# BEFORE THE ARKANSAS PUBLIC SERVICE COMMISSION

IN THE MATTER OF A NOTICE OF INQUIRY ) REGARDING A RULEMAKING FOR )	DOCKET NO. 06-004-R
DEVELOPING AND IMPLEMENTING ENERGY) EFFICIENCY PROGRAMS	

#### INITIAL COMMENTS OF THE ELECTRIC COOPERATIVES OF ARKANSAS

Pursuant to the Arkansas Public Service Commission's ("Commission") Order No.

1 in this Docket, dated January 12, 2006, the Electric Cooperatives of Arkansas (the "Cooperatives") hereby submit their Initial Comments as follows:

1. General Comments. The Cooperatives commend the Commission for its concern regarding rising energy prices and for opening this Docket to explore the possibility of energy efficiency programs in Arkansas. The Cooperatives support the adoption of reasonably based energy efficiency guidelines for Arkansas. The Cooperatives have a long history of encouraging the efficient use of electric energy. Currently and historically the Cooperatives have been actively engaged in: efficiency education; home energy audits; and support of high efficiency air to air and geothermal heat pumps, compact florescent lighting, and efficient home construction and renovation practices.

The Electric Cooperatives of Arkansas are: Arkansas Electric Cooperative Corporation ("AECC"); Arkansas Valley Electric Cooperative Corporation; Ashley-Chicot Electric Cooperative, Incorporated; C&L Electric Cooperative Corporation; Carroll Electric Cooperative Corporation; Clay County Electric Cooperative Corporation; First Electric Cooperative Corporation; Mississippi County Electric Cooperative, Incorporated; North Arkansas Electric Cooperative, Incorporated; Ouachita Electric Cooperative Corporation; Ozarks Electric Cooperative Corporation; Petit Jean Electric Cooperative Corporation; Rich Mountain Electric Cooperative, Incorporated; South Central Arkansas Electric Cooperative, Incorporated; Southwest Arkansas Electric Cooperative Corporation; and Woodruff Electric Cooperative Corporation.

- 2. In Order No. 1 in this Docket, the Commission asked that the parties provide information in their Initial Comments on a list of subjects. In response, the Cooperatives submit the following:
- a. Goals of Energy Efficiency Programs. The Cooperatives find all the Goals listed by the Commission to be laudable. However, the Cooperatives believe that "environmental benefits" are not an appropriate factor when evaluating energy efficiency programs. From the Cooperatives' perspective, any attempt to quantify environmental benefits would be potentially arbitrary and extremely difficult. Further, the Cooperatives believe that environmental issues are adequately addressed by state and federal regulations.
- b. Experiences of Other States and Regions. All states administer different energy efficiency programs such as weatherization, demand side management, public benefit funds for energy efficiency, Energy Star Programs, building codes, education, tax credits for businesses, product energy efficiency standards, and others.

Several organizations have extensive information as to what programs are being performed in each state, such as the American Council for an Energy-Efficient Economy ("ACEEE"), National Association of State Energy Officials ("NASEO"), U.S. Department of Energy Office of Energy Efficiency and Renewable Energy, and Energy Star.

A good starting place for information on other states can be found in two publications that provide a wealth of information. The first publication is "ACEEE's 3<sup>rd</sup> Annual Scorecard on Utility and Public Benefits Energy Efficiency Programs: A National Review and Update of State-Level Activity, October 2005". This publication provides

activities and rankings of spending levels by state. An even more comprehensive breakdown of activities in each state is available in NASEO's "State Energy Program and Activity Update, Winter 2005".

Typically the states that have been the most aggressive on spending for energy efficiency programs have been high energy cost states.

2003 State Spending Per Capita on Energy Efficiency

Rank	State	Per Capita
1	Vermont	\$ 28.26
2	Massachusetts	\$ 21.49
3	New Hampshire	\$ 16.45
4	Washington	\$ 15.21
5	Rhode Island	\$ 14.13
6	Oregon	\$ 13.44
7	Wisconsin	\$ 11.33
8	New Jersey	\$ 11.31
9	Montana	\$ 10.65
10	lowa	\$ 10.17
US Average		\$ 4.65
38	Arkansas	\$ 0.14

c. Energy Efficiency and Resource Planning. The Cooperatives currently include energy efficiency within resource planning by considering the effect that energy efficiency programs have on reducing the load forecast. The methodology used to develop the load forecast assumes that the continuation of current programs and development of new energy efficiency programs will have percentage impacts comparable to programs in past years.

If the Commission were to adopt rules with spending targets for energy efficiency measures based on a certain percentage of utility revenue, and assuming these levels were different than the current levels of the Cooperatives, then revisions would have to be made to the load forecast.

Other methods have been utilized in other jurisdictions to incorporate energy efficiency into resource planning. One method is to perform a detailed study of various programs and apply some test (such as one of the California Standard Practices Manual tests) to dictate which programs should be implemented. The tests generally compare the cost of demand-side measures with supply-side measures, and an energy efficiency program that "passes" the test generally means that such program is more economical than the supply-side measures. In theory this may appear to be an ideal approach. However, so many assumptions that are difficult to make have to be made to apply the tests that the level of confidence which can be placed in the analysis results is poor at best. Assumptions for each potential program include the number of participants in the program, free riders, the administrative and marketing cost of the program, the direct cost of the program, the energy savings per participant, the capacity savings per participant during peak usage periods, the price and total cost elasticities, and other items depending on what test is used to decide on whether the program should be implemented.

d. Cost Recovery. Under Ark. Code Ann. § 23-4-207 (4) utilities are currently allowed to recover the cost of advertising which promotes energy efficiency including appliances, equipment, or energy conservation measures, etc. A utility's expenditures on other efficiency programs should also be recoverable.

Voluntary Funding: All voluntary expenditures to enhance energy efficiency should be recoverable in the utility's rate proceedings.

Mandatory Funding: If energy efficiency funding is mandated, all utilities should be allowed an automatic pass through "efficiency rider" to recover these costs on an annual basis. The rider would collect in the current year the utility's expenditures from the previous year.

If the utility does not prefer to use an automatic pass through efficiency rider, the utility should also be allowed to exercise the option of incorporating the mandatory expenditure into its next general rate case.

e. *Technologies.* While it is not practical to believe that Arkansas alone can advance emerging efficiency technologies, the Cooperatives are members of and support the Electric Power Research Institute ("EPRI") and the National Rural Electric Cooperative Association's Cooperative Research Network. Both of these national organizations are at the forefront of support for electric technology/efficiency research. When an emerging technology has proven its effectiveness, such as a geothermal heat pump or compact fluorescent lighting, the Cooperatives have gone to lengths to educate their membership of its advantages.

A number of technology measures are encouraged or utilized by the Cooperatives in current programs. The Cooperatives' Model Home program, for example, incorporates a number of technologies for residential construction. These include insulating the crawl space or slab, utilizing framing techniques that provide for better insulation, using wet-spray cellulose insulation that provides for good insulation while also providing an excellent barrier against air infiltration (spray foam and blown-in fiberglass can also

provide such benefit), caulking to eliminate air infiltration, smart design of duct system and ensuring that ducts are sealed, energy efficient vinyl windows with low-e glazing, geothermal heat pump for heating, cooling and water heating, compact fluorescent lighting, and energy efficient appliances. While the Model Home program targets residential buildings, many of the measures are applicable for commercial buildings as well. Other measures for residential or commercial use include highly efficient air-to-air heat pumps that incorporate technology such as variable speed fans, energy efficient water heaters where appropriate, passive solar design, electronic ballasts and T-8 lamps, LED lighting for exit signs and other applications, lighting controls, and landscaping for energy efficiency. In the industrial sector, processes and thus energy efficiency opportunities vary from industry to industry. One measure that is applicable to a large number of industries is the use of energy efficient and properly-sized motors.

Advances in metering and monitoring systems are being made which can have applications in energy efficiency programs. The Cooperatives actively monitor progress as one of 19 participants in EPRI's IntelliGrid Consortium. The vision of IntelliGrid is to have an "electric power delivery infrastructure that integrates advances in communication, computing, and electronics to meet the energy needs of the future." A planned pilot area for IntelliGrid is a market response and distribution program that could demonstrate such functionalities as the ability to give to the customer more information about his consumption and billing information, provide for advanced pricing and real time pricing, monitor power quality, and communicate needs for voluntary load reductions.

The vision and work with IntelliGrid also encompasses efficiency improvements in the transmission and distribution system. Activities associated with IntelliGrid include analysis of the value of power electronics in the transmission grid. Efficiency improvements on the distribution system can also occur with the use of energy efficient transformers.

While the previous paragraphs illustrate the Cooperatives' commitment to improving energy efficiency, it must be recognized that there are other means to improving energy efficiency. An example of one that the Cooperatives believe is currently under-utilized is maintaining and enforcing building codes. Many opportunities for energy efficiency are available at the time of construction, but are impractical, less economical or uneconomical in retrofit situations. Enforcement of building codes could go a long way in providing for efficient future energy use in the state. Another program that the Cooperatives support is the Federal standards for appliance and equipment efficiency. By law, the Department of Energy ("DOE") must upgrade standards to the maximum level of energy efficiency that is technically feasible and economically justified. Unlike the lack of enforcement of building codes, there is serious activity currently underway to improve minimum efficiency standards of certain appliances and equipment. In a report to Congress dated January 2006, the DOE states that standards will be issued for 18 products by June 2011. These products include residential furnaces and boilers, mobile home furnaces, residential water heaters, distribution transformers, electric motors (1-200 hp), residential dishwashers, ranges and ovens (gas and electric), residential clothes dryers, room air conditioners, packaged terminal air conditioners and heat pumps and residential central air conditioners and heat pumps. The Energy Policy

Act of 2005 expanded the DOE's authority to regulate other product areas, including more commercial equipment such as certain commercial refrigerators, freezers, ice machines and clothes washers.

f. Education and Public Awareness. Education on the wise use of energy is a long-standing foundation of the Cooperatives' marketing and communication programs. A multimedia approach is used, including the use of radio, print and Webbased communications. Every issue of the Cooperatives' monthly publication, Rural Arkansas, contains information on ways cooperative members can make their homes and businesses more energy efficient.

Distribution cooperatives further the education process through a free energy audit program, which provides consumers information and analysis specific to their situations. Additionally, the Cooperatives host energy efficiency seminars in local communities to allow consumers to obtain information about energy efficient building techniques.

#### g. Financial Incentives.

To the Utility: Beyond actual cost recovery, the Cooperatives will not require any additional financial incentives to promote reasonable energy efficiency.

To the Consumer: The Cooperatives would like to have the option to use financial incentives for consumers to pursue energy efficiency programs. Consumer incentives should be justified by an overall benefit to the utility's other ratepayers.

h. *Funding Levels.* The Cooperatives are opposed to the mandatory funding of energy efficiency programs. The Cooperatives have clearly demonstrated a historic voluntary philosophical interest in promoting energy efficiency. In addition, the

Cooperatives have voluntarily spent hundreds of thousands of dollars per year promoting efficiency objectives. The Cooperatives' past actions clearly demonstrate that a utility funding mandate is not necessary.

If energy efficiency funding is mandated, the Cooperatives believe that funding should be based on a percent of electric energy revenue from retail sales, not to exceed five one hundredths of one percent (0.05%). The Commission should also consider a practical ceiling on mandated expenditures for utilities which have a higher percentage of industrial load and a lower percentage of residential load. This might be accomplished by ordering the lesser of a percent of revenue or a fixed amount per consumer. The funding should be retained by the utility and used to finance energy efficiency programs which meet the Commission's guidelines.

The Cooperatives should be allowed to pool their funds to finance statewide efficiency programs. The Cooperatives' mandated funding could be supplied by either AECC or directly by the distribution cooperatives.

i. Energy Efficiency Services. The Cooperatives have a long history of offering energy efficiency services to their member consumers. These services include: free home energy audits; information on efficient appliance usage; recommendations and analysis on available home insulation, energy efficient windows, air infiltration prevention, heating and cooling systems, and energy efficient water heaters; and peak shaving rate design incentives. In the past, the Cooperatives also offered rebates on high efficiency water heaters and heat pumps. In addition, the Cooperatives' popular Model Home program demonstrates how members can save

money on their utility bills while also creating a comfortable living environment by using proper building techniques and energy-efficient appliances.

j. *Metrics and Program Evaluation*. The Cooperatives suggest that the Commission's Promotional Practices Rules and the California Standard Practice Manual are outdated and are no longer appropriate, and agree with Oklahoma Gas and Electric Company that some of the Promotional Practices Rules act as barriers to the implementation by utilities of good energy efficiency programs (see Workshop Tr. at p. 312). If the Commission does not choose to abandon the Promotional Practices Rules, the Cooperatives would suggest that the Promotional Practices Rules be amended so that offering an incentive to conserve energy (Docket No. 90-205-R, Order No. 19, Section 2. (g)) is not a promotional practice.

The Cooperatives believe that each utility should be allowed to submit any cost benefit analysis methodology that it chooses when presenting a recommended efficiency program. If the Commission continues to mandate the California Standard Practice Manual for evaluating energy efficiency programs, the Cooperatives would suggest that only the Ratepayer Impact Measure Test is appropriate. In addition, regardless of whatever tests (Rate Payer Impact Measure Test, Utility Cost Test, Participant Test, and the Total Resource Cost Test) are mandated by the Commission, all requirements to consider a program's effect on fuel substitution and the economics of other utilities should be removed from the formula's required inputs. Each utility should only be expected to evaluate the effect of a program with regard to: its own economics, the participant, and the utility's other rate payers. In addition, other externalities such as the environment should not be a part of the mandated evaluation process. The Cooperatives

believe that state and federal environmental laws are sufficient and that the inclusion of environmental factors should not be mandatory.

In addition, it is impossible to accurately measure many of the consequences of some energy efficiency programs, mass consumer education being an example.

- k. **Development Process.** The Commission has asked for input on the process for developing energy efficiency programs. Specifically, the Commission has asked the following questions:
  - Should a collaborative process be used?
  - How should membership in the collaborative be determined?
  - Should the collaborative be sustained indefinitely as a forum for evaluating the performance of energy efficiency programs, making changes in energy efficiency programs, or proposing new energy programs?

Over the past 6-7 years, the Commission has used, with varying degrees of success, the collaborative process as a part of rulemaking dockets. In those collaborative processes, the starting point was usually a set of draft rules or guidelines proposed for consideration by either the Commission or the General Staff. Such direction and focus at the outset is critical to the success of a collaborative process involving multiple parties and varying interests.

So far, it appears that the collaborative process in this Docket would start with a blank slate, which might derail the collaborative process from the start. It would perhaps be better if the General Staff submitted a set of data requests to the utilities and other stakeholders to survey the current status of energy efficiency programs in Arkansas, surveyed other states for examples of existing energy efficiency rules, and drafted a set of proposed rules or guidelines to serve as the starting point for the collaborative.

Membership in the collaborative should include all jurisdictional utilities, the General Staff, the Attorney General, any other appropriate state agency, and select representatives of consumer and environmental/energy efficiency advocacy groups. Consensus is the goal of any collaborative process. If any and all third party stakeholders are allowed to participate, the collaborative will become too big, and the interests represented too varied, for consensus to result.

The collaborative process does not need to be sustained indefinitely. Once rules or guidelines are adopted by the Commission, it would seem that performance of, or changes in, energy efficiency programs, or the proposal of a new energy efficiency program, should be addressed by the Commission in new utility specific dockets or generic dockets, depending on whether the issue is specific to a particular utility or applies to all utilities.

- 3. At the Workshop on February 21, 2006, Chairman Hochstetter raised other issues to be addressed by the parties in their initial comments (see Workshop Tr. at pp. 326-27). In response, the Cooperatives submit the following:
- a. Cost Effectiveness Test. See the Cooperatives' comments on Metrics and Program Evaluation in Paragraph 2.j.
- b. Low Hanging Fruit. Several of the speakers at the Workshop indicated that most of the low hanging fruit in the area of energy efficiency existed in the area of commercial loads. The Cooperatives' loads are heavily residential, and the Cooperatives may not have a great deal of low hanging commercial load fruit to harvest.

A potential area for low hanging fruit was mentioned at the Workshop by Tom Nowlin with Petit Jean Electric Cooperative Corporation (see Workshop Tr. at p. 344) and Chris Benson with the Arkansas Energy Office (see Workshop Tr. at p. 347). Mr. Benson discussed energy codes for new construction as follows:

We do have a code for new — energy code for new buildings, residential and commercial in the state to a level that's some of the best in the country. The problem here ... is that out enforcement is nil. We basically have no enforced codes. So the challenge is to work with local communities ... to see if we can't get that code complied with, and it's — it's a difficult problem.

Workshop Tr. at p. 347. Enforcing existing energy codes could be done quickly and could produce significant results in the area of energy efficiency.

- c. Fast Ramp-Up. The Cooperatives do not wish to take a position on the establishment of a fast ramp-up energy efficiency time table. The Cooperatives do, however, believe that it is important for the Commission and the utilities to thoroughly consider any energy efficiency guidelines or rules prior to their being adopted.
  - 4. The Cooperatives submit additional issues and comments as follows:

The Cooperatives do not believe that establishing a "statewide" entity to oversee or implement energy efficiency programs is appropriate. The Cooperatives wish to assume full responsibility for executing any energy efficiency plan approved by the Commission.

Further, the Cooperatives would urge the Commission to adopt rules or guidelines which will allow for flexibility within the utility's plans so that each utility may develop plans and projects which best meet the needs of their service territory. What is appropriate in one socio-economic or climatic region may not be optimum in another.

WHEREFORE, the Cooperatives respectfully submit their Initial Comments as set out herein, and pray for all other relief to which they may be entitled.

### Respectfully submitted,

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## **CERTIFICATE OF SERVICE**

I, Stephen P. Williams, do hereby certify that on the 24th day of March, 2006, a true and correct copy of the foregoing Initial Comments was mailed by First Class U.S. Mail, with sufficient postage prepaid, to all parties on the service list for this docket.

Stephen P. Williams