

BEFORE THE
ARKANSAS PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION)	
OF ENTERGY ARKANSAS, INC. FOR)	DOCKET NO. 06-101-U
APPROVAL OF CHANGES IN RATES FOR)	
RETAIL ELECTRIC SERVICE)	

DIRECT TESTIMONY

OF

PAUL R. FORD

MANAGER, CUSTOMER RELATIONS

ENTERGY ARKANSAS, INC.

ON BEHALF OF

ENTERGY ARKANSAS, INC.

AUGUST 15, 2006

1 **I. BACKGROUND AND INTRODUCTION**

2 Q. PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.

3 A. My name is Paul R. Ford. I am employed by Entergy Arkansas, Inc.
4 ("EAI" or the "Company"), as Manager, Customer Relations. My business
5 address is 901 South Louisiana, Little Rock, Arkansas 72201.

6
7 Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

8 A. I am testifying on behalf of EAI.

9
10 Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
11 PROFESSIONAL WORK EXPERIENCE.

12 A. I joined EAI, formerly Arkansas Power & Light Company, in 1973 as a
13 customer service engineer. I later served as Division Customer Service
14 Manager for Northeast Arkansas and Southeast Missouri where I
15 established a customer service department with responsibility for
16 implementing sales and customer service strategies. I was later named
17 Manager, Commercial Market Development for Entergy Services, Inc.
18 ("ESI")¹ with responsibility for developing marketing strategies and
19 programs for the commercial and residential markets in Louisiana,
20 Mississippi, and Arkansas. I was named to my present position, EAI's
21 Manager of Customer Relations, in 2001. Customer Relations is

¹ ESI is a subsidiary of Entergy Corporation that provides technical and administrative services to all the Entergy Operating Companies.

1 responsible for responding to complaints by EAI's customers to the
2 Company, the Arkansas Public Service Commission, and various
3 governmental agencies; and for providing administrative support to EAI's
4 customer service organization.

5 I have also taught courses in management, marketing, economics,
6 and statistics, for universities in Arkansas and Louisiana, and have
7 published articles related to energy management.

8 I hold a Bachelor of Science degree in Mechanical Engineering
9 from the University of Arkansas, which was awarded in 1973, and earned
10 a Masters in Business Administration degree from the University of
11 Arkansas at Little Rock in 1980.

12

13 Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE THIS
14 COMMISSION?

15 A. Yes. I provided Direct Testimony before the APSC in Docket No.
16 04-159-TF concerning revisions to the Company's Policy Schedule No. 2,
17 Budget Billing Plan.

18

19 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

20 A. My Direct Testimony will describe EAI's proposed Weatherization Program
21 to provide weatherization services and energy efficiency education to the
22 Company's residential customers. I will also provide the estimated annual
23 cost of the Weatherization Program and discuss the program benefits.

1

2 **II. OVERVIEW OF THE WEATHERIZATION PROGRAM**

3 Q. WHY IS EAI PROPOSING A RESIDENTIAL WEATHERIZATION
4 PROGRAM AT THIS TIME?

5 A. Over the past few years, energy prices in the United States have
6 increased significantly and risks of sustained future price increases
7 threaten the social and economic well-being of Arkansans. The recent
8 passage of the Federal Energy Policy Act of 2005 is just one indication of
9 the priority our nation has placed on energy efficiency. As our customer
10 base is limited to Arkansas, the economic well-being of EAI is tied to the
11 Arkansas economy. Our low-income and fixed income customers
12 frequently live in older, energy inefficient housing and struggle to pay their
13 utility bills. Residential weatherization is a proven program that achieves
14 significant gains in energy efficiency and enables customers to better
15 manage their utility bills. Public comments filed by the Arkansas
16 Community Action Agencies Association in Docket 05-111-P indicate that
17 228,000 households in Arkansas could be eligible for federal
18 weatherization assistance in 2006. EAI is proposing the Weatherization
19 Program to contribute to the energy efficiency efforts of our state and to
20 assist our customers in managing their utility bills.

21

22 Q. PLEASE DESCRIBE THE PROPOSED WEATHERIZATION PROGRAM.

1 A. EAI proposes a Residential Weatherization Program that is modeled on
2 the U.S. Department of Energy ("DOE") Weatherization Assistance
3 Program ("WAP"). The DOE's WAP, which is administered by the
4 Arkansas Department of Human Services ("ADHS"), has been in
5 operation for 27 years. ADHS contracts with a group of subgrantees to
6 provide federal weatherization services, including various Community
7 Action Agencies and other nonprofit agencies that serve families in their
8 communities ("CAA Network").

9 A DOE report published in May 2005 and updated June 2006
10 indicates that 21 states now have weatherization programs funded by
11 utilities.² These states are Arizona, California, Colorado, Connecticut,
12 Iowa, Kentucky, Louisiana, Maryland, Massachusetts, Minnesota,
13 Montana, Nevada, New Hampshire, New Jersey, New York, Ohio,
14 Oregon, Pennsylvania, Texas, Washington, and Wisconsin. In most of
15 these states, the utility funded program is coordinated with DOE's WAP.

16 The process begins with an energy audit of the dwelling. This audit
17 is based on a computer software tool developed by Oak Ridge National
18 Laboratory for the DOE. Data is collected on the residence and entered
19 into the computer model. The program uses engineering and economic
20 calculations, including local weather data, energy costs, and equipment
21 costs, to compute the savings of individual conservation measures. A

² FY 2004 State Levering Summary and Table, compiled by the LIHEAP Clearinghouse, May 2005 (updated June 1, 2006), <http://www.liheap.ncat.org/pubs/04stlvsm.htm>.

1 prioritized list of cost-effective measures is produced and customized for
2 the dwelling based on building characteristics and type of heating and
3 cooling systems. The output also includes an estimated dollar value for
4 the projected energy savings, savings-to-investment ratios, and a list of
5 materials necessary to perform the recommended retrofit.
6 Weatherization service providers choose and install the best package of
7 efficiency measures for each home from this list. All retrofitted
8 residences are then audited by CAA Network personnel to assure that the
9 recommended measures have been installed properly.

10 Weatherization technologies include a wide range of energy
11 efficiency measures for retrofitting site built homes, mobile manufactured
12 housing, and apartment buildings. The most common measure is adding
13 insulation. The target level of insulation is based on the climatic zone in
14 which the dwelling is located. Air sealing is another effective measure.
15 This begins with a “blower door” test. The blower door is a variable
16 speed fan that fits in a doorway and is equipped with pressure gauges.
17 This test identifies the location of air leaks, thus providing a clear target
18 for air sealing. The sealing process typically involves caulking windows
19 and weather-stripping on doors. Another key target is leaks that occur
20 around the foundation and attic of the dwelling.

21 Addressing the efficiency of the heating equipment is important,
22 and weatherization crews use analyzers to check efficiency. They would
23 clean and tune up a furnace that has not been serviced recently and

1 adjust the controls as a routine part of weatherization. In some dwellings,
2 heating equipment is so old and inefficient that replacing it with modern,
3 high-efficiency units is cost effective. Modern controls such as
4 programmable thermostats also can save energy over their lifetimes.
5 Another key weatherization measure is water heating systems. Insulation
6 can be added to the water tank and pipes.

7 In warm climates such as Arkansas, weatherization includes
8 cooling efficiency measures. In some cases, crews provide circulating
9 fans such as ceiling fans that circulate inside air. On other houses, they
10 might include ventilating fans such as attic or whole-house fans that
11 introduce cooler outside air at night. Work crews also address leaks in
12 ducts that deliver warm air for heating or cool air for cooling.

13 During the weatherization project, minor health and safety repairs
14 may be made such as replacing broken window panes or sealing minor
15 roof leaks. Checking for and eliminating carbon monoxide leaks is
16 another key safety repair. These repairs are needed to make the
17 weatherization measures effective.

18 Not all of these measures are necessarily performed on every
19 dwelling. A more modern dwelling built to current energy efficiency
20 standards may not benefit from these weatherization measures. The
21 savings to investment ratio for a particular measure may not be positive,
22 or the home may be adequate in a particular efficiency area. Also, under
23 the federal funding program, there is a total dollar cap on spending and

1 an average expenditure limit per dwelling. There often are not sufficient
2 funds under this cap to complete every measure identified by the energy
3 audit as economical for a dwelling.

4
5 Q. DOES THE PROPOSED PROGRAM HAVE SPENDING LIMITS?

6 A. Yes. Based on the model of the federal WAP program, EAI proposes to
7 establish a fixed dollar amount each year for funding of weatherization
8 services and establish an average expenditure limit per dwelling.

9 In Docket 06-004-R, the Arkansas Community Action Agencies
10 Association proposed that all electric and gas utilities offer a residential
11 weatherization program. It was proposed that the Commission establish
12 an overall funding amount equal to the WAP's allocation to Arkansas,
13 which for the 2006 program year is \$3.2 million. Each gas and electric
14 utility's share of that amount would be based on its proportional share of
15 total residential sales converted to British Thermal Units ("BTU") for
16 purposes of the calculation. Consistent with this proposal, EAI has
17 determined that its annual weatherization program cost, based on the
18 Company's proportional share of the State's annual weatherization
19 services, to be \$980,663. The average expenditure per dwelling in
20 Arkansas for the WAP is \$2,826. EAI proposes to set its average
21 expenditure per dwelling at \$3,000, including administrative costs, which
22 would support the weatherization of approximately 327 homes each year.

1 The ADHS, Division of County Operations, Office of Community
2 Services, Weatherization Assistance Program, 2006 State Plan provides
3 information on the model that EAI proposes for its weatherization program.
4 The plan may be viewed and downloaded from the ADHS website at
5 <http://www.arkansas.gov/dhhs/dco/ocs/#haap>. Details of the State's
6 funding and maximum average expenditures are found on pages 16 and
7 17 of the plan.

8

9 Q. WHO WOULD PERFORM THE HOME WEATHERIZATION SERVICES?

10 A. Services under the Federal Weatherization Service are provided by
11 agencies included in the CAA Network as grantees. EAI proposes to
12 contract with agencies in the CAA Network operating within the EAI
13 service territory for delivery of the proposed Weatherization Program. The
14 same guidelines, procedures, and controls as used in the Federal program
15 would be applied to the EAI program. The notable difference is that the
16 program would be available only to EAI customers, and the income limits
17 of the federal program would not apply. Weatherization service would be
18 provided to any residential customer whose residence is determined by
19 the Audit Tool to benefit cost-effectively from weatherization, although we
20 expect that mostly low-income customers will qualify.

21

22 Q. HOW WOULD EAI'S RESIDENTIAL CUSTOMERS APPLY TO RECEIVE
23 WEATHERIZATION SERVICES?

1 A. A residential customer who desires to take advantage of the
2 Weatherization Program would apply at the CAA Network agency serving
3 his/her geographic location. A preliminary screening questionnaire will
4 determine if the residence is likely to meet the audit requirements. If the
5 residence passes the preliminary screening test, the customer is placed
6 on a waiting list for an audit. The list would be managed on a first-come,
7 first-serve basis. If the audit tool determines that efficiency measures are
8 cost-effective, weatherization would be performed. Once the annual
9 budget is expended, those customers remaining on the list would be
10 carried over to the next year.

11

12 Q. PLEASE DESCRIBE THE ENERGY EFFICIENCY EDUCATION
13 COMPONENT OF THE WEATHERIZATION PROGRAM.

14 A. The education component will consist of a residential energy efficiency kit.
15 These kits would be provided to the CAA Network agency delivering
16 weatherization services under contract to EAI. The kit would allow agency
17 staff to sit down with each customer at the time of the audit and explain in
18 detail potential ways to save energy. Staff would encourage the customer
19 to participate by installing items included in the kit. The kit would
20 encourage the customer to make an effort to save each month on utility
21 bills.

22 The kit would consist of educational documents and such easily-
23 installed devices as a compact fluorescent bulb, switch and outlet gaskets,

1 thermometer for hot water, freezer and refrigerator, electrical outlet safety
2 caps, as well as a smoke alarm. The annual cost of the weatherization
3 kits is estimated at \$24,945 for approximately 1,300 kits.

4

5 Q. WHY IS EAI PROPOSING TO PARTNER WITH THE CAA NETWORK IN
6 ITS SERVICE TERRITORY TO ADMINISTER THE PROGRAM?

7 A. A residential weatherization program requires specialized resources. In
8 addition to the cost of labor and materials at each home, there are
9 administrative costs which include such things as recordkeeping, taking
10 customer requests for service, scheduling, materials purchasing,
11 equipment, audits of program expenditures, and inspections of installed
12 weatherization measures. The CAA Network agencies already have this
13 infrastructure in place. To provide this internally, EAI would have to create
14 an infrastructure that is duplicative of the Federal program. It is not
15 unusual for a utility to contract for services such as meter reading, bill
16 processing, or vegetation management. By contracting with the CAA
17 Network agencies, EAI can mitigate incremental costs and take advantage
18 of a proven service delivery network.

19

1 **II. PROGRAM BENEFITS AND COST**

2 Q. WHAT ARE THE ANTICIPATED BENEFITS OF THE WEATHERIZATION
3 PROGRAM FOR PROGRAM PARTICIPANTS?

4 A. The benefits of the WAP have been extensively researched and
5 documented over the 30 year history of the program. Catalogs of studies
6 are available from the Oak Ridge National Laboratory and may be viewed
7 and downloaded from URL <http://weatherization.ornl.gov/Publications.htm>.

8 These studies document that for electrically heated houses which have
9 been weatherized under the federal program, there is an average
10 reduction of 10 percent in whole-house electricity consumption and a 27
11 percent reduction in electricity consumption for space-heating. Because
12 the EAI program will be the same as the federal program, it is reasonable
13 to conclude these same benefits will accrue to participants in the EAI
14 program.

15
16 Q. WHAT BENEFITS WILL ALL OTHER CUSTOMERS RECEIVE FROM
17 THE PROGRAM?

18 A. The studies available from the Oak Ridge National Laboratory also
19 document that the federal program achieves energy efficiency with a
20 positive cost-benefit ratio, which benefits all ratepayers. In addition,
21 energy efficiency programs, such as EAI's proposed weatherization
22 program, can provide other non-energy benefits including lower credit and
23 collection costs, reduced bad debt write-offs, avoided service shut-off

1 costs,³ and reduction in costs associated the Company's liability exposure
2 related to shut-offs.

3

4 Q. WHAT IS THE TOTAL ANNUAL COST TO THE COMPANY OF THE
5 WEATHERIZATION PROGRAM?

6 A. EAI estimates the annual weatherization services cost to be \$980,663. In
7 addition, the annual educational component cost is \$24,945. The overall
8 annual Program cost is \$1,005,608. This amount is included in Pro Forma
9 Adjustment 6, Miscellaneous Adjustments, as discussed in the Direct
10 Testimony of Company witness J. David Wright. EAI plans to manage the
11 program using existing internal resources, resulting in no additional EAI
12 expenses included in the program costs.

13

14 Q. HAS EAI INCLUDED AN ADJUSTMENT FOR LOST REVENUE IN THE
15 COST OF THE PROGRAM?

16 A. Docket 06-004-R is considering a wide range of efficiency measures in
17 addition to residential weatherization. Lost revenue is a consideration for
18 all efficiency programs. EAI has not included an adjustment for lost
19 revenue in the costs to be recovered for the weatherization program. The
20 small size of the program is not expected to have a significant effect on

³ Kushler, Mark, Ph.D., York, Dan, Ph.D., Witte, Patti; "Meeting Essential Needs: The Results of a National Search for Exemplary Utility-Funded Low-Income Energy Efficiency Programs," American Council for an Energy-Efficient Economic, Washington, D.C., April 2004 at 1.

1 revenue. EAI reserves the right to address lost revenue for all efficiency
2 programs, including residential weatherization, in the Efficiency
3 Rulemaking encompassed in Docket 06-004-R.

4

5 Q. DO THE BENEFITS OF THE WEATHERIZATION PROGRAM JUSTIFY
6 THE COST OF THE PROGRAM?

7 A. The previously referenced, Oak Ridge National Laboratory studies
8 document that the benefits of the Weatherization Program justify the costs
9 of the program.

10

11 Q. WILL EAI USE THE WEATHERIZATION PROGRAM TO PROMOTE THE
12 USE OF ELECTRICITY OR OTHER SERVICES OFFERED BY EAI?

13 A. No, the result of the energy efficiency measures will be the consumption of
14 less electricity, not promoting the use of more electricity. The EAI
15 weatherization program simply cannot reasonably be characterized as
16 promoting the use of electricity or other electric services.

17

18 Q. WILL EAI USE THE WEATHERIZATION PROGRAM TO INDUCE
19 CUSTOMERS TO CHOOSE ELECTRIC SERVICE OVER NATURAL GAS
20 SERVICE?

21 A. No. The measures involved in the weatherization program are designed
22 to increase the energy efficiency of the dwelling, such as insulation, and
23 have no direct relation to choosing electric over gas. Moreover, the

1 federal program does not permit fuel switching when replacing HVAC
2 equipment or appliances such as water heaters. EAI has proposed to
3 adopt the standards of the federal program, which includes this prohibition
4 on fuel switching. Further, the actual selection of the participants will be
5 made by the CAA Network agency rather than directly by EAI.

6

7 Q. IN LIGHT OF THESE FACTS, DOES EAI CONSIDER THE
8 WEATHERIZATION PROGRAM TO BE A PROMOTIONAL PRACTICE
9 UNDER THE COMMISSION'S PROMOTIONAL PRACTICES RULES?

10 A. No, it is my understanding that the intent of the Promotional Practices
11 Rules was to regulate the promotion of electric or gas service based on
12 energy efficiency or other claims. The proposed weatherization program
13 has a prohibition against fuel switching and by its design does not promote
14 the utility's services. Weatherization, separate and apart from promotion
15 of a utility service, does not fall within the practices the rules were
16 intended to regulate. In the alternative, should the Commission find that
17 the proposed weatherization program meets the definition of a promotional
18 practice under the Commission's existing promotional practices rules, then
19 the Company in its Application in this Docket seeks an exemption from
20 such rules pursuant to Rule 1.03 (b) of the APSC Rules of Practice and
21 Procedure.

22

1 Q. WHAT AUTHORITY DOES THE COMMISSION HAVE TO APPROVE
2 EAI'S PROPOSED WEATHERIZATION PROGRAM?

3 A. It is my understanding that the Commission has authority to approve EAI's
4 proposed Weatherization Program under the Energy Conservation
5 Endorsement Act of 1977.⁴ Research has documented that
6 weatherization achieves significant energy efficiency gains and benefits for
7 both the utility and its ratepayers. The proposed program meets the
8 requirements of this act for Commission approval.

9

10 Q. HOW DOES EAI PROPOSE TO RECOVER THE COSTS OF THE
11 WEATHERIZATION PROGRAM?

12 A. The annual program cost is included in the Company's cost-of service
13 study and would be recovered through base rates.

14

15 **V. SUMMARY AND CONCLUSION**

16 Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.

17 A. EAI proposes a residential weatherization program in furtherance of state
18 and national energy efficiency goals. The overall annual cost will be
19 included in base rates. EAI's weatherization program will be modeled on
20 the DOE's WAP program. EAI will contract with the CAA Network

⁴ Ark. Code Ann. § 23-3-405.

1 agencies in the Company's service territory for delivery of the proposed
2 weatherization program.

3

4 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

5 A. Yes, it does.

CERTIFICATE OF SERVICE

I, Steven K. Strickland, do hereby certify that a copy of the foregoing has been served upon all parties of record this 15th day of August 2006.

 / S /

Steven K. Strickland