



Grand Canyon State Electric Cooperative Association, Inc.

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ORIGINAL

September 16, 2009

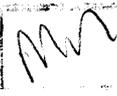
Docket Control
Arizona Corporation Commission
1200 W. Washington
Phoenix, AZ 85007

Re: *Navopache Electric Cooperative, Inc. Comments on Energy Efficiency*
(Docket Nos. E-00000J-08-0314 & G-00000C-08-0314)

Dear Sir/Madam:

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

Arizona Corporation Commission
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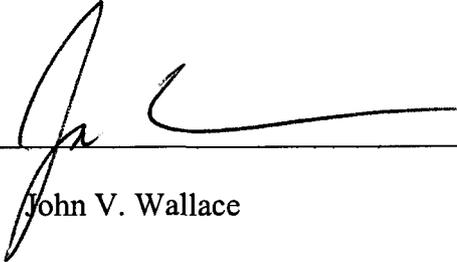
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Sincerely,

GRAND CANYON STATE ELECTRIC
COOPERATIVE ASSOCIATION

By 
John V. Wallace

Original and fifteen (15) copies of
Navopache's Comments
filed this 16th day of September, 2009
with:

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

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

September 16, 2009

Introduction

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

General Comments

The Electric Cooperatives propose that by adopting a prescriptive program that offers affected utilities a menu of energy efficient products to promote and energy saving programs to implement, they can achieve the intended EE goals and provide established energy savings data to comply with EE program reporting requirements.

Given the unique characteristics of each utility's demographics, geographic location, and weather conditions, not all programs may be practical for all utilities. The Electric Cooperatives believe that each affected utility should select and implement those items from the EE menu which it determines would be cost effective in its service territory to achieve maximum EE savings.

The Electric Cooperatives have developed a list of energy efficient appliances and products that it will encourage its membership to purchase to replace older, less efficient models. The Electric Cooperatives will develop a schedule of incentive payments for each

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particular appliance or product that is purchased and used by its members; similar to the existing water heater rebate program that Navopache has offered for nearly twenty years.

Navopache members who purchase and install a high efficiency electric water heater are provided a cash rebate or credit to their account for doing so. In addition, a free appliance timer is provided to help the member take full advantage of Navopache's time-of-use rates. Navopache developed time-of-use rates to help cooperative members achieve energy savings during peak energy usage periods. Navopache has time-of-use rates available on a voluntary basis for all classes of rate payers which it serves.

In the case of a residential member, energy used during the "off-peak" hours is less than half of the cost of energy used during "on-peak" periods of the day. Time-of-use rate schedules are just one example of an energy saving program that some of the cooperatives have in place or will implement as part of their prescriptive program to achieve EE.

THE PROPOSED ENERGY EFFICIENCY PROGRAM

Energy Efficient Appliances & Products

- Energy Star Appliances
- High Efficiency Electric Water Heaters
- Water Heater Insulation Blankets
- Compact Fluorescent Light Bulbs
- Appliance Timers
- Ground Source Heat Pumps
- Electric Thermal Storage Heaters
- Programmable Thermostats

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The Electric Cooperatives will partner with retail and wholesale outlets to provide a selection of energy efficient appliances and products from an approved list to its membership. The Electric Cooperatives will develop an approved incentive payment schedule for its members who purchase and install energy efficient appliances and products. Rebate amounts will be based upon the cost and established energy savings of each particular product or appliance.

In the case of energy efficient heating and cooling systems, such as ground source heat pumps and electric thermal storage heaters, Navopache already has in place an incentive program. Rebate amounts are based upon the demand in kilowatts of a specific heating or cooling system.

Navopache has been marketing Electric Thermal Storage heaters ("ETS") for over twenty years and has been providing cash rebates to its members who purchase and install them in their homes and businesses. ETS heaters are controlled by the member's time-of-use electric meter and a power line carrier unit. The heaters use electric energy to heat high density bricks only during the off-peak time periods of the day and night when electricity is priced at half of the on-peak rate.

The heaters provide radiant and convective heat 24-hours a day while a low energy use electric fan circulates warm air throughout any room. ETS heaters allow Navopache members to take advantage of time-of-use electric rates to enjoy electric heat at a reduction in energy usage and the associated cost. Since the inception of this program in the mid 1980's, Navopache members have installed over 23 megawatts of ETS heating load, often times replacing inefficient base-board heating units.

ETS heating load accounts for 25% of the Navopache winter base load. By virtue of each heater's operation being limited to the off-peak time periods, ETS heaters contribute to an improved load factor on the Navopache power system. ETS heaters reduce energy usage

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and the associated costs for heating requirements overall, specifically by avoiding energy usage during more expensive on-peak time periods.

Energy Saving Programs

- Time-of-Use Rate Schedules
- Energy Audits
- Energy Resource Conservation Loans To Finance:
 - Residential & Small Business Insulation Improvements
 - Residential & Small Business Energy Efficient Heating & Cooling Systems
- Utility Initiated Water Heater Control Program
- Utility Initiated Voltage Control Program

The Energy Saving Programs listed above have been implemented over the years by the Electric Cooperatives to control energy costs and to promote energy efficiency to their membership. The Electric Cooperatives believe that time-of-use rate schedules are an essential component in any effort to promote energy efficiency.

The Electric Cooperatives have performed Energy Audits for their members since the mid 1980's. Energy Audits form the foundation for Energy Resource Conservation Loans ("Weatherization Loans"), which provide low-cost financing to cooperative members to upgrade insulation, replace inefficient windows, and install weather stripping in homes and businesses. All of these measures result in improved energy efficiency.

Originally developed as Demand Side Management ("DSM") measures, Navopache's Water Heater Control Program and Voltage Reduction Program also reduce

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energy usage during on-peak time periods. Energy savings in kWh's from these programs can be easily calculated and reported as part of the proposed EE Program.

EE Program Goals

The primary goal of the proposed EE Program will be to promote and encourage energy efficiency by providing to its membership the menu of energy efficient appliances and products and energy saving programs. The Electric Cooperatives will provide incentives to its membership, form business relationships with providers of energy efficient appliances and products, and expand the energy saving programs already in place.

The secondary goal of the proposed EE Program is to standardize the reporting requirements of energy efficiency measures. The Electric Cooperatives believe that a major challenge of any energy efficiency measure is how to accurately document energy savings. Current proposals to achieve 15% energy savings by 2020 seem to lack a clear methodology to measure energy savings. The Electric Cooperatives believe that to attempt to meter energy savings at customer locations is problematic and would add unnecessary expense to a program. The Electric Cooperatives believe that it would be difficult to separate and identify kWh's saved through energy efficiency from those additional kWh's which will result from the normal load growth that the Electric Cooperatives expect to experience annually. The Electric Cooperatives believe a different reporting approach has merit and can be much more reliable for the purposes of the EE program.

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Program Reporting Methodology

The Electric Cooperatives propose that affected utilities report the number and description of energy efficient appliances and products from the approved list delivered to its membership on an annual basis. The Electric Cooperatives would base their energy savings by the established energy savings attributed to each particular appliance or product. An example would be the energy savings associated with the installation of Compact Fluorescent Light bulbs ("CFL's").

The Energy Star CFL, recognized by the U.S. Environmental Protection Agency and the U.S. Department of Energy, will save about \$30.00 over its lifetime and pay for itself in about 6 months. A CFL uses 75% less energy and lasts about 10 times longer than an incandescent bulb. If every American home replaced just one light bulb with an Energy Star CFL, we would save enough energy to light more than 3 million homes for a year, more than \$600 million in annual energy costs, and prevent greenhouse gases equivalent to the emissions of more than 800,000 cars*.

The Electric Cooperatives will report the energy efficiency savings in kWh's from the approved list of energy savings programs as part of the EE program reporting requirements. As an example, the Navopache Water Heater Control Program can cycle electric water heaters on and off during peak demand periods. A typical peak demand period on the Navopache power system can last two hours. During this time period, 3,400 electric water heaters can be cycled on and off for 7.5 minutes on a rotating basis. Navopache is billed by its wholesale supplier on a 15 minute demand interval.

The ACC recognizes the value of 1 kilowatt of load reduction per water heater controlled, due to the diversity of the load**. Given these facts, for each two hour period

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that the program is active, Navopache reduces kWh consumption for water heating by 3,400 kWh. In its annual report, Navopache will total the number of hours each month that the program is active and report the energy efficiency savings in kWh's.

* Source: www.energystar.gov

** Source: Navopache ACC Pre-Approved DSM Program

Program Cost Recovery

The Electric Cooperatives will work with ACC Staff to determine an appropriate energy efficiency cost recovery surcharge amount for all rate schedules, similar to a pre-approved DSM program cost recovery surcharge. The Electric Cooperatives will report all funds collected and dispensed to implement its proposed EE Program on an annual basis.

The annual report will provide detailed information on the number and description of energy efficient appliances and products delivered to its membership and the associated energy efficiency savings in kWh's.

Based on member participation and program costs, the energy efficiency cost recovery surcharge will be re-calculated on an annual basis to ensure that the program is adequately funded and that program goals are being met.

Conclusion

Navopache offers and Electric Cooperatives support these comments as an alternative method of achieving energy efficiency through a prescriptive program. The Electric Cooperatives believe that its proposed EE program is simple in its concept and offers a more reliable means of documenting energy efficiency savings at a minimum cost to their membership.