-metering
16 customer's net-metering facility without the utility's prior written authorization and
17 the execution of a new Standard Interconnection Agreement shall be the basis to
18 suspend service pursuant Section 6 of the Commission's General Service Rules
19 (GSRs). Specifically, GSR Rule 6.01.G. allows the utility to suspend service to an
20 account for the "misrepresentation of fact relevant to the conditions under which
21 the applicant or customer obtained or continued utility service". Sections 6 of the
22 GSRs addresses suspension requirements and procedures.

1 Staff added Rule 3.02.C. to clarify that modifications or changes to a net-
2 metering facility shall not be made if the modification or change would result in
3 the net-metering customer generating electrical energy in excess of the amount
4 necessary to offset part or all of the net-metering customer requirements for
5 electricity. Such a modification or change would make the net-metering
6 customer ineligible for net- metering service.

7 **Rule 3.03. Requirements for Preliminary Interconnection Site Review**
8 **Request**

9 Staff added Rule 3.03.A. addressing the requirements for a Preliminary
10 Interconnection Site Review Request that is to be filed with the Commission in
11 support of an application to exceed the 300 kW limit under Rule 2.06.B.4., or as
12 otherwise requested by the customer. This rule includes the information to be
13 provided to the utility regarding the net-metering facility. The notice provisions
14 are the same as the notice provisions under the Standard Interconnection
15 Agreement process.

16 Staff added Rule 3.03.B which is applicable to a Preliminary Interconnection Site
17 Review Request that generally mirrors the requirements for review of a Standard
18 Interconnection Agreement under Rule 3.01.D. However, this rule addresses the
19 situation where a customer may request multiple interconnection site reviews. In
20 that situation the utility shall make reasonable efforts to conduct the review in 30
21 calendar days but if it is unable to meet the deadline it will provide the customer
22 with an estimated date by which it will complete the review.

1 Staff added Rule 3.03.C. which provides that the preliminary site review is non-
2 binding and that the utility need only consider readily available data in its review.
3 The utility is required to notify the customer if additional site screening may be
4 required prior to interconnection of the facility. Consistent with existing Rule 3.01
5 G. that requires the net-metering customer to pay for any changes to existing
6 facilities that are not adequate to interconnect the net-metering facility, this Rule
7 further provides that the customer shall be responsible for the actual costs of
8 conducting the Preliminary Interconnect Site Review and any subsequent costs
9 associated with additional site screening.

10 Staff added Rule 3.03.D. to clarify that the Preliminary Interconnection Site
11 Review does not relieve the customer of the requirement to execute a Standard
12 Interconnection Agreement prior to interconnection of the facility.

13 **SECTION 4. STANDARD INTERCONNECTION AGREEMENT, PRELIMINARY**
14 **INTERCONNECTION SITE REVIEW REQUEST, AND STANDARD NET-**
15 **METERING TARIFF FOR NET-METERING FACILITIES**

16 Rule 4.01. Standard Interconnection Agreement, Preliminary Interconnection Site
17 Review Request, and Standard Net-Metering Tariff

18 Staff added language to Rule 4.01. to include the Preliminary Interconnection
19 Site Review Request (Appendix A-1) to the list of items to be filed with the
20 Commission.

21 **APPENDIX A STANDARD INTERCONNECTION AGREEMENT FOR NET-**
22 **METERING FACILITIES**

23 **I. STANDARD INFORMATION**

1 Section 1. Customer Information. Staff added clarifying language to this Section
2 to define the Utility Customer Account.

3 Section 2. Generation Facility Information. Staff added additional information
4 identifying the expected capacity factor and the expected annual production of
5 electrical energy to this Section in order to identify the expected load on the
6 electric system and to facilitate the determination of the facility's qualification as a
7 net-metering facility.

8 **II. INTERCONNECTION AGREEMENT TERMS AND CONDITIONS**

9 Section 2. Governing Provisions. Staff added a reference to the Commission's
10 General Service Rules to this Section because they govern the relationship
11 between the utility and the net-metering customer.

12 Section 4. Interconnection. Staff made several clarifying changes to this Section
13 and the provisions of Rule 3.01.G. were added.

14 Section 5. Modifications or Changes to the Net-Metering Facility Described in
15 Part 1, Section 2. Staff added a title to this Section and the revisions included in
16 Rule 3.02 were added.

17 Section 9. Notices. Staff added a requirement that the net-metering customer
18 notify the electric utility of any changes in the information in the Standard
19 Interconnection Agreement so that the utility is made aware of any changes in
20 the conditions under which the customer obtained net-metering service. Such
21 notification will serve to improve public safety and will provide the opportunity to
22 verify that, with the modifications, the net-metering facility will continue to serve
23 all or part of the net-metering customer's requirements for electricity.

1 Section 12. Net-Metering Customer Certification. Staff added this Section to
2 require the net-metering customer to confirm that the information provided is true
3 and correct and that the customer has read and understands the terms and
4 conditions of the Standard Interconnection Agreement.

5 **Appendix A-1 PRELIMINARY INTERCONNECTION SITE REVIEW REQUEST**

6 **I. STANDARD INFORMATION**

7 Section 1. Customer Information. This Section requires information similar to the
8 information required in Section 1 of the Standard Interconnection Agreement
9 regarding the name, address, facility location, contact information, and electric
10 service account number. Information regarding additional customer accounts to
11 be credited with net excess generation and the customer's annual energy
12 requirements for the previous twelve (12) months for the account physically
13 attached to the net metering facility and any additional accounts is required in
14 order to verify that the facility qualifies for net-metering service and is consistent
15 with the information required for an application to exceed the 300 kW limit under
16 Rule 2.06 B.3.

17 Section 2. Generation Facility Information. This Section requires the same
18 information as Section 2 of the Standard Interconnection Agreement except for
19 the information regarding the location of the lockable disconnect and the inverter
20 information. Information regarding the planned method of interconnection is
21 included in Section 3. This information is necessary to determine whether the
22 existing facilities at a given location will be sufficient to serve the facility or if
23 system modifications will be required.

1 Section 3. Interconnection Information. This Section requires the information
2 regarding the configuration of the generation facility equipment including control
3 schemes, customer's proposed point of interconnection, the load at the
4 customer's site, whether the connection will be single phase or three phase, and
5 the planned method of interconnection consistent with Rule 3.01B that addresses
6 the lockable disconnect switch and the inverter information. This information is
7 necessary to determine whether the existing facilities at a given location will be
8 sufficient to serve the facility or if system modifications will be required.

9 Section 3. Signature. This Section requires that the customer certify that the
10 information provided is true and correct.

11 **II, TERMS AND CONDITIONS**

12 Section 1. Requirements for Request. This Section incorporates the provisions
13 of Rule 3.03.A.

14 Section 2. Utility Review. This Section incorporates the provisions of Rule
15 3.03.B. and C.

16 Section 3. Application to Exceed 300 kW Net-Metering Facility Size Limit. This
17 Section incorporates the requirement to file the Preliminary Interconnection
18 Review Request submitted to the Electric Utility and the results of the utility's
19 interconnection site review with the Commission pursuant to Rule 2.06.B.3.

20 Section 4. Standard Interconnection Agreement. This Section clarifies that the
21 customer must execute a Standard Interconnection Agreement prior to
22 interconnection of the facility.

23 **APPENDIX B NET-METERING TARIFF**

1 **X.1. AVILABILTIY**

2 X.1.1. Staff added language to this Section to clarify that the net-metering
3 customer must own the net-metering facility and to describe the net-metering
4 facilities to which net-metering service is available. Staff deleted the language
5 requiring that the net-metering facility be located on the customer's premise
6 because it is not a requirement of Act 827.

7 **X.2. MONTHLY BILLING**

8 X.2.1. Staff added this provision to include the provisions of Ark. Code Ann. § 23-
9 18-604(d)(1) regarding separately metering, billing, and crediting each net-
10 metering facility.

11 X.2.2. Staff clarified this Section to state that the kilowatt hour units of the
12 customer's bill are "netted". The term "affected" was removed.

13 X.2.7. Staff revised the language to incorporate the provisions of Ark. Code Ann.
14 § 23-18-604(b)(6) regarding the purchase of net excess generation. In addition,
15 Staff deleted Section X.2.7. (as previously numbered) because net excess
16 generation no longer expires under Act 827.

17 X.2.8.(b). Staff revised the language to remove "in the customer's name" and
18 insert "under common ownership" pursuant to § 23-18-604(d)(2)(A) and to
19 include the other elements of the definition of additional meter. The description
20 of an additional meter included in X.2.8 (b) was also added to this Section.

21 X.2.8.(d). Staff deleted this Section because the language was added to
22 X.2.8.(b).

- 1 X.2.9. Staff changed the language to use the defined term “Renewable Energy
- 2 Credit”.

Respectfully submitted,

**GENERAL STAFF OF THE ARKANSAS
PUBLIC SERVICE COMMISSION**

BY: /s/ *Dawn Kelliher Guthrie*

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CERTIFICATE OF SERVICE

I, Dawn Kelliher Guthrie, hereby certify that a copy of the foregoing has been served on all parties of record by electronic mail via the Electronic Filing System this 22nd day of July, 2016.

/s/ *Dawn Kelliher Guthrie*

Dawn Kelliher Guthrie