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ARKANSAS PUBLIC SERVICE COMMISSION

IN THE MATTER OF CONSIDERATION OF)	こり、ヒリ
SECTION 111(d)(11), (13) AND (15) OF THE	ý	DOCKET NO. 06-105-U
FEDERAL ENERGY POLICY ACT OF 2005)	ORDER NO. 8

<u>ORDER</u>

By Order No. 1, issued July 28, 2006, the Commission initiated this docket to consider standards for net metering, fossil fuel generation efficiency and interconnection under the Federal Energy Policy Act of 2005 (EPAct). The EPAct amended the Public Utility Regulatory Policy Act of 1978 (PURPA) to require states to consider the federal standards established in the EPAct. After the filing of the initial comments in this docket, the Arkansas General Assembly passed Act 1026 of 2007 to add certain definitions and to clarify the authority of the Commission to adopt net metering standards and interconnection rules. By Order No. 4 of this docket, issued August 24, 2007, the Commission elected to reconsider the existing rules under the revised PURPA standards and in accordance with the provisions of Act 1026. In conjunction with Order No. 4, the Commission proposed amendments to the Commission's current net metering rules. In response to Order No. 4, comments and/or reply comments were filed by Arkansas Electric Energy Consumers (AEEC), Southwestern Electric Power Company (SWEPCO), the General Staff of the Arkansas Public Service Commission (Staff), Entergy Arkansas, Inc. (Entergy), the Attorney General of Arkansas (AG), Arkansas Electric Corporative Corporation (AECC), and Oklahoma Gas and Electric Company (OG&E). Additionally, Empire District Electric Company and Mr. William R. Ball filed comments in this docket in response to Order



No. 1. As a result, Empire District Electric Company and Mr. Ball remain as parties to the docket and Mr. Ball entered an appearance *pro se* at the hearing in this docket conducted on October 22, 2007, at which time he offered additional comments.

In Order No. 4 the Commission invited comments on the rules proposed in that Order and specifically invited comments on whether the Commission should exercise the options provided in Arkansas Code Ann. § 23-18-604(b)(3) by expanding the scope of net metering to include facilities that do not use renewable energy resources for fuel, and whether the Commission should increase the KW cap for individual net metering facilities beyond those established in Ark. Code Ann 23-18-603(6)(B).

Under Arkansas Code Ann. § 23-18-604(b)(3) the Commission may expand the scope of net metering to include facilities that do not use renewable resources or may increase the cap for net metering facilities "if so doing results in desirable distribution system, environmental, or public policy benefits." Only two of the parties have suggested that the Commission increase the cap for net metering facilities. AEEC suggests that the Commission should raise the cap size to encourage large industrial customers to participate in net metering activities. (AEEC Reply Comments p. 4, T. 43). Mr. Ball noted that Google has installed net metering facilities in California, which would not be allowed in Arkansas as a result of the current cap limits. (T. 53). It is clear that raising the cap could make more facilities eligible under the net metering rules, but the parties advocating that position have not addressed whether such an action would result in desirable distribution, environmental or public policy benefits, nor do they suggest a specific size limitation. The parties leave the Commission to speculate as to what the cap limits should be.

There are significant problems associated in raising the cap. For example, net metering facilities are allowed to sell into the system at retail rates. Therefore it must be determined whether a facility is a net metering facility or whether the facility has attained utility scale generation in size. If utility scale generation is achieved excess power should be sold into the market at wholesale and not be eligible for retail net metering rates. The record in this docket does not offer any guidance on this issue, but suggests that the Commission should simply speculate. Therefore the record does not justify the request to raise the caps beyond the limits established in Ark. Code Ann 23-18-603(6)(B).

If a customer desires to install net metering facilities in excess of the 300 KW limit established in Arkansas Code Ann. § 23-18-603(6)(B) the customer could petition this Commission to expand the scope of net metering to include such a facility; however, the record does not establish that raising the statutory cap to some unknown level is in the public interest. As noted in Order No. 4, the Commission's preference is to "await the development of circumstances or particular requests by customers or other parties that warrant our expansion of the reach in applicability of the Rules to larger facilities and those that use non-renewable fuels." The KW cap established in the statute need not be increased at this time and that there is no record established in this docket which would justify such an increase.

Only one party has suggested that the Commission include facilities that use non-renewable fuels. AEEC asserts that the Commission's position conflicts with federal law because PURPA §111(d)(12) suggests that each utility develop a plan to minimize dependence on one fuel source and to ensure that the electricity it sells is generated

using a range of fuels. (AEEC Reply Comments p. 4, T. 43). The fact that PURPA encourages utilities to use more than one fuel source does not suggest that the Commission's position conflicts with federal law. The Commission is not required to provide any new consideration of the federal net metering and interconnection standards because the Commission's prior actions are grandfathered under the provisions of PURPA §124. The Commission nonetheless elected to proceed to reconsider the rules under the revised PURPA standards and the provisions of Act 1026 of 2007. Again, however, the record does not reflect that the decision to use non-renewable resources would result in desirable distribution system, environmental, or public policy benefits. In fact, as stated by Mr. Ball:

As for expanding the scope of renewable energy as far as the fuels allowed, I think it would not be helpful to allow non-renewable fuel sources in because it would weaken the intent of the Arkansas Renewable Energy Development Act, which was to develop our renewable energy.

(T. 52). Additionally, as pointed out by the AG:

Allowing non-renewable resources to enjoy the same benefits as renewable ones may inhibit the further development of renewables.

In addition, current net metering customers are few in number and consequently the benefits they have enjoyed have had no discernible impact on the utility rates other customers and customer groups have to pay. If net metering activities expand too quickly, other customers may be harmed."

(AG Comments p. 2, T. 22). Given the comments of Mr. Ball and the AG, the record simply does not support a finding that the inclusion of non-renewable fuels will necessarily result in public policy benefits.

In the prefiled comments the parties address the issue of what the annual billing cycle for a net metering customer should be. This issue is significant because the

customer can carrier forward credits earned when the customer is selling into the system and apply those credits to bills incurred when the customer is using more electricity than it is generating. The concern is that an inappropriate annual billing cycle could result in a situation where the customer builds credits immediately prior to the close of the billing cycle and then loses those credits as a result of the requirement that excess generation credits expire at the end of the annual billing cycle as specified in proposed Rule 2.03 (C). SWEPCO notes the requirement of proposed Rule 2.03 (C) and then states that the lack of a definition for "annual billing cycle" may result in disagreement among customers. SWEPCO suggests that the annual billing cycle be defined as, "[t]he period for net metering billing which will commence with the first billing cycle of the summer seasonal rate period and will conclude with the last billing cycle of the winter seasonal rate period." SWEPCO then states:

The identification of the "annual billing cycle" would also eliminate another discrepancy. Although the language of the bill provides for the accumulation of excess generation credit, SWEPCO notes that this language defeats the purpose of the summer/winter differential that is currently built into the SWEPCO tariffs. The proposed language allows a customer to generate power in the winter and "bank it" for the summer months as long as it is in the same year.

(SWEPCO Comments p. 2, T. 10).

In initial comments the AG suggests that the annual billing cycle definition be uniformly applied to all utilities and suggests that the billing cycle dates be established in the rules. (AG Reply Comments p. 2, T. 22). At the hearing counsel for the AG stated that the AG has no objections to an annual billing cycle that is consistent with each utility's normal annual billing cycle, but opposes making a specific exception for net metering customers. (T. 60). Staff proposes that the annual billing cycle commence

with the first billing cycle after the customer signs the interconnection agreement. (Staff Reply Comments p.1, T. 28). Entergy suggests that the annual billing cycle be consistent with the annual reporting period of the utility. (Entergy Comments p. 3, T. 17). Entergy explained during the hearing that keeping the annual billing cycle consistent with each utility's accounting cycle could substantially lessen the burden and expense of the utilities when compared to the cost involved in requiring an annual accounting for net metering on a customer-by-customer basis. (T. 57).

As for allowing each utility to establish an annual billing cycle which could be designed to minimize the ability of net metering customers to benefit from accumulated credits, there is merit to the AG's argument that utilities should not be allowed to make specific exceptions for net metering customers. Additionally, as explained by Mr. Ball, the concern that net metering customers will bank energy credits during off peak seasons for use during peak seasons is somewhat misplaced.

[W]hat we find happening with the homes that we've had so far on the net metering system so far that it's actually just the reverse happened. . . [I]n the summer we're consuming more, but we're also making more.

So all of the studies have shown that energy produced from photovoltaics most certainly is semi-coincident or coincident with peak demand, so we're actually putting power back on the grid at a time that it's needed the most. So I think it would be a non-issue in terms of whether billing started at the connection or the interconnection when a net metering customer began to enter in or entered into a contract with the utility or simply just a January 1, December 31 calendar date.

(T. 51). The record clearly supports the conclusion that the reduced expense associated with keeping the annual billing cycle consistent with each utility's annual accounting period is reasonable and in the public interest.

Another issue addressed in the comments concerns who should bear the cost if more expensive, non-standard meters are required to serve a net metering customer. As

suggested by OG&E, the cost responsibility of non-standard meters required by net metering customers who create excessive integration costs on the distribution system should be the responsibility of the cost-causing customer in order to avoid unintended subsidization of net metering customers. (OG&E Reply Comments p. 2, T. 38). Entergy suggests that proposed Rule 2.02 (A) be revised to include the statement that, "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." (Entergy Comments p. 3, T. 17). The AG supports the recommendation "as it ultimately protects other ratepayers from excess cost." (AG Reply Comments p. 2, T. 22). The record supports Entergy's recommended language as a matter of fairness to other customers and it is the intent in adopting this language that the utilities will charge only that cost differential which is "required" to serve the net metering customer.

Entergy suggests that proposed Rule 2.04 (D) include a clarification to state that the tracking and redemption of any renewable energy credit is the sole responsibility of the customer. (Entergy Comments p.4, T. 18). SWEPCO asserts that it is unclear how the renewable energy credit would be tracked or measured and requests clarification on the issue. (SWEPCO Comments p. 2, T. 10). Staff asserts that proposed Rule 2.04 (D) does not require clarification, (Staff Reply Comments p. 2, T. 29), and, although Mr. Ball did not object to the proposed clarification, he does note that the tracking and measuring of the renewable energy credits is the responsibility of the customer and the utilities have no involvement in that process. (T. 52).

Proposed Rule 2.04 (D) in no way suggests that the utility would have any involvement in the renewable energy credit created by a net metering customer and Staff is correct in asserting that the record does not reflect any need to change the proposed Rule; however, the utility and net metering customer are at liberty to contract for any arrangements which are mutually agreeable to the parties. This could include assistance in tracking and measuring the renewable energy credit or even a sale of the credit from the customer to the utility. Additional consideration of this issue may be necessary in the future, but for now it appears best to await the development of circumstances or particular requests by customers or other parties that warrant modification of the Rule.

The final issue concerns SWEPCO's suggestion that Section I of Appendix A, which contains the customer information to be provided in the Standard Interconnection Agreement for Net Metering Facilities, include an e-mail address for the customer. At the hearing Mr. Ball suggested that the utility's e-mail contact also be provided. These recommendations are uncontested and reasonable and will therefore be adopted.

Revisions to the Net Metering Rules proposed in Order No.4 which are designed to amend those proposed Rules to be consistent with this Order are attached hereto and incorporated herein. The attached Rules are hereby found to be supported by the record in this docket and in the public interest. Therefore, the Rules attached hereto are hereby adopted as the Net Metering Rules of the Arkansas Public Service Commission.

BY ORDER OF THE PRESIDING OFFICER PURSUANT TO DELEGATION.

This 27th day of November, 2007.

Presiding Officer

Secretary of the Commission

I hereby certify that the following order issued by the Arkansas Public Service Commission has been served on all parties of record this date by U.S. mail with postage prepaid, using the address of each party as indicated in the official docker file.

Acana & Wisson Secrectary of the Commission Date 11-21-07

ATTACHMENT TO ORDER 8 DOCKET NO. 06-105-U

ARKANSAS PUBLIC SERVICE COMMISSION



NET METERING RULES

Approved by Order #4 Docket No. 02-046-R (7-26-2002) Amended by Order #8 Docket No. 06-105-U (11-27-2007)

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DEFINITIONS

Annual billing cycle

The normal annual fiscal accounting period used by the utility.

Biomass facility

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

Commercial customer

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

Commission

The Arkansas Public Service Commission.

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 facility

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

Geothermal facility

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

Hydroelectric facility

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

Micro turbine facility

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

Net excess generation

The amount of electricity that a net metering customer has fed back to the electric utility that exceeds the amount of electricity used by that customer during the applicable 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 facility

A facility for the production of electrical energy that:

- (A) Uses solar, wind, hydroelectric, geothermal, or biomass resources to generate electricity including, but not limited to, fuel cells and micro turbines that generate electricity if the fuel source is entirely derived from renewable resources; and,
- (B) Has a generating capacity of not more than twenty-five (25) kilowatts for residential or three hundred (300) kilowatts for commercial or agricultural use; 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; or,
- (F) Is designated by the Commission as eligible for net metering service pursuant to Ark. Code Ann. § 23-18-604(B)(3).

Parallel operation

The operation of on-site generation by a customer while the customer is connected to the 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 customer

A customer served under a utility's standard rate schedules applicable to residential service.

Solar facility

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

Wind facility

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

SECTION 1. GENERAL PROVISIONS

Rule 1.01. Purpose

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

Rule 1.02. 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).

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- 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, that 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 that offers residential or commercial electrical service, or both, 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 utility either before or at the time the net metering facility is placed in operation in accordance with these Rules.

Rule 2.03. 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 2.03.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 2.04. Billing for Net Metering

- A. On a monthly basis, the net metering customer shall be billed the charges applicable under the currently effective standard rate schedule and any appropriate rider schedules. Under net metering, only the kilowatthour (kWh) units of a customer's bill are affected.
- B. 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.

- C. If the kWhs generated by the net metering facility and fed back to the electric utility exceeds 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 month to month until the close of an annual billing cycle, at which time any net excess generation credit shall expire.
- D. Any renewable energy credit created as a result of electricity supplied by a netmetering customer is the property of the net-metering customer that generated the renewable credit.

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

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

- A. A net metering customer shall execute a Standard Interconnection Agreement for Net Metering Facilities (Appendix A) prior to interconnection with the utility's facilities.
- B. A net metering facility shall be capable of operating in parallel and safely commencing the delivery of power into the utility system at a single point of interconnection. To prevent a net metering customer from back-feeding a deenergized 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) days prior to the date the customer intends to interconnect the net metering facilities to the utility's facilities. Part I, Standard Information, Sections 1 through 4 of the Standard Interconnection Agreement must be completed for the notification to be valid. The customer shall have all equipment necessary to complete the interconnection prior to such notification. If mailed, the date of notification shall be the third day following the mailing of the Standard Interconnection Agreement. The electric utility shall provide a copy of the Standard Interconnection Agreement to the customer upon request.
- D. Following notification by the customer as specified in Rule 3.01.C, the utility shall review the plans of the facility and provide the results of its review to the customer within 30 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 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 utility's system.

G. If the utility's existing facilities are not adequate to interconnect with the net metering facility, any changes will be performed in accordance with the Utility 's Extension of Facilities Tariff.

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

Modifications or changes made to a net metering facility shall be evaluated by the electric utility prior to being made. The net metering customer shall provide detailed information describing the modifications or changes to the electric utility in writing prior to making the modifications to the net metering facility. The utility shall review the proposed changes to the facility and provide the results of its evaluation to the customer within thirty (30) days of receipt of the customer's proposal. Any items that would prevent parallel operation due to violation of applicable safety standards and/or power generation limits shall be explained along with a description of the modifications necessary to remedy the violations.

SECTION 4. STANDARD INTERCONNECTION AGREEMENT AND STANDARD NET METERING TARIFF FOR NET METERING FACILITIES

Rule 4.01. Standard Interconnection Agreement 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), 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. 86-033-A 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.

STANDARD INTERCONNECTION AGREEMENT FOR NET METERING FACILITIES

I. STANDARD INFORMATION

Section 1. Customer Information			
Name: Mailing Address: City: Facility Location (if different from above): Daytime Phone: Utility Customer Account (from electric bill):			
Mailing Address:			
City: State: Zip Code:			
Facility Location (if different from above):			
Daytime Phone: Evening Phone:			
Utility Customer Account (from electric bill):			
Section 2. Generation Facility Information			
System Type: Solar Wind Hydro Geothermal Biomass Fuel Cell Micro turbine			
Generator Rating (kW): AC or DC (circle one) Describe Location of Accessible and Lockable Disconnect: Inverter Model:			
Describe Location of Accessible and Lockable Disconnect:			
Inverter Manufacturer: Inverter Model:			
Inverter Location: Inverter Power Rating:			
Section 3. Installation Information			
Attach a detailed electrical diagram of the net metering facility.			
Installed by: Qualifications/Credentials:			
Mailing Address:			
Mailing Address:			
Daytime Phone: Installation Date:			
Postion A. Cortification			
Section 4. Certification 1. The system has been installed in compliance with the local Building/Electrical			
Code of			
(City/County)			
Signed (Inspector): Date:			
Signed (Inspector): Date: Date: Date: Date:			
attached.)			
attaonoa.)			
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.			
opolation of the dystam.			
Signed (Owner): Date:			
Section 5. Utility Verification and Approval			
1. Facility Interconnection Approved: Date: Date: Verification Date:			

II. INTERCONNECTION AGREEMENT TERMS AND CONDITIONS

This Interconnection Agr	reement for Ne	t Metering Facilit	ies ("Agreen	nent") is made and
entered into this	day of		20	, by
("Utility") and	•			(specify whether
corporation or other), ea	ch hereinafter	sometimes referr	ed to individ	lually as "Party" or
collectively as the "Partie	es". In conside	ration of the mutu	ual covenant	ts set forth herein,
the Parties agree as follo	ows:			

Section 1. The Net Metering Facility

The Net Metering Facility meets the requirements of Ark. Code Ann. § 23-18-603(5) 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 Net Metering 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 kilowatthour 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 be valid. The customer shall have all equipment necessary to complete the interconnection prior to such notification. If mailed, the date of notification shall be the third day following the

mailing of the Standard Interconnection Agreement. The electric utility shall provide a copy of the Standard Interconnection Agreement to the customer upon request.

Following notification by the customer as specified in Rule 3.01.C, the utility shall review the plans of the facility and provide the results of its review to the customer within 30 calendar days. Any items that would prevent parallel operation due to violation of applicable safety standards and/or power generation limits shall be explained along with a description of the modifications necessary to remedy the violations.

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

Modifications or changes made to a net metering facility shall be evaluated by the Utility prior to being made. The Customer shall provide detailed information describing the modifications or changes to the Utility in writing prior to making the modifications to the net metering facility. The Utility shall review the proposed changes to the facility and provide the results of its evaluation to the Customer within thirty (30) calendar days of receipt of the Customer's proposal. Any items that would prevent parallel operation due to violation of applicable safety standards and/or power generation limits shall be explained along with a description of the modifications necessary to remedy the violations.

Section 5. Maintenance and Permits

The customer shall obtain any governmental authorizations and permits required for the construction and operation of the net metering facility and interconnection facilities. The Customer shall maintain the net metering facility and interconnection facilities in a safe and reliable manner and in conformance with all applicable laws and regulations.

Section 6. Access to Premises

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

Section 7. Indemnity and Liability

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

Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to or any liability to any person not a party to this Agreement. Neither the Utility, its officers, agents or employees shall be liable for any claims, demands, costs, losses, causes of action, or any other liability of any nature or kind, arising out of the engineering, design construction, ownership, maintenance or operation of, or making replacements, additions or betterment to, the Customer's facilities by the Customer or any other person or entity.

Section 8. Notices

All written notices shall be directed as follows:

Attention:

[Utility Agent or Representative]

[Utility Name and Address]

Attention:		
[Customer]		
Name:		
City:		
Customer notices to Utility shall refer to the Coset forth in Section 1 of this Agreement. Section 10. Term of Agreement The term of this Agreement shall be the same standard rate schedule. This Agreement shall	e as the term of the otherwise applicable I remain in effect until modified or	
terminated in accordance with its terms or ap	plicable regulations or laws.	
Section 11. Assignment This Agreement and all provisions hereof sharespective parties hereto, their personal represent Customer shall not assign this Agreement written consent of the Utility, and such unauth termination of this Agreement. IN WITNESS WHEREOF, the parties have care	esentatives, heirs, successors, and assigns. It or any part hereof without the prior It in a contract the prior may result in	
their duly authorized representatives.	adod the rigide home to be exceeded by	
Dated this day of Customer:	, 20 Utility:	
 		
By:	By:	
Title:	Title:	
Mailing Address: Mailing Address:		
· · · · · · · · · · · · · · · · · · ·	<u> </u>	

ARKANSAS PUBLIC SERVICE COMMISSION

Origina	1		Sheet No.		
Replaci	ing:		Sheet No.		
Name o	of Compa	any			
Kind of	Service	<u>Electric</u>	Class of Service: All		
Part III.	Rate S	chedule No. X	_		
Title: N	IET MET	TERING		PSC File Mark Only	
X.	X. NET METERING				
X.1.	AVAILABILITY				
	X. 1.1.	1.1. To any residential or commercial customer who takes service under standard rate schedule(s) (list schedules) who has installed a net metering facility and signed a Standard Interconnection Agreement for Net Metering Facilities with the Utility. Such facilities must be located on the customer's premise and intended primarily to offset some or all of the customer's energy usage at that location.			
		The provisions of	the customer's standard rate schedule are	modified as specified herein.	
	X. 1.2	•	not take service under this tariff and simulta other alternative source generation or co-g	-	
X.2.	MONT	THLY BILLING			
	X.2.1.	the currently effect	sis, the net metering customer shall be bille ctive standard rate schedule and any appro y the kilowatthour (kWh) units of a custome	priate rider schedules. Under	
	X.2.2.	metering custom metering custom	upplied by the electric utility exceeds the ele er and fed back to the electric utility during t er shall be billed for the net billable kWhs su the rates and charges under the Utility's sta	he billing period, the net upplied by the electric utility in	
	X.2.3.	during the billing	enerated by the net metering customer and period exceeds the electricity supplied by th any compensation from, the utility for such a billing period.	e electric utility, the customer	

THIS SPACE FOR PSC USE ONLY