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ARKANSAS PUBLIC SERVICE COMMISSION

FILED

IN THE MATTER OF AMENDMENTS TO THE)
ARKANSAS PUBLIC SERVICE COMMISSION'S)
RULES CONCERNING METER AGGREGATION)
AND COMBINED BILLING FOR NET-METERING)
CUSTOMERS)

DOCKET NO. 12-060-R
ORDER NO. 7

ORDER

On April 15, 2013, by Order No. 4 in this docket, the Arkansas Public Service Commission ("Commission") proposed amendments to its Net Metering Rules ("NMRs") to allow meter aggregation for net metering customers. The NMRs implement the Arkansas Renewable Energy Development Act of 2001 ("AREDA," codified at Ark. Code Ann. § 23-18-601, *et. seq.*). In Order No. 4, the Commission proposed for adoption the same amendments proposed by the General Staff ("Staff") of the Commission on September 10, 2012, (with the exception of language conforming the amendments to the later-adopted Act 1221 of 2013, concerning the carryover of net-metering credits). Staff's proposed amendments were initially the subject of Reply Comments by other parties on September 24, 2012. The Commission provided a schedule for, and the following parties submitted on or before May 31, 2013, comments on the proposed amendments: The Electric Cooperatives of Arkansas ("Electric Cooperatives" or "ECs"), Entergy Arkansas Inc. ("EAI"), Southwestern Electric Power Company ("SWEPCO"), the Arkansas Attorney General ("AG"), William Ball (Mr. Ball), the Arkansas Advanced Energy Association ("AAEA") and Staff.

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On May 31, 2013, the Arkansas Municipal Power Association (“AMPA”) submitted a *Petition for Late Intervention* (“Petition”), comments, and a request for exemption of Arkansas municipally owned electric utilities. On June 3, 2014, Arkansas Electric Energy Consumers, Inc. (“AEEC”) submitted a *Motion for Extension of Time to File Comments* (“Motion”) with attached comments. By Orders No. 5 and No. 6, respectively, the Commission denied AMPA’s Petition and granted AEEC’s Motion.

Positions of the Parties

Staff, having proposed the amendments, supports them without substantive alteration. Staff at 1. Staff, however, recommends changing the word “exceeds” to “exceed” in order to correct the grammar of subsection 2.04(C). Staff at 2. The AG similarly supports the amendments as proposed, and supports Staff’s recommended grammatical change. AG letter at 1.

The AAEA and Mr. Ball also support the proposed amendments. Ball at 1;AAEA at 1. AAEA states that the amendments provide a thoughtful, orderly process for the connection of either a single net-metering facility, or more than one net-metering facility. AAEA at 1. AAEA points out that the proposed rule would enable meter aggregation for the Arkansas public water authority which AAEA provided as an example in earlier comments. *Id.* AAEA specifically supports the proposed rule’s inclusion of provisions allowing a single customer to include meters that are in the same customer name, but different customer classes. *Id.*

While EAI and SWEPCO state that they support net metering under certain conditions, EAI, SWEPCO and Electric Cooperatives each stand by their earlier comments generally stating that rule amendments allowing meter aggregation are not in

the public interest and exceed the net-metering authority provided through AREDA. ECs at 1, 4 and 5; EAI at 2; SWEPCO at 1-2. Electric Cooperatives state that the proposed rule is contrary to the plain language of AREDA and disagree with several Commission findings that formed part of the basis of the Commission's determination in Order No. 4 that AREDA authorizes meter aggregation. ECs at 2-3 and 4. Electric Cooperatives believe that AREDA's provision authorizing the Commission to establish "appropriate terms and conditions" for net metering cannot properly be read to include meter aggregation. ECs at 2. Electric Cooperatives also disagree with the Commission's finding that meter aggregation does not constitute "retail wheeling," stating that the similarity of meter aggregation to retail wheeling is not a matter of accounting, but rather one of physics. ECs at 3.

AAEA and Mr. Ball renew their earlier comments to the effect that meter aggregation should not be limited to situations in which the customer owns the net-metering facility. AAEA at 1; Ball at 1. AAEA states that it does not intend to further pursue this issue within this proceeding, but Mr. Ball states that it is important to include generation facilities leased from, or otherwise owned by, persons other than the customer within the rules. Ball at 1. He asserts that 70% of all renewable energy systems nationwide are leased and most of the remainder are financed, thereby enabling customers to address the issue of up-front costs. *Id.* He notes that the current net-metering rules do not explicitly restrict net metering based on facility ownership, and that proposed revisions should not create such a restriction. *Id.* EAI and the Electric Cooperatives renew their opposition to Mr. Ball's recommendation, stating that its

adoption would violate AREDA's definition of a net-metering customer as an "owner of a net-metering facility." EAI at 7; ECs at 5, *citing* Ark. Code Ann. § 23-18-603(5).

EAI, the Electric Cooperatives, and SWEPCO reiterate earlier comments that net metering involves a subsidy of net-metering customers by non-net-metering customers, and AEEC agrees. EAI at 2; ECs at 2 and 4; SWEPCO at 1-2; AECC at 1 (referencing the utility estimates of cost shifting summarized in Order 4 at 23-24). Electric Cooperatives emphasize that the subsidy tends to flow from low-income to higher-income customers. ECs at 1-2. Electric Cooperatives and AEEC add that net metering involves subsidies between rate classes, violating general ratemaking principles of cost causation. ECs at 1; AEEC at 2.

EAI explains that meter aggregation will increase the cost-shifting inherent in net metering, which it states shifts the fixed costs of generation and the full cost of transmission, distribution, and customer service to non-net-metering customers. EAI at 2; *see also*, Electric Cooperatives at 5. EAI states that it must still plan to meet system peak because distributed generation may not be operating at the peak and net-metering generation is unlikely to significantly reduce EAI's future need for capacity. EAI at 3. According to EAI, the record of this proceeding lacks evidence that meter aggregation benefits will outweigh costs, so that it is unlikely that its benefits will exceed the costs inherent in net-metering subsidies. EAI at 3.

SWEPCO similarly states that net metering generation cannot be depended upon to serve load, and may require transformer and distribution system upgrades to accommodate the reverse delivery of excess power from oversized systems. SWEPCO at 5. SWEPCO suggests that, with meter aggregation, in addition to subsidizing fixed costs

for net-metering customers, non-net-metering customers may need to pay for unused excess net-metering generation. *Id.* SWEPCO provides the example that a customer with oversized generation at one location could offset all energy usage at other locations, thereby getting a minimum bill and not paying for the delivery of electricity to the other premises. SWEPCO at 4.

SWEPCO, EAI, and AEEC recommend that the Commission establish cost-allocation and ratemaking principles at this time to address subsidies related to meter aggregation, rather than waiting to address the issue on the undisputed basis that current net-metering rate impacts are negligible. SWEPCO at 3; EAI at 3; AECC at 2. EAI suggests the Commission require net metering customers to pay a per-kW fee, or in the alternative, require utilities to pay the customer an avoided-cost rate, in order to properly account for generation costs, T&D, and customer service costs.

SWEPCO adds that aggregating meters across rate classes is problematic for rate design, which reflects the costs of serving each unique class, and is inconsistent with the separation of residential and commercial rates reflected in the Commission's General Service Rules ("GSRs"). SWEPCO at 4, 6. As an example, SWEPCO notes that a net metering customer with one delinquent account and with five accounts in different rate classes might be required by the meter aggregation rules to apply net excess generation to the delinquent account, while the GSRs would not allow such cross-class crediting. *Id.* at 6. EAI at 4. AEEC also recommends that, if the Commission does not address net-metering cost-allocation at this time, in the alternative, the Commission should address it in future utility rate proceedings. AEEC at 3.

Non-utility witnesses reiterated the view that net metering subsidies may not exist, or (in the case of Mr. Ball) may flow from customers to the utility (*see, e.g., Id.* at 257-258). Mr. Schroedter, on behalf of AEEC, urged the Commission, not necessarily to determine the amount of any subsidies at this time, but rather to establish now that the Commission intends to review the issue on a utility-by utility basis within rate cases, or to establish a process for such review. *Id.* at 259. Ms. Brenske, however offered the view that utilities do not now know the magnitude of the subsidies and that, given the nature of net metering (which uses a single meter for consumption and generation), even in a rate case the specifics will be unknown unless a customer uses two separate meters. *Id.* at 256. She suggested that any such subsidy would be “lost in the noise” (*Id.* at 255, 264, and 274) and noted that rate cases are based on test year billing determinants and costs, and not on revenue fluctuations that might occur due to many causes—including net metering—between rate cases (*Id.* at 278). Ms. Brenske stated Staff’s position that AREDA establishes a public policy of promoting renewable generation, and to the extent there are costs associated with providing that public policy benefit, Staff believes that all customers ought to share them. *Id.* at 254-256. Mr. Ball added that AREDA explicitly provides an avenue to address any subsidies by providing that utilities may charge net-metering customers a fee upon a showing that the direct interconnection and administrative costs of net-metering outweigh its system, environmental, and public policy benefits. *Id.*

Electric Cooperatives and SWEPCO disagree with the view, reflected in Order No. 4, that AREDA’s 25kW and 300kW limits are on individual facilities and not on aggregate customer facilities. ECs at 2-3; SWEPCO at 3-4; *see* Order No. 4 at 38; *see*

also, EAI Initial at 8 and EAI Reply at 14. Electric Cooperatives state that the Commission's application of the limits on a per-facility basis renders these statutory limits meaningless (unless such increased limits are properly implemented under Ark. Code Ann. § 23-18-604(b)(4), which authorizes the Commission to increase net metering limits). ECs at 2-3. SWEPCO states that the proposal opens the door to oversizing of customer facilities, which might lead to unnecessary energy losses, to over-production of solar energy during the day, to customers fully offsetting their bills and to upward pressure on rates due to lost revenue. SWEPCO at 4. EAI also reiterates earlier comments that accounts should only be aggregated within a single rate class, and only among meters on non-separate premises. EAI at 4.

The Commission questioned hearing witnesses regarding whether the existing 300 kW limit on the size of non-residential net-metering facilities alleviates utility concerns that meter aggregation would unduly benefit larger electricity consumers with multiple premises. *Id.* at 269-270. Mr. Brice, on behalf of SWEPCO, suggested that a 300 kW net-metering facility might serve six locations for customers such as convenience stores on a general service tariff for customers with demand up to 50 kW. *Id.* at 270. Mr. Ball, however, indicated that, for a 300 kW solar facility, which produces about 36,000 kWh per month, this would be true only if the convenience stores each used about 6,000 kWh per month. *Id.* Mr. Kessinger indicated that the kW comparison is more appropriate. *Id.* at 272. Mr. Pettett, on behalf of EAI, indicated that convenience stores have a high load factor, so that a solar facility may not cover all of their energy needs. *Id.* Mr. Kessinger stated that the EC's favor applying the 300 kW limit to all meters on a premises in the aggregate, rather than to each meter. *Id.* at 273.

EAI urges that the rule provide that a customer cannot be credited with excess generation from more than one designated net-metering facility to a single additional account. EAI at 6. At the public hearing, AAEA indicated that it interpreted the rule to allow a customer to pool generation credits from all of a customer's designated net-metering facilities, and to apply that aggregate credit to the customer's list of credit-receiving accounts. AAEA indicated that this approach would be simpler than requiring the customer to assign specific accounts for crediting to each net-metering account, and more in keeping with AREDA's purposes. *Tr* at 24-25.

Ms. Amy Westmoreland responded on behalf of EAI in response to Commission questioning on this issue. She explained that each account is currently billed separately, with no connection established between accounts paid by a single customer. *Id.* at 237-238. According to Ms. Westmoreland, meter aggregation would make billing of one account dependent on the billing of another. *Id.* at 239. Also, bills for separate individual accounts for the same customer may fall under different monthly billing cycles. *Id.* at 239-240. Ms. Westmoreland stated that she does not think AAEA's interpretation of meter aggregation is easier for the utility than an approach under which the customer separately specifies aggregated accounts for each net metering facility. *Id.* at 241. Mr. Forrest Kessinger, on behalf of AECC, added that excess generation credits could be either pooled or specified for each net metering facility, but that the latter approach adds surety for the utility as to exactly how credits should be allocated. *Id.* at 243-244. Thomas Brice, on behalf of SWEPCO, agreed with these comments. *Id.* at 245. Ms. Westmoreland also indicated that crediting generation

across classes would complicate the attribution of sales to different classes for utility accounting, reporting and ratemaking purposes. *Id.* at 249.

Ms. Diana Brenske, on behalf of Staff, stated that it is important for the customer to tell the utility how to credit excess generation from particular net-metering facilities, starting with the net-metering account itself. *Id.* at 252. She favors having the customer designate particular meters associated with each net metering facility, rather than pooling generating accounts and non-generating accounts in the aggregate. *Id.* at 253.

Utilities indicate that administration of meter aggregation will be costly and will take time. EAI estimates that upgrading billing systems will cost \$400,000 and take 6-8 months. EAI at 5; *see also*, SWEPCO at 4 (commenting that its current manual billing of net metering customers would need to be converted to automation); *see also*, Electric Cooperatives at 2 (estimating the cost of additional computer billing software at hundreds of thousands of dollars, and commenting that ongoing administrative costs will constitute a very material subsidy).

EAI requests that, if the Commission approves meter aggregation rules, it should amend them to allow 120 days for implementation; SWEPCO requests 180 days. EAI at 5; SWEPCO at 5. EAI also requests that the proposed rule be amended to require 60 days rather than 30 days' notice to the utility of a customer's intention to aggregate meters and to require that such notice be in writing. EAI at 5.

Findings and Rulings

The Commission adopts the NMR rule amendments reflected in Attachment 1, as proposed by Order No. 4 (with the addition of language conforming the amendments to Act 1221 of 2013, concerning the carryover of net-metering credits) and adopts the

reasoning outlined in that order in support of the amendments, on the basis of the extensive comments leading up to that proposal, as clarified below.¹ These amendments expand net metering by requiring jurisdictional electric utilities to perform an administrative function whereby net metering credits associated with a net-metering facility owned by the customer are allocated to the same customer's other accounts, in a sequence determined through reasonable prior notice to the utility by the customer.

As recommended by utilities, and in conformity with AREDA, customers must own the facility or facilities, and all aggregated accounts served by a particular utility must be within the utility's territory. As recommended by utilities, the AG and Staff and as determined in Order No. 4, combined billing for the purpose of net-metering aggregation is not required or allowed.

As recommended by non-utility parties, aggregated meters may be located on separate premises in order to most advantageously locate renewable generation. As supported in earlier comments by Staff, the AG and Mr. Ball, meters may be aggregated among accounts that are in different rate classes, provided that they are in the name of the same customer.

Order No. 4 provided that AREDA's facility peak limits of 25 kW for residential use and 300 kW for any other use (*see*, Ark. Code Ann. § 23-18-603(6)(B)) "are limitations on individual facilities, not on aggregate customer investment, in, ownership of, or interconnection of multiple renewable energy facilities." Order No. 4 at 38. This provision in Order No. 4 responded to EAI's recommendation that the Commission should establish aggregate limits of 25 kW for residential use or 300 kW for other uses

¹ *See*, Order No. 4, pages 36-39.

on the net-metering facilities that a residential or non-residential customer might own on multiple separate premises. Order No. 4 thus did not adopt EAI's recommendation to impose aggregate net-metering facility limits on total customer generation.

Electric Cooperatives observe that Order No. 4 provides for no specific limit on the amount of generation that might be sited at a single premises, which might have multiple accounts. The Commission clarifies that it interprets AREDA to establish such limits, based on the residential, non-residential, or residential and non-residential usage at each premises. By explicitly providing net-metering facility peak limits of 25 kW on residential usage and 300 kW on all other uses, the General Assembly clearly intended for the size of individual net-metering facilities to be limited. While meter aggregation is a billing and accounting function that may reasonably be applied to the separate premises that contribute to a customer's total requirements for electricity, the statutory size limit on individual facilities is a physical limitation that may and should reasonably be applied within a defined location in order to retain its intended meaning. The Commission therefore interprets AREDA to require that, within each non-separate premises (as already defined in the Commission's General Service Rule ("GSR") 5.20 A (2)(b)), net-metering facilities designated to an account or accounts for residential use may not exceed the peak limitation for residential usage, and net-metering facilities designated to an account or accounts for other uses may not exceed the peak limitation on other uses.²

² GSR 5.20 A (2)(b) defines "Non-Separate Premises" as those which "(1) are operated as one location by an individual customer; (2) are physically integrated an essentially part of each other; (3) provide a complete service or produce a complete product; (4) are similar in terms of the nature and purpose of energy use; and (5) are in the same service territory. Tracts of land separate by public streets, public roads, or public alleys are considered contiguous."

Based on the testimony of utility billing experts, and on the opinion of Staff, the Commission maintains the requirement in the amendments for the customer to designate which accounts should receive credits from each net-metering facility. Thus, in order to reduce potential complexity, excess generation credits from more than one designated net-metering facility shall not be credited to more than one additional account.

Given the nascent state of distributed renewable generation in Arkansas at this time, the common agreement that its current cost impacts are negligible, the paucity of the record regarding the precise potential future economic impacts of net metering, and the statutory directive to promote the growth of net metering and the public policy benefits thereof, the Commission remains convinced that it is unnecessary and premature at this time to further delay the promotion of net metering in an attempt to translate the exact economic impact of potential expanded net metering into new ratemaking mechanisms. Further, any party is at liberty to raise the issue of subsidies within a rate case or in other proceedings, and the statute provides sufficient guidance for the consideration of that issue.

Jurisdictional electric utilities shall file in this docket any tariff amendments necessary to comply with the amended rule on or before noon of September 20, 2013. Staff shall testify, and other parties may testify, regarding the compliance of those tariffs with the rules on or before noon of October 18, 2013. Customers may use the tariffs implementing the rule starting on the first day after the Commission approves those tariffs; provided that customers with net-metering facilities in existence on the date of

energy use; and (5) are in the same service territory. Tracts of land separate by public streets, public roads, or public alleys are considered contiguous.”

the issuance of this Order No. 6 may provide the required advance notice to the utility at any time after the date of the issuance of this order.

Based upon initial comments in this Docket that that Empire has no net-metering customers; that OG&E had a total of twelve net-metering customers, only three of which had excess kWh at the end of 2011; that SWEPCO had a total of nineteen net-metering customers, only one of which had excess kWh at the end of the year; that EAI had a total of eighty-two total net-metering customers; and that the seventeen distribution electric cooperatives had a total of approximately 150 total net-metering customers; the Commission finds that a very small number of customers currently are in a position where they are likely to aggregate meters in the near future. OG&E Initial at 2; Empire Initial at 3; SWEPCO Initial at 2; EAI at ; ECs at 5. Given the very small number of net-metering customers for whom, at this time, annual generation exceeds consumption, this schedule will allow utilities a reasonable period of time to prepare to process requests from potential meter aggregation customers.

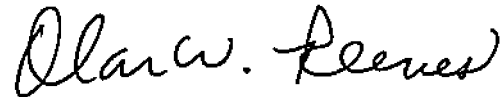
The Commission therefore orders that

- (1) The attached rule amendments are adopted;
- (2) Jurisdictional electric utilities shall file in this docket any tariff amendments necessary to comply with the amended rule on or before noon of September 20, 2013; and
- (3) Staff shall testify, and other parties may testify, regarding the compliance of those tariffs with the rules on or before noon of October 18, 2013.

BY ORDER OF THE COMMISSION,

This 3rd day of September, 2013.



Colette D. Honorable, Chairman



Olan W. Reeves, Commissioner

I hereby certify that this order, issued by the
Arkansas Public Service Commission,
has been served on all parties of record on
this date by the following method:

U.S. mail with postage prepaid using the
mailing address of each party as
indicated in the official docket file, or
 Electronic mail using the email address
of each party as indicated in the official
docket file.



Elana C. Wills, Commissioner



Kristi Rhude, Secretary of the Commission

Attachment 1

Amendments to the Net Metering Rules

DEFINITIONS

Net-metering customer

An owner of a net-metering facility.

Rule 2.04. Billing for Net Metering

- C. 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 ~~month-to-month until the close of an annual billing cycle, at which time any net excess generation credit shall expire.~~

(1) 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).

(2) After application of subdivision (C)(1) and upon request of the net-metering customer pursuant to subsection (D), 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.

(3) Net excess generation shall be credited as described in subdivisions (C)(1) and (C)(2) during subsequent billing 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.

(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.

- D. Upon request from a net-metering customer an electric utility must apply net excess generation to the net-metering customer's additional meters provided that:

(1) The net-metering customer must give at least 30 days' notice to the utility.

(2) The additional 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 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.

(4) The net-metering customer's identified additional meters do not have to be used for the same class of service.

E. Any renewable energy credit created as a result of electricity supplied by a net-metering customer is the property of the net-metering customer that generated the renewable credit.