



Grand Canyon State Electric Cooperative Association, Inc.

Your Touchstone Energy Cooperatives 



0000095272

ORIGINAL

April 9, 2009

Docket Control
Arizona Corporation Commission
1200 W. Washington
Phoenix, AZ 85007

Arizona Corporation Commission
DOCKETED

APR - 9 2009

Re: *Electric Cooperatives' Comments on Energy Efficiency*
(Docket Nos. E-00000J-08-0314 & G-00000C-08-0314)

DOCKETED BY	
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Dear Sir/Madam:

On April 1, 2009, the Arizona Corporation Commission Staff filed a letter in these dockets requesting that interested parties file written comments on ten questions on Energy Efficiency ("EE").

The following comments on Staff's questions are provided by Duncan Valley Electric Cooperative, Inc. ("Duncan"); Graham County Electric Cooperative, Inc. ("Graham"); Graham County Utilities ("Graham Utilities"); Mohave Electric Cooperative, Inc. ("Mohave"); Navopache Electric Cooperative, Inc. ("Navopache"); Trico Electric Cooperative, Inc. ("Trico"); and Sulphur Springs Valley Electric Cooperative, Inc. ("Sulphur") (collectively, "Cooperatives").

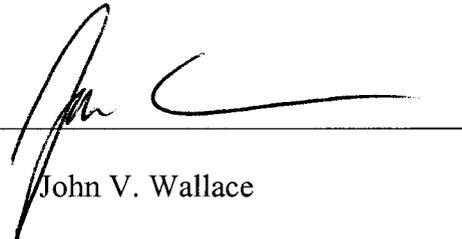
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Sincerely,

GRAND CANYON STATE ELECTRIC
COOPERATIVE ASSOCIATION

By

A handwritten signature in black ink, appearing to read "John V. Wallace", is written over a horizontal line. The signature is stylized and cursive.

Original and fifteen (15) copies of
Electric Cooperative's Comments
filed this 9th day of April, 2009
with:

DOCKET CONTROL
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

ELECTRIC COOPERATIVE COMMENTS
ON ENERGY EFFICIENCY FOR GAS AND ELECTRIC UTILITIES
(DOCKET NOS. E-00000J-08-0314 & G-00000C-08-0314)

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Introduction

On April 1, 2009, the Arizona Corporation Commission Staff filed a letter in these dockets requesting that interested parties file written comments on ten questions on Energy Efficiency (“EE”).

The following comments on Staff’s questions are provided by Duncan Valley Electric Cooperative, Inc. (“Duncan”); Graham County Electric Cooperative, Inc. (“Graham”); Graham County Utilities (“Graham Utilities”); Mohave Electric Cooperative, Inc. (“Mohave”); Navopache Electric Cooperative, Inc. (“Navopache”); Trico Electric Cooperative, Inc. (“Trico”); and Sulphur Springs Valley Electric Cooperative, Inc. (“Sulphur”) (collectively, “Cooperatives”).

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1. What should the annual percentage be and on what schedule?

Cooperatives' Response: While the Cooperatives are committed to increasing the amount and scope of their EE programs, they believe it is not realistic to achieve a 1.5 percent annual savings in kWh. Cooperatives cannot force members to reduce their energy usage or stop them from increasing their load for whatever reason the member chooses to do so. Arizona cooperatives already have lower average residential sales than cooperatives across the country.

As the case with the REST Rules, one set of EE goals is not appropriate for all utilities. As demonstrated in the table below, each cooperative with an EE/DSM program is currently only meeting a fraction of the 1.5 percent annual savings in kWh using EE programs, despite the fact that Sulphur, for instance, has had an aggressive EE Home program and Heat Pump rebate in place for over 17 years.

Mohave 1.5% = 10,362,904 kWh - Estimated Savings = 5,036,400 kWh

Navopache 1.5% = 6,515,991 kWh - Estimated Savings = 1,542,400 kWh

Sulphur 1.5% = 12,286,078 kWh - Estimated Savings = 1,000,000 kWh *

Trico 1.5% = 9,279,740 kWh - Estimated Savings = 1,291,244 kWh

*900,000 kWh (Estimated EE Savings) plus 100,000 kWh (Estimated Load Control)
The goal of the load control program is to limit system peak not to lower kWh sales.

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The Cooperatives believe that any annual percentage goal should be based on the current amount of EE savings that is achievable by each individual cooperative and not on the annual sales in kWh. The Cooperatives believe that each cooperative needs to have a goal that reflects its specific service territory and characteristics including customer composition, age of commercial and housing stock, economic wealth, etc. Given that many of the cooperatives customer and kWh sales growth rates are well above the national utility average, it could prove impossible to reduce kWh sales on an annual basis. Also, many Cooperative service territories are mostly residential customers thereby making large kWh sales reductions more costly on a per kWh basis. The Cooperatives believe that any goal for EE savings should not be based on a percentage of annual sales in kWh. Annual kWh sales vary significantly with changes in business conditions, customer decisions to contract or expand operations, weather variability, and pattern of new customer growth.

Numerous factors can drastically affect a cooperative's annual sales in kWh which makes a goal based a percentage of sales unreliable. For example, a cooperative's EE programs and measures may effectively be neutralized or exceeded by the addition of a large load such as a Wal-Mart, Sam's Club, Home Depot or 6% growth rate in its base customer load if annual kWh sales reduction is used as the goal. This can result even if a cooperative works with large new customers to

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incorporate the most cost effective EE measure. Likewise, for irrigation a hot dry year or individual customer decisions to switch from natural gas to electric may have the same effect of increasing a cooperative's kWh sales from one year to the next and thereby canceling out any EE effort regardless of a cooperatives efforts to implement EE program and measures. Several factors can drastically affect a cooperative's annual sales in kWh which makes a goal based a percentage of sales unreliable.

In contrast, goals based on the total number of EE projects or total kWh savings per EE project implemented would be a reliable measure and thereby be a more achievable goal. The Cooperatives have determined that one of the EE programs that could have the largest return for the dollars spent is making businesses, rental properties, older homes, steel buildings and mobile homes more energy efficient. This same program would also have significant hurdles in initial cost to make EE improvements (in particular the older mobile homes and rental properties).

As a part of an annual EE implementation plan filed with the ACC, each cooperative would specify the number of the different types of building (residential, commercial, etc.) that would receive an energy audit, the average estimated cost associated with each EE measure (i.e. lighting upgrades for businesses, insulation and weather stripping for residential), the estimated savings associated with each EE measure,

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total annual estimated savings from all EE projects and estimated surcharge to collect EE program costs. Similar to the REST Plans, an annual report would be made to the Commission that would demonstrate the Cooperatives' EE achievements compared to the goals set forth in the EE plan. In the early years of their implementation plans, the Cooperatives would propose to concentrate the majority of their new efforts in the area of making older buildings more EE. As with any EE program, there are limits on the number of older buildings in each cooperative's service territory as well as the number of customers who will choose to conduct an energy audit and follow through with EE measures. In later years the Cooperatives would propose to add new EE demonstration programs designed to establish the cost effectiveness of additional EE programs and measures..

Other issues include what current/future EE programs would qualify in the calculation of EE savings and how will the EE savings be measured. For example, at the end of 2008, Sulphur had 1,885 homes in the Good Cents EE program. On average these homes use 11,000 kWh less per year than a standard home. Including this annual savings would bring the annual Sulphur EE savings to 20,735,000 kWh saved for 2008 (1,885 X 11,000). The 1 million of annual savings in kWh Sulphur included in the table above only includes the 47 homes certified in 2008. Sulphur also estimates that it has paid 1,635 Heat Pump rebates in the same period of time.

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The estimated annual kWh reduction is 3,100 kWh per heat pump. This would add another 5,068,500 kWh reduction, for a total of 25,803,500 kWh saved per year.

2. What are the estimated annual costs of achieving this goal?

Cooperatives' Response: The Cooperatives estimate that the cost to make a residential building more energy efficient could range from \$3,000 to \$5,000 per building depending on the EE measures employed and the current condition of the home. The costs of making business/commercial buildings and schools more energy efficient will vary significantly based on the size, type of building and EE measures employed. This \$3,000 to \$5,000 does not include the costs associated with administering the EE program, commercial buildings or margin and fixed cost recovery.

EE programs that are adopted by customers will result in less revenues and margins being collected from those customers which may negatively impact the financial condition of the distribution cooperative and in some cases the customers supplier of fossil fuel (if fossil fuel is used for heating). As discussed in more detail below in response to Question No. 9, there are also cost recovery issues associated with fixed costs and margins.

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3. What is the estimated annual savings , in dollars, of achieving this goal?

Cooperatives' Response: The estimated savings associated with each residential house that utilizes more EE is approximately \$200 to \$400 per year depending on size and type of residential building and EE measures employed.

4. How and to what extent can energy efficiency help to relieve system constraints?

Cooperatives' Response: Assuming that there are existing constraints on a cooperative's distribution system and that adequate EE measures can be employed in the area of such restraints, EE measures could postpone the need for capacity upgrades of constrained equipment. Consistent reduction in peak demand will lower the requirement to increase capacity and slow the construction and borrowing process. Avoiding construction and borrowing will also help keep rates stabilized in the long run.

5. What adequate level of funding?

Cooperatives' Response: To increase participation in EE programs each cooperative will need to advertise its EE programs and conduct more customer education regarding the availability and benefits of these programs. In addition to customer education, the Cooperatives believe that they will need to lower the cost of EE programs through incentives to increase customer participation. In the early

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years, the Cooperatives would propose to the majority of the cost of EE programs (i.e. \$3,000 to \$5,000 cost to make older residential buildings more efficient) through the surcharge. Assuming at some later date, as the customer demands for EE measures increase beyond the funds available, the EE plans could be re-evaluated.

In addition to actual EE programs, a critical component to reducing consumer consumption is accurate price signals. Time of use rates, critical peak pricing, inclining block rates and interruptible rate structures are all examples of creative price structures that would help incent customers to reduce their energy usage during high priced peak hours and reduce the need for increased construction for peaking power units. The Cooperatives are willing to explore different rate structures that would reduce the demand growth rate in their service territories and delay construction projects.

Cooperatives will also need to hire employees or contractors to conduct residential and commercial EE audits. Cooperatives will need employees to administer and track the success of their EE programs. All of these EE costs will be significant and will need to be recovered from customers in a timely fashion in the form of a surcharge or other mechanism.

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6. What are the best methods for cost recovery?

Cooperatives' Response: Concerning the direct EE program costs such as energy audits, incentives, administration, customer education, additional EE employees, etc. these costs are best collected through a separate EE surcharge similar to the REST tariff. Cooperatives that do not have Commission approved DSM/EE adjustors would need to be able to apply for such without the time and expense associated with filing a full rate case application.

In addition to cost recovery mechanisms, proper rate designs could minimize the decrease in revenues if Cooperatives are allowed to use critical peak pricing and time of use rates for more of their customers. These rates are designed to reduce peak consumption yet recover a Cooperatives costs.

7. What would be the bill impacts of achieving this goal?

Cooperatives' Response: The cooperatives would propose to estimate this information as a part of filing their EE plan discussed above. In the beginning years, the Cooperatives would propose that the EE surcharge range from \$2 to \$5 per customer per month.

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Concerning the bill impacts of decoupling, the Cooperatives' have estimated that their fixed costs associated with their distribution system are approximately \$28 to \$42 per month, per customer. A cooperative's current monthly charge which ranges from approximately \$7 to \$20 could be increased to recover more of its total fixed costs with a corresponding decrease to the kWh rate through the use of revenue decoupling. The Cooperatives need to explore which decoupling mechanisms and rate structures would work best to recover costs, incent more efficient usage of energy and keep the Cooperative whole financially. In addition, because the Cooperatives are not vertically integrated as with most IOU's, the costs and benefits often reside with either the distribution or the generation cooperative and are not always shared equally.

With a higher fixed charge revenue decoupling mechanism, the largest bill impacts are to low users who are not necessarily low income customers. However, average customers will pay approximately the same bill amount under decoupling as they do currently if they use the same amount of energy. Again, there are many other rate structures that would incent the customer to use less energy during peak times and keep the Cooperative whole financially such as time of use and critical peak pricing. The Commission must be willing to approve proper price signals in order to achieve the desired result.

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8. What waivers may be necessary for unexpected circumstances?

Cooperatives' Response: If a 1.5% annual kWh savings goal for all utilities is adopted, the Cooperatives would most likely seek a waiver to this requirement for the reasons stated above and file a request for an alternative proposal as described in response to Question No. 1. As mentioned above, customer class characteristics such as a system with mostly residential load, significant variations in weather and changes in customer growth rates that occur year to year may result in large fluctuations in annual kWh sales and may also result in a filing for a waiver.

9. What are the revenue concerns, quantified, for the utilities?

Cooperatives' Response: Revenue and margin erosion is a true concern and will occur to some degree. Cooperatives use margins to pay loan payments, invest in plant improvements, etc. Unlike the integrated IOU utilities, the benefits from EE savings in the form of lower energy costs and delayed capacity additions must be shared by the distribution cooperative's customers and generation and transmission cooperative or power supplier which are all separate entities.

Only a small portion of the fixed, distribution-related expenses are currently recovered from customers through the monthly fixed charge with a majority being collected through the per kWh charge. Consequently, for each kWh that a customer

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saves through EE, the distribution cooperative loses a portion of its margin and fixed cost recovery. In addition to the costs of EE programs discussed above, each cooperative would need to determine the amount of fixed cost and margin recovery that is necessary to remain whole financially. Decoupling mechanism have been implemented in the past with varying success and the Cooperatives would like to explore through the Commission workshops which mechanism is best suited for a Cooperative model. Other options include peak pricing signals through time of use rates.

10. What are the methods that should be used to address the revenue concerns of the utilities?

***Cooperatives' Response:** Concerning the recovery of the margins and the fixed costs, the two methods of recovering margins and fixed costs would be through adding these amounts to the EE surcharge or through revenue decoupling. If recovery of these costs is through the EE surcharge, as a part of determining its EE surcharge amount, each cooperative would make a calculation of its fixed costs and margins divided by its total kWh sold. The Cooperatives would then be able to recover this amount per kWh saved from EE programs in addition to the EE program costs through the EE surcharge.*

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For reasons of revenue and financial stability and because the majority of a distribution cooperative's costs are fixed in nature, the Cooperatives believe that the best approach to dealing with revenue and margin losses is through the use of some sort of revenue decoupling mechanism. Another important factor besides decoupling mechanisms that at best disturb the natural economics of pricing signals, is to continue to explore better rate structures that incent customers to use less energy during peak cost periods. Time of use rates, critical peak pricing tariffs and interruptible rate structures are all efficient methods to promote EE. These pricing structures usually keep the utility whole in terms of cost recovery, but also incent the customer to use less energy at the correct time. The Cooperatives encourage the Commission to continue to explore creative price signals to reduce peak consumption.

The Cooperatives are not aware of any studies that have been conducted on EE performance incentives for Cooperatives but are aware that studies that have been conducted in Colorado and other states involve IOUs which operate under a different business model. IOUs operate under an incentive structure designed to increase profits/margins which ultimately flows through to share holders as dividends or higher share prices. Instead of a profit incentive, the cooperative business model is based on accumulation of margins which if not retained for improving or expanding

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electric service for its customer members is returned to its customers through patronage dividends/refunds on the basis of the amount of business conducted with the cooperative.