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BEFORE THE ARIZONA CORPORATION COMMISSION

2008 MAY 20 A 8:43

COMMISSIONERS

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- WILLIAM A. MUNDELL
- JEFF HATCH-MILLER
- KRISTIN K. MAYES
- GARY PIERCE

Arizona Corporation Commission  
DOCKETED  
MAY 20 2008

DOCKETED BY [Signature]

IN THE MATTER OF THE PROPOSED ) DOCKET NO. RE-00000A-07-0608  
 RULEMAKING REGARDING NET METERING )  
 )  
 ) **ELECTRIC COOPERATIVES'**  
 ) **COMMENTS**  
 )  
 )

The following comments on the Arizona Corporation Commission's Notice of Proposed Rulemaking Regarding Net Metering ("Net Metering Rules") are being submitted by Duncan Valley Electric Cooperative, Inc. ("Duncan"), Graham County Electric Cooperative, Inc. ("Graham"), Mohave Electric Cooperative, Inc. ("Mohave"), Navopache Electric Cooperative, Inc. ("Navopache"), Trico Electric Cooperative, Inc. ("Trico") and Sulphur Springs Valley Electric Cooperative, Inc. ("Sulphur") (collectively the "Electric Cooperatives").

**I. INTRODUCTION**

Net metering creates a subsidy for customers who receive net metering. The cooperative and its members have incurred the cost of a transmission and distribution system to serve all member/customers. A customer that is net metered avoids paying the full cost of those facilities and yet receives a full retail rate for power generated by the customer. The other members will eventually be forced to pay higher rates to subsidize these costs that are not being paid by net

1 metered customers. In addition, as a result of the high cost of Distributed Generation (“DG”)  
2 systems, affluent member/customers will be installing DG at the expense of less affluent  
3 member/customers.

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5 For example, currently the Electric Cooperatives have monthly customer charges ranging  
6 from approximately \$7.50 to \$20.00. These monthly customer charges do not completely recover the  
7 fixed cost associated with the distribution and transmission plant dedicated to serving this customer.  
8 The Electric Cooperatives’ current rate design collects a portion of the fixed costs associated with  
9 providing distribution and transmission service from the per kWh charge that on average is  
10 approximately \$0.10 per kWh and will be avoided by net metered customers when their DG systems  
11 produce energy. By avoiding the Electric Cooperatives’ kWh charge, a net metered customer is not  
12 paying their share of the fixed costs associated with the transmission and distribution system that has  
13 been built to provide electric service to a net metered customer.  
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15 The Electric Cooperatives have comments regarding the Net Metering Rules in the following  
16 areas, as more specifically described herein:

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18 A. The Electric Cooperatives have concerns about the language in R14-2-2302 M.  
19 regarding a generating capacity of less than or equal to 125 percent of the Net Metering Customers  
20 on-site total connected load and the problems associated defining and quantifying “total connected  
21 load” and with sizing of DG systems, payment for net energy provide to the utility, etc. that this  
22 language may cause.

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24 B. Concerning R14-2-2302 D., the Electric Cooperatives are concerned the definition of  
25 Combined Heat and Power (CHP) in the revised Draft Rules will provide incentives for distributed  
26 generation from resources that are not qualified as renewable energy sources.  
27

1 C Concerning R14-2-2306.E, the Electric Cooperatives are concerned about the time  
2 and expense associated with Net Metering customers who take service under Time of Use tariffs.

3 **R-14-2-2302 Definitions – D. Combined Heat and Power**

4 The Electric Cooperatives are concerned that the definition of Combined Heat and Power  
5 (CHP) in the revised Draft Rules will provide incentives for distributed generation from resources  
6 that are not qualified as renewable energy sources. These grid-connected CHP generators could  
7 prevent renewable energy resources from interconnection due to the necessary limitation on total  
8 distributed generation interconnection that is driven by reliability concerns. This effect would  
9 interfere with a utility's ability to meet its Renewable Energy Standard and Tariff (REST) annual  
10 distributed renewable energy requirements. The Electric Cooperatives propose language consistent  
11 with the intent of the REST Rules to restrict net metered CHP to sources using renewable resources.  
12 Also, given that the benefits of CHP in reducing societal consumption of fuels is derived from its  
13 ability to increase the efficiency of fuel utilization, the Electric Cooperatives propose that the  
14 PURPA efficiency and useful heat definitions of a Qualified Facility be applied to qualification for  
15 net metering service.

16 **R-14-2-2302 Definitions - M. Net Metering Facility: Generating Capacity Less Than or Equal**  
17 **to 125% of Customer's Total Connected Load**

18 The Revised Net Metering Rule R-14-2-2302 M.4 state that a customer with generating  
19 capacity less than or equal to the 125% of the customer's total connected load is eligible to receive  
20 net metering. Most of the Electric Cooperatives' customers do not have demand meters.  
21 Consequently, under the Revised Net Metering Rules, "total connected load" would need to be  
22 estimated. Estimating "total connected load" can be an involved and difficult process with many  
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1 variables. For these reasons, the Electric Cooperatives recommend that the language “total  
2 connected load be removed from this section and the language “peak demand” be inserted.

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4 The Electric Cooperatives have also previously stated in their comments that net metering  
5 systems should be sized to meet the customer’s load and that customers should not be incented to  
6 over-size their distributed generation (“DG”) system such that on a regular, net basis they are able to  
7 provide electricity to the utility. A net metering rule that would allow net metered customers to  
8 oversize their systems by up to 25% appears to incent customers to install more DG equipment so  
9 that net metered customers could regularly sell energy to a utility. In addition, the Electric  
10 Cooperatives are already required to maintain reserve margins for all customers in order  
11 to maintain system reliability. To require utilities and their consumers to buy power from net  
12 metered customers on a regular basis that is due to the additional 25% is unfair to non-net metered  
13 customers and duplicative.  
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15 The Electric Cooperatives also have concerns about the potential need to upgrade their  
16 distribution systems to meet the net metered customer’s 125 percent of total connected load. Since  
17 most electric utilities including the Electric Cooperatives design/size their distribution systems based  
18 on 100 percent of the customers total connected load, during low load periods a net metered  
19 customer’s generation output could produce flow back into the distribution system at a level greater  
20 than 100 percent of its total connected load. To remain consistent with current design practice for  
21 the distribution system, it is important to limit the customer’s generation to no more than 100  
22 percent. This would allow sizing of the local distribution system in a consistent manner regardless of  
23 whether or not there is currently, or may be in the future, customers with generating facilities. This  
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1 will also eliminate the need for additional distribution plant investment to meet the 125 percent of  
2 the total connected load.

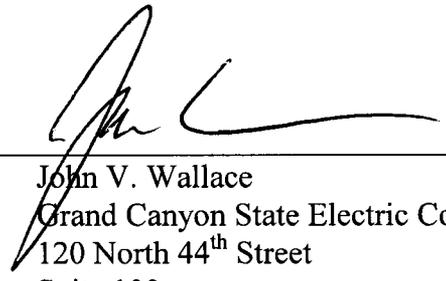
3 Finally, as noted in the Net Metering Staff Report dated December 17, 2007, many types of  
4 distributed generation are not dispatchable and there will be a need for total distributed generation  
5 limits to maintain system reliability. The limit can be reached through a small number of large  
6 systems or a large number of small systems. The Staff Report accompanying the original proposed  
7 Draft Rules, notes on page 2 that customers will use Net Metering for "... essentially storing excess  
8 power on the grid...". This is a new role for electric utilities, one for which their assets are generally  
9 not appropriately suited. Eventually, as self-generation capacity reaches some future threshold yet to  
10 be determined, utilities will need to install energy storage assets, at some cost, to manage the energy  
11 storage demands imposed by customers. For the reasons stated above and to more closely align  
12 distribution system sizing with distributed generation sizing, the Electric Cooperatives would request  
13 that the percentage stated in Net Metering Rule R-14-2-2302 M.4 be changed from 125% to 100%.

14 **Section R14-2-2306.E - Billing for Net Metering**

15 While Time of Use (TOU) Net Metering can technically be implemented, the cost to the  
16 customer could be very expensive using existing available technology. As smart metering systems  
17 are implemented service territory wide, the cost of TOU Net Metering equipment and monthly  
18 reading may decline. No language changes are suggested at this time, but the proposed Net Metering  
19 tariffs will reflect technology for TOU Net Metering at the time the tariffs are presented. In addition,  
20 the implementation of TOU Net Metering in customer billing systems, while again are technically  
21 possible, will involve significant expense as those information processing systems will need to be  
22 programmed to support a billing concept they were not designed to calculate. The question of excess  
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1 credit carryover of TOU summer credits into winter and vice versa with dissimilar values will need  
2 to be addressed in the Net Metering tariffs. The Electric Cooperative's do not support participation  
3 in a TOU program for Net Metering customers, due to the concerns above and that the costs for such  
4 customers would not properly be recovered in the TOU rates. Should the Commission require  
5 offering of a TOU program to Net Metering customers, Net Metering customer's will need a separate  
6 TOU rate class to appropriately reflect the Net Metering customer's costs and service.  
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11 RESPECTFULLY SUBMITTED this 20th day of May, 2008.  
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13  
14 By:   
15 John V. Wallace  
16 Grand Canyon State Electric Cooperative Assn.  
17 120 North 44<sup>th</sup> Street  
18 Suite 100  
19 Phoenix, Arizona 85034

20 Original and thirteen copies of the foregoing  
21 filed this 20th day of May, 2008, with:

22 Docket Control  
23 Arizona Corporation Commission  
24 1200 West Washington Street  
25 Phoenix, Arizona 85007  
26  
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TITLE 14. PUBLIC SERVICE CORPORATIONS; CORPORATIONS AND ASSOCIATIONS;  
SECURITIES REGULATION

CHAPTER 2. CORPORATION COMMISSION – FIXED UTILITIES

ARTICLE 23. NET METERING

- D. "Combined Heat and Power" or "CHP" (also known as cogeneration) means a system that is fueled by Renewable Resources and generates electricity and useful thermal energy in a single, integrated system. Qualifying CHP systems shall meet all PURPA efficiency and effective utilization of heat production standards for a Qualifying Facility (QF) certification.
- M. "Net Metering Facility" means a facility for the production of electricity that:
1. Is operated by or on behalf of a Net Metering Customer and is located on the Net Metering Customer's premises.
  2. Is intended primarily to provide part or all of the Net Metering Customer's requirements for electricity;
  3. Uses Renewable Resources, a Fuel Cell, or CHP to generate electricity;
  4. Has a generating capacity less than or equal to 100~~125~~% of the Net Metering Customer's peak demand~~total connected load~~, or in the absence of customer load data, a capacity less than or equal to the Customer's electric service drop capacity; and
  5. Is interconnected with and can operate in parallel and in phase with an Electric Utility's existing distribution system.