Public Service Commission
Utilities Division
State Agency #126.03

ARKANSAS PUBLIC SERVICE COMMISSION

RULES FOR CONSERVATION AND ENERGY EFFICIENCY PROGRAMS

ARKANSAS PUBLIC SERVICE COMMISSION

RULES FOR CONSERVATION AND ENERGY EFFICIENCY PROGRAMS

TABLE OF CONTENTS FOR THE
RULES FOR CONSERVATION AND ENERGY EFFICIENCY PROGRAMS

Section 1: Purpose 1

Section 2: Benefits and Objectives of Energy Efficiency Programs 1

Section 3: Definitions 2

Section 4: Administration and Implementation of Energy Efficiency Programs 3

Section 5: Plan Filing Requirements 4

Section 6: Benefit/Cost Tests 6

Section 7: Cost Recovery 8

Section 8: Program Plans 9

Section 9: Annual Reporting Requirements 11

Section 10: Records 11

RULES FOR CONSERVATION AND ENERGY EFFICIENCY PROGRAMS

Section 1: Purpose

In the Energy Conservation Endorsement Act of 1977, Ark. Code Ann. §§23-3-401 to 405 (2003), ("the Act"), the Arkansas General Assembly recognized that "enormous amounts of energy are wasted by consumers of all classes and economic levels due to inadequate insulation of buildings and other inefficiencies in the use of energy."[1] The Act broadly defines "energy conservation programs and measures,"[2] and states that "energy conservation programs and measures" are broadly defined and that "[i]t shall be considered a proper and essential function of public utilities regulated by the Arkansas Public Service Commission to engage in energy conservation programs, projects, and practices which conserve, as well as distribute, electrical energy and supplies of natural gas, oil, and other fuels."[3]

Furthermore, the Act provides the Commission with the authority to "propose, develop, solicit, approve, require, implement, and monitor" energy efficiency programs "by utility companies" if the Commission finds that such programs and measures "will be beneficial to the ratepayers of such public utilities and to the utilities themselves."[4] "At the time any such programs or measures are approved and ordered into effect" by the Commission, the Act requires that the affected utility also "be allowed to increase its rates or charges as necessary to recover any costs incurred by the public utility company as a result of its engaging in any such program or measure."[5]

Due to the current level and expected increases in energy prices for both infrastructure investment and commodity purchases, along with the minimal level of energy efficiency programs in Arkansas, Commission action regarding energy efficiency is necessary. Consequently, the Commission has developed these rules. These rules apply to the provision of both electricity and natural gas service subject to the jurisdiction of the Arkansas Public Service Commission.

Section 2: Benefits and Objectives of Energy Efficiency Programs

A. An overriding focus for any energy efficiency initiative should be the benefits and objectives of the initiative. The overall objectives of the initiative are to encourage and enable utility customers to make the most efficient use of utility capacity and energy and to discourage inefficient and wasteful use of energy. Objectives can take the form of standards, codes, or programs. When proposing any one or a combination of energy efficiency programs, standards, or codes, a utility shall describe, in qualitative and quantitative terms, how its proposal furthers or accomplishes any or all of the following objectives or ancillary benefits in support of energy efficiency that are reasonably applicable to the utility's proposal. Should the utility determine that its proposal does not

[1] Ark. Code Ann. § 23-3-402.
[2] Ark. Code Ann. § 23-3-403.
[3] Ark. Code Ann. § 23-3-404.
[4] Ark. Code Ann. § 23-3-405(a)(1)-(2)
[5] Ark. Code Ann. § 23-3-405(a)(3).

accomplish or meet one or more of the listed objectives or benefits, the utility shall briefly explain why its proposal does not do so.

- Energy savings directly attributable to program activities;
- Long-term and permanent changes in behavior, attitudes, awareness, and knowledge about energy savings and use of energy efficient technologies in order to achieve energy savings;
- Permanent peak electric demand reduction;
- Energy cost savings and cost-effectiveness;
- Reliability enhancements;
- Energy security benefits;
- Environmental benefits;
- Economic development/competitiveness benefits;
- Increases in system-wide capacity;
- Accelerating the commercialization of advanced or emerging technologies;
- Improving affordability of energy for all customers; and
- Implementing programs in an efficient manner;

B. When providing information on these objectives, utilities are directed to describe, in quantitative terms, the benefits and costs of these different aspects of the program, standard, or code, and to comment on the barriers that impede accomplishment of these energy efficiency objectives and how to overcome these barriers. Utilities are also encouraged to provide estimates of the energy efficiency potential (including demand savings) in Arkansas associated with these options.

Section 3: Definitions

Administrator – The entity responsible for creating and managing an energy efficiency program or portfolio of programs.

Cost-effective – A standard used to describe a "net beneficial" result for programs to be implemented, determined through a process that includes a review of relevant benefit/cost tests. A "cost-effective" program would be one that has a high probability of providing aggregate ratepayer benefits to the majority of utility customers.

Deemed Savings – Pre-determined, validated estimates of energy and peak demand savings attributable to particular energy efficiency measures, based upon engineering calculations, baseline studies and/or reasonable assumptions. Such savings are generally those representing the difference between standard efficiency measures and energy efficient measures. Deemed savings values must be revised periodically to reflect new technologies and new federal, state or local policies and codes.

Demand Response – Changes in energy use by end use customers from their normal consumption patterns in response to changes in the price of energy over time, or in response to incentive payments designed to induce lower energy use at times of high wholesale market prices or when system reliability is jeopardized.

Energy Efficiency – Reducing the rate at which energy is used by equipment and/or processes while maintaining or improving the customer's existing level of comfort and end-use functionality at a lower customer cost. Reduction in the rate of energy used may be achieved by substituting more advanced technology or by reorganizing the process to reduce waste heat, waste cooling, or energy. Demand response is a form of energy efficiency.

Energy Efficiency Savings – Energy efficiency (kW, kWh, ccf) savings are determined by comparing measured energy use before and after implementation of an energy efficiency measure or by reference to a set of deemed savings approved by the Commission.

Evaluation, Measurement, and Verification (EM&V) – The performance of studies and activities intended to determine the actual savings and other effects from energy efficiency programs and measures.

Implementer – An entity charged by a utility to deliver programs to customers. Implementers, Administrators, and utilities may be the same entity, or related by a contract.

Market transformation – Strategic efforts to induce lasting structural or behavioral changes in the market that result in increased adoption of energy efficient technologies, services and practices. Energy savings from market transformation programs must be beyond that which would be achieved through compliance with building codes and appliance and equipment efficiency standards.

Measure – The equipment, materials and practices that when installed and used at a customer site result in a measurable and verifiable reduction in either purchased energy consumption, measured energy or peak demand or both.

Portfolio – The entire group of programs offered by an administrator

Program – A particular energy efficiency service or set of services to a particular target population.

Program Plan – A plan to deliver a portfolio of energy efficiency programs which includes a set of benefit/cost test results, specific objectives that can be evaluated using quantifiable measures, and provisions to evaluate, monitor and verify results.

Program Year – The year in which programs are administered and delivered, for the purposes of planning and reporting, a program year shall be considered a calendar year, January 1 through December 31.

Section 4: Administration and Implementation of Energy Efficiency Programs

A. All electric and gas utilities in Arkansas under the jurisdiction of the Commission shall propose and be responsible for the administration and implementation of cost-effective energy efficiency programs within their service territories. Each utility shall file an

application for approval by the Commission of its portfolio of energy efficiency programs. The energy efficiency program portfolio of each utility shall include programs for all customer classes.

B. Waivers

Exemptions from these rules may be granted by the Commission in accordance with Rule 1.03 of the Commission's Rules of Practice and Procedure. Nothing in these Rules shall preclude the Commission from modifying these Rules on its own initiative or in response to a party's motion and after notice and hearing.

C. Independent Administrator

The Commission may designate an administrator independent of the utilities, although the utility will ultimately retain the responsibility for compliance with these rules.

Section 5: Plan Filing Requirements

A. General Requirements

Administrators shall propose general program designs, specific programs, and specific measures. Administrators may propose programs and/or measures in any combination. All programs should include the following general elements:

- A showing of high probability of providing aggregate ratepayer benefits to the majority of ratepayers.
- The identification of the specific objectives of the program.
- The identification of the specific EM&V procedures that will be used to determine whether the program has achieved its stated objectives.

B. Portfolio Description and Support

Each plan filing shall address the following:

- demonstration that the scope of programs serves all customer classes;
- plan benefit/cost analysis listing total costs and benefits, including expected savings goals for the portfolio of programs;
- cost recovery proposal; and
- any additional supporting information the administrator may propose.

C. Program Description and Support

Each program filing shall address the following:

- services to be provided;
- target population;
- all barriers being addressed and how they are being addressed;

- proposed customer incentives (if any);
- an evaluation, measurement and verification plan using an industry accepted protocol approved by the Commission;
- timeframe if the program term is limited;
- a plan for addressing over-subscription to the program;
- an analysis demonstrating that the program or measure is beneficial including the prescribed cost / benefit analyses;
- estimated energy and peak demand savings and the basis for these savings estimates, which may include Deemed Savings as approved by the Commission; and
- any additional analyses the administrator may propose.

D. Uniformity of Programs

Programs addressing both electric and gas customers shall be coordinated to the extent reasonable.

Fuel switching and load building programs not otherwise authorized under the Commission Rules and Regulations Governing Promotional Practices of Electric and Gas Utilities shall not be included as energy efficiency programs.

E. Customer Incentives

Programs may include incentives to encourage customers to make energy efficient investments if the incentives are cost justified and are a component of a program that has a high probability of providing aggregate ratepayer benefits to the majority of utility customers.

Incentives may include information, technical assistance, leasing programs, product giveaways and direct financial inducements. Financial inducements may include but are not limited to rebates, discounted products and services, and low rate financing.

All customer incentives shall be considered in the benefit/cost testing of programs. Costs of customer incentives shall be considered a direct program cost.

Incentives should not be any higher than necessary to overcome the customers' barriers to invest in the measure and should be reduced or eliminated as the measure becomes more of a standard practice.

F. Statewide Programs

The Commission, after notice and hearing, may direct utilities to offer uniform statewide energy efficiency and conservation programs if it determines such standardization to be the most cost-effective result and in the public interest. Utilities may request approval to offer statewide or region-wide programs for which public messages, commercial terms and conditions, and customer reception are best served by such an approach.

G. Pilot and Quick Start Programs

The Commission may approve pilot energy efficiency programs. A pilot program design is distinct from Quick Start and other program designs in that it shall include explicit questions that the pilot will address; explicit EM&V designed to address pilot questions; estimates of program costs and savings; a provisional benefit/cost evaluation; and shall be of limited duration until reassessment after a pre-determined period. Pilot programs shall have characteristics from among the following:

- Addressing a new end use;
- Applying a new technology or a new delivery method;

Quick Start programs are programs that are limited in nature and that in other jurisdictions have been shown to have a high probability of providing aggregate ratepayer benefits to the majority of utility customers. Although estimates of program costs must be included in proposals to implement all Initial Plan Quick Start programs, Quick Start programs are exempt from the requirement to provide cost-effectiveness showings under the benefit-cost tests of Section 6. Estimated energy and demand savings and an explicit EM&V program must be included for all Quick Start programs except the statewide Education program.

Programs that are neither Pilots nor Quick Start programs must comply with all of the plan filing requirements of this section.

All costs for Pilot, Quick Start, and other programs shall be considered eligible for cost recovery.

H. Program Filing Procedures and Schedule

A program filed under these rules shall not be implemented until a Commission order is issued expressly approving the program.

The period from the filing date to the date of the Commission order shall be no more than one hundred and eighty days which will permit investigation, analysis, and adjudication of the program.

The Commission shall establish a procedural schedule for the review of each program filing.

Section 6: Benefit/Cost Tests

A. Administrators shall present sufficiently detailed calculations, sensitivity analyses, and supporting testimony of the effect of the proposed conservation and energy efficiency program using each of the following tests set forth in the *California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects,* (State of California, Governor's Office of Planning and Research, July 2002), (hereafter "Manual"): The Participant Test, The Ratepayer Impact Measure Test, The Total Resource Cost Test, and the Program Administrator Cost Test.

The Commission will rely on the formulae found in the Manual. However, the Commission may rely on some inputs contained in the Manual and not on others. Furthermore, the costs and benefits contained in the Manual are suggestions and are not endorsed by the Commission for every program. For this reason, the Commission will not limit the costs and benefits that can be considered in the benefit/cost tests to those listed therein.

Cost-effectiveness results shall be presented on both a program and portfolio basis.

Administrators may submit additional economic analyses and benefit/cost test information in support of a proposed program.

B. A utility shall use an evaluation period of either ten years (a gas utility may use an evaluation period of fifteen years), or the actual measure lives for each measure in a program to evaluate a program or program portfolio.

Results of the tests shall be presented consistent with the descriptions shown in Table 1, or by other means as approved by the Commission.

TABLE I - Cost-Effectiveness Tests

with Primary and Secondary Means of Expressing Test Results

Participant Test	
Primary	Secondary
Net present value (all participants)	Discounted payback (years) Benefit-cost ratio ("BCR") Net present value (average participant)
Ratepayer Impact Measure	
Lifecycle revenue impact per Unit of energy (kWh or therm) or demand customer (kW) Net present value	Lifecycle revenue impact per unit Annual revenue impact (by year, per kWh, kW, ccf, or customer) First-year revenue impact (per kWh, kW, ccf, or customer) BCR
Total Resource Cost	
Net present value (NPV)	BCR Levelized cost (cents or dollars per unit of energy or demand) Societal (NPV, BCR)
Program Administrator Cost	
Net present value	BCR Levelized cost (cents or dollars per unit of energy or demand)

Section 7: Cost Recovery

A. Cost recovery of conservation and energy efficiency programs shall be in accordance with the provisions of Ark. Code Ann. § 23-3-401 *et. seq.* Cost recovery shall be limited to the incremental costs which represent the direct program costs that are not already included in the then current rates of the utility.

B. A utility may request cost recovery through a surcharge or rider. If a utility requests cost recovery through a surcharge or rider, the cost recovery through that mechanism shall be limited to the incremental costs of providing the program that are not already included in the then current rates of the utility.

C. A utility may request that costs from approved program budgets be included in the rider. A utility may request that cost recovery begin when the energy efficiency program is implemented and offered to customers.

D. Demand response programs that involve rates (e.g., interruptible service, curtailment, off-peak service, time-of-use rates) shall not be included in any surcharge or rider. The rates

for those mechanisms will be established through utility-specific rate or tariff proceedings.

E. If a utility is recovering conservation and energy efficiency program costs through a surcharge or rider, the utility shall file, contemporaneous with the Annual Report under Section 9, a re-determined Energy Efficiency Cost Rate ("EECR"). In support of this re-determined rate, the utility shall file a schedule of actual program costs for the reporting period, actual amounts collected under the rider for the reporting period, and approved program budgets for the current calendar year. The EECR shall be adjusted to reflect a reconciliation of any over or under recovery for the prior year and the approved budget for the current calendar year.

Section 8: Program Plans

Program plans shall cover at least one year and may cover up to three years.

All programs filed by gas and electric utilities should be consistent and should be fuel neutral, *i.e.*, they should be compliant with the Commission Rules and Regulations Governing Promotional Practices of Electric and Gas Utilities, including restrictions on fuel substitution and load building programs.

Program plans shall reflect the effects of all energy efficiency programs in the electric resource plans or natural gas procurement plans of the electric and natural gas utilities respectively. Furthermore, all energy efficiency programs shall be consistent with each utility's current electric resource plans or natural gas procurement plans.

A. Initial Plan Filings

The initial filings of energy efficiency programs will cover program years 2007-2009. (Program year 2007 will be a partial calendar year, while 2008 and 2009 will be full calendar years.) They should initially include energy efficiency measures that can be implemented on a relatively "quick start and/or pilot" basis. The initial programs should be limited in nature in order to enable implementation in the 2007 program year. Proposed "quick start" or pilot programs for program year 2007 shall be filed not later than July 1, 2007 with review to be completed and implementation to occur not later than October 1, 2007. Electric and gas utilities should file energy efficiency programs choosing individual programs from within the following general list of Initial Program Categories:

Education: This would include the education of customers of all classes on energy efficiency and conservation. It should, to the greatest extent possible, be a consistent statewide group of messages. It should include education of builders and installers of equipment. All messages should be fuel neutral. The messages should encourage the efficient use of electricity and gas. The messages should increase awareness of opportunities to use electricity and natural gas more efficiently. This category of programs would apply to all customer classes.

Energy Audits, Evaluations leading to savings: This would include home and commercial energy audits and audits of commercial and industrial processes and equipment. The audits and evaluations would produce recommendations for opportunities to implement site-specific efficiency and conservation measures. Programs would be designed for audits to lead to savings results, and could include cost-effective and economically justified customer incentives to encourage the implementation of site-specific measures. This category of programs would apply to all customer classes. A training component to increase the number and quality of auditors will be needed.

Inspection and tune up of heating and air conditioning systems: This would be applicable to residential, commercial, and industrial systems. This category of programs would apply to all customer classes.

Lighting: Improved lighting for residential, commercial, and industrial customers. This category of programs would apply to all customer classes.

Increased deployment of demand response programs: Many programs already exist. This would look for additional opportunities to offer demand response programs including interruptible service, curtailment service, off-peak service, etc. In the near term, this category of programs would apply to commercial and industrial customer classes and may eventually extend to residential customers.

Weatherization: A Residential weatherization program that would be based solely on efficiency criteria, targeting least efficient homes first. The program should establish clear criteria to target the least efficient homes first. This category of programs would apply to the residential customer class. (An example of such a program is the Quick Start and comprehensive Severely Energy Inefficient Homes ("SEIH") program, which the Commission has directed all investor-owned gas and electric utilities to offer, using either the existing State Weatherization Assistance Program ("WAP") Network model[6] or a substantially equivalent alternative implementation method chosen by the utility, provided the alternative method assures that the SEIH program and all other residential programs are effectively available to all customers, consistent with the timeframe for initial program plan filings.)

Commercial and industrial prescriptive incentive programs: these programs offer a fixed-dollar incentive for multiple defined prescriptive measures (i.e. lighting, HVAC replacements, occupancy sensors, motors, etc).

All programs filed from the above category list should have a high probability of providing ratepayer benefits to the majority of customers. Program plans for program years 2008 and 2009 may contain additional programs beyond those included in the above category list.

---

[6] Appendix D, pp. D-9 and 10, and Appendix E, pp. E-3 through 6 of the Report of Richard Sedano to the Commission on the Collaborative Stakeholder Process in Docket No. 06-004-R, with errata, dated November 2, 2006.

B. Comprehensive Plan Filings

Beginning April 1, 2009, each electric and gas utility shall file a comprehensive set of program plans (for program years 2010 and later) unless administration of programs has been previously delegated by the Commission, in which case each administrator shall file a comprehensive set of program plans by that date.

The programs proposed may continue to include, but are not limited to, the "quick start and/or pilot" programs contained in the List of Initial Program Categories.

Section 9: Annual Reporting Requirements

By April 1 annually, each electric and gas utility shall file an annual report addressing the performance of all approved conservation and energy efficiency programs.

The report shall present the results of the prescribed EM&V measures for each program.

The report shall present the EM&V measures for the utility's portfolio.

The report shall include a measure of each program's savings.

The report shall present the amounts spent on each conservation and energy efficiency program and the total amounts spent on all programs.

Section 10: Records

All energy efficiency measures are subject to inspection by the Commission.

All records of energy efficiency programs shall be maintained in sufficient detail to permit a thorough audit and evaluation of all program costs and program performance. This section does not limit the existing authority of the Arkansas Public Service Commission.