

**Arkansas Public Service Commission
Tariff ("TF") Docket Summary Cover Sheet
Must be filed with each new TF docket filed at the Commission**

STYLE OF DOCKET: (Style may be changed by Secretary of Commission)	Docket Number:
<u>IN THE MATTER OF THE APPLICATION OF ENTERGY ARKANSAS, INC. FOR APPROVAL OF ENERGY EFFICIENCY PROGRAMS AND COST RATE RIDER</u>	<u>07-085-TF</u>

DOCKET DESIGNATOR: TF **LAST RATE CASE DOCKET:** 09-084-U

Does this change company name:
 Yes No

PETITIONER	ATTORNEY(S)' NAME, ADDRESS, PHONE, FAX AND E-MAIL
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Write a brief statement, limited to the space provided herein describing the case that you are filing. Please provide enough information to assure that the nature of your docket is clear.

In this Application, EAI seeks Commission approval of its proposed portfolio of energy efficiency ("EE") programs for the 2011-2013 program years. The programs for which EAI seeks approval are described in detail in EAI's Three-Year Plan for the 2011-2013 Program Years (the "Three-Year Plan"), which is attached to this Application as EAI Exhibit 1. In addition, EAI is filing the supporting testimonies of Richard P Smith, Karen M. Radosevich, and Peter Lemoine.

Pursuant to Rule 2.03(b), of the Commission's Rules of Practice and Procedure, please provide name, address, phone, fax, e-mail of at least one person, but not more than two, to appear on the Service List for this docket

Mr. Matthew R. Suffern, Entergy Services, Inc., 425 W. Capitol Ave., P. O. Box 551, Little Rock, AR 72203, 501-377-5855, fax 501-377-5426, msuffer@entergy.com; Steven K. Strickland, Entergy Arkansas, Inc., 425 W. Capitol Ave., P. O. Box 551, Little Rock, AR 72203, 501-377-4457, fax 501-377-4415, sstrick@entergy.com

- Number of customers by class affected by this tariff change:** Residential 582,557
Commercial 88,725 Industrial 20,605 Public Agencies, institutions or others 674
- Company's current authorized retail revenue requirement:** \$957,249,807
- Estimated annual retail revenue impact if proposal is approved, both in dollars and as a percentage of current retail revenue requirement:** 2011 \$8.9 million or 0.93% of current retail
- Estimated monthly impact on an average residential customer in both dollars and percentage increase:** 2011 \$0.46 increase for 1000 kWh avg residential usage or 124% increase.
- Proposed effective date:** Energy Efficiency Program Plan effective 7-1-11

Form completed by: Matthew Suffern Date: 3-1-11
 Representing: Entergy Arkansas, Inc.



BEFORE THE
ARKANSAS PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION)
OF ENTERGY ARKANSAS, INC. FOR)
APPROVAL OF ENERGY EFFICIENCY) DOCKET NO. 07-085-TF
PROGRAMS AND ENERGY EFFICIENCY)
COST RATE RIDER)

APPLICATION

COMES NOW Entergy Arkansas, Inc. (“EAI” or the “Company”) and, in support of its Application seeking approval of its Energy Efficiency Programs for the 2011-2013 Program Years (“Application”), states as follows:

1. The Company is a corporation organized and existing under the laws of the State of Arkansas, and is a public utility, as defined by Ark. Code Ann. § 23-1-101 *et seq.*, subject to the jurisdiction of the Arkansas Public Service Commission (“APSC” or the “Commission”). The Company’s principal place of business is located at the Metropolitan National Bank Building, 425 West Capitol Avenue, Little Rock, Arkansas 72201. A copy of the Company’s Agreement of Consolidation of Merger (Articles of Incorporation) is on file with the Arkansas Public Service Commission (“APSC” or the “Commission”) and is hereby incorporated by reference.

2. In this Application, EAI seeks Commission approval of its proposed portfolio of energy efficiency (“EE”) programs for the 2011-2013 program years. The programs for which EAI seeks approval are described in detail in EAI’s Three-Year Plan for the 2011-2013 Program Years (the “Three-Year Plan”), which is attached to this Application as EAI Exhibit 1.

BACKGROUND

3. Since late 2007, EAI has been offering its customers Quick Start Programs that were approved by the Commission originally in Order No. 8 in this Docket.¹ In 2009, EAI submitted an application seeking to extend those program offerings for an additional year. In Order No. 23 in this proceeding, the Commission authorized EAI to extend those programs for an additional 18 month term ending on June 30, 2011.² The Commission subsequently directed EAI to file its next round of EE plans, programs, portfolios, and budgets on March 1, 2011.³

4. Pursuant to that directive, EAI prepared its Three-Year Plan, which is attached to this application as EAI Exhibit 1. As discussed in the Direct Testimony of Richard P. Smith submitted in support of this Application, the Three-Year Plan was developed by updating and refreshing a plan EAI

¹ EAI has offered an Agricultural Irrigation Load Control Program (“AIRC”) to certain customers since 2008, first on a pilot basis then on an expanded basis. The Commission has evaluated and approved that program in Docket No. 08-072-TF.

² Order No. 23 at 3.

³ Docket No. 07-085-TF, Order No. 24 at 4.

previously had developed in 2009 for program years 2010-2012. Although EAI developed that plan for potential implementation for the 2010-2012 program years, certain issues remained that prevented expanding EAI's EE portfolio at that time: Arkansas' contractor and vendor network requiring additional development to support expanded EE programs and the final determination by the Commission on a mechanism to recover Lost Contributions to Fixed Costs ("LCFC") and to provide incentives or shared savings in Arkansas.

5. Both of these issues were addressed over the 2009 - 2010 period. The installation contractor and vendor network continued to develop, through the efforts of EAI, the Arkansas Energy Office, and other utilities in Arkansas.⁴ It is important to note that, even with the success of the installation contractor network, additional development of that network will be required as described within the Three-Year Plan.

6. In addition, in Docket No. 08-137-U, the Commission provided the needed policy guidance to provide investor-owned utilities in Arkansas with a mechanism to recover LCFC and to provide incentives based on the achievement of certain goals. However, it must be noted that the Commission is continuing to evaluate a Petition for Rehearing filed in Docket No. 08-137-U regarding the authority of the Commission to allow recovery for LCFC and

⁴ For additional details regarding the development of this network, see EAI's Annual Report for the 2009 Program Year filed on April 1, 2010 in Docket No. 08-038-RP.

incentives associated with EE programs. If the Commission or a reviewing court reverses the orders approving these cost recovery mechanisms, EAI would have to reevaluate its energy efficiency program offerings at the proposed levels and may petition the Commission regarding revisions to the Three-Year Plan.

EAI'S PORTFOLIO OF PROGRAMS

7. The Company has developed a portfolio of cost-effective energy efficiency and demand response programs that will provide a diverse set of program offerings for each of the Company's customer classes and meet the benefits and objectives as outlined by the Commission in the Rules for Conservation and Energy Efficiency Programs ("C&EE Rules"). The portfolio is built around three broad program categories: Residential Solutions, Business Solutions, and CitySmartSM. These categories will provide easy entry points for program participants and will provide a natural evolution from the current Quick Start Program portfolio offered by EAI. EAI proposes to offer these EE Programs:

1. Residential Lighting and Appliances
2. Cooling Solutions for Residential and Small Business Customers
3. Home Energy Solutions
4. Energy Efficiency Arkansas
5. Arkansas Weatherization Program

6. Residential Benchmarking Pilot
7. ENERGY STAR New Homes
8. Residential Direct Load Control
9. Energy Solutions for Manufactured Homes
10. Energy Solutions for Multifamily
11. C&I Prescriptive Program
12. CitySmartSM
13. C&I Custom Solutions
14. Agricultural Irrigation Load Control
15. Small Business
16. Agricultural Energy Solutions

8. In Order No. 17 in Docket No. 08-144-U, the Commission set forth a Checklist of Factors that it would use to determine whether a utility's proposed EE programs and EE portfolio are comprehensive under the C&EE Rules. In Section 1 of the Three-Year Plan, EAI provides its analysis of how its proposed plan, and the programs contained therein, satisfy each of the factors set forth by the Commission in Order No. 17.

9. As discussed in the Three-Year Plan and in the Direct Testimony of Richard P. Smith and of Peter Lemoine, filed in support of the Application and the Three-Year Plan, EAI believes these programs are comprehensive. These

programs are projected to achieve the savings targets adopted by the Commission in Order No. 17 in Docket No. 08-144-U. Table 1, below, provides EAI's projected energy savings from the portfolio of programs contemplated under the Three-Year Plan.

Table 1
Projected Savings

Total Portfolio	2011	2012	2013	Total
Annual Energy Savings (MWh)	56,262	111,145	165,469	332,875
Annual Energy Goal (MWh)	55,008	110,016	165,023	330,047
% of Goal Achieved	102%	101%	100%	101%

10. Order No. 17 in Docket No. 08-144-U also reiterates the Commission's directive, consistent with the C&EE Rules, that EE programs/portfolios be cost effective. As discussed in greater detail in Section 2 of the Three-Year Plan and in the Direct Testimony of Karen M. Radosevich filed in support of the Application, the portfolio contemplated under this plan is cost-effective. Cost-effectiveness was defined by applying the Total Resource Cost ("TRC") Test, as defined by the California Standard Practice Manual. This test was used to determine the cost-effectiveness of measures, programs, and the entire portfolio, with the TRC Test result of 1.89. In addition, a benefit-to-cost ratio was calculated for the Participant Test, the Ratepayer Impact Measure ("RIM") Test, and the Program Administrator Cost ("PAC") Test, as discussed in greater detail in Ms. Radosevich's testimony.

11. The estimated budget for each program is set forth in detail in the Three-Year Plan, and is summarized in the table below:

COST RECOVERY

12. As reflected in the proposed budgets above, EAI's proposed portfolio of programs reflects a significant increase in EE expenditures over the next three years. In the Energy Efficiency Cost Rate Rider ("Rider EECR") filing due April 1, 2011, EAI will propose to include its 2011 program costs, which will include (1) the AILC program costs for the 2011 program year approved in Order No. in Docket No. 08-072-TF; (2) the estimated program costs for the first six months of 2011, approved by the Commission in Order Nos. 23,⁵ 28,⁶ and 30⁷ in Docket 07-085-TF; and (3) the estimated program costs for the last six months of 2011 for those programs contemplated under the Three-Year Plan, as well as the updated budgets that the administrators of the Arkansas Weatherization Program and Energy Efficiency Arkansas provide.

13. As authorized by Rider EECR, EAI will include a true-up for any over or under recovery of 2010 program costs that is calculated. This would include the effects of the two increases to the Residential Energy Solutions

⁵ In Order No. 23, the APSC approved extending EAI's Quick Start Programs for an additional 18 months, until July 1, 2011.

⁶ In Order No. 28, the Commission approved a second increase in funding of EAI's Residential Solutions Program, raising the total annual budget by \$865,000.

⁷ In Order No. 30, the Commission approved a third increase in funding of EAI's Residential Solutions Program, raising the total annual budget by \$285,000.

Program that EAI requested and the Commission approved in 2010.⁸ EAI also will include its calculation of LCFC for the 2011 program year in that Rider EECR filing. EAI's proposed calculation of its LCFC is described in Mr. Smith's direct testimony.

14. EAI requests that the following individuals be placed on the service list as its representatives in this Docket:

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WHEREFORE, Entergy Arkansas, Inc. prays that the Commission find that its proposed portfolio of Energy Efficiency Programs, developed pursuant to the C&EE Rules as found in Attachment A to the Commission's Order No. 18 in APSC Docket No. 06-004-R, is in the public interest.

⁸ See Order Nos. 28 and 30 in Docket No. 07-085-TF.

Respectfully submitted,
ENTERGY ARKANSAS, INC.

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CERTIFICATE OF SERVICE

I, Matthew R. Suffern, do hereby certify that a copy of the foregoing has been served upon all parties of record by forwarding the same by electronic mail and/or first class mail, postage prepaid this 1st day of March 2011.

/s/ Matthew R. Suffern
Matthew R. Suffern

BEFORE THE
ARKANSAS PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION)
OF ENTERGY ARKANSAS, INC. FOR)
APPROVAL OF ENERGY EFFICIENCY) DOCKET NO. 07-085-TF
PROGRAMS AND ENERGY EFFICIENCY)
COST RATE RIDER)

EAI EXHIBIT 1.

ENERGY EFFICIENCY PROGRAMS
PLAN FOR 2011-2013 PROGRAM YEARS

Entergy Arkansas, Inc 2011 – 2013 Energy Efficiency Program Plan

Docket No. 07-085-TF

March 1, 2011

**Entergy Arkansas, Inc.
2011 – 2013 Energy Efficiency Program Plan
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Executive Summary

Entergy Arkansas, Inc. (“EAI” or “the Company”) has prepared this portfolio of energy efficiency (“EE”) programs (the “Plan”) pursuant to Conservation and Energy Efficiency Rules adopted by the Arkansas Public Service Commission (“APSC” or the “Commission”) in its Order No. 18 in Docket 06-004-R (the “Rules”) and Order No. No. 24 in Docket No. 07-085-TF, where the Commission directed EAI to file its next round of EE plans, programs, portfolios, and budgets on March 1, 2011.

The portfolio of programs included within this plan is designed to offer cost-effective EE programs to EAI customers, with programs developed for each of EAI’s customer classes. In addition, all program categories described in the Rules are contemplated within this portfolio. The programs proposed in this plan generally contemplate a three-year implementation period, and they build upon the Company’s Quick Start Energy Efficiency Programs that have been implemented since late 2007. The portfolio satisfies the Benefits and Objectives outlined in the Rules, and indeed, the Plan goes beyond them in an effort to bring significant value to EAI’s customers through the delivery of effective conservation, EE, and demand response program.

As EAI has indicated in several filings made with the Commission, EAI’s ability to offer expanded EE programs to its customers historically has been limited by two key factors. One factor has been the need to develop a vendor/contractor infrastructure to support programs that would be offered in Arkansas. Another limiting factor was the lack of a cost recovery mechanism that would authorize utilities in Arkansas to recover the lost contribution to fixed costs (“LCFC”) as well as an incentive/shared savings mechanism to promote EE investment. As EAI has discussed previously, through its Quick Start Programs, EAI made great strides in developing the vendor/contractor network in Arkansas. While more development is needed, EAI’s efforts as well of the efforts of the Arkansas Energy Office (“AEO”), have led to the development of a contractor/vendor network that can provide support to EAI, and other Arkansas utilities, for increased EE program offerings. For the second factor, the Commission addressed that in Order No.14 in Docket 08-137-U, providing EAI and other APSC-jurisdictional utilities with a mechanism for recovering the LCFC, as well as an incentive for utilities to invest in EE. Although it does reduce the disincentive for utilities to invest in EE, that Order has been the subject of a Petition for Rehearing that was filed by the Arkansas Electric Energy Consumers (“AEEC”), which was granted by the Commission for the purpose of obtaining additional time to consider AEEC’s Petition. Should the Commission or an appellate court take any action to remove or reduce LCFC recovery and incentives for EE programs, EAI, and presumably other APSC-jurisdictional utilities, will once again be limited in their ability to offer EE programs in Arkansas.

Summary of the Portfolio

EAI’s Three Year Plan:

- **Is designed to exceed the APSC’s goals, saving nearly 333 GWh over 2011-2013**

Executive Summary

- **Represents a substantial business commitment to Demand Side Management¹ (“DSM”) vis-a-vis EAI’s peers.² The Company’s program budget in 2013 is estimated to equal 3.2% of annual revenue.**
- **Is cost-effective with an overall Total Resource Cost Test (“TRC”) of 1.89**
- **Is driven by APSC’s vision of Comprehensiveness**
- **Offers significant energy savings opportunities for all customer classes and market segments**
- **Includes total gross benefits to EAI customers equal to \$267 Million over the lifetime of the EE implemented**

The portfolio is built around two broad program categories: Residential Solutions and Business Solutions. These categories will provide easy entry points for program participants and will provide a natural evolution from the current Quick Start Portfolio offered by EAI. Within each category, a number of programs will be offered; programs that were selected based on a number of factors, including the successful infrastructure created by the Quick Start Programs, a comprehensive review of best practice EE programs from around the country, and a rigorous analytical process. The tables below summarize important portfolio and program results and metrics.

¹ The term Demand Side Management is used interchangeably with energy efficiency and demand response for purposes of this Three –Year Plan

² IOUs spending \$10 Million or more a year on energy efficiency programs.

Table 1: Program Savings & Budget Summary

EAI Programs	TRC Test	Annual MWh Savings				Annual MW Savings				Annual Budget (\$000)			
	Ratio	2011	2012	2013	Total	2011	2012	2013	Total	2011	2012	2013	Total
Residential Lighting and Appliances	1.88	21,010	24,789	25,818	71,618	2.7	3.3	3.4	9.4	\$3,085	\$3,856	\$4,319	\$11,259
Residential & Small Commercial Cooling Solutions	1.24	1,383	2,767	4,150	8,300	0.6	1.2	1.8	3.6	\$646	\$1,293	\$1,939	\$3,878
Home Energy Solutions	1.01	1,604	3,209	4,011	8,824	0.9	1.8	2.3	5.0	\$1,702	\$3,404	\$4,255	\$9,362
Energy Efficiency Arkansas	0.00	0	0	0	0	0.0	0.0	0.0	0.0	\$1,000	\$1,000	\$1,000	\$3,000
AR Weatherization	2.21	2,890	2,890	2,890	8,671	0.8	0.8	0.8	2.5	\$1,200	\$1,200	\$1,200	\$3,600
Benchmarking	1.68	12,656	6,328	6,328	25,311	4.3	2.2	2.2	8.7	\$996	\$1,494	\$1,992	\$4,482
ENERGY STAR Homes	1.00	0	723	1,084	1,807	0.0	0.2	0.3	0.6	\$90	\$442	\$640	\$1,172
Direct Load Control	2.88	0	0	0	0	3.1	7.3	5.2	15.6	\$518	\$1,725	\$2,588	\$4,831
Mobile Homes	1.12	214	427	641	1,282	0.2	0.3	0.5	1.0	\$290	\$579	\$869	\$1,737
Multifamily Direct Install	1.04	273	364	455	1,093	0.1	0.1	0.1	0.3	\$210	\$279	\$349	\$838
C&I Prescriptive	2.33	8,400	45,360	75,569	129,328	2.0	10.6	17.7	30.2	\$1,411	\$7,619	\$12,694	\$21,724
City Smart	1.68	1,725	6,901	10,352	18,979	0.2	0.9	1.4	2.5	\$453	\$1,813	\$2,719	\$4,985
C&I Custom	1.61	5,176	15,528	31,056	51,760	0.9	2.6	5.2	8.6	\$2,001	\$6,003	\$12,006	\$20,011
Agricultural Irrigation Load Control	2.83	0	0	0	0	19.1	12.2	8.0	39.2	\$5,263	\$5,507	\$4,006	\$14,776
Small Commercial Direct Install	1.33	603	1,207	1,810	3,620	0.2	0.4	0.6	1.2	\$467	\$934	\$1,401	\$2,802
Agricultural Energy Solutions	1.48	326	652	1,304	2,281	0.1	0.2	0.4	0.7	\$147	\$294	\$589	\$1,030
Total Portfolio	1.89	56,262	111,145	165,469	332,875	35.2	44.1	49.9	129.1	\$19,479	\$37,443	\$52,566	\$109,488

APSC Goal (% Sales) ¹	0.25%	0.50%	0.75%	1.5%
APSC Goal (MWh)	55,008	110,016	165,023	330,047
Annual MWh Savings as % of Goal	102.3%	101.0%	100.3%	100.9%

¹ Weather adjusted 2010 Retail Sales = 21,082,534 MWh

Table 2 Portfolio Budget

Program Cost Summary	2011		2012		2013		Total 3	
	Annual Budget		Annual Budget		Annual Budget		Year Budget	
Type	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$85,756	0.4%	\$172,874	0.5%	\$271,028	0.5%	\$529,658	0.5%
Marketing & Delivery	\$7,402,758	38.0%	\$11,767,573	31.4%	\$13,793,697	26.2%	\$32,964,028	30.1%
Incentives / Rebates	\$8,849,898	45.4%	\$19,961,350	53.3%	\$30,444,074	57.9%	\$59,255,321	54.1%
Evaluation, Measurement, & Verification	\$674,813	3.5%	\$1,708,033	4.6%	\$2,709,757	5.2%	\$5,092,603	4.7%
Administration	\$2,465,593	12.7%	\$3,833,588	10.2%	\$5,346,966	10.2%	\$11,646,147	10.6%
Total Budget	\$19,478,819	100.0%	\$37,443,418	100.0%	\$52,565,522	100.0%	\$109,487,758	100.0%

Table 3: Lost Contribution to Fixed Costs & Incentives³

	LCFC Value (\$000)	Shareholder Incentive Value (\$000)
2011	\$1,293	\$0
2012	4,389	\$1,364
2013	\$8,993	\$2,621
Total	\$14,675	\$3,985

³ LCFC values shown in table do not include any annual escalators. However, LCFC values used in the calculation of program and portfolio cost-effectiveness include a GDP deflator and include a 2% annual Electric & Fuel Charge Escalation Rate. This is because most measures have an effective useful life (EUL) longer than three years, and many have EULs of 15 years or more. Because this is a long time horizon, it is important to include these escalators in the benefit-cost calculations.

Executive Summary

Table 4: Portfolio Cost-effectiveness Results

Test	Results	
Participant Cost	NPV (all participants)	\$ 104,913,427
	Benefit-cost ratio	1.93
	NPV (average participant)	\$39
Ratepayer Impact Measure (RIM)	NPV	\$ 45,064,288
	Benefit-cost ratio	1.20
	Lifecycle revenue impact per kWh	-\$0.000166
	2011 revenue impact per kWh	\$0.000920
	2012 revenue impact per kWh	\$0.000922
	2013 revenue impact per kWh	\$0.000835
Total Resource Cost (TRC)	NPV	\$ 125,137,685
	Benefit-cost ratio	1.89
	Levelized cost per kWh	\$0.076
Program Administrator Cost (PAC)	NPV	\$ 174,516,441
	Benefit-cost ratio	2.89
	Levelized cost per kWh	\$0.049

EAI’s portfolio of Residential Energy Efficiency Solutions programs includes attractive value propositions and considerable energy saving opportunities for all of EAI’s residential customers. These programs offer multiple participation opportunities for owners and renters of single family homes, apartments and condominiums, and mobile/manufactured homes, alike. Residential Solutions is comprised of 10 programs, which are summarized below.

1. Residential **Home Energy Solutions** will achieve long-term, significant cost effective electricity savings through the use of local auditors and contractors who will help residential customers analyze their energy use and identify opportunities to improve EE; install low-cost energy-saving measures; and identify and provide tiered incentives to encourage customers to install all EE improvements that will yield savings.
2. The **Energy Solutions for Multifamily** program will target multifamily property owners, managers and renters. The program will provide free audits and direct-install measures as well as bonus incentives for property owners who co-fund additional efficiency projects with packages of measures.
3. **Manufactured Homes** will target manufactured (mobile) home owners as well as mobile home community managers and owners. The program will build relationships with mobile home community owners, managers and residents through community meetings and direct marketing, and by providing energy audits and direct install measures free of charge in common areas and in homes (where permitted).
4. **ENERGY STAR New Homes** will increase the supply of qualified home builders that are motivated to design, build and independently verify energy efficient homes in Arkansas, thereby raising the EE bar for residential construction in the Company’s territory. Incentives will be paid to qualified builders who construct new homes meeting ENERGY STAR New Homes Version 3 specifications.
5. **Efficient Cooling Solutions for Residential and Small Business Customers** will provide residential and small business customers with a comprehensive set of options to

lower the energy consumption and cost associated with keeping their homes and businesses cool and comfortable in the summer. Customers needing a new air conditioner will find that EAI's ENERGY STAR AC program offers an attractive value proposition, with a tiered incentive structure that pays the highest rebates for the most efficient units; this structure is equally attractive to contractors and distributors. Additional incentives will be available to customers who opt for an ENERGY STAR or ACCA Quality Installation ("QI").

6. The objective of the **Residential Lighting & Appliances** program is to increase awareness and sales of efficient lighting and appliances to residential and small business customers. The program offers customers the opportunity to purchase, largely through retail locations, a variety of discounted products that are ENERGY STAR qualified or better.
7. **Residential Direct Load Control**. This opt-in load control initiative would allow the Company to cycle off a participant's home central air conditioner ("CAC") condenser during peak events. Over the long-run system and customer benefits include, among others lower rates (due to a lesser need to dispatch the most expensive generating units) and better regional air quality (since peaking units emit higher levels of criteria pollutants relative to other units). To minimize discomfort, the enabling technology allows the air-handler fan to remain powered to circulate air throughout the house.
8. **Residential Benchmarking Pilot**. This program encourages participants to implement both behavioral and technological changes to reduce home energy use relative to their peers.
9. **Arkansas Weatherization Program ("AWP")**. EAI is a partner in this statewide weatherization program targeted at customers with highly-inefficient homes. This plan includes funding to weatherize approximately 2,190 homes in the Company's territory over three years.⁴
10. **Energy Efficiency Arkansas ("EEA")**⁵ – EAI is a partner in this statewide program implemented by The Arkansas Energy Office to provide education and training for key Arkansas market players to support the expansion of EE.

EAI's proposed **Business Solutions** programs include attractive value propositions and considerable energy saving opportunities for every type of non-residential ratepayer. Business Solutions is comprised of six programs, which are summarized below.

1. The **C&I Prescriptive Program** offers an easy way for non-residential customers to see significant savings without having to worry about complex analyses or detailed participation rules; incentives and claimed savings are based on deemed savings measures. Participants can choose from a large menu of qualified technologies, such as lighting and controls, variable speed drives, HVAC equipment, refrigeration equipment, office equipment, agricultural, and food service equipment.
2. **C&I Custom Solutions**. Many large commercial and industrial customers engage in EE projects that are specialized, require a high level of technical assistance, and calculated incentives – the Custom Program is designed for these customers, and will feature

⁴ Note: This is a program operated by the Arkansas Community Action Agencies, and the thus Company did not file a separate program plan. Details of the plan will be available within the AWP filing by the Arkansas Community Action Agencies Association.

⁵ Note: This program is implemented by the Arkansas Energy Office and EAI supports the program via prescribed funding levels. More details of the program will be within the Energy Efficiency Arkansas program filing by the Arkansas Energy Office.

bonus incentives for projects that are wide in scope (that include multiple measure types and/or end uses).

3. **Small Business** is tailored to meet the needs of EAI's small business customers, which constitutes a large majority of non-residential ratepayers. The program will provide audits, identify cost-effective efficiency retrofit opportunities and deliver direct installation, financial incentives and other services to encourage early replacement of existing equipment with high efficiency alternatives, as well as the installation of new measures.
4. **CitySmartSM** will be a continuation of the Quick Start Program of the same name that targets Local Public Entities. Due to the unique operation of these customers compared with businesses, EAI's experience has shown that a stand-alone program offering is needed for this market. Customers eligible for CitySmartSM include but are not limited to municipalities, K-12 schools, and universities. CitySmartSM will offer similar technological measures as Business Solutions, including prescriptive measures such as lighting, motors, and LED traffic signals, as well as custom measures such as large HVAC, boilers, and chillers.
5. **Agricultural Energy Solutions** will help farms in the Company's territory overcome first costs and education barriers to EE through energy audits, prescriptive and customer projects, and agricultural supplier education (to increase stocking of efficient farm equipment).
6. **Agricultural Irrigation Load Control** is a Commission-approved peak load control pilot program that provides incentives to qualified agricultural customers for allowing EAI to interrupt electric service to well pumps during the summer. Service is interrupted through Company-installed AML meters. This program is implemented in-house, without an implementation contractor.

As reflected above, the AWP and the EEA are implemented by other entities, with funding provided by EAI and the other investor-owned utilities in Arkansas. At the time of preparing this filing and the Three-Year Plan, EAI had received general guidance regarding estimated budgets for AWP and included those estimated budgets in our cost/benefit analysis results from those entities. The EEA has a proposal before the Commission awaiting approval that includes American Recovery and Reinvestment Act ("ARRA") funding to reduce the utility's cost for the EEA program cost. However, EAI prepared estimated costs based upon historic years and increasing those historic years in a manner consistent with EAI's other program expansions and including these estimated budget within EAI's portfolio for purposes of the cost/benefit analysis. EAI plans to adjust our estimated EEA budget once approved budgets are known. In addition, EAI historically has sought approval of its Irrigation Load Control program in a separate docket, Docket No. 08-072-TF. Approval for the program years 2011 and 2012 was provided by the Commission in Order No. 8 in that docket. Accordingly, the figures above reflect the projected costs and savings that were approved by the Commission in that Order.

Distribution of Program Savings & Costs

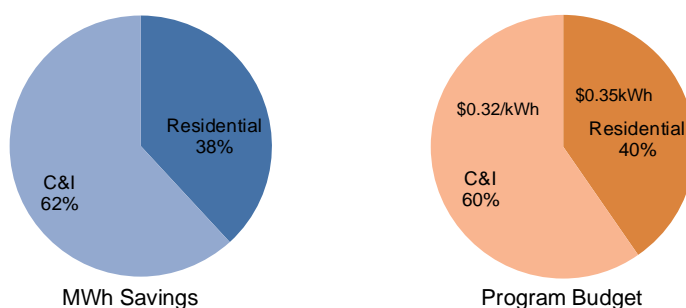
Figure 1 below illustrates the distribution of savings and program budget over the Three Year Plan by customer class.

C&I programs account for approximately 60% of planned savings and costs. Of this about two-thirds is accounted for by C&I Prescriptive; this is commensurate with the ability to scale this program very quickly and achieve significant savings through a large volume of projects.

Executive Summary

Programs that require more time to ramp-up, such as C&I Custom (typical Custom projects have a duration of 6 months to a year) grow more prominent in the portfolio over time; C&I Custom savings more than doubles, from 9% of total portfolio savings in 2011 to 19% of total portfolio savings in 2013.

Figure 1: MWh Savings & Program Budget, by Customer Class⁶



The Planning Process

The programs proposed in the Plan are designed to satisfy the Commission’s directives in Order No. 17 in Docket No. 08-144-U, as well as, and more generally, the conservation and EE benefits and objectives set forth in the Rules. The portfolio was developed through a bottom-up analysis of a comprehensive list of EE measures, the experience of the Company’s Quick Start Programs, best practice program designs, and best estimates of program and portfolio costs and customer participation based on EAI’s experience and an extensive review of other utilities’ experiences.

In Order No. 17, the Commission adopted numerical targets for an initial period of three years and stated that utilities meeting these performance levels will presumptively satisfy the Commission’s direction for utilities to implement comprehensive EE programs and portfolios as an essential utility function. See Order No. 17 at 36. As set forth in greater detail in this report, EAI’s proposed portfolio of programs is designed to meet the Commission-directed targets for the 2011, 2012, and 2013 program years. Accordingly, EAI believes this portfolio satisfies the Commission’s directives in the Rules and in Order No. 17.

⁶ Cost effectiveness values (\$/kWh) are on a “first-year” basis. That is, annual program budget divided by annual program savings.

In addition, in Order No. 17, the Commission set forth a Checklist of Factors that it will use to determine whether a utility's proposed EE programs and EE portfolio are comprehensive under the Rules. In section 1 of this plan, EAI provides its analysis of how this proposed plan, and the programs contained therein, satisfy each of the factors set forth by the Commission.

The APSC's Checklist of Factors was a touchstone of the program analysis; it was the basis upon which programs were considered, and re-considered, until EAI arrived with a set of programs firmly grounded in each of the seven factors.

The program designs were also developed around the list of cost-effective measures, customer count and energy use by segment, rate class, business classification, state economic and demographic data, building and appliance codes and standards, and EAI's DSM Potential Study. Market barriers for each customer segment were identified and best practice strategies to address these barriers were built into the program delivery mechanisms and budgets.

Order No. 17 also reiterates the Commission's directive, consistent with the Rules, that EE programs/portfolios be cost-effective. As discussed in greater detail in Section 2 of this plan, the portfolio contemplated under this plan is cost-effective. Cost-effectiveness was defined by applying the TRC Test, as defined by the California Standard Practice Manual. This test was used to determine the cost-effectiveness of measures, programs, and the entire portfolio.

The portfolio-level analysis included calculating the portfolio-wide costs-effectiveness tests and balancing the investments between programs and sectors. In addition, the portfolio's results were benchmarked against the results of EE programs nationwide to ensure the Company's goals are aggressive but achievable and cost-effective compared to EAI's peers.

Other Related EE Policy Issues

In 2010, through a series of orders, the Commission provided guidance on a number of policy issues associated with the implementation of EE programs in Arkansas. As discussed above and throughout later sections of this plan, EAI has relied upon that guidance in developing the proposed portfolio contemplated in this plan. However, for certain issues, the rules and/or protocols for implementation of the Commission's directives are being developed through other proceedings.

In Order 14 in Docket No. 08-137-U, the Commission approved a LCFC mechanism. Several inputs to that calculation will be derived from information contained with and/or analyses conducted in connection with this plan. In addition, EAI anticipates being eligible to receive incentives pursuant to Order 15 in Docket No. 08-137-U. However, specifics regarding these key aspects are not discussed in this plan, but rather are discussed in the application and testimony seeking approval of this plan.

Another issue resolved by the Commission provides the ability for certain commercial and industrial ("C&I") customers to evaluate their participation options for a utility's EE programs. In Order Nos. 10 and 1 in Docket Nos. 10-010-U and 10-101-R, respectively, the Commission ordered the establishment of a rulemaking docket to develop amendments to the Rules to allow a Self-Directed Energy Efficiency Option ("S-D Option") for large C&I customers of investor-

owned electric and gas utilities. That Order contemplates that large C&I customers ultimately will be able to exercise the S-D Option after their applications for approval to exercise that option are approved by the Commission. The Order discusses various requirements that the Commission directed to be included within the amended Rules. In this plan, EAI has not assumed any C&I customers would be exercising the S-D Option, which based upon the schedule for the rulemaking, would occur no earlier than the 2012 program year. However, EAI's projected savings and targets will be affected depending upon the number of large C&I customers that successfully apply to the Commission to exercise the S-D Option.

As the Company has discussed in numerous proceedings before the Commission, EAI's three-year plan for the 2010-2012 time period included an extensive discussion of EAI's intention to develop a third-party Evaluation, Measurement, and Verification ("EM&V") process that would be implemented with EAI's proposed portfolio of programs. However, on December 10, 2010, the Commission issued an Order in a number of dockets that established a collaborative process for developing an EM&V protocol and amendments to the Rules in connection with EE programs in Arkansas. The Commission concluded that "once finalized by the Commission, the resulting EM&V protocols shall be used to evaluate EE program portfolio goal achievement, to calculate LCFC, and to calculate any incentive award amounts, except to the extent such results may be affected by default values approved in [that] Order." Accordingly, EAI will implement its EM&V process consistent with the forthcoming direction from the Commission on this issue. Also in that Order, the Commission established a "default net-to-gross value of 80 %" to be applied to for all EE program measures. Thus, whereas EAI originally had proposed various net-to-gross values associated with its EAI's three-year plan for the 2010-2012 time period, for purposes of this Plan, EAI has utilized the default ratio pursuant to the Commission's directive. This default ratio is subject to a true-up through the EM&V process. This Plan also includes an annual budget of 5 % of portfolio cost as discussed in NAPEE best practices for EM&V.

1. Introduction

1.1. Goals of the Comprehensive Filing

1.1.1. APSC Comprehensiveness Checklist

In Order No. 17 in Docket No. 08-144-U, the Commission set forth a Checklist of Factors it will use when determining whether a utility's proposed EE programs and total EE portfolio are Comprehensive pursuant to C&EE Rules. In this section, the Company identifies these seven factors and discusses how EAI's EE proposed portfolio meets the particular aspect(s) of Comprehensive articulated in each factor

Factor 1: Whether the programs and/or portfolio provide, either directly or through identification and coordination, the education, training, marketing, or outreach needed to address market barriers to the adoption of cost-effective energy efficiency measures.

In EAI's program descriptions provided in Section 3 of this Plan, EAI identifies the target market(s) barriers to EE and outlines specific implementation strategies to help overcome these

barriers. Nearly all market barriers fall into general categories: Availability, Awareness and Attractiveness:

- **Lack of market availability** –The efficient technology or service is not adequately available in the marketplace.
- **Lack of customer awareness** – The customer is not aware of the technology or service, its characteristics, and how to purchase it.
- **Attractiveness** – The technology or service is not attractive in terms of financial payback, convenience of project development and installation, and other attributes.

Each market barrier can be addressed using different techniques, each with their own costs and limitations. Awareness can be improved with advertising and contractor training, for example, and attractiveness can be improved with financial incentives. Availability typically requires intensive outreach, education and training of contractors. The mix of program incentive, marketing, and implementation dollars depends on the current status of each market barrier – this is why the program non-incentive dollars can vary considerably across programs, as shown in Table 5.

Table 5. Program Marketing and Delivery Budgets

Program	Marketing & Delivery Budget Allocation
Energy Efficiency Arkansas	100%
Agricultural Irrigation Load Control	67%
ENERGY STAR Homes	67%
Direct Load Control	46%
Total Portfolio	38%
Mobile Homes	37%
Agricultural Energy Solutions	33%
Home Energy Solutions	30%
City Smart	26%
Benchmarking	21%
Residential Lighting and Appliances	21%
C&I Prescriptive	21%
AR Weatherization	17%
Small Business	17%
Residential & Small Commercial Cooling Solutions	14%
C&I Custom	13%
Multifamily	8%

While some programs require primarily awareness building, others require primarily improved attractiveness or improved availability.

For example, one of the primary barriers to ENERGY STAR New Homes being built is a lack of availability of convenient and centralized customer access to qualified home builders and developers. Therefore, EAI's proposed ENERGY STAR New Homes program will devote sufficient resources to expand the network of qualified ENERGY STAR New Home builders within the Company's territory by offering education and training to assist New Home builders in Arkansas to qualify for this certification.

Lack of availability is not a significant barrier for all programs. For example, efficient central ACs and heat pumps are available in the marketplace, but cost and customer awareness are

significant issues. To overcome the cost barrier and improve the financial attractiveness of efficient ACs, the program provides adequate incentives (with higher incentives going to the most efficient ACs and heat pumps). The program will increase contractor (and thereby customer) awareness of efficient ACs and heat pumps by providing technical and program training to AC contractors, and by promoting the incentives to AC distributors.

The relatively modest Marketing & Delivery budgets for Small Business and Multifamily Direct Install programs reflect the fact these are hard-to-reach markets that require higher incentive levels to make the EE investment sufficiently attractive. The innovative model developed for these programs is designed to allow EAI to minimize marketing and delivery cost while maximizing quality control.

Factor 2: Whether the programs and/or portfolio have adequate budgetary, management, and program delivery resources to plan, design, implement, oversee and evaluate energy efficiency programs.

Most programs described in this portfolio will be delivered in coordination with third party contractors selected by EAI. The exceptions include EEA, which is run by the Arkansas Energy Office and AWP, which is implemented through the Arkansas Community Action Agencies, and Agricultural Irrigation Load Control, which is delivered solely by EAI.

The third-party program delivery model is the dominant strategy employed by both utility and non-utility administered DSM programs nationwide. Third party contractors can bring programs to market quickly, leveraging their experience implementing programs in other jurisdictions. EAI is in the process of considering various contract mechanisms that will help ensure third-party implementers not only comply with EAI professional standards, but reach their program goals cost-effectively (e.g., performance contracts).

Third party implementers will work closely with EAI DSM staff on all aspects of DSM program planning, delivery, reporting and EM&V. In order to adequately supervise the proposed portfolio of programs, EAI will need incremental personnel to its EE Resources staff. At a minimum, EAI expects to develop and fill the following positions dedicated to managing the Comprehensive portfolio:

1. Manager all EE resources
 - a. Manager of Residential Programs.
 - i. Plus one support staff
 - b. Manager of C&I Programs
 - i. Plus one support staff
 - c. Manager of EM&V
2. Analytical support – primarily for interfacing with IT while developing and integrating the database software and then managing the program tracking and reporting database(s)

This supports EAI's estimate of 6 full-time resources being needed starting in 2011 to support EAI's proposed portfolio. Based on conversations with utility managers in other jurisdictions, this is an adequate level of staffing to manage a portfolio of the size proposed in this plan. However, EAI will evaluate needs to hire additional resources as these programs are implemented and as results and experiences are reviewed. Note that this list of expected resource needs does not take into account EAI's continued reliance upon existing customer

service, marketing and other current EAI resources, which also may be used to help support program implementation.

The level of training and/or certification required for each position varies. For example, the C&I Program Manager will likely be an individual with a PE and/or CEM background who has a deep understanding of the needs of large utility customers. However, the person will also need to have strong project management skills in order to oversee contractor-driven initiatives such as Small Business.

Most residential programs are either mass market driven (e.g., Lighting and Appliances) or contractor driven (e.g., Cooling Solutions and Home Energy Solutions) so it is important for the Residential Program Manager to have a solid understanding of the relevant market channels and excellent communication and management skills to handle the myriad contractor dynamics.

EM&V personnel will likely have a strong background in economics, statistics, or program evaluation.

EAI will also develop an ongoing training program for DSM Resources staff. The training will be driven in large part by the ability to attract appropriately skilled and certified staff. Likely training topics include program best practices, codes and standards, and professional accreditation courses (e.g. BPI or RESNET certification), among others.

Factor 3: Whether the programs and/or portfolio reasonably address all major end-uses of electricity or natural gas, or electricity and natural gas, as appropriate.

The first step in the Company's analysis was to evaluate a comprehensive set of EE measures. For this analysis, the PSC approved deemed savings prepared by Frontier Associates was the major source of measure information. This list was supplemented with measure data from a variety of nationally recognized sources, including California's Database for Energy Efficiency Resources ("DEER"), and the federal ENERGY STAR program, among others. Measures were assessed for cost-effectiveness using the Total Resource Cost ("TRC") test, which compares the incremental costs of efficiency measures with the utility's avoided costs. Measures passing the TRC test were then bundled into DSM programs.

The list of measures that passed the TRC, by end use and sector, is shown below in Table 6. In total, EAI identified 10 specific end uses (not counting specialty end-uses for custom C&I applications) and 47 categories of cost effective measures. Many measures categories include multiple measures (e.g., varying wattages of CFLs, different SEER levels of ACs) as well as multiple deemed savings values depending on weather zone and housing fuel type. In total there were 493 measures tested for cost-effectiveness, 312 of which passed the TRC and were included in the portfolio.

It is important to distinguish between the list of measures used for planning purposes and the actual list of measures used for implementation. The below list of measures reasonably addresses all major end uses and cost-effective measures available in the marketplace and indeed the Company plans to offer each of these measures through its programs. But EAI's programs also are designed to retain enough flexibility in program delivery that the Company can supplement the currently offered measures with additional cost-effective measures as the market dictates. In fact the C&I Custom program is built upon this premise – that all cost-

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effective⁷ EE measures and projects will be considered. The bottom line is, the market will change and baselines will change; EAI's proposed portfolio is designed to be adaptable to such change.

⁷ For planning purposes this means measures and projects that pass the TRC.

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Table 6: Measure End Uses

Sector	End Use	Measure Category	Notes
C&I	Agriculture	Agriculture prescriptive and custom projects	Deemed savings for certain agriculture measures may be developed
		Agriculture Irrigation Load Control	
	Compressed Air	Air Compressors	
	HVAC	Air-Air Heat Pump Systems	
		Central AC Tune-up	
		Electronically Commutated Motors	
		Unitary HVAC/Split Systems	
	Lighting	Water Source Heat Pumps	
		CFL Hard Wired	
		Efficient Linear Lighting	
LED Exit Sign			
LED/Induction			
Other/Various	Metal Halide		
	Occupancy Sensor		
	CitySmart Project	Includes a mix of custom and prescriptive offerings across a variety of end uses	
Other/Various	Custom Project	Includes all major end uses plus specialty end uses for industry	
	Small Commercial Direct Install	Primarily lighting but most major end-uses will be available for retrofit projects	
Residential	Appliance	Window AC	
	Other/Various	Home Energy Solutions Tier 1 Audit	
		Home Energy Solutions Tier 2 Audit	
	Other/Various	Mobile Home QHEC	QHEC stands for "Quick Home Energy Checkup" - equivalent to a Tier 1 Audit
		Multifamily - QHEC	
	Building Envelope	Weatherization	
	Electronics	Smart Strips	Safely cut idle power to home appliances
	HVAC	Air Infiltration	
		Attic Knee Wall Insulation	
		Ceiling Insulation	
		Central AC Replacement	
		Central AC Tune-up	
		Direct Load Control Switch	
Direct Load Control Thermostat			
Floor Insulation			
Lighting	Heat Pump Replacement		
	Radiant Barriers		
	Wall Insulation		
	Window AC Replacement		
Lighting	Compact Fluorescent Fixtures		
	Compact Fluorescent Lamps		
Lighting	Multifamily - Lighting		
	ENERGY STAR Home		
New Home	Benchmarking		
Other/Various	Water Heating	Faucet Aerators	
	Water Heating	Low Flow Shower Heads	
		Water Heater Jackets	
		Water Heater Pipe Insulation	
		Water Heater Replacements	

Factor 4: Whether the programs and/or portfolio, to the maximum extent reasonable, comprehensively address the needs of a customer at one time, in order to avoid cream-skimming and lost opportunities.

Nine of the Company's proposed 16 programs (13 if load control initiatives and EEA are excluded) are specifically designed to implement projects that are comprehensive with respect to homes or buildings and/or end uses:

1. **C&I Custom.** Projects for this program are by nature comprehensive, but the program also offers enhanced incentives for participants who implement projects that are particularly wide in scope.
2. **Residential Benchmarking Pilot.** This program encourages participants to implement both behavioral and technological changes to reduce home energy use relative to their peers.
3. **City Smart.** In addition to offering incentives, this program assists participants with energy use benchmarking, and technical assistance in developing Energy Master Plans.
4. **Home Energy Solutions.** This program offers two levels of home energy audits and incentives for whole home EE projects.
5. **Residential & Small Business Cooling Solutions.** This program is comprehensive with respect to offerings within the AC end-use, including higher incentives for the most efficient cooling equipment, and bonus incentives for customers who also undergo whole home projects through Home Energy Solutions, or who undergo a Quality Install, as well as incentives for AC Tune-ups.
6. **Small Business.** This program emphasizes retrofit projects for small Business customers.
7. **AR Weatherization.** This program provides funding for home weatherization projects for customers with highly inefficient homes within the Company's territory.
8. **Agriculture Energy Solutions.** This program provides energy audits and calculated incentives for farms.
9. **ENERGY STAR Homes.** This program provides incentives to qualified contractors who build homes compliant with the latest ENERGY STAR New Homes standard.

These programs represent 39 % of planned energy savings (kWh) and 60 % of program⁸ budgets. Given the savings goals and cost-effectiveness guidelines set forth by the APSC as well as the relatively young market for EE in Arkansas, the Company concludes that its proposed investment in these nine programs shifts the emphasis of EAI's efficiency offerings as far as reasonably possible from "cream skimming" or addressing only "low-hanging fruit."

Note that compared to historical program performance in other jurisdictions, the Company will have to meet aggressive goals without relying nearly as heavily on several very cost-effective measures. Thus, where comparisons to achievements in other states or areas frequently may be referenced as an example of what can be achieved in Arkansas today, those historic results have relied heavily on areas of EE that today may not be available in Arkansas in an order of magnitude that existed in those other states and jurisdictions. Examples of this include:

⁸ Budget calculation excludes load control program budgets. If these program budgets are included, these nine programs represent 50% of the total portfolio budget.

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1. **CFLs:** EAI's proposed Lighting and Appliances program will decrease promotion for CFLs concurrent with new federal standards for lighting. The Energy Independence and Security Act of 2007 (EISA 2007) established minimum efficiency requirements for general service lamps effective in 2012, which will essentially phase out today's standard general-service incandescent lighting for most applications. Other examples of technologies that have contributed significantly to program performance historically in other jurisdictions, but are not or will not be available to EAI due to increased minimum efficiency standards include:
 2. **NEMA Premium Motors** which became standard in 2010, and
 3. **AC measures**, including:
 - a. Central AC: 14 SEER in warm states (<5000 HDD), and
 - b. Room AC: 11-15 % better EER in warm states (<5000 HDD), which are anticipated to have significantly increased minimum Federal efficiency standards in 2011 or 2012

One should also proceed cautiously when comparing historical program costs, especially from other jurisdictions, to today's DSM program costs. Historical program costs from other territories do not reflect current market conditions in the relevant space (jurisdiction) and time.

The Company's inclusion of EE programs that are more prescriptive⁹ or mass market¹⁰ in nature is necessary not only for the Company to meet savings goals but because these programs focus on customer decision types that are not necessarily Comprehensive in nature. Illustrating this point is perhaps best served by an analogy: Imagine having your car mechanic inform you in the course of performing an annual check-up on your vehicle that your brakes are wearing very thin and need to be replaced immediately. The mechanic also informs you of a number of other issues with your car that are not of immediate concern but which nonetheless warrant your attention. Given your budget (even if the mechanic offers you a discount), you decide to replace only your brakes and to wait before fixing the other items. Similarly, home and business owners make many decisions every year that impact their energy use, and many of these decisions do not involve projects that address the entire building structure. In working towards the Company's and the Commission's goal for EAI's energy efficiency plan to be truly comprehensive, EAI will seek to influence every type of customer decision, be it straightforward lighting projects, new appliance purchases, or whole home and business projects.

Factor 5: Whether such programs take advantage of opportunities to address the comprehensive needs of targeted customer sectors or to leverage non-utility program resources.

The first section of Factor 5, "Whether such programs take advantage of opportunities to address the comprehensive needs of targeted customers..." is addressed above under the discussion of Factor 4.

⁹ Multifamily, Mobile Homes and C&I Prescriptive.

¹⁰ This includes Lighting & Appliances.

¹² Does not include demand reduction programs or Energy Efficiency Arkansas.

There are three sources of non-utility program resources that the Company can leverage through its EE programs.

1. **Federal Programs & Incentives.** Each program plan notes the availability of existing federal incentives (primarily tax breaks) for the relevant program target populations. For example, the Home Energy Solutions program will promote the 2011 home energy tax credit to consumers, contractors and distributors. The maximum Federal home energy efficiency tax credit (for all qualified measures installed – including all end uses) is \$500 per taxpayer, a three-fold decrease from the 2009-2010 credit.

In addition, programs will leverage EPA's ENERGY STAR branding, where appropriate.

2. **State Programs & Incentives:** EAI is supporting both the AR Weatherization and EEA programs through this plan. EAI also will leverage other state support, where appropriate. For example, the Small Business Direct Install Program will promote the Arkansas Small Business Revolving Loan Fund to small business owners.
3. **Third Party Financing:** EAI will identify and promote, off the utility bill, third party financing options for customers undergoing comprehensive EE projects.

Factor 6: Whether the programs and/or portfolio enables the delivery of all achievable cost-effective energy efficiency within a reasonable period of time and maximizes net benefits to customers and to the utility system.

The Company's Comprehensive Plan is designed to maximize cost-effective electric savings over the three-year program period, and to lay the groundwork for market transformation and the National Action Plan for Energy Efficiency's ("NAPEE") vision of attaining all achievable energy efficiency by 2025 in Arkansas. During this period, the APSC's stated goals will be achieved by mixture of prescriptive and comprehensive EE measures and projects. Over the course of these three years participation in programs relying on more prescriptive measures become less prominent in the portfolio; conversely the programs specifically designed to implement projects that are comprehensive with respect to homes or buildings, grow more prominent in the portfolio. This is because most comprehensive programs take time to ramp-up. For example, participation in the Lighting and Appliances program is simple – once the product buy-downs are in place in participating retail locations, customers can simply purchase the efficient equipment at the discounted price. However gaining a participant in the Home Energy Solutions program is more complex because it requires a network of highly qualified contractors. Although EAI began to build this network through its Quick Start Program, not every contractor recruited is active in the program. In fact, it is true nationwide that for every three contractors recruited to perform high quality EE services for a program, typically only one will be very active, one will be somewhat active, and the other not active at all. As the program expands the network of Building Performance Institute (BPI) qualified (or equivalent) contractors' participation in Home Energy Solutions also expand because contractors drive that market.

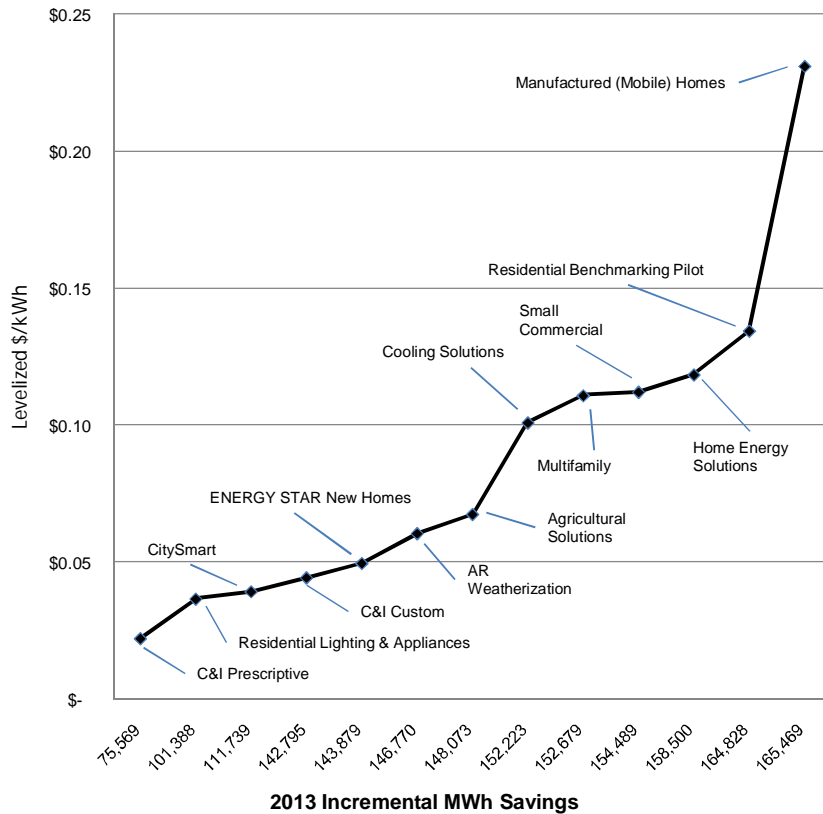
Figure 3, which is EAI's EE supply curve for 2013,¹² helps illustrate a important related fact about the cost-effectiveness of DSM investments: the incremental savings gained from the addition of the next (marginal) program is less cost-effective than the savings gained from the previous program; that is, additional kWh savings become more difficult to achieve cost-effectively.

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The following example helps explain this fact. Imagine a homeowner who first participates in EAI’s programs by purchasing discounted CFLs and installs them throughout their home. If they are pleased with the performance of the lamps, the next summer when their AC burns-out, the homeowner may look into EAI’s rebates for efficient CACs and decides on a new efficient CAC. This unit costs about \$400 more than the standard unit, of which EAI will cover a portion through an incentive. In addition, the CAC needs to be installed by a qualified contractor (who charges an hourly labor fee). Although the savings from the efficient unit are cost-effective from the standpoint of the customer, EAI, and society, the Cooling program costs over twice as much, on a per kWh saved basis, as does Residential Lighting and Appliances. The next step may be for the customer to participate in Home Energy Solutions—e.g., to undergo a comprehensive audit and home retrofit—which, though still cost-effective, is not as cost-effective as investing in an efficient CAC.

Although EAI’s plan is designed to maximize cost-effective electric savings over the three-year program period, all savings options are far from equally cost-effective.

Figure 3 : EAI Comprehensive Program EE Supply Curve, 2013



To summarize, the portfolio of programs are designed to maximize net benefits to customers and to the utility system. This was accomplished by the leveraging the bottom-up measure

design process discussed earlier. The Plan attempts to include all cost-effective measures to provide the best chance for cost effective results while also addressing the comprehensive check list. The programs were also compared with best practice programs for appropriate funding levels to ensure the programs would have a reasonable chance to succeed. This effort required a balance of full maximization of benefits to stay cost effective and the extra cost to meet the comprehensive check list.

Factor 7: Whether the programs and/or portfolio have EM&V procedures adequate to support program management and improvement, calculation of energy, demand and revenue impacts, and resource planning decisions.

The Company is in the process of developing a robust data tracking system.¹³ As outlined in each program plan below, program personnel will track all the variables necessary to support more precise measurement of savings, LCFCs and incentives, and EAI will work with the EM&V contractor from the start to ensure the list of variables tracked is comprehensive. EAI is participating in the EM&V Rule making collaborative and will incorporate the approved EM&V collaborative outcomes in the this plan. Tracking data will also be used to support the development and monitoring of program performance metrics (e.g., progress relative to goal, incentive processing time), as well as program QA/QC.

QA/QC, including anticipated project verification standards, are outlined in the Delivery Strategy section of each program plan. The Company will work with selected implementers to finalize a set of best practice quality control procedures that maximize the quality of work performed by participating contractors, minimize program free-ridership.

1.1.2. Consistency with APSC Rules

EAI is filing this portfolio of comprehensive EE programs in response to Order No. 24 in Docket No. 07-085-TF, the Order in which the Commission directed EAI to file its next round of EE plans, programs, portfolios, and budgets on March 1, 2011. The Rules adopted by the Commission in Order No. 18 of Docket No. 06-004-R provide that utilities subject to its provisions shall present a comprehensive portfolio on April 1, 2009. As EAI discussed earlier, certain barriers prohibited an expansion of EAI's existing Quick Start Portfolio, and after a litigated proceeding, the Commission approved EAI's 2009 filing for approval of program plans, extending the one year period for programs proposed to 18 months, until July 1, 2011. See Order No. 23 in Docket No. 07-085-TF.

In Order No. 17 in Docket No. 08-144-U, the Commission provided additional guidance regarding what would be considered to be "Comprehensive" programs under the Rules, and EAI has described above how its proposed portfolio meets the elements set forth by the Commission. In addition, the portfolio of programs proposed in this plan satisfies the benefits and objectives of comprehensiveness currently set forth in the Rules. The portfolio is designed to offer cost-effective EE programs to each of EAI's customer classes and covers all program categories described in the Rules. The programs proposed in this filing build upon the Company's Quick Start EE programs that have been implemented since late 2007.

¹³ Program administrative budgets include costs associated with building out and maintaining the tracking system.

This comprehensive set of programs will utilize the knowledge gained throughout the Quick Start Programs and the contractor networks and trade ally networks that have been established, and streamline the implementation process in a cost-effective manner to ensure stewardship of rate-payer funding. In addition, this comprehensive set of programs meets the benefits and objectives as set out in Section 2 of the Rules, as shown below.

Achieving the Benefits and Objectives of the Commission

The Comprehensive portfolio presented here will achieve the benefits and objectives outlined in Section 2 of the Rules.

- **Energy savings directly attributable to program activities.** The portfolio presented will save nearly 333 GWh of energy and reduce demand by 129MW over the three-year period.
- **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.** Marketing and training are the two primary methods through which this portfolio will achieve long-term and permanent changes. General awareness campaigns and program-specific marketing will raise awareness and understanding of energy saving and demand reducing opportunities for customers. Contractor training and education will change the business model of EAI's trade allies and lead to long-term and permanent improvements in the delivery of EE services.
- **Permanent peak electric demand reduction.** The portfolio presented will reduce peak demand by an estimated 129 MW over the three-year period.
- **Energy cost savings and cost-effectiveness.** The portfolio presented is cost-effective with a TRC Test results of 1.89 and achieves cost savings at levels comparable or below many existing utility programs.
- **Reliability enhancements.** The portfolio achieves peak-time demand reductions, which will reduce the stress on the Company's generation at system peak. This reduction in peak demand will lead to enhanced reliability in the system.
- **Energy security benefits.** This portfolio will reduce per capita fuel needs for power generation and potentially reduce the demand for new generating facilities.
- **Environmental benefits.** This portfolio will lead to lower electricity consumption and generation, which leads to lower emissions of carbon dioxide, nitrogen oxides, sulfur dioxide, and other emissions. These benefits will be quantified in annual reports based on achieved savings.
- **Economic development/competitiveness benefits.** Participating contractors, equipment retailers and distributors, and the state economy will all benefit through the proposed portfolio. Incentives from the programs will drive demand for products and services, and maintain and create jobs in Arkansas.
- **Increases in system-wide capacity.** The portfolio achieves peak-time demand reductions, which increases the amount of capacity available.
- **Accelerating the commercialization of advanced or emerging technologies.** Through the implementation of these programs, the demand for energy-efficient technologies will increase dramatically in EAI's territory. Creating demand for these types of products will play a role in accelerating the commercialization of new energy-efficient technologies.

- **Improving affordability of energy for all customers.** The proposed conservation and EE programs offer incentives to customers to adopt cost-effective opportunities that will reduce their energy usage, and therefore reduce their energy bills.
- **Implementing programs in an efficient manner.** EAI will continue to work with implementation contractors selected through a competitive RFP process to implement the programs, and hold these contractors responsible for achieving targets within the budgets.

1.2. From Quick Start to Comprehensive Programs

This portfolio represents an evolution from the Company's current Quick Start offerings towards the future of EE for EAI's customers. For Residential customers, this will be seamless as many Quick Start Programs simply are expanding in scope and budget. For EAI's business customers, the Business Solutions program is an easier point-of-entry for all customers and provides new opportunities for them to improve their energy management. The Company is paying special attention to the requirements of customers and trade allies to ensure they stay abreast of all changes during this transition.

Using the collective experience of EE programs nationwide, the Company has designed this portfolio to be consistent with the best practices of successful programs, with adjustments to account for the fact that the market for EE is still very young in the Company's territory and an important part of early programs is infrastructure building. Although a great deal of infrastructure has developed since the inception of the Quick Start Programs, the comprehensive programs will challenge the Company to continue aggressively training and recruiting contractors, equipment vendors, energy service companies, retailers, and manufacturers beyond what has thus far been undertaken.

The existing Quick Start Programs will continue through the market launch of the new programs. This will allow customers to complete active projects within the Quick Start Programs. The Quick Start Programs will be closed to new business upon the market entry of the new programs and will not accept new applications nor Letters of Intent.

Table 7 below shows the proposed Quick Start and Comprehensive Programs align.

Table 7: Quick Start Programs and Corresponding Comprehensive Programs

Quick Start Residential	Corresponding Comprehensive Program & New Programs
Residential Energy Solutions →	Home Energy Solutions
CFL →	Lighting & Appliances
AC Tune-Up →	Cooling Solutions
AR Weatherization →	AR Weatherization
	ENERGY STAR New Homes
	Multifamily
	Manufactured Home Energy Solutions
	Residential Benchmarking Pilot
	Direct Load Control
Quick Start C&I	
Large C&I Standard Offer →	C&I Prescriptive
Large C&I Energy Solutions →	C&I Custom
Small Commercial Energy Solutions →	Small Commercial
AC Tune-Up →	Cooling Solutions
CitySmart →	CitySmart
Irrigation Pump Load Control →	Irrigation Pump Load Control
	Agricultural Energy Solutions

1.2.1. Program Launch

Based on EAI’s Quick Start Program experience and discussions with utility program administrators in other jurisdictions, EAI expects the new EE programs listed above to be available to customers in four months following program approval.¹⁴ This takes into account the implementation contractor selection process, hiring and training staff, developing a final implementation plan and marketing materials, building out the required IT infrastructure to support the tracking system, call center, etc., and many other activities.

EAI expects that most Quick Start Programs will make the full transition to Comprehensive Programs during the same time frame –four months following PSC approval of the programs.

¹⁴ One exception is the ENERGY STAR New Homes programs, which will not launch until 2012, for reasons discussed in the program plan below.

1.3. Treatment of Opt-outs

A Self-Direct Option will be available to commercial and industrial customers beginning 2012. The rules to provide guidance for this Opt-Out option are presently in development via a collaborative lead by the APSC General Staff. Should customers choose to opt-out with the Self-Direct Option, they 1) are relieved of EECR charges on their electric bills other than for charges related to cost to administer the Self-Direct Option and 2) EAI will be able to adjust APSC established targets to compensate for customer who choose the Self-Direct Option.

EAI is fully participating in the collaborative which is developing amendments to the C&EE Rules to incorporate the Self-Directed Option

1.4. Evaluation, Measurement & Verification

EAI has used both deemed savings and more robust Evaluation, Measurement and Validation (“EM&V”) as part of the Quick Start Program offerings. The custom commercial and industrial projects installed in 2009 and 2010 required the use of one or more of the International Performance Measurement & Verification Protocol options to validate EE savings. EAI understands the importance of EM&V and is participating within the EM&V Collaborative Process (“EM&V Collaborative”) as directed by the commission. The EM&V Collaborative is underway and has submitted Request for Proposals for EM&V consultants to provide the guidance and facilitate the EM&V Collaborative. The consultants have responded and the EM&V Collaborative are presently in the process of selecting the EM&V consultant.

The EM&V Collaborative results and approval for those results will not be completed in time to be reflected within this program plan. As result, EAI is budgeting EM&V at a 5% level of total portfolio cost. The 5% funding level is the maximum funding level within the NAPEE best practices for EM&V.

The Commission also required a consistent program net-to-gross (NTG) ratio of 0.80, applied to all program savings estimates (and cost-effectiveness calculations, where appropriate¹⁵). EAI appreciates the Commission’s rationale for this assumption. Nonetheless it is important to briefly summarize some of the important implications of this decision:

1. It may have eliminated certain programs from the Company’s analysis with historically high net-to-gross ratios, but marginal cost-effectiveness. This may have made it more complicated for us to arrive at a portfolio that comports to Factor 6, above, that “the programs and/or portfolio enables the delivery of all achievable cost-effective EE.”
2. By the same logic, EAI concludes that the cost-effectiveness of some programs included in this plan is lower than expected. ENERGY STAR New Homes, for example is a program with historically very-low free ridership, 10% or less. The same is true for the programs that target “hard-to-reach” markets; these include Multifamily, Manufactured Homes, and Small Business.
3. Conversely, 20% free-ridership is a conservative assumption for some other programs, based on evaluations from other jurisdictions; C&I Custom, for example.

¹⁵ The California Standard Practice Manual requires NTG be applied to TRC benefits, but not to PCT benefits, for example.

It could be argued that “it all balances out” but that is not the approach taken with any other key assumption in the portfolio. For example, deemed savings were developed using standard industry calculations and vetted by numerous parties. Recognizing that this will not be the case going forward, the bottom line is assuming the same level of free-ridership across all programs made it more challenging for the Company to manage portfolio risk during the planning process.

1.5. Third Party Financing

EAI will identify and promote off the utility bill third party financing options for customers undergoing comprehensive home EE projects.

2. The Planning Process

2.1. Summary

EAI’s Comprehensive Energy Efficiency portfolio is the product of a multi stage analysis that used industry best practice in program design to arrive at a set of programs fulfilling APSC saving goals and definitions of “Comprehensiveness.”

Figure 1 illustrates the program planning process. To summarize, EAI’s planning process involved:

- A **bottom-up measure analysis** of applicable measures – drawn primarily from the Arkansas deemed savings database;
- **Measure cost-effectiveness screening** – only measures passing the measure level TRC Test were included;
- A **comprehensive program review** that began with an examination of EAI’s Quick Start Programs and expanded to include a broad array of best practice and innovative program designs;
- **Development of program incentive and non-incentive costs** based on
 - Customer acceptance of measure simple pay-back
 - Quick Start Program experience and an examination of costs from comparable marketplaces;
- **Development of program participation estimates** based primarily on
 - Customer acceptance of measure simple pay-back
 - Quick Start Program experience,
 - A status review of important contractor networks, such as Home Energy Rating System (“HERS”) raters, Building Performance Institute (“BPI”) certified contractors and ENERGY STAR certified homebuilders,
 - Consideration of key demographic and housing data in the Company’s territory, such as median income and housing types, and
 - Consideration of recent participation rates from comparable jurisdictions

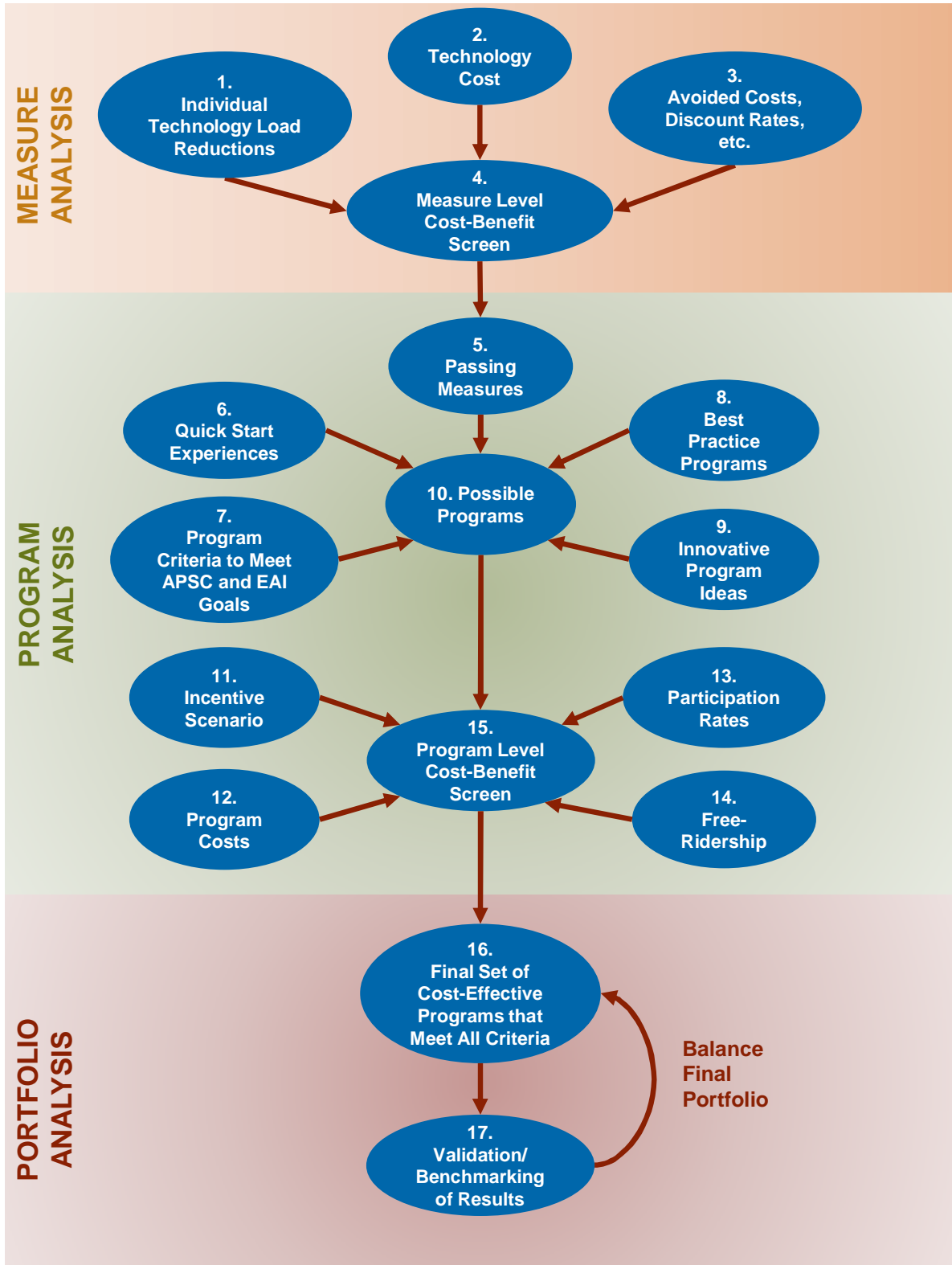
The Planning Process

- **Program and portfolio rebalancing** to ensure the Plan meets APSC goals, definitions of Comprehensiveness, and other objectives;

Further details on the analysis are provided in the sub-sections below.

The Planning Process

Figure 1. Development of the Comprehensive Portfolio



2.2. Measure Analysis

The first step in the analysis was to analyze a comprehensive set of EE measures, which are the building blocks for the conservation and EE programs. A measure is a specific technology or practice that results in a decrease in the amount of energy used per unit of useful service. For this analysis, the Commission-approved deemed savings prepared by Frontier Associates—and approved by the APSC in January-- was the major source of measure information. This list was supplemented with measure data from a variety of nationally recognized sources, including DEER, and the federal ENERGY STAR program, amongst others.

Measures were assessed for cost-effectiveness using the TRC Test, which compares the incremental costs of efficiency measures with the utility's avoided costs.

In total 493 measures were analyzed during this analysis, 312 of which passed the TRC Test and bundled into EE programs.

2.3. Program Analysis

Next, we conducted an industry review and established a comprehensive list of possible programs to consider for inclusion in the Three-Year Plan. Programs were considered if they met best practice criteria and/or if they met the APSC's definitions of Comprehensiveness and comported to the Rules.

The list of program types considered were drawn from the list of Quick Start offerings as well as a review of best practice program information drawn from the following sources:

- Specific best practice utility programs, including programs administered by:
 - **NSTAR** (Massachusetts);
 - **National Grid** (Massachusetts);
 - **Oncor Electric** (Texas)
 - **Baltimore Gas & Electric** (Maryland);
 - **Wisconsin's Focus on Energy**; and
 - **Pacific Gas & Electric** (California).
- NAPEE Rapid Deployment Energy Efficiency Toolkit
- American Council for an Energy Efficient Economy ("ACEEE")
- The Consortium for Energy Efficiency

The APSC's Comprehensiveness Checklist was used as a touchstone throughout the program analysis; it was the basis upon which programs were considered, and re-considered, until EAI arrived with a set of programs firmly grounded in each of the seven factors.

The program designs were also developed around the list of cost-effective measures, customer count and energy use by segment, rate class, business classification, state economic and demographic data, building and appliance codes and standards, and EAI's DSM Potential Study. Market barriers for each customer segment were identified and best practice strategies to address these barriers were built into the program delivery mechanisms and budgets.

2.3.1. Program Analysis

For each program the budget was built from the ground up based on measure costs, the market barriers (e.g., cost, awareness, availability) relevant to targeted customers and delivery channels, the program delivery mechanisms (e.g., contractor or retail), and other factors. Program costs from comparable programs and markets were used as reference points, but in the end the budgets in this plan are designed to deliver the proposed programs within EAI's territory.

For example, 13 % of EAI's customers live in mobile/manufactured homes, and the majority of these customers have household incomes below median. Therefore the Company designed Energy Solutions for Manufactured Homes specifically to target this sizable market using primarily low cost and free direct install measures; the program incentive levels reflect this.

Not all programs require high incentive levels. A primary barrier to building ENERGY STAR-qualified Homes being built is a lack of availability of convenient and centralized customer access to qualified home builders and developers. Therefore, EAI's proposed ENERGY STAR New Homes program will devote sufficient budget to expand the network of qualified ENERGY STAR New Home builders within the Company's territory.

For planning purposes the average incentive level was set between 25 % and 75 % of measure incremental cost, or a buydown to a simple payback of 1.0 (for residential) or 1.5 years (for C&I), whichever was less non-residential customers typically require rates of return on the order of 50 %, and residential customers on the order of 100 %, in order to adopt energy-efficient technologies. The simple payback thresholds applied in this analysis allow incentives to be set at the level needed to meet these acceptable levels. A cap of 75 % is typically used because it is important for participants to "have some skin in the game" —evaluations have shown that low incentive levels are associated with high levels of free-ridership. Some programs will also offer bonus incentives for projects that are particularly comprehensive in nature. For example, Cooling Solutions will offer QI bonus incentive, and an enhanced incentive for installing an efficient AC as part of a comprehensive Home Energy Solutions project.

For some measures, incentive levels were directly set as a dollar amount per measure based on the levels established by EAI and a review of the levels from other successful utility programs. This applies to A/C Tune-ups, ENERGY STAR Homes, and Custom C&I projects. It also applies to free direct-install measures that will be offered through some programs.

These incentive levels were established primarily for budgeting purposes. All specific incentive levels will be determined in the final program design. In addition, per-customer caps are in place for several programs that maximize the amount of total incentives that any one customer can receive.

Developing participation estimates for EAI's proposed programs involved two steps. The first step was a modeling exercise based on academic research; the second step involved a review of preliminary participation estimates in light of market data specific to EAI's territory.

ICF International used its Energy Efficiency Program Model ("EEPM") to develop measure installation estimates using a technique based on results of peer-reviewed academic studies on the diffusion of technologies, including work by Lawrence and Lawton, Packey, and others.¹⁶ This technique is described below.

First, the planning model calculates customers' acceptance of measure payback time using a formula that determines a measure's maximum market share based on the customer payback time; the payback time is calculated based on the customer's cost of purchasing the measure after the incentive is deducted.¹⁷ This formula is constructed such that the faster the payback time, the greater the share of the market captured.

1. Second, the model calculates annual market adoption (installations) of these measures, by sector. This is done using a formula that calculates annual installations based on:
 - a. An initial, or baseline year's adoption
 - b. A maximum fraction of the market that a measure or program is assumed to achieve; and
 - c. An annual market adoption growth rate.

Plotting a measure's market adoption over time produces the typical S-shaped curve characteristic of technology adoption (diffusion in the marketplace). An example of such a curve is shown in

Figure 2. The curve illustrates that initial market diffusion is typically exponential, as early adopters take quickly to the technology (when CFLs were first on the market, the earliest adopters were willing to pay more than \$10/bulb; as the price began to decline, early adoption increased rapidly). Next, as competition for similar products grows, the technology diffuses through mid-adopter markets (continuing with the example, CFLs have improved in quality and decreased in price). Finally, as the market matures, the curve flattens and late-adopters purchase the technology, when it is both cheaper and when fewer alternatives are available.

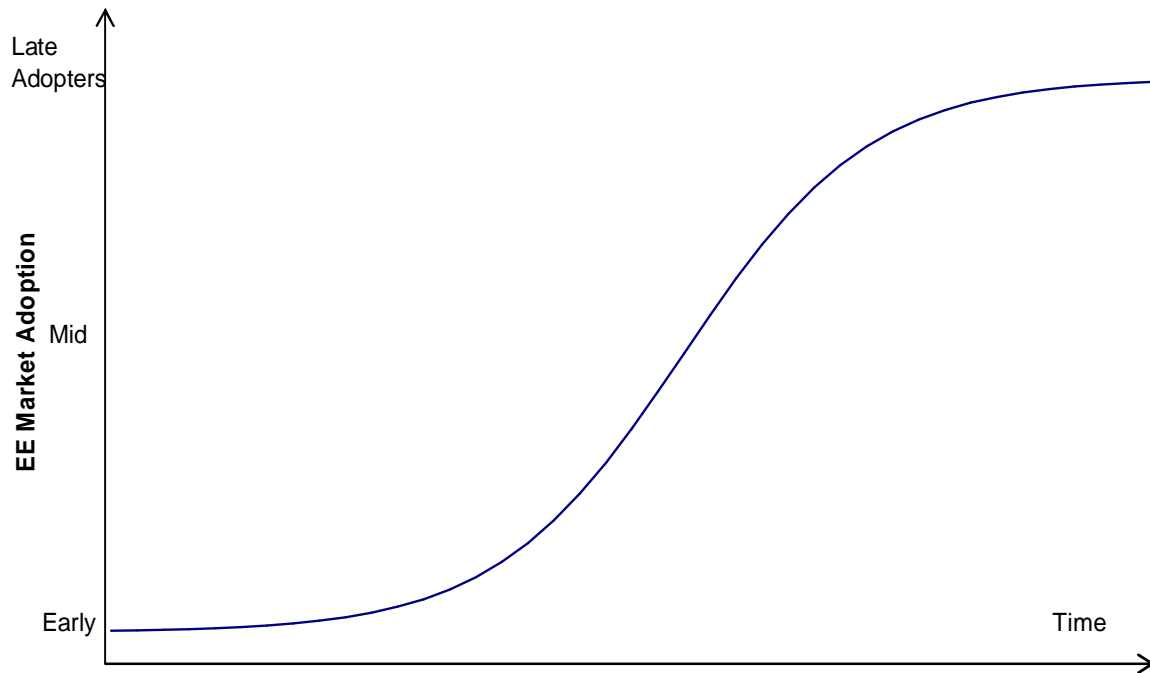
Preliminary participation estimates for each measure and program were developed as such.

¹⁶ Lawrence, Kenneth D. and William H. Lawton. 1981. "Applications of Diffusion Models: Some Empirical Results." In *New-Product Forecasting*, edited by Y. Wind, V. Mahajan, and R.N. Cardozo. Lexington, MA: D.C. Heath.

Packey, Daniel J, 1993. "Market Penetration of New Energy Technologies." U.S. Dept. of Energy, National Renewable Energy Laboratory.

¹⁷ Payback time = Measure incremental cost / Annual \$ savings to customer from reduced energy use

Figure 2: Illustrative Market Adoption Curve



These preliminary participation projections were contemplated, and adjusted, if appropriate, to better reflect the market for EE in EAI's territory, in light of the following information:

- Quick Start Program experience,
- A status review of important contractor networks, such as HERS raters, BPI certified contractors and ENERGY STAR certified homebuilders,
- Consideration of key demographic and housing data in the Company's territory, such as median income and housing types, and
- Consideration of recent participation rates from comparable jurisdictions

For example, when the model estimated participation in ENERGY STAR Homes it did not account for recent new construction data, or the number of ENERGY STAR qualified homebuilders in EAI's territory. Therefore, we adjusted participation to account for these factors.

Program TRC Test Results

Each program's cost-benefit ratio was calculated, also in accordance with Commission Rules and the California Standard Practice Manual. Only programs that had a TRC Test Results of 1.0 or greater were included in the final portfolio.

2.4. Portfolio Benchmarking

Based on this Plan, in 2013 EAI's Comprehensive Programs will achieve savings levels that will place the Company's EE program in the top tier of utility-administered EE portfolios in the country. The below Table 8 includes 2009 program information from the U.S. Energy Information Administration's Form 861 database.¹⁸ The investor owned utilities (IOUs) included are those who all reported spending \$10,000,000 or more on DSM programs in 2009. Within this group the average 2009 kWh savings as a percent of sales equaled 0.35%; the median was 0.28%.

EAI's proposed programs are also very cost-effective vis-a-vis EAI's peers (as shown in Table 9); as is EAI's financial commitment (as shown in Table 10).

¹⁸ The U.S. Energy Information Administration (EIA) data used in this analysis is the best publically available source for benchmarking program performance across utilities. Nonetheless, using this data for comparison purposes does not result in an apples-to-apples analysis. First, utility portfolios are heterogeneous in terms of their programs and measure mixes, which reflects variance in markets and economies across the country. Some utilities' territories encompass more nonresidential customers than others, for example. Therefore, one utility portfolio may heavily emphasize residential programs, while another, large industrial. Second, this data is self-reported by utilities to the EIA, which does not ensure that every utility calculates program cost metrics correctly, or at least that they use the same methodology.

Table 8: IOU Administered EE Program Performance, 2009

Investor Owned Utility	State	Incremental Savings as % Sales
1 Massachusetts Electric Co	MA	1.08%
2 Southern California Edison Co	CA	0.90%
3 Puget Sound Energy Inc	WA	0.87%
4 Entergy Arkansas, Inc. (2013)	AR	0.75%
5 Nevada Power Co	NV	0.72%
6 Western Massachusetts Elec Co	MA	0.70%
7 United Illuminating Co	CT	0.69%
8 Pacific Gas & Electric Co	CA	0.66%
9 The Narragansett Electric Co	RI	0.55%
10 Connecticut Light & Power Co	CT	0.51%
11 Baltimore Gas & Electric Co	MD	0.43%
12 Avista Corp	WA	0.39%
13 Arizona Public Service Co	AZ	0.37%
14 PacifiCorp	OR	0.30%
15 Interstate Power and Light Co	IA	0.29%
16 Idaho Power Co	ID	0.28%
17 Public Service Co of NH	NH	0.28%
18 Public Service Co of NM	NM	0.27%
19 Consumers Energy Co	MI	0.16%
20 MidAmerican Energy Co	IA	0.16%
21 Duke Energy Ohio Inc	OH	0.13%
22 Northern States Power Co - Minnesota	MN	0.13%
23 Progress Energy Florida Inc	FL	0.10%
24 Florida Power & Light Co	FL	0.09%
25 Kansas City Power & Light Co	MO	0.08%
26 Consolidated Edison Co-NY Inc	NY	0.07%
27 Tampa Electric Co	FL	0.07%
28 Union Electric Co	MO	0.03%
29 Alabama Power Co	AL	0.03%
30 Georgia Power Co	GA	0.03%

Source: U.S. Energy Information Administration Form 861 Data, 2009

The Planning Process

Table 9: IOU Administered DSM Program Cost-Effectiveness, 2009¹⁹

Investor Owned Utility	State	Program Cost (\$Million)	Program Cost as % Revenue	\$/kWh
1 Arizona Public Service Co	AZ	\$25.6	0.8%	\$0.24
2 Entergy Arkansas Inc. (2013)	AR	\$52.6	3.2%	\$0.32
3 Nevada Power Co	NV	\$50.0	2.0%	\$0.33
4 Puget Sound Energy Inc	WA	\$70.7	3.2%	\$0.37
5 Consumers Energy Co	MI	\$22.2	0.6%	\$0.41
6 Public Service Co of NM	NM	\$12.1	1.2%	\$0.50
7 Avista Corp	WA	\$17.6	1.8%	\$0.51
8 PacifiCorp	OR	\$80.8	1.9%	\$0.52
9 Southern California Edison Co	CA	\$404.9	3.4%	\$0.57
10 Duke Energy Ohio Inc	OH	\$13.3	0.5%	\$0.59
11 Massachusetts Electric Co	MA	\$90.2	4.3%	\$0.76
12 Connecticut Light & Power Co	CT	\$53.3	1.6%	\$0.86
13 Public Service Co of NH	NH	\$15.5	1.4%	\$0.86
14 The Narragansett Electric Co	RI	\$27.1	3.0%	\$0.87
15 Idaho Power Co	ID	\$34.8	3.3%	\$0.88
16 MidAmerican Energy Co	IA	\$42.4	1.7%	\$0.89
17 Western Massachusetts Elec Co	MA	\$12.4	3.1%	\$0.99
18 Pacific Gas & Electric Co	CA	\$523.1	4.7%	\$0.99
19 Baltimore Gas & Electric Co	MD	\$87.6	3.1%	\$1.21
20 Georgia Power Co	GA	\$28.7	0.4%	\$1.30
21 Union Electric Co	MO	\$13.7	0.5%	\$1.30
22 Interstate Power and Light Co	IA	\$60.0	4.5%	\$1.40
23 United Illuminating Co	CT	\$29.9	3.3%	\$1.65
24 Northern States Power Co - Minnesota	MN	\$75.8	2.2%	\$1.66
25 Kansas City Power & Light Co	MO	\$18.8	1.4%	\$1.68
26 Consolidated Edison Co-NY Inc	NY	\$31.4	0.4%	\$1.92
27 Progress Energy Florida Inc	FL	\$80.3	1.5%	\$2.02
28 Florida Power & Light Co	FL	\$186.1	1.6%	\$2.08
29 Tampa Electric Co	FL	\$32.2	1.5%	\$2.55
30 Alabama Power Co	AL	\$56.3	1.0%	\$3.90
32 Progress Energy Carolinas Inc	NC	\$21.0	0.5%	\$3.99
33 Public Service Co of Colorado	CO	\$43.9	1.6%	\$9.71

Source: U.S. EIA Form 861 Data, 2009

¹⁹ \$/kWh is on a "first year" basis. That is, annual program spend divided by incremental savings achieved in the same year. Average=\$1.50/kWh and Median=\$0.94/kWh.

Table 10: IOU Administered Program Spending, 2009²⁰

Investor Owned Utility	State	Program Cost (\$Million)	Program Cost as % Revenue	\$/kWh
1 Pacific Gas & Electric Co	CA	\$523.1	4.7%	\$0.99
2 Interstate Power and Light Co	IA	\$60.0	4.5%	\$1.40
3 Massachusetts Electric Co	MA	\$90.2	4.3%	\$0.76
4 Southern California Edison Co	CA	\$404.9	3.4%	\$0.57
5 United Illuminating Co	CT	\$29.9	3.3%	\$1.65
6 Idaho Power Co	ID	\$34.8	3.3%	\$0.88
7 Entergy Arkansas Inc. (2013)	AR	\$52.6	3.2%	\$0.32
8 Puget Sound Energy Inc	WA	\$70.7	3.2%	\$0.37
9 Baltimore Gas & Electric Co	MD	\$87.6	3.1%	\$1.21
10 Western Massachusetts Elec Co	MA	\$12.4	3.1%	\$0.99
11 The Narragansett Electric Co	RI	\$27.1	3.0%	\$0.87
12 Northern States Power Co - Minnesota	MN	\$75.8	2.2%	\$1.66
13 Nevada Power Co	NV	\$50.0	2.0%	\$0.33
14 PacifiCorp	OR	\$80.8	1.9%	\$0.52
15 Avista Corp	WA	\$17.6	1.8%	\$0.51
16 MidAmerican Energy Co	IA	\$42.4	1.7%	\$0.89
17 Florida Power & Light Co	FL	\$186.1	1.6%	\$2.08
18 Public Service Co of Colorado	CO	\$43.9	1.6%	\$9.71
19 Connecticut Light & Power Co	CT	\$53.3	1.6%	\$0.86
20 Progress Energy Florida Inc	FL	\$80.3	1.5%	\$2.02
21 Tampa Electric Co	FL	\$32.2	1.5%	\$2.55
22 Kansas City Power & Light Co	MO	\$18.8	1.4%	\$1.68
23 Public Service Co of NH	NH	\$15.5	1.4%	\$0.86
24 Public Service Co of NM	NM	\$12.1	1.2%	\$0.50
25 Alabama Power Co	AL	\$56.3	1.0%	\$3.90
26 Arizona Public Service Co	AZ	\$25.6	0.8%	\$0.24
27 Consumers Energy Co	MI	\$22.2	0.6%	\$0.41
28 Duke Energy Ohio Inc	OH	\$13.3	0.5%	\$0.59
29 Union Electric Co	MO	\$13.7	0.5%	\$1.30
30 Progress Energy Carolinas Inc	NC	\$21.0	0.5%	\$3.99
32 Consolidated Edison Co-NY Inc	NY	\$31.4	0.4%	\$1.92
33 Georgia Power Co	GA	\$28.7	0.4%	\$1.30

Source: U.S. EIA Form 861 Data, 2009

²⁰ Average program cost as % revenue=2.04% and median=1.68%

3. EAI's Comprehensive Portfolio

3.1. Residential Solutions

EAI's portfolio of Residential Energy Efficiency Solutions programs includes attractive value propositions and considerable energy saving opportunities for all of EAI's residential customers. These programs offer multiple participation opportunities for owners and renters of single family homes, apartments and condominiums, and mobile/manufactured homes, alike. Residential Solutions is comprised of eight programs, which are summarized below.

1. Residential **Home Energy Solutions** will achieve long-term, significant cost effective electricity savings through the use of local auditors and contractors who will help residential customers analyze their energy use and identify opportunities to improve EE; install low-cost energy-saving measures; and identify and install other EE improvements and that will yield savings.
2. The **Energy Solutions for Multifamily** program will target multifamily property owners, managers and renters. The program will provide free audits and direct install measures as well as bonus incentives for property owners who co-fund additional efficiency projects with packages of measures.
3. **Energy Solutions for Manufactured Homes** will target manufactured (mobile) home owners as well as mobile home community managers and owners. The program will build relationships with mobile home community owners, managers and residents through community meetings and direct marketing, and by providing free energy audits, and direct install measures free of charge in common areas and in homes (where permitted).
4. **ENERGY STAR New Homes** will increase the supply of qualified home builders that are motivated to design, build and independently verify energy efficient homes in Arkansas, thereby raising the EE bar for residential construction in the Company's territory. Incentives will be paid to qualified builders who construct new homes meeting ENERGY STAR New Homes Version 3 specifications.
5. **Efficient Cooling Solutions for Residential and Small Business Customers** will provide residential and small business customers with a comprehensive set of options to lower the energy consumption and cost associated with keeping their homes and businesses cool and comfortable in the summer. Customers needing a new air conditioner will find that EAI's ENERGY STAR AC program offers an attractive value proposition, with a tiered incentive structure that pays the highest rebates for the most efficient units; this structure is equally attractive to contractors and distributors. Additional incentives will be available to customers who opt for an ENERGY STAR or ACCA QI.
6. The objective of the **Residential Lighting & Appliances** program is to increase awareness and sales of efficient lighting and appliances to residential and small Business customers. The program offers customers the opportunity to purchase, largely through retail locations, a variety of discounted products that are ENERGY STAR qualified or better.
7. **Residential Direct Load Control**. This opt-in load control initiative would allow the Company to cycle off a participant's home CAC condenser during peak events. Over the long-run system and customer benefits include, among others, lower rates (due to a lesser need to dispatch the most expensive generating units), and better regional air

quality (since peaking units emit higher levels of criteria pollutants relative to other units). To minimize discomfort, the enabling technology allows the air-handler fan to remain powered to circulate air throughout the house.

8. **AWP**. EAI is a partner in this statewide weatherization program targeted at customers with severely-inefficient homes. This plan includes funding to weatherize approximately 2190 homes in the Company's service territory over three years.²¹

Through this plan EAI is also providing support to the statewide EEA program (though the Company is not claiming any savings for this program).

The Residential Solutions programs will be packaged and marketed as one Comprehensive market offering to enhance the energy performance of the Company's residential customers. In this way, it presents a natural evolution from the Quick Start Programs. Residential program design was informed by EAI's experience with Quick Start Programs, by research on best practice residential EE programs throughout the country, including those administered by:

- **NSTAR** (Massachusetts);
- **National Grid** (Massachusetts);
- **Oncor Electric** (Texas)
- **Baltimore Gas & Electric** (Maryland);
- **Wisconsin's Focus on Energy**; and
- **Pacific Gas & Electric** (California).

Note the existing Quick Start Programs will continue through the market launch of Residential Solutions programs for customers to complete active projects within the Quick Start Programs. The Quick Start Programs will then be closed to new business upon the market entry of the Residential Solutions and will not accept new applications nor Letters of Intent.

²¹ Note: Because this is a program operated by the State, the Company did not file a separate program plan.

3.1.1. Home Energy Solutions

PROGRAM DESCRIPTION

Residential Home Energy Solutions will achieve long-term, significant cost-effective electricity savings through the use of local auditors and contractors who will help residential customers analyze their energy use and identify opportunities to improve EE, install low-cost energy-saving measures, and identify and implement more comprehensive home EE projects.

Home Energy Solutions will offer two levels of home energy audits. The Tier 1 Audit will include a “walk-through” inspection and direct installation of low-cost measures, such as CFLs and hot water heater tank wraps. The Tier 2 Audit is a comprehensive home inspection with diagnostic testing, performed by a qualified contractor.

Home Energy Solutions is designed to minimize the following market barriers to EE implementation for EAI’s residential customers:

- Lack of awareness of energy-efficient upgrades
- Lack of awareness of energy and cost savings due to properly operating systems
- Lack of easy access to qualified vendors and installers
- First cost barriers
- A lack of trust on the part of homeowners towards contractors

Key to the program’s success will be developing a trained and certified group of home performance contractors²² capable of providing whole-house energy services in the market. This training will leverage as possible the EEA training resources. EAI also plans to provide training outside of the EEA efforts. Home Energy Solutions contractors will be required to adhere to strict training, engineering, reporting, quality assurance, and other requirements set forth by EAI. If a sufficient network of qualified contractor is developed within the State of Arkansas over the next few years, this initiative will likely evolve into a full Home Performance with ENERGY STAR (HPwES) program, which will offer ENERGY STAR brand recognition and a national network of resources.²³

TARGET MARKET

Single family residences (“SFR”s) are the primary target of the Home Energy Solutions program. SFRs comprise approximately 80% of EAI’s housing stock. Experience also shows that the following customer segments are strong candidates for this type of program:

- Homeowners who have shown interest in reducing their energy consumption and costs specifically through participation in utility programs
- Homeowners that are in the market for home improvements
- Homeowners that frequently visit home improvement stores

²² Specifically Building Performance Institute (BPI) or Residential Energy Services Network’s (RESNET) rater certification.

²³ Currently there is an insufficient network of qualified (e.g., BPI and RESNET certified) contractors to support HPwES sponsorship requirements.

MARKET SIZE

There are approximately 457,000 single family residences in EAI's territory.

ELIGIBLE MEASURES & INCENTIVE STRATEGY

Measures eligible for rebates are likely to include, but will not necessarily be limited to:

- HVAC
 - Central Air Conditioners and Heat Pumps
 - bonus incentives will be paid on cooling equipment to customers who install bundles of measures
 - Furnace - ECM Motor
 - Duct Sealing
- Building envelope
 - Insulation – floor, ceiling, and wall
 - Weatherization
- Water (Electric heat only)
 - Efficient hot water (DHW) heaters
 - DHW Tank Wraps (Direct Install)
 - Faucet aerators (Direct Install)
 - Pipe insulation (Direct Install)
- Lighting
 - CFLs (Direct Install)
 - Hard-wired CF fixtures
 - Lighting controls

EAI anticipates customers will pay \$50 for a Tier 1 audit.²⁴ Final costs will be determined by installation contractor and vendor bids. The fee will be waived for customers who follow-up with more comprehensive EE improvements, including air and duct sealing or appliance retrofits, or who undergo a Tier 2 Audit

For the Tier 2 audit EAI plans to pay two levels of incentives for customers who complete comprehensive home energy improvement projects. EAI anticipates that first "standard" incentive level will be capped somewhere between \$1,000 and \$1,200 per home, plus \$200 to \$250 for the Tier 2 audit,²⁵ if the project is calculated to reduce annual energy consumption to a minimum level, anticipated to equal 15% to 20%. An "enhanced" incentive cap is anticipated to equal between \$1,600 and \$2,000 per home, plus \$200 to \$250 for the Tier 2 audit, will be paid for projects that are calculated to reduce annual energy consumption by at least 30%.

Final incentive structure will be determined upon final program implementation. All customer rebates will be paid after completion of a comprehensive home energy improvement project. Rebates for the Tier 2 Audit is applicable only if a resulting comprehensive home energy improvement project is completed within six months of the audit.

²⁴ This covers approximately one-third to one-quarter of the total value of the audit

²⁵ It is anticipated that the incentive will cover approximately half of the full cost of the audit.

²⁸ Congress is likely to consider further extensions of these credits beyond 2011, but they current expire 12/31/11. Note also that the \$500 limit is a lifetime cap; if a customer received that amount in credits in earlier years (2006-10), they cannot claim additional credits for 2011.

FEDERAL & STATE INCENTIVES

The maximum Federal home energy efficiency income tax credit for 2011 (for all qualified measures installed – including all end uses) is \$500 per taxpayer, a three-fold decrease from the 2009-2010 credit.²⁸

EAI will promote the 2011 tax credit to consumers, contractors and distributors. The Company will provide education and training on this subject to all participating auditors/contractors.

THIRD PARTY FINANCING

EAI will identify and promote off the utility bill third party financing options for customers undergoing comprehensive home EE projects.

DELIVERY STRATEGY

A contractor will be selected by the Company to assist with implementation of Home Energy Solutions.

Key elements of program delivery include:

1. *Contractor recruitment and training:* EAI will recruit HVAC, remodeling, insulation and weatherization contractors as well as HERS raters and other trade allies interested in offering home energy performance services to their customers, and arrange for them to participate in program training. Auditors/contractors will be required to sign a participation agreement, and abide by all program protocols and reporting requirements. Program auditors will be required to understand key building science principles; Building Performance Institute (BPI) or Residential Energy Services Network's (RESNET) certification will be strongly recommended. All participating contractors must also take a half-day training session and complete a partnership agreement that outlines expectations and customer service requirements. Contractors who perform the Tier 2 Audit will be encouraged to have BPI or RESNET certification,²⁹ but required equivalent set of skills.

Training will also include managing customer relations, how to talk about the program with homeowners, and how to properly conduct business services.

2. *Marketing:* The primary customer recruitment mechanism will be the direct marketing activities of participating auditors. However, EAI will also recruit customers using direct mail, bill inserts, as well as general awareness activities. Program information will also be posted on EAI's Web site, and provided through the call center, as appropriate.
3. *Audits and comprehensive home efficiency projects:*
 - o **Tier 2 Audit:** Participating auditors/contractors will provide comprehensive home energy audits for interested customers for a fee – contractors will set their own prices for the audit. During the audit, and with the customer's approval, the

²⁹ EAI anticipates sponsoring one BPI training event in Little Rock.

contractor will install up to six CFLs in specific areas, faucet aerators, low-flow showerheads, pipe insulation, and water heater blankets on electric water heaters where needed. The audit will be designed primarily to estimate potential energy savings due to infiltration and heat loss through walls and attics. Diagnostic evaluations conducted during the audit are likely to include duct and air seal testing and combustion safety testing.

The auditor will estimate pre-project (baseline) home energy consumption using historical customer billing data (if authorized) and industry standard building energy modeling software. An audit report will be presented to the customer with recommendations for upgrades and information about available financing or cash incentives.

Home efficiency projects may be carried out by the contractor performing the audit or other program qualified contractor(s). Post-audit home energy consumption estimates will be performed using industry standard building energy modeling software.³⁰ As stated above, incentive caps will be based on the post-project savings estimates generated by the auditor.

- **Tier 1 Audit:** For customers who do not want the comprehensive (Tier 2) audit the program will offer a walkthrough/visual inspection audit. Contractors will directly install low-cost measures, such as CFLs, hot water heater wraps, pipe insulation, and low-flow showerheads for customers with electric water heaters, where needed. Some homeowners may follow-up with more comprehensive EE improvements, including air and duct sealing or appliance retrofits, or request a more comprehensive energy audit.
4. *Incentive application:* Contractors will review and complete incentive applications with the customer and submit applications to the Company with the customer's approval.
 5. *Quality Control:* QA/QC will likely include – at a minimum - the following:
 - Desktop review 100% of the paperwork submitted for job reporting;
 - Performing a minimum of two field inspections per contractor per quarter; inspection rates can be heavier for auditors and contractors experiencing problems complying with program standards for any reason;
 - Providing feedback to contractor on QA/QC inspection results, including requests for corrective action when necessary;
 6. *Incentive payment:* All Tier 2 customer rebates will be paid after completion of a comprehensive home energy improvement project. Rebates for the Tier 2 Audit are applicable only if a resulting comprehensive home energy improvement project is completed within six months of the audit. Tier 1 incentives are payable pending completion of the audit and program approval.

³⁰ The software tool will also include a database of deemed measure savings and costs and other cost-effective measure savings and costs.

PROGRAM TRACKING REQUIREMENTS

The Company is in the process of developing a robust program data tracking system. The minimum data collection requirements for this program are expected to include:

1. Audit information including date enrollment received, customer information, audit completion date, audit results, and measures.
 - a. Characteristics of measures installed, including but not necessarily limited to, where appropriate
 - o Deemed savings
 - o Tracking of old and new equipment via serial and model numbers to assist in determining actual energy savings
 - o Equipment size and efficient
 - o Location of installation
 - o Hours of operation
 - o Orientation of building surfaces treated
 - o Seasonality of equipment
 - o Load shape of equipment
2. Numbers of auditors/contractors participating in the program who are both trained and have a signed agreement in place;
3. Quality assurance results

ADMINISTRATIVE REQUIREMENTS

Program administration will be the responsibility of EAI via vendor operations management.

ESTIMATED BUDGET

Incremental annual and total program budgets for 2011-2013 are shown below.

Program Cost Summary	2011		2012		2013		Total 3	
	Annual Budget		Annual Budget		Annual Budget		Year Budget	
Type	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$10,254	0.6%	\$20,508	0.6%	\$25,635	0.6%	\$56,397	0.6%
Marketing & Delivery	\$512,704	30.1%	\$1,025,407	30.1%	\$1,281,759	30.1%	\$2,819,869	30.1%
Incentives / Rebates	\$1,025,407	60.2%	\$2,050,814	60.2%	\$2,563,518	60.2%	\$5,639,739	60.2%
Evaluation, Measurement, & Verification	\$51,270	3.0%	\$102,541	3.0%	\$128,176	3.0%	\$281,987	3.0%
Administration	\$102,541	6.0%	\$205,081	6.0%	\$256,352	6.0%	\$563,974	6.0%
Total Budget	\$1,702,176	100.0%	\$3,404,351	100.0%	\$4,255,439	100.0%	\$9,361,967	100.0%

COST-EFFECTIVENESS

Test	Results	
Participant Cost	NPV (all participants)	\$ 895,062
	Benefit-cost ratio	1.07
	NPV (average participant)	\$113
Ratepayer Impact Measure (RIM)	NPV	\$ 596,620
	Benefit-cost ratio	1.04
	Lifecycle revenue impact per kWh	-\$0.000003
	2011 revenue impact per kWh	\$0.000083
	2012 revenue impact per kWh	\$0.000082
	2013 revenue impact per kWh	\$0.000063
Total Resource Cost (TRC)	NPV	\$ 168,245
	Benefit-cost ratio	1.01
	Levelized cost per kWh	\$0.212
Program Administrator Cost (PAC)	NPV	\$ 6,396,146
	Benefit-cost ratio	1.81
	Levelized cost per kWh	\$0.118

SAVINGS TARGETS & PARTICIPATION

Key Program Modeling Assumptions and Outputs	2011	2012	2013	Total
Coincident peak kW savings per installation	0.63	0.63	0.63	0.63
Annual kWh savings per installation	1,114	1,114	1,114	1,114
Annual kWh savings as a % of base usage	7.64%	7.64%	7.64%	7.64%
Estimated Participants	1,440	2,880	3,600	7,920
Annual MW Savings	0.9	1.8	2.3	5.0
Annual MWh Savings	1,604	3,209	4,011	8,824

OVER-SUBSCRIPTION PLAN

Oversubscription will be managed by suspending marketing and outreach. Once the budget for the current year is expended, a waiting list will be established for program participation in the following program year.

3.1.2. Energy Solutions for Multifamily

PROGRAM DESCRIPTION

This program will target multifamily property owners (landlords) and managers, as well as apartment and condo renters to address the three principal barriers to multifamily EE:

1. *The split incentive barrier:* Multifamily building owners are disinclined to make EE improvements because they generally do not pay the energy bills for their units.
2. *The income barrier:* Tenants of many multifamily units cannot afford the upfront costs of EE improvements. By providing direct installation (DI) measures at no cost, both unit and building efficiency is improved and tenants receive the benefit of lower utility bills. No capital investment is required for in-unit DI measures and very little time is taken from the property owner/manager.
3. *The educational barrier:* Owners and occupants do not fully understand the economic, comfort and other benefits of EE. For the property owner, water consumption and sewer charges are typically reduced. Common area efficiency projects further reduce the cost of operations, helping to keep rent down, and reducing vacancies.

The multifamily property sector is a commercial enterprise providing residential living spaces. In this quasi-commercial role, the property owner straddles the residential and commercial EE programs' definitions. EAI's Multifamily Program specifically addresses their unique needs, which are often overlooked, through a combination of incentives for both direct install and prescriptive measures, and through property owner and tenant education.

TARGET MARKET

Building owners and managers/landlords are the primary target audience. Multifamily building occupants are the secondary audience.

MARKET SIZE

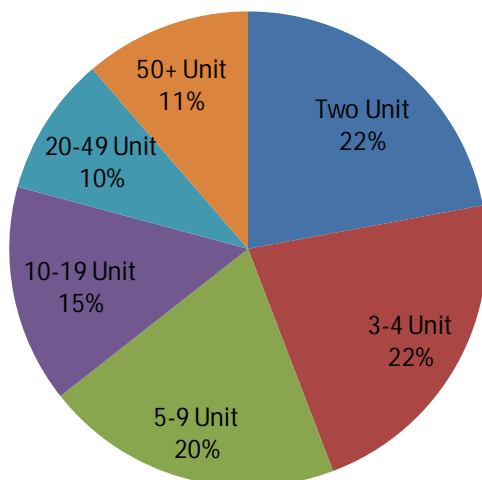
There are approximately 47,000 multifamily units in EAI's territory, which represents 8% of the housing stock.

The distribution of multifamily units in EAI's territory is shown in the below figure.³¹ Based on research of best practice³² multifamily programs EAI anticipates targeted multifamily complexes larger than 4 units in size. This represents about 56% of the multifamily housing stock.

³¹ Based on 2009 American Housing Survey data.

³² A unit minimum ensures the program reaches the maximum number of multifamily customers per program dollar. Under this eligibility requirement residential customers in multifamily structures two to four units in size may participate in Home Energy Solutions and the Residential Efficient Lighting and Appliances programs.

Figure 5: Distribution of Multifamily Housing in EAI's Territory (N=47,000)



Sources: U.S. Census Bureau and EAI

ELIGIBLE MEASURES & INCENTIVE STRATEGY

EAI expects that during the first program year, the program will expend considerable effort reaching property owners and managers and educating them on the benefits of EE (e.g. it saves them money, it saves their tenants money, the equipment is higher quality, and tenants will be happier). During this period, the program will focus on installing the following measures:

Common Area DI Measures are expected to include

- High-efficiency linear and CFL fluorescent fixtures
- LED Exit Signs
- Parking and outdoor security lighting fixtures

And, where permitted (by property owners and tenants):

Free In-Unit DI Measures, which are expected to include

- ENERGY STAR CFLs
- Energy-efficient showerheads, and faucet aerators (kitchen and bath)
- Domestic Water Heater (“DWH”) pipe Insulation

Once property owners realize the benefits of these measures they will be more inclined to invest in additional for their tenants’ units. For example, during the first program year, the landlord may install CFLs in hallways, and T8s and occupancy sensors in the laundry rooms. After realizing the benefits of these measures the property owner may later install prescriptive measures such as hard-wired CF fixtures in all his or her tenants’ units, or make building water and cooling system improvements.

Incentive Levels

In-unit DI measures will be free to both renters and property owners.

Common area DI measure incentives are anticipated to equal between 25% and 75% of incremental cost or buy-down to 1.5 year payback, whichever is less.

Prescriptive incentives for multifamily property owners will be available for EE equipment upgrades and improvements to building lighting and HVAC systems that are not considered by the program to be DI measures. Incentives will be paid based on the quantity, size and efficiency of the equipment and are anticipated to equal between 25% and 75% of incremental cost or buy-down to 1.5 year payback, whichever is less.

The Company may also offer **bonus incentives** to property managers who install packages of measures (e.g., three or more) in common areas and/or tenant units. Bonus incentives are anticipated to equal a buy-down to a one-year simple payback

EAI will not provide incentives that are prohibited within the promotional practice rules.

FEDERAL & STATE INCENTIVES

The maximum Federal home energy efficiency tax credit for 2011 (for all qualified measures installed – including all end uses) is \$500 per taxpayer, a three-fold decrease from the 2009-2010 credit.

EAI will coordinate with the Arkansas Energy Office, the Arkansas Office of the Department of Community Planning & Development, the local Building Owners and Managers Association (BOMA) chapter, the National Affordable Housing Management Association (NAHMA), amongst others. Leveraging the access and influence of the public agencies and property owner/management associations with these customers will give EAI the opportunity to conduct larger-scale direct installations of EE measures on multifamily properties.

THIRD PARTY FINANCING

EAI will identify and promote off the utility bill third party financing options for owners of multifamily dwellings.

DELIVERY STRATEGY

An implementation contractor will be selected by the Company to assist with delivery of this program.

Key elements of program delivery include:

1. *Contractor recruitment.* EAI will recruit and train a limited number partnering contractors to provide full turnkey program delivery services. These contractors will, in effect, act as “general” contractors and will comprise an EAI system-based infrastructure to deliver program services.
Note that “general” contractors may employ local labor/specialty contractors to carry-out DI and prescriptive projects.
2. *Contractor Training:* The program will provide both technical and sales training to contractors. As available and appropriate EAI will leverage EEA training for contractors.

- a. *Technical training* will focus on key aspects of the technical knowledge and skills needed by contractor personnel to provide customers with the specified energy-efficient products and services.
 - b. *Sales training* will help contractors increase their understanding of the benefits associated with up-selling property owners and tenants to energy efficient technologies.
3. *Energy Audit*: Property owners and managers will receive an initial visit from the implementation contractor who will perform a free basic energy audit (similar to the Tier 1 Audit offered by the Home Energy Solutions program). During these audits, the program will inspect common areas, and if possible, at least one unit within the building to identify potential for DI and prescriptive measures.
4. *Energy efficiency projects*:
 - a. *Tenant unit DI measure installations* may be combined with the initial site visit or scheduled separately depending on site manager/tenant discussions.
 - b. *Common area DI measure installations* may be installed during the initial site visit or may require an estimate from the participating contractor, followed by a second visit for measure installation.
 - c. *Prescriptive projects* will include prescriptive measures not categorized as DI.
5. *Marketing*: Program outreach and marketing will focus on private property owners, including managers and operators of multifamily buildings—this is the community who holds the key to market transformation within a sector that is historically slower, because of split-incentive and income barriers, to adopt efficient technologies.

Although contractors will be the primary delivery vehicle for this program EAI will reach property owners and tenants directly through low-cost communication vehicles including earned media, professional and trade media, invitational events, direct mail, Web sites, and association presentations. Communication materials can be distributed with greater impact in smaller quantities through targeted channels.

6. *QA/QC review*: Incentive applications will be subject to a QA/QC review to ensure all required forms and documentation have been submitted and that incentive calculations are correct. To minimize errors in this process there will be a 100 % review on all project documentation for verification of equipment efficiency rating, proper installation, etc. on the part of the Company.
7. *Project verification*: EAI will perform pre- and post-installation verifications on a statistically significant sample of all common area projects. EAI reserves the right to site-verify installations prior to approval and incentive payment for any project. Over time, as contractors' exhibit consistently high performance, verifications for those contractors can be reduced. Contractors who exhibit poor performance will be re-trained and have 100% of their projects verified for a period of time, and can be removed from the program if poor performance continues.
8. *Incentive payment*: Rebates for EE projects will be built into the contractor's quotes – that is, contractors will front the cost of rebates and will invoice EAI on a regular (e.g. bi-monthly) basis to be made whole. This structure is necessary for program participants to

overcome first-cost barriers, to simplify the transaction, and minimize the “hassle” factor.”

PROGRAM TRACKING REQUIREMENTS

The Company is in the process of developing a robust program data tracking system. The minimum data collection requirements for this program are expected to include:

1. Audit information including date enrollment received, customer information, audit completion date, audit results, and DI measures.
 - a. Characteristics of measures installed, including but not necessarily limited to, where appropriate
 - o Deemed savings
 - o Tracking of old and new equipment via serial and model numbers to assist in determining actual energy savings
 - o Equipment size and efficient
 - o Location of installation
 - o Hours of operation
 - o Orientation of building surfaces treated
 - o Seasonality of equipment
 - o Load shape of equipmentNumbers of auditors/contractors participating in the program who are both trained and have a signed agreement in place;
2. Quality assurance results;

The multifamily market is complex and difficult to penetrate. Therefore, the program will carefully track data in this sector (including unit and complex level data) to ensure that all cost-effective measures have been considered for a participating building. The high turn-over of residents, the variety of building ownership arrangements and the number of units per complex also present valuable descriptions of the market and help assess the remaining opportunities for energy and demand savings. For example, the program may track both the number of participating buildings or complexes and the number of individual units treated to better understand market penetration, as well as to assure that untreated units are reachable later. The program may collect additional information about multifamily buildings, including, but not necessarily limited to:

- o Square footage of common areas
- o Square footage of apartments
- o Occupancy and/or bedroom counts

ADMINISTRATIVE REQUIREMENTS

Program administration will be the responsibility of EAI via vendor operations management.

ESTIMATED BUDGET

Incremental annual and total program budgets for 2011-2013 are shown below.

EAI's Comprehensive Portfolio

Program Cost Summary	2011		2012		2013		Total 3	
	Annual Budget		Annual Budget		Annual Budget		Year Budget	
Type	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$1,731	0.8%	\$2,309	0.8%	\$2,886	0.8%	\$6,926	0.8%
Marketing & Delivery	\$17,315	8.3%	\$23,086	8.3%	\$28,858	8.3%	\$69,258	8.3%
Incentives / Rebates	\$173,145	82.6%	\$230,860	82.6%	\$288,575	82.6%	\$692,580	82.6%
Evaluation, Measurement, & Verification	\$8,657	4.1%	\$11,543	4.1%	\$14,429	4.1%	\$34,629	4.1%
Administration	\$8,657	4.1%	\$11,543	4.1%	\$14,429	4.1%	\$34,629	4.1%
Total Budget	\$209,506	100.0%	\$279,341	100.0%	\$349,176	100.0%	\$838,022	100.0%

COST-EFFECTIVENESS

Test	Results	
Participant Cost	NPV (all participants)	\$ 732,108
	Benefit-cost ratio	2.06
	NPV (average participant)	\$748
Ratepayer Impact Measure (RIM)	NPV	\$ (455,532)
	Benefit-cost ratio	0.64
	Lifecycle revenue impact per kWh	\$0.000003
	2011 revenue impact per kWh	\$0.000011
	2012 revenue impact per kWh	\$0.000007
	2013 revenue impact per kWh	\$0.000006
Total Resource Cost (TRC)	NPV	\$ 30,140
	Benefit-cost ratio	1.04
	Levelized cost per kWh	\$0.119
Program Administrator Cost (PAC)	NPV	\$ 82,480
	Benefit-cost ratio	1.12
	Levelized cost per kWh	\$0.111

SAVINGS TARGETS & PARTICIPATION

Key Program Modeling Assumptions and Outputs	2011	2012	2013	Total
	Coincident peak kW savings per installation	0.27	0.27	0.27
Annual kWh savings per installation	1,116	1,116	1,116	1,116
Annual kWh savings as a % of base usage	7.65%	7.65%	7.65%	7.65%
Estimated Participants	245	326	408	979
Annual MW Savings	0.1	0.1	0.1	0.3
Annual MWh Savings	273	364	455	1,093

OVER-SUBSCRIPTION PLAN

Oversubscription will be managed by suspending marketing and outreach. Once the budget for the current year is expended, a waiting list will be established for program participation in the following program year.

3.1.3. Energy Solutions for Manufactured (Mobile) Homes

PROGRAM DESCRIPTION

This program will target both manufactured (mobile) home owners as well as mobile home community managers and owners to address the three principal barriers to EE in this hard-to-reach sector:

1. *The low income barrier:* According to the U.S. Census Bureau about 80% of people living in manufactured homes are considered “low-income households” with nearly 30% living below the poverty line. Therefore, most mobile home owners cannot afford the upfront costs of EE improvements.
2. *The educational barrier:* Mobile home owners and community owners and managers do not fully understand the economic, comfort and other benefits of EE.
3. *The split incentive barrier:* For those manufactured home communities that are master metered, residents are less likely to implement EE because they do not pay for electricity.

Energy Solutions for Manufactured Homes will address these market barriers by building relationships with mobile home community owners, managers and residents through community meetings and direct marketing, and by providing free energy audits and direct install measures free of charge in common areas and in homes (where permitted).

Note that because little data exists on mobile home energy use in the Company’s territory, the program will collect the data necessary to develop measure savings estimates specific to these structure types. Specifically, the program will collect field data (e.g., energy end-use and building and occupancy characteristics) required to support calculations of manufactured home measure savings.

TARGET MARKET

This program will target both manufactured home community owners and managers³³ and mobile home owners. In order to maximize program cost-effectiveness, EAI will focus program promotion in geographic areas with the greatest concentration of mobile homes. For the geographic targeting goals,³⁴ the program anticipates using 2010 U.S. Census and other data about the concentration of mobile homes by ZIP code. The program will also focus efforts on communities that are not master metered in order to minimize the split incentive barrier.

MARKET SIZE

There are approximately 78,000 manufactured homes in EAI’s territory, which represents 13% of EAI’s housing stock; according to the U.S. Census Bureau, the concentration of mobile homes in Arkansas is twice the national average. Based on data available through the Manufactured and Mobile home MLS, there are approximately 250 mobile home communities in

³³ In many cases community managers also own the property.

³⁴ Program contractors will have assigned geographic areas and savings goals.

Arkansas. Manufactured home communities vary greatly in size, from less than 10 to over 1,000. A majority of communities include between 100-200 units, although many include over 200 units.

ELIGIBLE MEASURES & INCENTIVE STRATEGY

EAI expects that during the first program year, it will expend considerable effort reaching out to community owners/managers and home owners and educating them on the benefits of EE. During this period, the program will focus on installing the following measures:

Common Area DI Measures are expected to include, at a minimum

- High-efficiency linear and CFL fluorescent fixtures
- Parking and outdoor security lighting fixtures

And, where permitted (by community owners/managers and home owners):

Free In-Unit DI Measures, which are expected to include

- Energy-efficient showerheads and aerators
- DWH pipe Insulation
- Energy Star CFLs

Additional DI measures may be made available as the Company learns more about the efficiency needs of this sector through program audits.

Incentives will also be paid for **prescriptive projects** identified by the program and agreed to by homeowners and community managers.

A large majority of manufactured homes also have either a window or central AC. The program will offer discounted **AC tune-ups** to these customers through the Residential AC Solutions program.

Incentive Levels

In-unit DI measures will be free to mobile home owners.

EAI anticipates that **AC tune-up** incentives will bring down the customer co-pay to between \$25 and \$50.

Common area DI measures will be free to community managers/owners.

Home owners and community owners/managers interested in additional EE may be referred to the Home Energy Solutions program, or other programs as appropriate.

EAI will not provide incentives that are prohibited within the promotional practice rules.

FEDERAL & STATE INCENTIVES

The program will promote the Arkansas Small Business Assistance Loan to community owners and managers.

The maximum Federal home energy efficiency income tax credit for 2011 (for all qualified measures installed – including all end uses) is \$500 per taxpayer, a three-fold decrease from the 2009-2010 credit.

EAI will promote the 2011 tax credit to community managers/owners and mobile home owners. The Company will provide education and training on this subject to all participating auditors/contractors.

EAI will also coordinate with the Arkansas Energy Office, the Arkansas Office of the Department of Community Planning & Development, among others. Leveraging the access and influence of the public agencies and property owner/management associations with these customers will give EAI the opportunity impact as many mobile home owners as cost-effectively possible.

THIRD PARTY FINANCING

EAI will identify and promote off the utility bill third party financing options for owners of manufactured homes.

DELIVERY STRATEGY

An implementation contractor will be selected by the Company to assist with delivery of this program.

Key elements of program delivery include:

1. *Contractor recruitment:* EAI will recruit and train a limited number partnering contractors to provide full turnkey program delivery services. These contractors will, in effect, act as “general” contractors and will comprise an EAI system-based infrastructure to deliver program services.

Note that “general” contractors may employ local labor/specialty contractors to carry-out DI and prescriptive projects.

2. *Contractor Training:* The program will provide both technical and sales training to contractors.
 - a. *Technical training* will focus on key aspects of the technical knowledge and skills needed by contractor personnel to provide customers with the specified energy-efficient products and services.
 - b. *Sales training* will help contractors increase their understanding of the benefits associated with up-selling mobile home owners and community owners/managers to energy efficient technologies.
3. *Energy Audit:* Mobile home owners and community managers will receive an initial visit from the implementation contractor who will perform a free basic energy audit (similar to the Tier 1 Audit offered by the Home Energy Solutions program). During these audits, the program will inspect common areas, and if possible, at least one mobile home within the community to identify potential for DI and other measures.
4. *Energy efficiency projects:*

- a. *Manufactured home measure installations* may be combined with the initial site visit or scheduled separately depending on site manager and homeowner discussions.
 - b. *Common area measure installations* may be installed during the initial site visit or may require an estimate from the participating contractor, followed by a second visit for measure installation.
5. *Marketing*: Program outreach and marketing will focus on community owners/managers; however, the program will also market directly to home owners. Although contractors will be the primary delivery vehicle for this program EAI will reach community managers and home owners directly through low-cost communication vehicles including earned media, professional and trade media, invitational events (e.g., manufactured home community meetings), direct mail, and the program Web site.
6. *QA/QC review*: Incentive applications and contractor invoices will be subject to a QA/QC review to ensure all required forms and documentation have been submitted and that incentive calculations are correct. To minimize errors in this process there will be a 100 % review on all project documentation for verification of equipment efficiency rating, proper installation, etc. on the part of the Company.
7. *Project verification*: EAI will perform pre- and post-installation verifications on a statistically significant sample of all common area projects. EAI reserves the right to site-verify installations prior to approval and incentive (or contractor invoice) payment for any project. Over time, as contractors' exhibit consistently high performance, verifications for those contractors can be reduced. Contractors that exhibit poor performance will be re-trained and have 100% of their projects verified for a period of time, and can be removed from the program if poor performance continues.
8. *Incentive payment*: Most measures are installed free of charge through this program. Contractors will invoice EAI on a regular (e.g. bi-monthly) basis for equipment and labor costs in order to be made whole. This structure is necessary for program participants to overcome first-cost barriers, to simplify the transaction, and minimize the "hassle" factor.

PROGRAM TRACKING REQUIREMENTS

The Company is in the process of developing a robust program data tracking system. The minimum data collection requirements for this program are expected to include:

1. Energy Audit information including date enrollment received, customer information, audit completion date, audit results, and DI measures installed.
 - a. Characteristics of measures installed, including but not necessarily limited to, where appropriate
 - o Deemed savings
 - o Tracking of old and new equipment via serial and model numbers to assist in determining actual energy savings
 - o Equipment size and efficiency
 - o Location of installation
 - o Hours of operation
 - o Orientation of building surfaces treated

- Seasonality of equipment
 - Load shape of equipment
2. Numbers of auditors/contractors participating in the program who are both trained and have a signed agreement in place;
 3. Quality assurance results;

Currently deemed savings do not necessarily fit to mobile home load profiles. The program will collect the data necessary to develop measure savings estimates specific to these structure types. In addition to the above data, the program will also collect the field data (e.g., energy end-use and building characteristics) required to support calculations of manufactured home measures savings.

ADMINISTRATIVE REQUIREMENTS

Program administration will be the responsibility of EAI via vendor operations management.

ESTIMATED BUDGET

Incremental annual and total program budgets for 2011-2013 are shown below.

Program Cost Summary	2011		2012		2013		Total 3	
	Annual Budget	% of Budget	Annual Budget	% of Budget	Annual Budget	% of Budget	Year Budget	% of Budget
Type	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$1,516	0.5%	\$3,031	0.5%	\$4,547	0.5%	\$9,094	0.5%
Marketing & Delivery	\$106,102	36.6%	\$212,205	36.6%	\$318,307	36.6%	\$636,614	36.6%
Incentives / Rebates	\$151,575	52.4%	\$303,150	52.4%	\$454,724	52.4%	\$909,449	52.4%
Evaluation, Measurement, & Verification	\$7,579	2.6%	\$15,157	2.6%	\$22,736	2.6%	\$45,472	2.6%
Administration	\$22,736	7.9%	\$45,472	7.9%	\$68,209	7.9%	\$136,417	7.9%
Total Budget	\$289,508	100.0%	\$579,016	100.0%	\$868,524	100.0%	\$1,737,047	100.0%

COST-EFFECTIVENESS

Participant Cost	NPV (all participants)	\$ 761,552
	Benefit-cost ratio	1.94
	NPV (average participant)	\$209
Ratepayer Impact Measure (RIM)	NPV	\$ (350,187)
	Benefit-cost ratio	0.82
	Lifecycle revenue impact per kWh	\$0.000002
	2011 revenue impact per kWh	\$0.000014
	2012 revenue impact per kWh	\$0.000014
Total Resource Cost (TRC)	2013 revenue impact per kWh	\$0.000013
	NPV	\$ 170,988
	Benefit-cost ratio	1.12
Program Administrator Cost (PAC)	Levelized cost per kWh	\$0.231
	NPV	\$ 170,988
	Benefit-cost ratio	1.12
	Levelized cost per kWh	\$0.231

SAVINGS TARGETS & PARTICIPATION

Key Program Modeling Assumptions and Outputs	2011	2012	2013	Total
Coincident peak kW savings per installation	0.27	0.27	0.27	0.27
Annual kWh savings per installation	352	352	352	352
Annual kWh savings as a % of base usage	2.42%	2.42%	2.42%	2.42%
Estimated Participants	606	1,213	1,819	3,638
Annual MW Savings	0.2	0.3	0.5	1.0
Annual MWh Savings	214	427	641	1,282

OVER-SUBSCRIPTION PLAN

Oversubscription will be managed by suspending marketing and outreach. Once the budget for the current year is expended, a waiting list will be established for program participation in the following program year.

3.1.4. ENERGY STAR® New Homes

PROGRAM DESCRIPTION

The ENERGY STAR New Homes Program has two goals:

1. Increase the supply of qualified home builders that are motivated to design, build and independently verify energy efficient homes in Arkansas, thereby
2. Raising the EE bar for residential construction in the Company's territory.

In order to attain these goals, the Program will be designed to minimize the following market barriers:

- Lack of consumer demand for independently verified, energy efficient new homes
- Lack of supply of independently verified, energy efficient new homes
- Lack of consumer awareness of energy, cost and comfort improvements associated with efficient new homes
- Lack of convenient and centralized access to qualified home builders and developers

Most home builders do not have an incentive to construct homes other than those that minimally pass state mandated energy codes— which by definition is the least efficient home that can legally be built. A key driver for this behavior is that, historically, home builders sell on sticker price rather than on true ownership costs (e.g., mortgage plus utilities). In addition, the benefits associated with energy efficient homes (e.g., lower cost, improved comfort, better durability, etc.) are often not mentioned during the sales process. Consumers also typically do not ask home builders or realtors about efficiency and therefore contractors are often resistant to fronting the additional costs associated with building more efficient homes.

In order to help move the market for efficient homes, EAI's ENERGY STAR New Homes Program will work with key market actors to successfully sell more energy efficient homes in a manner that allows them to recoup their additional costs and increase profits and homebuyer satisfaction. Specifically, the program will provide financial incentives to help offset cost barriers and raise homebuyer awareness of the value of ENERGY STAR Homes.

EAI will offer incentives level for qualified home builders beginning in 2012.³⁵ Incentives will be paid to home builders who construct homes that meet the ENERGY STAR Version 2.5/3.0 specifications, which come into effect for homes permitted on or after April 1, 2011.

ENERGY STAR New Homes will be offered through the current infrastructure of ENERGY STAR Home partners in Arkansas. There are currently 36 partners operating in the state of Arkansas, yet only 146 ENERGY STAR homes were built in 2010 in the state. 655 ENERGY STAR homes were built between 2006 to 2010. In order to have the greatest net impact and minimize free-ridership, the program will also recruit new builders into the program, and employ strict builder participation criteria to ensure contractors do not “cut corners.”

³⁵ Preparations for the 2012 launch will begin 2011. Due to the relatively slow construction market, and the fact that this market operates on a calendar year, EAI believes that it would be an efficient use of program dollars to officially launch the program prior to 2012.

TARGET MARKET

The Residential New Construction Program will be available to all qualified residential home builders.

MARKET SIZE

Over the 2012 to 2013 period, the Company expects around three thousand new homes to be built per year in its territory. This is in comparison to about 4,500 homes being built in 2008, 2,700 homes in 2009, and about 2,900 in 2010.

ELIGIBLE MEASURES & INCENTIVE STRATEGY

Examples of qualifying efficient measures include:

- New residential homes with some or all of the following upgrades:
 - Right sized HVAC systems
 - Duct Sealing
 - Insulation
 - Reduced infiltration
 - ENERGY STAR appliances
 - ENERGY STAR windows
 - ENERGY STAR doors
 - Programmable thermostats

Incentives will be paid to participating home builders for building new homes that meet ENERGY STAR New Home Version 2.5/3.0 specifications. These new specifications require high EE performance levels, as well as stringent energy performance checklists. EAI anticipates paying participating home builders \$750 per new home that meet the Version 2.5/3.0 specifications.

Final incentive levels are subject to change depending on discussions with the implementation contractor, product costs and availability, and other factors. Over time, these incentives may also be adjusted based upon customer response.

FEDERAL & STATE INCENTIVES

There are no Federal incentives for this Program beyond the ENERGY STAR branding that will be available for promoting homes that meet the new ENERGY STAR specification.

DELIVERY STRATEGY

An implementation contractor, selected by EAI will deliver ENERGY STAR New Homes.

Key elements of Residential New Construction Program implementation include:

1. *ENERGY STAR Home partner outreach*: The implementation contractor will conduct extensive outreach, including existing and new partner recruitment, education and training, marketing support, and technical assistance.
2. *HERS Raters recruitment and training*: The implementation contractor will work with partners to expand the HERS Raters infrastructure. Currently, there are only five

qualified HERS Rating organizations in Arkansas. The implementation contractor will expand this infrastructure by working with industry professionals, such as home inspectors and insulation contractors who can augment their marketability with HERS rater certification.

3. *Marketing.* Partners will work with HERS Raters to recruit homebuyers through direct marketing efforts. Marketing options include advertising, bill inserts, retail trade shows, outreach through realtors, etc. EAI's Web site will also contain relevant program information.
4. *Project implementation:* Partners will install upgrades in new homes according to program protocols.
5. *Incentive application:* Partners will submit applications for services performed. The implementation contractor will then conduct a QA/QC review of all applications to ensure that all required information and documentation has been provided. The implementation contractor will also conduct a QA/QC review to ensure that the installation of key upgrades and the integrity of the HERS process satisfy the program protocols.
6. *Incentive payment.* Partners will receive a per project incentive for approved applications. EAI will not pay cash incentives for fuel switching per Commission directive. For this program, this means EAI will not encourage customers or home-builders to change the technology of the installed heating system in order to qualify for an incentive.
7. *Project verification:* Qualified HERS Raters will conduct site visits to verify installation upgrades. EAI reserves the right to site-verify installations prior to project approval and incentive payment. The implementation contractor will perform site verification on a statistically significant number of installations to verify the performance of work completed. Requirements for receiving an incentive will include, at a minimum:
 - a) The home must be in EAI's service territory;
 - b) The home must be new, separately metered, residential construction;
 - c) The home must be tested and certified by a certified HERS Rater;
 - d) The home builder must have subscribed to EAI's program.

For documentation purposes and to demonstrate compliance with all program rules, the home builder or their HERS Rater must submit to EAI monthly reports that contain the following:

- a) Contact and accreditation information for the home builder or their HERS Rater;
- b) Information about the participating builder;
- c) Information about each certified home that includes floor plan ID, address, certification, and inspection dates;
- d) Information about the HVAC equipment in each certified ENERGY STAR home;
- e) An EPA ENERGY STAR certificate for each home;
- f) Documentation of equipment sizing procedures based on ACCA Manual J (Form J-1) or other approved sizing procedures for all HERS-certified homes.

PROGRAM TRACKING REQUIREMENTS

The Company is in the process of developing a robust program data tracking system. The minimum data collection requirements for this program are expected to include:

New home characteristics

- Street Address (Drive, etc).
- City
- Zip code
- Community
- County
- Square footage (conditioned space)
- Number of Floors
- Floor Plan
- Slab Date
- Assigned Rater
- Meter number

HERS Rater requirements

- Certificate Date
- Prescriptive Path (Yes or No)
- Heating Type (Gas, electric, etc.)
- DWH Type (Gas, solar, electric, etc.)
- HERS Index
- Test/Sampled
- Duct Leakage (Tested Homes Only)*
- ARI Reference Number
- SEER value (if applicable)
- Condenser/Coil/AH/DWH Model Number

ADMINISTRATIVE REQUIREMENTS

EAI will be responsible for developing the implementation contractor RFP and selection, approving final program design and marketing strategy, and monitoring contractor performance goals.

The implementation contractor responsibilities include working with EAI on final program design, marketing materials development, program marketing and outreach activities, management and oversight of the contractor network, QA/QC activities, customer and contractor dispute resolution, tracking and reporting, and program element goal achievement.

ESTIMATED BUDGET

Incremental annual and total program budgets for 2012 and 2013 are shown below. Although EAI anticipates program activities will occur in preparation for a January 2012 launch, due to the relatively slow construction market, and the fact that this market operates on a calendar year, EAI believes that it would be an efficient use of program dollars to officially launch the program prior to 2012.

Program Cost Summary	2011		2012		2013		Total 3	
	Annual Budget		Annual Budget		Annual Budget		Year Budget	
Type	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$15,000	16.7%	\$2,000	0.5%	\$2,500	0.4%	\$19,500	1.7%
Marketing & Delivery	\$60,000	66.7%	\$175,000	39.6%	\$250,000	39.0%	\$485,000	41.4%
Incentives / Rebates	\$0	0.0%	\$225,194	50.9%	\$337,790	52.8%	\$562,984	48.0%
Evaluation, Measurement, & Verification	\$0	0.0%	\$15,000	3.4%	\$20,000	3.1%	\$35,000	3.0%
Administration	\$15,000	16.7%	\$25,000	5.7%	\$30,000	4.7%	\$70,000	6.0%
Total Budget	\$90,000	100.0%	\$442,194	100.0%	\$640,290	100.0%	\$1,172,484	100.0%

COST-EFFECTIVENESS

Test	Results	
Participant Cost	NPV (all participants)	\$ 797,334
	Benefit-cost ratio	1.29
	NPV (average participant)	\$1,062
Ratepayer Impact Measure (RIM)	NPV	\$ 39,956
	Benefit-cost ratio	1.02
	Lifecycle revenue impact per kWh	<\$0.000000
	2011 revenue impact per kWh	\$0.000005
	2012 revenue impact per kWh	\$0.000011
Total Resource Cost (TRC)	NPV	\$ 9,218
	Benefit-cost ratio	1.00
	Levelized cost per kWh	\$0.152
Program Administrator Cost (PAC)	NPV	\$ 1,722,702
	Benefit-cost ratio	2.77
	Levelized cost per kWh	\$0.055

SAVINGS TARGETS & PARTICIPATION

Key Program Modeling Assumptions and Outputs	2011	2012	2013	Total
	Coincident peak kW savings per installation	#DIV/0!	0.74	0.74
Annual kWh savings per installation	#DIV/0!	2,407	2,407	2,407
Annual kWh savings as a % of base usage	#DIV/0!	16.51%	16.51%	16.51%
Estimated Participants	0	300	450	751
Annual MW Savings	0.0	0.2	0.3	0.6
Annual MWh Savings	0	723	1,084	1,807

OVER-SUBSCRIPTION PLAN

Oversubscription will be managed by suspending marketing and outreach. Once the budget for the current year is expended, a waiting list will be established for program participation in the following program year.

3.1.5. Efficient Cooling Solutions for Residential & Small Business Customers

PROGRAM DESCRIPTION

The program is designed to minimize the following market barriers to efficient cooling in the residential and small business marketplaces:

- Lack of awareness of efficient air conditioners at time of purchase
- Lack of awareness of energy and cost savings
- Lack of easy access to qualified vendors and installers
- Lack of awareness of properly tuned air conditioning systems
- Lack of awareness of energy and cost savings due to properly operating AC systems

Efficient Cooling Solutions will provide residential and small business customers with a comprehensive set of options to lower the energy consumption and cost associated with keeping their homes and businesses cool and comfortable in the summer. Customers needing a new air conditioner will find that rebates for ENERGY STAR qualified ACs and heat pumps are attractive value proposition, with a tiered incentive structure that pays the highest rebates for the most efficient units, a structure is equally attractive to contractors and distributors. Additional incentives will be available to customers who opt for an ENERGY STAR or ACCA QI.

Customers with functioning ACs can improve the efficiency of their units with the help of an AC Tune-up. Research shows that most central AC systems have tune-up opportunities, resulting from either improper refrigerant charge or incorrect airflow rates³⁶. And, many central AC systems are incorrectly sized. These inefficiencies can lead to increased energy usage and accelerated equipment degradation. The program will build capacity within the territory's HVAC contractor network to address these issues and provide value-added services to its customers. And marketing efforts will promote the value of these services to customers and the energy-saving and economic benefits.

The Company's AC offerings will be cross-promoted with the Residential Home Solutions program because experience shows that investment in a new efficient AC can lead to a more comprehensive home efficiency project. The obvious benefit to this approach is that – to use a simple example – all else equal, a well-insulated and sealed home requires a smaller air conditioner than a poorly insulated and leaky home. EAI will also provide a bonus incentive for customers opting to install packages of measures.

In summary, the Company's proposed Efficiency Air Conditioning Solutions program will help create a transformed AC market in the Arkansas by:

- targeting consumers at every possible decision point,
- providing a tiered incentive structure attractive to customers, contractors and distributors
- rewarding best practice, including Quality Installations, and
- minimizing cream-skimming and lost opportunities by cross-promoting efficient air conditioning the Residential Solutions program.

³⁶ Consortium for Energy Efficiency, *Specification of Energy-Efficient Installation and Maintenance for Residential HVAC Systems*, 2000

TARGET MARKET

Unit Replacement

All qualified residential and small business customers with central air conditioning or heat pumps.

AC Tune-Up

All qualified residential and small Business customers with working central air conditioning or heat pumps.

MARKET SIZE

There are approximately 370,000 residential customers in EAI's territory with central air conditioning or heat pumps. Air conditioners and heat pumps have a 15 year life-time; therefore an estimated 25,000 new units are sold each year. There are approximately 85,000 small business customers in the Company's territory

ELIGIBLE MEASURES & INCENTIVE STRATEGY

Unit Replacement

Incentives for CAC and heat pump replacement are anticipated to equal between 25% and 75% of incremental cost, or a buy-down to a one-year simple payback. Incentives will be structured based on unit SEER level and tonnage. And bonus incentives will be paid for:

- Quality Installations (as defined by the U.S. EPA and ACCA), and/or
- Installing additional efficiency measures through the Home Energy Solutions program.

All incentives will be paid directly to customers. Experience shows this strategy aids in mitigating free-ridership.

AC Tune-Ups

EAI anticipates paying HVAC contractors \$100 per tune-up. Final incentive levels may change pending discussions with the implementation contractor, changes in product prices and availability, or other factors. Over time, these incentives may also be adjusted based upon customer response.

FEDERAL & STATE INCENTIVES

Federal tax incentives for residential Central ACs and Heat Pumps decreased in 2011. Residential customers can now deduct 10% of the installed cost of the efficient unit,³⁷ up to a cap of \$300 per taxpayer. The maximum energy efficiency tax credit (for all qualified measures installed – including all end uses, not just HVAC) is \$500 per taxpayer, a three-fold decrease from the 2009-2010 credit.

³⁷ The efficiency requirement equals the maximum CEE 2009 tier, or approximately 16 SEER.

EAI will promote the 2011 tax credit to consumers, contractors and distributors. The Company will provide education and training on this subject to all participating contractors.

Note: The following HVAC technologies are anticipated to have significantly increased minimum Federal efficiency standards in 2011 or 2012. These technologies include:

- Central AC: 14 SEER in warm states (<5000 HDD) (2015)
- Room AC: 11-15% better EER (2014)

If instituted, these changes will likely have a downward impact on program cost-effectiveness, demand reduction and energy saving results in future years.

FINANCING

EAI will identify and promote off the utility bill third party financing options with this program.

DELIVERY STRATEGY

An implementation contractor selected by EAI will deliver the program.

Key elements of the delivery strategy include:

1. *HVAC Contractor recruitment and training:* The implementation contractor will recruit HVAC contractors and organize required trainings, including QI, AC Tune-up, and training in program processes and procedures.
2. *Distributor recruitment and training (Applicable to AC replacement only):* Experience shows that the most effective new AC programs drive participation from the top-down. Therefore, the program will work early on to gain buy-in from distributors, who can “work for the program” by promoting EAI’s incentives to their contractor networks.
3. *Marketing :* This is a contractor-driven initiative - HVAC contractors will recruit customers through direct marketing efforts. However, EAI will also recruit customers using direct mail, bill inserts, as well as general awareness activities. Program information will also be posted on EAI’s Web site, and provided through the call center, as appropriate.
4. *Project implementation:* HVAC contractors will provide tune-up and installation services according to program protocols.
5. *Incentive application & payment:* HVAC contractors will submit all project paperwork to the implementation contractor for QA/QC review. Customers will be paid incentives for work completed following application approval.
6. *Project verification:* EAI will perform pre- and post-installation verifications on a statistically significant sample of all common area projects. EAI reserves the right to site-verify installations prior to approval and incentive payment for any project. Over time, as contractors’ exhibit consistently high performance, verifications for those contractors can be reduced. Contractors who exhibit poor performance will be re-trained and have 100%

of their projects verified for a period of time, and can be removed from the program if poor performance continues.

Retrofit or “Accelerated” Unit replacement

Currently there is insufficient data on the performance of the existing stock of functioning AC equipment in the Company’s territory to support cost-effectiveness calculations for retrofit/early AC replacement measures. However, as outlined below under Program Tracking Requirements, EAI will collect such existing unit data in the field through the program.

Until the “data is in,” the Company may support limited promotion of early replacement with AC contractors and customers taking into consideration limited budget and program cost-effectiveness.

PROGRAM TRACKING REQUIREMENTS

AC Replacement

The Company is in the process of developing a robust program data tracking system. The minimum data collection requirements for this program are expected to include:

- 1) Existing (old) unit data
 - a) Model number
 - b) Whether the unit is functioning or burned-out
 - c) Whether or not the unit was well maintained
 - d) Whether or not the duct system was well maintained
 - e) If functioning, the approximate remaining effective useful life (EUL)
- 2) New unit data
 - a) Model number
 - b) SEER level
 - c) Sizing calculations
 - d) Tonnage
 - e) And, if a QI is performed
 - i) Refrigerant charge level
 - ii) Air flow calculations
 - iii) Manual J calculations
 - f) Date of installation

AC Tune-Up

- 1) Unit data
 - a) Model number
 - b) Whether the unit is functioning or burned-out
 - c) Whether or not the unit is well maintained
 - d) Whether or not the duct system was well maintained
 - e) Approximate remaining effective useful life (EUL)
 - f) Tune-up data
 - i) Pre/post refrigerant charge levels
 - ii) Pre/post air flow measurements
 - iii) Other checklist items

- (1) Air coil cleaning
- (2) Blower fan cleaning.
- iv) Date of tune-up

ADMINISTRATIVE REQUIREMENTS

EAI will be responsible for developing the implementation contractor RFP and selection, approving final program design and marketing strategy, and monitoring contractor performance goals.

The implementation contractor responsibilities include working with EAI on final program design, marketing materials development, program marketing and outreach activities, management and oversight of the contractor and distributor networks, QA/QC activities, customer and contractor dispute resolution, tracking and reporting, and program element goal achievement.

ESTIMATED BUDGET

Incremental annual and total program budgets for 2011-2013 are shown below.

Program Cost Summary	2011		2012		2013		Total 3	
	Annual Budget	% of Budget	Annual Budget	% of Budget	Annual Budget	% of Budget	Year Budget	% of Budget
Type	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$4,427	0.7%	\$8,854	0.7%	\$13,281	0.7%	\$26,562	0.7%
Marketing & Delivery	\$88,539	13.7%	\$177,078	13.7%	\$265,617	13.7%	\$531,235	13.7%
Incentives / Rebates	\$442,696	68.5%	\$885,392	68.5%	\$1,328,087	68.5%	\$2,656,175	68.5%
Evaluation, Measurement, & Verification	\$44,270	6.8%	\$88,539	6.8%	\$132,809	6.8%	\$265,617	6.8%
Administration	\$66,404	10.3%	\$132,809	10.3%	\$199,213	10.3%	\$398,426	10.3%
Total Budget	\$646,336	100.0%	\$1,292,672	100.0%	\$1,939,008	100.0%	\$3,878,015	100.0%

COST-EFFECTIVENESS

Test	Results	
Participant Cost	NPV (all participants)	\$ 2,399,083
	Benefit-cost ratio	1.65
	NPV (average participant)	\$119
Ratepayer Impact Measure (RIM)	NPV	\$ (603,213)
	Benefit-cost ratio	0.90
	Lifecycle revenue impact per kWh	\$0.000005
	2011 revenue impact per kWh	\$0.000031
	2012 revenue impact per kWh	\$0.000030
Total Resource Cost (TRC)	2013 revenue impact per kWh	\$0.000026
	NPV	\$ 1,011,960
	Benefit-cost ratio	1.24
Program Administrator Cost (PAC)	Levelized cost per kWh	\$0.132
	NPV	\$ 2,017,391
	Benefit-cost ratio	1.62
	Levelized cost per kWh	\$0.101

SAVINGS TARGETS & PARTICIPATION

Key Program Modeling Assumptions and Outputs	2011	2012	2013	Total
Coincident peak kW savings per installation	0.18	0.18	0.18	0.18
Annual kWh savings per installation	412	412	412	412
Annual kWh savings as a % of base usage	2.83%	2.83%	2.83%	2.83%
Estimated Participants	3,354	6,707	10,061	20,122
Annual MW Savings	0.6	1.2	1.8	3.6
Annual MWh Savings	1,383	2,767	4,150	8,300

OVER-SUBSCRIPTION PLAN

Over-subscription will be managed by suspending marketing and outreach. Once the budget for the current year is expended, a waiting list will be established for program participation in the following program year.

3.1.6. Residential Lighting and Appliances

PROGRAM DESCRIPTION

The objective of the Lighting and Appliances initiative is to increase awareness and sales of efficient lighting and appliances to EAI's residential population. The program will offer customers the opportunity to purchase, largely through retail locations, a variety of discounted products that are ENERGY STAR qualified or better.

The Residential Lighting and Appliances Program is designed to minimize the following market barriers to EE implementation for EAI's residential customers:

- Lack of information about energy-saving lighting products and appliances
- Lack of easy access to ENERGY STAR qualified products
- Higher first-cost for ENERGY STAR qualified products
- Consumer mis-information about the quality of efficient products

The two main program activities include (1) retailer outreach and training, and 2) administration of the incentive process (including program tracking). For retailer outreach, the implementation contractor will work to expand the Quick Start Program retail network, as well as increase the number of available products. Outreach will also include the development of a marketing strategy that leverages the ENERGY STAR brand, development of point-of-purchase (POP) materials, and ongoing retailer training.

The incentive process will include both midstream and upstream approaches. EAI will continue its in-store/instant coupon-based approach, but will also negotiate with retailers and manufacturers to buy-down the cost of program-qualified products.

TARGET MARKET

The Residential Lighting and Appliances Program will be available to all qualified residential customers.

MARKET SIZE

There are approximately 580,000 residential customers in EAI's service territory.

ELIGIBLE MEASURES & INCENTIVE STRATEGY

In 2011 EAI will implement a blended incentive strategy: Both markdown/buydown, and coupon incentive processes will be developed to ensure all retailers and customers are able to participate.

- **Markdown / Buydowns** will be provided directly to a manufacturer or retail partner with the goal of lowering first costs of products and passing the savings on to the customer. The customer will be able to see the actual discount offered compared to everyday price on the shelf.

The selected implementation contractor will issue an RFP to solicit participation by retailers in its service territory. A solicitation process allows EAI to partner with industry to support the most important objectives of the program, the APSC's goals, and to continuously specify key objectives throughout the life of the Program. EAI will sign a

Memorandum of Understanding ("MOU") with selected retailers delineating roles and responsibilities and each party's commitments in support of programmatic objectives.

- Continuing with the Quick Start incentive process, **in-store instant rebate coupons** will be redeemable at the point of sale by customers.

Because it takes time to negotiate buy-downs with retailers, EAI anticipates that it will launch the program using only in-store rebate coupons, and then later add the buy-down approach with participating retailers. Continuing the coupons for the short term is important since not all retailers will participate in the negotiated markdowns. However EAI expects to phase-out the coupon approach by the end of 2012 in favor of the simple, expedited customer experience that is characteristic of the markdown approach.

Anticipated Measures

Lighting

- CFLs
- CF fixtures

Appliances

- ENERGY STAR Refrigerators:
- ENERGY STAR Window AC

Home Electronics

- Smart Strip

EAI anticipates that this program will decrease rebates for CFLs concurrent with the federal phase-out of general service incandescent lighting. The Energy Independence and Security Act of 2007 (EISA) established minimum efficiency requirements for general service lamps effective in 2012, which will essentially phase out general-service incandescent lighting for most applications.

Note that final incentive levels and measure mix may change pending discussions with the implementation contractor, with retailers, changes in product prices and availability, or other factors. Over time, these incentives may also be adjusted based upon customer or retailer response.

FEDERAL & STATE INCENTIVES

There are currently no Federal or State cash or tax incentives for the ENERGY STAR products promoted by this program.³⁸ However the program will cross promote 2011 Federal tax credits for energy efficient home improvements, Energy Efficient Mortgages, and State Low-income energy assistance.

³⁸ The Arkansas ENERGY STAR® Appliance Rebate Program, which closed in December 2010, provided over \$6.5 Million in incentive to residents of Arkansas for efficient refrigerators, clothes washers, and water heaters. At the time of this filing, data on the market impact of this program in EAI's territory was not available.

THIRD PARTY FINANCING

Third party financing is not applicable to this program.

DELIVERY STRATEGY

An implementation contractor, selected by EAI, will assist EAI with program delivery.

Key elements of the Residential Lighting and Appliances Program implementation include:

1. *Retailer and supplier recruitment:* The implementation contractor will solicit participation by existing retailers, including those currently participating in the Quick Start Program. The program will expand across multiple retail channels (Do It Yourself -- DIY e.g. Home Depot), warehouse clubs, independently owned hardware stores, grocery, drug stores, etc.) To increase participation throughout the life of the program. The implementation contractor will finalize product specifications and performance criteria, product stocking based on anticipated rebate volume, and data sharing requirements.

Note: In some localities and customer segments, market saturation for specific high-efficiency products may already be quite high. Strategies such as targeting certain market channels (e.g., grocery) and specialty CFL applications will be considered to ensure energy savings can be attributed to the program.

2. *Training requirements:* The contractor will also provide training to retailers and suppliers on the ENERGY STAR product line, and on program processes. On-going training and merchandising visits by field staff create a foundation for the program to participate in manufacturer and retailer seasonal promotions, taking advantage of ENERGY STAR and other national campaigns while ensuring continuous education of the customer.
3. *Marketing plan development and implementation:* EAI will work with the implementation contractor to develop a marketing plan. Marketing will focus on two key tactics. One, with a large majority of buying decisions made on the retail floor at point of purchase, EAI plans to leverage the broader marketing campaign by providing engaging in-store collateral materials to inform and educate potential buyers. These materials will feature ENERGY STAR brands, maximize floor and shelf space, engage/influence the buying process, and incorporate a call to action. Two, the marketing team will conduct ongoing online promotions to drive traffic EAI's program Web site. Once at the Web site, consumers will find a wealth of information about specific appliances and lighting products.
4. *Incentive process:* EAI will work with the implementation contractor to develop an incentive payment plan. The most likely option is for incentives to be paid to participating retailers by the implementation contractor, with EAI advancing funds to the implementation contractor.
5. *Project verification:* Because this program does not track individual participants, the Company will not verify installation of the products rebated by the program. Tracking products and reporting accomplishments will be completed through agreements reached with retailers, manufacturers and suppliers. A statistically significant sample of retailers will be audited to ensure compliance with program processes.

PROGRAM TRACKING REQUIREMENTS

The Company is in the process of developing a robust program data tracking system. The minimum data collection requirements for this program are expected to include:

- Number
- Type, and
- Quantity

of products that receive incentives and their deemed savings

Note: Tracking products and reporting accomplishments will be completed through agreements reached with retailers, manufacturers and suppliers.

ADMINISTRATIVE REQUIREMENTS

EAI will be responsible for selecting an implementation contractor approving final program design and marketing strategy, and monitoring contractor performance goals.

The implementation contractor responsibilities include working with EAI on final program design, marketing materials development, program marketing and outreach activities, management and oversight of the retailer network, QA/QC activities, customer and contractor dispute resolution, tracking and reporting, and program element goal achievement.

ESTIMATED BUDGET

Incremental annual and total program budgets for program years one through three are shown below.

Program Cost Summary	2011 Annual Budget		2012 Annual Budget		2013 Annual Budget		Total 3 Year Budget	
	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$18,583	0.6%	\$23,228	0.6%	\$26,016	0.6%	\$67,827	0.6%
Marketing & Delivery	\$650,393	21.1%	\$812,991	21.1%	\$910,550	21.1%	\$2,373,935	21.1%
Incentives / Rebates	\$1,858,266	60.2%	\$2,322,832	60.2%	\$2,601,572	60.2%	\$6,782,670	60.2%
Evaluation, Measurement, & Verification	\$185,827	6.0%	\$232,283	6.0%	\$260,157	6.0%	\$678,267	6.0%
Administration	\$371,653	12.0%	\$464,566	12.0%	\$520,314	12.0%	\$1,356,534	12.0%
Total Budget	\$3,084,721	100.0%	\$3,855,902	100.0%	\$4,318,610	100.0%	\$11,259,233	100.0%

COST-EFFECTIVENESS

Test	Results	
Participant Cost	NPV (all participants)	\$ 29,471,592
	Benefit-cost ratio	3.41
	NPV (average participant)	\$12
Ratepayer Impact Measure (RIM)	NPV	\$ (7,709,160)
	Benefit-cost ratio	0.78
	Lifecycle revenue impact per kWh	\$0.000061
	2011 revenue impact per kWh	\$0.000164
	2012 revenue impact per kWh	\$0.000113
Total Resource Cost (TRC)	2013 revenue impact per kWh	\$0.000075
	NPV	\$ 12,606,222
	Benefit-cost ratio	1.88
	Levelized cost per kWh	\$0.046
Program Administrator Cost (PAC)	NPV	\$ 17,239,530
	Benefit-cost ratio	2.79
	Levelized cost per kWh	\$0.031

SAVINGS TARGETS & PARTICIPATION

Key Program Modeling Assumptions and Outputs	2011	2012	2013	Total
Coincident peak kW savings per participant	0.00	0.00	0.00	0.00
Annual kWh savings per participant	32	31	29	30
Annual kWh savings as a % of base usage	0.22%	0.21%	0.20%	0.21%
Estimated Participants	646,984	808,730	905,778	2,361,493
Annual MW Savings	2.7	3.3	3.4	9.4
Annual MWh Savings	21,010	24,789	25,818	71,618

Participants by Installation and End Use				
Installations-Lighting	612,129	765,161	856,981	2,234,271
Installations-HVAC	4,775	5,968	6,684	17,427
Installations-Electronics	29,149	36,436	40,809	106,394

OVER-SUBSCRIPTION PLAN

Over-subscription will be managed by suspending marketing and outreach. Once the budget for the current year is expended, a waiting list will be established for program participation in the following program year.

3.1.7. Residential Benchmarking Pilot

PROGRAM DESCRIPTION

The Residential Benchmarking Pilot is an innovative program that will provide energy consumption information to residential customers in a paper report format as well as through the internet. The program concept is based on well-grounded social science research, which shows that peer-pressure is a powerful behavioral change mechanism. The reports will inform customers how their energy use compares with that of their peer groups, how their energy has changed over time, and actions customers can take to reduce energy use. Claims for third-party vendors for programs like this have suggested that savings between 1% of 3% are possible.

This pilot program concept is designed to address the following market barriers to EE:

- Lack of customer awareness of energy and demand consumption, in a certain time period and over multiple periods of time
- Lack of customer awareness of how their energy consumption compares to their peer groups
- Lack of customer understanding of how to reduce their energy consumption

As a Pilot, EAI proposes to undertake this program to answer the following research questions:

- What are the verifiable energy savings and demand reductions that this program achieves for EAI's residential customers?
- How do these energy savings persist over time, with and without the continued delivery of the energy benchmarking reports?
- What are the free-ridership and spill-over effects of this program?
- Could this program be utilized for all of EAI's customers in a future program years?

In order to characterize energy consumption amongst peer groups, additional customer data will need to be collected through publicly available datasets including Census and appraisal district data. Then peer groups (homes with similar characteristics, of similar age, and in geographic proximity) will be established so that each customer can understand how they perform compared with one hundred similar homes in their area.

In addition to providing energy savings, this program provides an excellent way for EAI to communicate its EE and conservation commitment to its customers on an ongoing basis. If the performance of the initial three-year period of implementation is cost-effective EAI expects to expand this program to additional customers in future program years.

TARGET MARKET

The target market for this pilot is single-family residential customers. 50,000 of these customers will be randomly selected to receive energy benchmarking reports, and another 50,000 customers will be part of a control group.

MARKET SIZE

There are approximately 456,000 single family residential customers in EAI's territory.

ELIGIBLE MEASURES & INCENTIVE STRATEGY

The benchmarking report will be the only measure in this program.

No direct incentives will be paid to customers in this program, but customers will receive the benchmarking reports for no additional charge, and will be able to opt-out of the program. The energy reports will promote incentives for other EAI programs. The Company will provide customer support through phones and online tools.

FEDERAL & STATE INCENTIVES

None applicable.

THIRD PARTY FINANCING

None applicable.

DELIVERY STRATEGY

An implementation contractor, selected by EAI, will fully administer the Benchmarking pilot program. The key elements of the implementation strategy include:

1. *Selection of the random sample* of participants (equal to 50,000 in year 1) and a customer control group of non-participants (also equal to 50,000).
2. *Creation of the peer groups for customer comparison.* This is a highly technical process that will merge multiple databases of information, and will be handled entirely by the implementation contractor.
3. *Development of the reports and the online components.* EAI will assist in the design and look-and-feel of these components.
4. *Delivery of reports.* The implementation contractor will be responsible for printing and mailing the reports.
5. *Monthly performance reports to EAI:* The implementation contractor will report at least monthly to the Company with the results-to-date, so that any necessary changes can be made to the program delivery.

PROGRAM TRACKING REQUIREMENTS

The Company is in the process of developing a robust program data tracking system. The minimum data collection requirements for this program are expected to include:

- Treatment and control group billing data
 - Historical (pre-treatment)
 - On-going throughout treatment
- Participation in other EAI program offerings by treatment and control groups

EAI's Comprehensive Portfolio

ADMINISTRATIVE REQUIREMENTS

Program administration will be the responsibility of EAI via vendor operations management.

ESTIMATED BUDGET

Incremental annual and total program budgets for program years one through three are shown below.

Program Cost Summary	2011 Annual Budget		2012 Annual Budget		2013 Annual Budget		Total 3 Year Budget	
	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$6,000	0.6%	\$9,000	0.6%	\$12,000	0.6%	\$27,000	0.6%
Marketing & Delivery	\$210,000	21.1%	\$315,000	21.1%	\$420,000	21.1%	\$945,000	21.1%
Incentives / Rebates	\$600,000	60.2%	\$900,000	60.2%	\$1,200,000	60.2%	\$2,700,000	60.2%
Evaluation, Measurement, & Verification	\$60,000	6.0%	\$90,000	6.0%	\$120,000	6.0%	\$270,000	6.0%
Administration	\$120,000	12.0%	\$180,000	12.0%	\$240,000	12.0%	\$540,000	12.0%
Total Budget	\$996,000	100.0%	\$1,494,000	100.0%	\$1,992,000	100.0%	\$4,482,000	100.0%

COST-EFFECTIVENESS

Participant Cost	NPV (all participants)	\$ 5,493,711
	Benefit-cost ratio	3.27
	NPV (average participant)	\$24
Ratepayer Impact Measure (RIM)	NPV	\$ (1,481,516)
	Benefit-cost ratio	0.81
	Lifecycle revenue impact per kWh	\$0.000017
	2011 revenue impact per kWh	\$0.000041
	2012 revenue impact per kWh	\$0.000028
	2013 revenue impact per kWh	\$0.000014
Total Resource Cost (TRC)	NPV	\$ 2,585,393
	Benefit-cost ratio	1.68
	Levelized cost per kWh	\$0.073
Program Administrator Cost (PAC)	NPV	\$ 2,585,393
	Benefit-cost ratio	1.68
	Levelized cost per kWh	\$0.073

SAVINGS TARGETS & PARTICIPATION

Key Program Modeling Assumptions and Outputs	2011	2012	2013	Total
Coincident peak kW savings per installation	0.09	0.03	0.02	0.09
Annual kWh savings per installation	253	84	63	253
Annual kWh savings as a % of base usage	1.74%	0.58%	0.43%	1.74%
Estimated Participants	50,000	75,000	100,000	100,000
Annual MW Savings	4.3	2.2	2.2	8.7
Annual MWh Savings	12,656	6,328	6,328	25,311

OVER-SUBSCRIPTION PLAN

Oversubscription will be managed by suspending marketing and outreach. Once the budget for the current year is expended, a waiting list will be established for program participation in the following program year.

3.1.8. Residential Direct Load Control

PROGRAM DESCRIPTION

This opt-in load control initiative would allow the Company to cycle off a participant's home CAC condenser during peak events. Over the long-run system and customer benefits include, amongst others lower rates (due to a lesser need to dispatch the most expensive generating units), and better regional air quality (since peaking units emit higher levels of criteria pollutants relative to other units). To minimize discomfort, the enabling technology allows the air-handler fan to remain powered to circulate air throughout the house.

The program – which will be delivered by a turn-key implementation contractor – will employ load control technology both radio switches (installed directly on the CAC) and smart thermostats (installed in the customer's home) to control participants' AC units that will have the provision to integrate with smart metering technology in the future to attempt to implement with a "no regret"³⁹ strategy. Enrollees will be compensated at varying levels depending on the cycling option they choose; the greater the level of cycling during the peak period, the greater the incentive. Specific cycling options will be determined following program approval, but typical cycling options range from 25% to 100%. For planning purposes EAI estimates the average annual incentive to participants will equal \$75.

The peak period is defined weekdays 1p.m. to 7 p.m. during the months of June through September.⁴⁰ Given the expected regulatory approval schedule this program is not expected to be available prior to the summer peaking season of 2012. Planning and implementation budgets will be used in 2011 to prepare for the 2012 market launch.

TARGET MARKET

Residential customers with functioning central air conditioners will be eligible.

Rental properties will be eligible, but only if the property owner gives their approval to install the control equipment.

MARKET SIZE

There are approximately 370,000 residential customers with CACs. The functional status and/or effective useful life (EUL) of these units is not known at this time. In order to better understand the existing stock of CACs both this program and the Cooling Solutions initiative will collect field data, including CAC model number and other information.

ELIGIBLE MEASURES & INCENTIVE STRATEGY

Customers will receive an annual bill credit for participating in the program. The bill credit will be paid each year regardless of whether any peak events were called. Participants may opt out at anytime but will not be able to re-enroll for 12 months following the date of opt out.

³⁹ The no regret strategy is implementing demand response technology in such a way as to reduce the risk of losing the technology investment when smart grid/ automated metering (AMI) technology is deployed.

⁴⁰ Except for Company recognized holidays or the nearest weekday if the holiday is on a weekend.

Incentive levels will vary by cycling strategy, which will be finalized pending program approval. The Company anticipates the average annual participant incentive will equal \$75.

EAI anticipates offering at least two cycling strategies ranging from:

- **100% cycling.** Participants opting for this strategy would have their AC cycled off for up to six hours during the peak event, for example.
- **25% cycling.** Participants opting for this strategy would have their AC cycled off for 15 minutes, then back on for 30 throughout the peak event, for example.

Other common strategies include 50% and 75% cycling options.

The anticipated number of peak events is not known at this time.

EAI will not provide incentives that are prohibited within the promotional practice rules.

FEDERAL & STATE INCENTIVES

None applicable.

THIRD PARTY FINANCING

None applicable.

DELIVERY STRATEGY

An implementation contractor will be selected by the Company for turn-key program implementation.

Key elements of program delivery include:

1. *Customer recruitment* through including marketing channels such as direct mail, outbound calling, the program Web site, and other tactics.
2. *Customer intake and installation scheduling services*
3. *Pre-screening* of interested customers
4. *Radio and thermostat installation services*, including customer instruction of thermostat functionality and programming
5. *Customer support and complaint resolution*
6. *Maintenance and repair* or replacement of defective control units
7. *Updated cycling forecasts* on program Web site and communication of cycling events via phone, email or other media
8. Administration of cycling events
9. Annual incentive payment
10. "Scram" tests in the absence of cycling events to ensure system is operational
11. *Monitoring of actual load impacts*, and development of a demand impact adjustment factor (prior to evaluation)
12. *QA/QC.* Quality control audits will be performed by the contractor on a statistically significant sample of each installer's sites.

PROGRAM TRACKING REQUIREMENTS

The Company is in the process of developing a robust program data tracking system. The minimum data collection requirements for this program are expected to include:

1. Customer scheduling and customer service data
2. Thermostat and radio switch installation information, including but not limited to:
 - a. Model of equipment installed
 - b. Date of installation
 - c. CAC data, including model number and other data.
3. Quality assurance results;

The turn-key implementation contractor will be expected to track program data and upload program information to the Company at regular intervals

ADMINISTRATIVE REQUIREMENTS

Program administration will be the responsibility of EAI via vendor operations management.

ESTIMATED BUDGET

Incremental annual and total program budgets for program years one through three are shown below.

Program Cost Summary	2011		2012		2013		Total 3	
	Annual Budget		Annual Budget		Annual Budget		Year Budget	
Type	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	0.0%
Marketing & Delivery	\$236,290	45.7%	\$787,634	45.7%	\$1,181,451	45.7%	\$2,205,374	45.7%
Incentives / Rebates	\$225,038	43.5%	\$750,127	43.5%	\$1,125,191	43.5%	\$2,100,357	43.5%
Evaluation, Measurement, & Verification	\$33,756	6.5%	\$112,519	6.5%	\$168,779	6.5%	\$315,053	6.5%
Administration	\$22,504	4.3%	\$75,013	4.3%	\$112,519	4.3%	\$210,036	4.3%
Total Budget	\$517,588	100.0%	\$1,725,293	100.0%	\$2,587,939	100.0%	\$4,830,820	100.0%

COST-EFFECTIVENESS

Test	Results	
Participant Cost	NPV (all participants)	\$ (404,450)
	Benefit-cost ratio	0.82
	NPV (average participant)	-\$14
Ratepayer Impact Measure (RIM)	NPV	\$ 8,433,509
	Benefit-cost ratio	3.10
	Lifecycle revenue impact per kWh	-\$0.000074
	2011 revenue impact per kWh	\$0.000011
	2012 revenue impact per kWh	\$0.000011
	2013 revenue impact per kWh	-\$0.000010
Total Resource Cost (TRC)	NPV	\$ 8,130,222
	Benefit-cost ratio	2.88
	Levelized cost per kWh	N/A
Program Administrator Cost (PAC)	NPV	\$ 8,433,509
	Benefit-cost ratio	3.10
	Levelized cost per kWh	N/A

SAVINGS TARGETS & PARTICIPATION

Key Program Modeling Assumptions and Outputs				Total
	2011	2012	2013	
Coincident peak kW savings per installation	1.04	1.04	1.04	1.04
Annual kWh savings per installation	0	0	0	0
Annual kWh savings as a % of base usage	0.00%	0.00%	0.00%	0.00%
Estimated Participants	3,001	10,002	15,003	15,003
Cumulative MW Savings	3.1	10.4	15.6	15.6
Annual/Incremental MW Savings	3.1	7.3	5.2	15.6
Annual MWh Savings	0	0	0	0

OVER-SUBSCRIPTION PLAN

Oversubscription will be managed by suspending marketing and outreach. Once the budget for the current year is expended, a waiting list will be established for program participation in the following program year.

3.1.9. Arkansas Weatherization Program

The AWP is a joint statewide program that leverages the Arkansas Community Action Agencies as program implementers and administrators to provide weatherization and EE improvements to Severely-Inefficient homes throughout the state of Arkansas. EAI will continue its role as a partner in this program. EAI directs readers to the separate AWP filing Docket No. 07-079-TF for more information on EAI's plan for this program.

EAI has assumed a funding level of \$1.2 million dollars per year for this program funding. Final funding and budgets will be adjusted once the AWP is approved.

3.1.10. Energy Efficiency Arkansas

The purpose of the EEA Program is to cost-effectively deliver relevant, consistent, and fuel neutral information and training that causes people to consume less energy through EE and conservation measures.

EAI is planning to continue participation in EEA and has included EEA in the budget for this Plan. EAI directs readers to Docket No. 08-066-RP for more information on the EEA Program. EAI has assumed a funding level of \$1 million per year for program planning purposes and will adjust final budgets and funding level based upon final EEA approval.

3.2. Business Solutions

EAI's proposed Business Solutions programs include attractive value propositions and considerable energy saving opportunities for every type of non-residential ratepayer. Business Solutions is comprised of five programs, which are summarized below.

1. The **C&I Prescriptive Program** offers an easy way for non-residential customers to see significant savings without having to worry about complex analyses or detailed participation rules; incentives and claimed savings are based on deemed measures. Participants can choose from a large menu of qualified technologies, such as lighting and controls, variable speed drives, HVAC equipment, refrigeration equipment, office equipment, agricultural, and food service equipment.
2. **C&I Custom Solutions**. Many large commercial and industrial customers engage in EE projects that are specialized, require a high level of technical assistance, and calculated incentives – the Custom Program is designed for these customers, and will feature bonus incentives for projects that are wide scope (that include multiple measure types and/or end uses).
3. **Small Business Direct Install** is tailored to meet the needs of EAI's small business customers, which constitutes a large majority of non-residential ratepayers. The program will provide audits, identify cost-effective efficiency retrofit opportunities and deliver direct installation, financial incentives and other services to encourage early replacement of existing equipment with high efficiency alternatives, as well as the installation of new measures.
4. **CitySmartSM** will be a continuation of the Quick Start Program of the same name that targets Local Public Entities. Due to the unique operation of these customers compared with businesses, EAI's experience has shown that a stand-alone program offering is needed for this market. Customers eligible for CitySmartSM include but are not limited to municipalities, K-12 schools, and universities. CitySmartSM will offer similar technological measures as Business Solutions, including prescriptive measures such as lighting, motors, and LED traffic signals, as well as custom measures such as large HVAC, boilers, and chillers.
5. **Agricultural Energy Solutions** will help farms in the Company's territory overcome first costs and education barriers to EE through energy audits, prescriptive and customer projects, and agricultural supplier education (to increase stocking of efficient farm equipment).
6. **Agricultural Irrigation load Control** is an EAI program implemented without contracted implementer and Commission-approved peak load control pilot program provides incentives to qualified agricultural customers for allowing EAI to interrupt electric service to well pumps during the summer. Service is interrupted through Company-installed AMI meters. By the end of 2013 the Company anticipates 2,200 accounts will be enrolled in the Pilot with a projected gross demand reduction of 44 MWs. The three year program budget is approximating \$14 million.

The Business Solutions programs will be packaged and marketed as one Comprehensive market offering to enhance the energy performance of the Company's commercial and industrial customers. In this way, it presents a natural evolution from the Quick Start Programs. C&I program design was informed by EAI's experience with Quick Start Programs, by research on best practice C&I EE programs throughout the country, including those administered by:

- **NSTAR** (Massachusetts);
- **National Grid** (Massachusetts);
- **Baltimore Gas & Electric** (Maryland);
- **Wisconsin's Focus on Energy**; and
- **Pacific Gas & Electric** (California).

Note the existing Quick Start Programs will continue through the market launch of Business Solutions programs for customers to complete active projects within the Quick Start Programs. The Quick Start Programs will then be closed to new business upon the market entry of the Business Solutions and will not accept new applications nor Letters of Intent.

3.2.1. C&I Prescriptive

PROGRAM DESCRIPTION

The primary objective of the C&I Prescriptive Program is to provide an expedited, simple solution for nonresidential customers interested in purchasing energy efficient technologies that can produce verifiable savings. Participants can choose from a menu of incentives for a wide range of measures, such as lighting and controls, variable speed drives, HVAC equipment, refrigeration equipment, office equipment, and food service equipment. Incentives and savings will be based primarily on measures in the deemed savings database.⁴¹

The C&I Prescriptive program is designed to reduce or bypass market barriers such as:

- Lack of EE information and awareness of energy and non-energy benefits;
- The perception that energy efficient technologies have high “first costs”;
- Lack of customer understanding about measure payback;
- Lack of customer awareness of energy efficient technologies;
- Lack of easy access to qualified vendors and installers;
- Absence of tools to quantify savings;
- Lack of access to capital; and
- Split incentives between owners and tenants in leased spaces.

C&I Prescriptive is designed to quickly and easily transition from the Quick Start offering, generate significant energy savings, as well as a longer-term market penetration by nurturing delivery channels, such as design professionals, distributors, installation contractors, and Energy Service Companies (“ESCO”s).

TARGET MARKET

The C&I Prescriptive program will be available to all C&I customers.

MARKET SIZE

There are approximately 108,000 C&I accounts in EAI's territory (86,000 commercial and 22,000 industrial).

ELIGIBLE MEASURES & INCENTIVE STRATEGY

The majority of Prescriptive incentives will be paid for measures in the deemed savings database. Examples of these are included below:

HVAC

⁴¹ It is expected that the majority of projects rebated through Prescriptive will be “time dependent,” or “end-of-life” opportunities where deemed savings are applicable. However, the program will also promote retrofit opportunities and track the variables appropriate for estimating retrofit savings. In some cases, such projects may be more appropriate for Custom program incentives.

- Air-Air Heat Pump Systems
- Electronically Commutated Motors
- Unitary HVAC/Split Systems
- Unitary HVAC/Split Systems
- Water Source Heat Pumps

Lighting

- CFLs, Hard Wired
- Efficient Linear Lighting
- LED Exit Sign
- LED/Induction
- Metal Halide
- Occupancy Sensor

Compressed Air

- Air Compressors

Food service measures

- Variable frequency drives
- Efficient cooking equipment

Incentives will be paid to program participants pending project completion and verification. The incentive levels will vary by measure, and final incentive levels will be determined in the final program implementation planning period. For planning purposes, most incentives were set between 25% and 75% of incremental costs in order to reduce the payback of measures to 1.5 years.

Paid-incentives totals will be initially capped by Tax ID Group so that all customers groups have an equal chance to participate. The cap level will be determined in the final program design. EAI reserves the right to change cap levels based on demonstrated participation and savings rates amongst Tax ID Groups in order to maximize program cost-effectiveness. To maximize participation, incentives will be subject to a per customer cap; for planning purposes this is assumed to be \$50,000. All incentive levels and caps will be determined during the final program design.

EAI will not provide incentives that are prohibited within the promotional practice rules.

FEDERAL & STATE INCENTIVES

EAI will promote Federal tax credits for commercial buildings through its Business Solutions programs.

A Federal tax deduction of up to \$1.80 per square foot is available to owners or designers of new or existing commercial buildings that save at least 50% of the heating and cooling energy of a building that meets ASHRAE Standard 90.1-2001. Partial deductions of up to \$0.60 per square foot can be taken for measures affecting any one of three building systems: the building envelope, lighting, or heating and cooling systems. These tax deductions are available for systems "placed in service" from January 1, 2006 through December 31, 2013.

THIRD PARTY FINANCING

Third party financing is not applicable to this program.

DELIVERY STRATEGY

An implementation contractor selected by EAI will deliver the program Key elements of the Prescriptive Program implementation strategy include:

1. *Trade ally recruitment and training:* Trade allies (installation contractors) are the key delivery mechanism for this program element as they promote participation and available incentives to their customers. Trade allies will be recruited to participate in training sessions, which will be designed to inform them about program incentives, participation processes, and requirements. Trade allies actively participating in the program and other EAI program offerings will receive regular communications about program activities and changes to ensure they are informed and engaged participants.
2. *{Marketing.* Customers will be recruited through participating contractors, and through other communication and outreach activities, and EAI account representative referrals. To ensure that nonresidential customers perceive EAI's EE programs as a seamless set of offerings, cross-referrals from other programs will also be provided where appropriate.
3. *Technical assistance:* The program implementation contractor will provide guidance regarding program offerings and participation processes/requirements to customers and trade allies as needed to minimize confusion and barriers to participation.
4. *Application submittal:* Customers will submit incentive applications and required documentation after installation of qualifying EE measures has been completed.
5. *QA/QC review:* Incentive applications will be subject to a QA/QC review to ensure all required forms and documentation have been submitted and that incentive calculations are correct. To minimize errors in this process there will be a 100 % review on all applications for verification of equipment efficiency rating, proper installation, etc. on the part of the Company.
6. *Project verification:* EAI will perform pre- and post-installation verifications on a statistically significant sample of all projects, and will verify all projects over certain size and cost thresholds (to be determined). EAI reserves the right to site-verify installations prior to approval and incentive payment for any project. Over time, as contractors' exhibit consistently high performance, verifications for those contractors can be reduced. Contractors that exhibit poor performance will be re-trained and have 100% of their projects verified for a period of time, and can be removed from the program if poor performance continues.
7. *Incentive payment:* To minimize barriers to participation, the program will seek to expedite incentive payments to participating C&I customers.

PROGRAM TRACKING REQUIREMENTS

The Company is in the process of developing a robust program data tracking system. The minimum data collection requirements for this program are expected to include:

1. Business NAICS and Tax ID code
2. Contractor information
3. For each project:
 - o A unique project ID
 - o Characteristics of measures installed, including but not necessarily limited to, where appropriate
 - Deemed savings
 - Tracking of old and new equipment via serial and model numbers to assist in determining actual energy savings
 - Equipment size and efficient
 - Location of installation
 - Hours of operation
 - Orientation of building surfaces treated
 - Seasonality of equipment
 - Load shape of equipment
 - o Anticipated project savings,
 - o Project audit/verification status and date
 - o Incentive amount and paid date

ADMINISTRATIVE REQUIREMENTS

EAI will be responsible for developing the implementation contractor RFP, contractor selection, approving final program design and marketing strategy, and monitoring contractor performance goals. EAI account managers will market the program to managed accounts.

The implementation contractor responsibilities include working with EAI on final program design, marketing materials development, program marketing and outreach activities, project management and QA/QC activities, customer and contractor dispute resolution, tracking and reporting, and program element goal achievement.

ESTIMATED BUDGET

Incremental annual and total program budgets for program years one through three are shown below.

Program Cost Summary	2011		2012		2013		Total 3	
	Annual Budget		Annual Budget		Annual Budget		Year Budget	
Type	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$8,500	0.6%	\$45,899	0.6%	\$76,467	0.6%	\$130,865	0.6%
Marketing & Delivery	\$297,491	21.1%	\$1,606,450	21.1%	\$2,676,346	21.1%	\$4,580,287	21.1%
Incentives / Rebates	\$849,974	60.2%	\$4,589,857	60.2%	\$7,646,702	60.2%	\$13,086,533	60.2%
Evaluation, Measurement, & Verification	\$84,997	6.0%	\$458,986	6.0%	\$764,670	6.0%	\$1,308,653	6.0%
Administration	\$169,995	12.0%	\$917,971	12.0%	\$1,529,340	12.0%	\$2,617,307	12.0%
Total Budget	\$1,410,956	100.0%	\$7,619,163	100.0%	\$12,693,526	100.0%	\$21,723,645	100.0%

COST-EFFECTIVENESS

Test	Results	
Participant Cost	NPV (all participants)	\$ 30,477,843
	Benefit-cost ratio	1.69
	NPV (average participant)	\$17,295
Ratepayer Impact Measure (RIM)	NPV	\$ 36,448,499
	Benefit-cost ratio	1.55
	Lifecycle revenue impact per kWh	-\$0.000195
	2011 revenue impact per kWh	\$0.000067
	2012 revenue impact per kWh	\$0.000178
Total Resource Cost (TRC)	2013 revenue impact per kWh	\$0.000150
	NPV	\$ 58,270,675
	Benefit-cost ratio	2.33
Program Administrator Cost (PAC)	Levelized cost per kWh	\$0.054
	NPV	\$ 84,249,922
	Benefit-cost ratio	5.69
	Levelized cost per kWh	\$0.022

SAVINGS TARGETS & PARTICIPATION

Key Program Modeling Assumptions and Outputs	2011	2012	2013	Total
Coincident peak kW savings per installation	17.16	17.16	17.16	17.16
Annual kWh savings per installation	73,389	73,389	73,389	73,389
Annual kWh savings as a % of base usage	11.46%	11.46%	11.46%	11.46%
Estimated Participants	114	618	1,030	1,762
Annual MW Savings	2.0	10.6	17.7	30.2
Annual MWh Savings	8,400	45,360	75,569	129,328

OVER-SUBSCRIPTION PLAN

Over-subscription will be managed by suspending marketing and outreach. Once the budget for the current year is expended, a waiting list will be established for program participation in the following program year.

3.2.2. C&I Custom Solutions

PROGRAM DESCRIPTION

The C&I Custom Program will support C&I customers in identifying and implementing site-specific and unique cost-effective retrofit and new construction EE opportunities through measures not addressed by the Prescriptive Program which often require engineering calculations to determine energy savings. A typical project may involve industrial process efficiency, chillers/boilers⁴², data center efficiency, or projects that otherwise fall outside of the Prescriptive program.⁴³ This program will benefit Large C&I customers by not only implementing projects that yield substantial energy savings, but also by fundamentally changing the way these customers view energy by conducting energy audits, co-funding feasibility studies, and training in best practices.

As such, the Custom Program is designed to minimize the following market barriers to EE implementation for EAI's C&I customers:

- Lack of EE information and awareness of energy and non-energy benefits;
- The perception that energy efficient technologies have high "first costs";
- Lack of customer understanding about measure payback;
- Lack of awareness of energy efficient technologies;
- Lack of easy access to qualified vendors and installers;
- Absence of tools to quantify savings; and
- Lack of access to capital.

The program will provide two levels of Custom EE project support to large C&I customers: Tier 1 Custom, and Tier 2 Comprehensive Custom.

Tier 1 Custom

Tier 1 Custom projects typically involve straightforward single measures that do not account for interactions between systems. Examples include LED lighting, air compressors, VFDs, etc. All projects must be able to show specific and verifiable energy savings and costs, typically developed by a qualified third party firm. Any measure that improves a customer's EE will be eligible provided it is cost-effective.⁴⁴ Incentive levels will be project-specific and based on engineering calculations.

The Tier 1 service will include technical assistance components to help customers in evaluating EE opportunities, including:

- Whole-facility audits or studies to assist customers in identifying efficiency opportunities and analyzing associated costs and savings; and
- Information and referrals to other EAI programs and initiatives, such as efforts to facilitate energy benchmarking for commercial facilities.

⁴² Fuel Switching will not be promoted with this program.

⁴³ Note custom projects may include prescriptive measures.

⁴⁴ Must pass the Total Resource Cost test.

Tier 2 Comprehensive Custom

For **existing facilities**, Large C&I customers could receive enhanced incentives through the Comprehensive Custom program track. The Comprehensive track is designed to assist EAI's large C&I customers maximize electrical EE by accounting for the interactive effects between equipment and systems. Comprehensive projects must be wide in scope, including all possible electrical energy measures and end-uses and must have positive interactivity.

Comprehensive projects can be horizontally or vertically integrated: Horizontal integration defines the extent to which comprehensive energy conservation measures are addressed across multiple end uses; a project that addresses lighting, HVAC and process measures, for example. Vertical integration defines the extent to which energy conservation measures are addressed within any given end use; the optimization of a Chilled Water system as opposed to simply installing a more efficient chiller, for example.

For projects involving the design of a **new facility**, the Comprehensive Design track would target time dependent opportunities during the design phase of the facility. The Comprehensive Design track would provide the customer with the opportunity to capture the maximum energy savings potential for the project by examining the building as an integrated system.

Across both Tier 1 and 2 Custom:

1. Projects typically take six to twelve months from start to completion. New facility projects often take a year or longer.
2. The program will develop pre-and post-project Energy Performance Ratings using ENERGY STAR's Portfolio Manager for commercial participants, where appropriate.⁴⁵

TARGET MARKET

The Custom Program will be available to all C&I customers. Custom projects tend to be implemented by larger customers; therefore EAI will pay special attention to managed accounts through this program.

MARKET SIZE

There are approximately 2,000 large commercial accounts and 21,000 and industrial accounts eligible for this program.

ELIGIBLE MEASURES & INCENTIVE STRATEGY

Any measure that can improve a customer's electric EE will be eligible, provided it is cost-effective.⁴⁶ Examples of efficient technology types that may be incorporated in a custom project include:

- HVAC and process chillers;
- Compressed Air;
- Data Center Efficiency;

⁴⁵ The Portfolio Manager database is extensive, but does include all Commercial building types.

⁴⁶ Under the Total Resource Cost test.

- HVAC system improvements (chilled water, economizers)
- Custom Lighting, including LED technology;
- Plug Load Controls;
- Process equipment;
- Pumps.

Tier 1 Incentive Strategy for Custom Projects

Tier 1 incentives will include calculated rebates for measures and co-funding of technical assistance. Because each project will be unique, cash incentives will be customized, and calculated on project by project basis. All measures must individually pass cost effectiveness analysis to qualify for incentives. Note some projects may also include prescriptive measures, for which the Prescriptive program incentive levels apply.

Tier 1 incentives are anticipated to equal up to 75% of project incremental costs for new construction and other lost-opportunity projects and up to 50% of total cost for retrofit projects, or a buy-down to a 1.5 year simple payback, whichever is less.

Tier 2 Incentive Strategy for Comprehensive Custom Projects

To qualify for incentives, Comprehensive, Tier 2 projects must be wide in scope, including all possible electrical EE measures and must have positive interactivity. All EE measures must individually pass cost effectiveness analysis to qualify for incentives. The customer must install a plurality (two of three, three of four, five of seven, etc) of the measures that pass the cost effectiveness analysis and achieve a large majority (e.g., 80%) of the identified energy savings, to qualify as a Comprehensive project.

The enhanced incentives for Comprehensive track projects will be provided for all qualified projects. All measures must individually pass cost effectiveness analysis. Failure to install sufficient measures as outlined in the facility assessment to achieve the minimum level of savings shall drop incentives levels back to the standard Tier 1 Custom level.

Across both Custom Tiers:

- a. EAI will also assist a limited number of businesses with funding feasibility studies. The specific criteria by which EAI will choose to co-fund a feasibility study will be determined in final program design, but will include criteria by which EAI can decide with high probability that the customer will invest in EE measures upon the completion of the study.
- b. Paid-incentives totals will be initially capped by Tax ID Group so that all customers groups have an equal chance to participate. The cap level will be determined in the final program design. EAI reserves the right to change cap levels based on demonstrated participation and savings rates amongst Tax ID Groups in order to maximize program cost-effectiveness.
- c. EAI will not provide incentives that are prohibited within the promotional practice rules.

Note: To maximize participation, incentives will be subject to a per customer cap; for planning

purposes this is assumed to be \$50,000. All incentive levels and caps will be determined during the final program design.

FEDERAL & STATE INCENTIVES

EAI will promote Federal tax credits for commercial buildings through its Business Solutions programs.

A Federal tax deduction of up to \$1.80 per square foot is available to owners or designers of new or existing commercial buildings that save at least 50% of the heating and cooling energy of a building that meets ASHRAE Standard 90.1-2001. Partial deductions of up to \$.60 per square foot can be taken for measures affecting any one of three building systems: the building envelope, lighting, or heating and cooling systems. These tax deductions are available for systems "placed in service" from January 1, 2006 through December 31, 2013.

DELIVERY STRATEGY

An implementation contractor selected through a by EAI will administer Business Solutions, including both the Prescriptive and Custom programs.

Key elements of EAI's implementation strategy for both the Tier 1 and Tier 2 Custom tracks include:

1. *Trade ally recruitment and training:* Custom Program offerings will be promoted to some key segments of the trade ally market (e.g., engineering firms, energy service providers) so they can promote participation and available incentives to their customers. Trade allies will be recruited to participate in training sessions regarding program incentives, and participation processes and requirements.
2. *Customer recruitment:* Customers will be recruited primarily through direct outreach activities. Referrals by EAI managed account representatives will also be a key element of customer recruitment. To ensure that C&I customers perceive EAI's EE programs as a seamless set of offerings, cross-referrals from other programs will also be provided where appropriate.
3. *Technical assistance:* This program will provide both cost-sharing for facility assessment and engineering support to identify and assess the cost-effectiveness of energy savings opportunities not covered by EAI's prescriptive incentives. In addition, program staff will guide customers and trade allies through the participation process to minimize confusion and barriers to participation.
4. *Application submittal:* Preapproval will be required for all Custom projects. Customers will submit incentive applications and required documentation after installation of qualifying EE measures has been completed. As discussed above, Tier 2 Comprehensive projects require more extensive documentation.
5. *QA/QC review:* Incentive applications will be subject to a quality assurance review by program technical staff to ensure accuracy of savings and incentive calculations. To minimize errors in this process there will be a 100 % review on all applications for verification of equipment efficiency rating, proper installation, etc. on the part of the

Company.

6. *Project verification:* EAI reserves the right to site-verify installations prior to project approval and incentive payment. The implementation contractor will perform site verification on a statistically significant number of installations to verify the performance of work completed. All projects over a certain incentive threshold (TBD) and all Comprehensive projects will require site verification.
7. *Incentive payment:* To minimize barriers to participation, the program will seek to expedite incentive payments to participating C&I customers. As discussed above, incentive payment is subject to approval of project documentation and on-site verification.
3. *Long-term monitoring:* Pre-and post-project Energy Performance Rating using ENERGY STAR's Portfolio Manager will be used for Commercial participants, where appropriate.⁴⁷ Portfolio Manager can help both EAI, and program participants track progress over time in commercial buildings. Specifically, Portfolio manager aids in:
 - a. Monitoring EE improvements compared to baseline;
 - b. Monitoring energy cost saving
 - c. Tracking reductions in greenhouse gas emissions; and
 - d. Verifying and documenting results.

PROGRAM TRACKING REQUIREMENTS

The Company is in the process of developing a robust program data tracking system. The minimum data collection requirements for this program are expected to include:

1. Business NAICS and Tax ID code
2. Contractor information
3. For each project:
 - o A unique project ID
 - o Characteristics of measures installed, including but not necessarily limited to, where appropriate
 - Equipment size and efficient
 - Location of installation
 - Hours of operation
 - Orientation of building surfaces treated
 - Seasonality of equipment
 - Load shape of equipment
 - Deemed savings for Prescriptive measures
 - o Anticipated project savings,
 - o Pre- and post-project diagnostic and performance measurements,
 - o Project audit/verification status and date
 - o Incentive amount and paid date

⁴⁷ The Portfolio Manager database is extensive, but does include all Commercial building types.

EAI's Comprehensive Portfolio

ADMINISTRATIVE REQUIREMENTS

EAI will be responsible for identifying and selecting the implementation contractor, approving final program design and marketing strategy, and monitoring contractor performance goals. EAI account managers will market the program to managed accounts as part of the Business Solutions offering.

The implementation contractor responsibilities include working with EAI on final program design, marketing materials development, program marketing and outreach activities, project management and QA/QC activities, customer and contractor dispute resolution, tracking and reporting, and program element goal achievement.

ESTIMATED BUDGET

Incremental annual and total program budgets for program years one through three are shown below.

Program Cost Summary	2011		2012		2013		Total 3	
	Annual Budget	% of Budget	Annual Budget	% of Budget	Annual Budget	% of Budget	Year Budget	% of Budget
Type	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$13,252	0.7%	\$39,757	0.7%	\$79,513	0.7%	\$132,522	0.7%
Marketing & Delivery	\$265,044	13.2%	\$795,132	13.2%	\$1,590,264	13.2%	\$2,650,440	13.2%
Incentives / Rebates	\$1,325,220	66.2%	\$3,975,660	66.2%	\$7,951,320	66.2%	\$13,252,200	66.2%
Evaluation, Measurement, & Verification	\$132,522	6.6%	\$397,566	6.6%	\$795,132	6.6%	\$1,325,220	6.6%
Administration	\$265,044	13.2%	\$795,132	13.2%	\$1,590,264	13.2%	\$2,650,440	13.2%
Total Budget	\$2,001,082	100.0%	\$6,003,247	100.0%	\$12,006,493	100.0%	\$20,010,822	100.0%

COST-EFFECTIVENESS

Test	Results	
Participant Cost	NPV (all participants)	\$ 18,954,810
	Benefit-cost ratio	1.85
	NPV (average participant)	\$28,606
Ratepayer Impact Measure (RIM)	NPV	\$ 1,783,575
	Benefit-cost ratio	1.05
	Lifecycle revenue impact per kWh	-\$0.000009
	2011 revenue impact per kWh	\$0.000100
	2012 revenue impact per kWh	\$0.000152
	2013 revenue impact per kWh	\$0.000195
Total Resource Cost (TRC)	NPV	\$ 15,450,128
	Benefit-cost ratio	1.61
	Levelized cost per kWh	\$0.068
	NPV	\$ 24,234,212
Program Administrator Cost (PAC)	Benefit-cost ratio	2.46
	Levelized cost per kWh	\$0.044

SAVINGS TARGETS & PARTICIPATION

Key Program Modeling Assumptions and Outputs	2011	2012	2013	Total
Coincident peak kW savings per installation	13.02	13.02	13.02	13.02
Annual kWh savings per installation	78,115	78,115	78,115	78,115
Annual kWh savings as a % of base usage	12.19%	12.19%	12.19%	12.19%
Estimated Participants	66	199	398	663
Annual MW Savings	0.9	2.6	5.2	8.6
Annual MWh Savings	5,176	15,528	31,056	51,760

OVER-SUBSCRIPTION PLAN

Over-subscription will be managed by suspending marketing and outreach. Once the budget for the current year is expended, a waiting list will be established for program participation in the following program year.

3.2.3. Small Business

PROGRAM DESCRIPTION

EAI's Small Business program will provide small businesses and other qualified non-residential customers the opportunity to receive financial incentives as well as educational services for projects involving the replacement of existing electrical and mechanical equipment where the equipment being replaced continues to function, but is outdated and inefficient. This program identifies such cost-effective efficiency retrofit opportunities and provides direct installation, financial incentives and other services to encourage early replacement of existing equipment with high efficiency alternatives, as well as the installation of new measures.

The program initiative can be thought of as a subset of the Prescriptive offering; however, Small Business warrants a separate implementation plan because of its unique focus on (1) hard-to-reach markets and (2) retrofit opportunities.

This initiative is designed to reduce or bypass market barriers such as:

- Small business owners without technical expertise or time to devote to EE improvements. Most of these businesses have few very personnel who “do it all” and do not necessarily have adequate time or resources to focus on sound energy management.
- Lack of a cogent set of EE services that can be easily delivered to this very diverse hard-to-reach market (e.g., corner stores, auto repair shops, strip malls, etc.). Many larger businesses have access to ESCO, lighting distributors, and other market actors who help facilitate energy management – small business typically does not.
- Most small businesses have limited access to investment capital. This means that business owners may not be able to front the money for the efficiency upgrade without immediate assistance from the program.

Strategies to reach this sector are much different than other sectors and require more direct individual contacts and marketing and information channels. For instance, neighborhood trade and business associations are an important vehicle for reaching these businesses. Many small business owners are tenants, rather than owners or operators of the spaces they occupy; because a large percentage of tenants do not have the authority to approve EE improvements, the program will also directly engage commercial real estate owners and operators.

TARGET MARKET

Eligibility for this program will be limited to Small Business customer with less than 100 kW of peak demand.

This sector is typically comprised of small “mom and pop” stores, restaurants, strip center stores other small businesses. It is considered a “hard to reach” market because often faces barriers to participation in efficiency programs that are more severe or complex than those addressed by mainstream program design.

Participating customers must use approved program contractors.

Note these customers are also eligible for the measures and services provided through the Prescriptive program.

MARKET SIZE

There are approximately 80,000 Business accounts in EAI's territory with 100 kW of less of peak demand.

ELIGIBLE MEASURES & INCENTIVE STRATEGY

Examples typical measures of these included Small Business projects are:

- Lighting upgrades
- Lighting controls
- Exit sign conversion or replacement (non-LED to LED)
- Refrigeration
- Energy efficient pre-rinse sprayers, showerheads, and faucet aerators (electric water heat only)
- Hot water pipe insulation (electric water heat only).

Incentives for deemed measures will be paid to program participants pending project completion and verification. The incentive levels will vary by measure, and final incentive levels will be determined in the final program implementation planning period; for planning purposes, most incentives were set 50% and 75% of incremental costs in order to reduce the payback of measures to 1.5 years. DI participants will be paid an enhanced incentive for installing a plurality of recommend DI measures; for planning purposes the enhanced incentive is anticipated to equal a buy-down to a 1 year simple payback.

Paid-incentive totals will be initially capped by Tax ID Group so that all customers groups have an equal chance to participate. The cap level will be determined in the final program design. EAI reserves the right to change cap levels based on demonstrated participation and savings rates amongst Tax ID Groups in order to maximize program cost-effectiveness.

EAI will not provide incentives that are prohibited within the promotional practice rules.

FEDERAL & STATE INCENTIVES

EAI will promote Federal tax credits for commercial buildings through its Business Solutions programs.

A Federal tax deduction of up to \$1.80 per square foot is available to owners or designers of new or existing commercial buildings that save at least 50% of the heating and cooling energy of a building that meets ASHRAE Standard 90.1-2001. Partial deductions of up to \$.60 per square foot can be taken for measures affecting any one of three building systems: the building envelope, lighting, or heating and cooling systems. These tax deductions are available for systems "placed in service" from January 1, 2006 through December 31, 2013.

THIRD PARTY FINANCING

Third party financing is not applicable to DI measures/projects unless provided by installation contractors.

DELIVERY STRATEGY

An implementation contractor selected by EAI will administer this program. Key elements of the implementation strategy include:

1. *DI contractor recruitment:* EAI will recruit and train a limited number of Direct Installation (DI) contractors to provide full turnkey program delivery services. These DI contractors will, in effect, act as general contractors and will comprise an EAI system-based infrastructure to deliver program services. Note that "general" DI contractors may employ local labor/specialty contractors to carry-out retrofit projects.
2. *Contractor Training:* The program will provide both technical and sales training to contractors.
 - a. Technical training will focus on key aspects of the technical knowledge and skills needed by contractor personnel to provide customers with the specified energy-efficient products and services. EEA training will be leveraged as available and appropriate
 - b. Sales training will help contractors increase their understanding of the benefits associated with up-selling customers to energy efficient technologies.
3. *Marketing:* Specific tactics to promote this program are likely to include:
 - a. Print advertisements (e.g., business journals, trade publications, community newspapers)
 - b. Direct mail postcards
 - c. Online Marketing
 - d. Small Business Events and Direct Outreach/Grassroots Marketing
4. *QA/QC review:* All projects applications will be subject to a QA/QC review to ensure all required forms and documentation have been submitted and that incentive calculations are correct. To minimize errors in this process there will be a 100 % review on all project documentation for verification of equipment efficiency rating, proper installation, etc. on the part of the Company.

5. *Project verification:* EAI will perform pre- and post-installation verifications on a statistically significant sample of all projects (typically this equals approximately 10%). EAI reserves the right to site-verify installations prior to approval and incentive payment for any project. Over time, as contractors' exhibit consistently high performance, verifications for those contractors can be reduced. Contractors that exhibit poor performance will be re-trained and have 100% of their projects verified for a period of time, and can be removed from the program if poor performance continues.
6. *Incentive payment:* Rebates for retrofit projects will be built into the contractor's quotes – that is, contractors will front the cost of rebates and will invoice EAI on a regular (e.g. bi-monthly) basis to be made whole. This structure is necessary for small business owners to overcome first-cost barriers.

To avoid gaming by contractors, price points for all measures will be established by the program.

PROGRAM TRACKING REQUIREMENTS

The Company is in the process of developing a robust program data tracking system. The minimum data collection requirements for this program are expected to include:

1. Business NAICS and Tax ID code
2. Contractor information
3. For each project:
 - A unique project ID
 - Characteristics of measures installed, including but not necessarily limited to, where appropriate
 - Deemed savings
 - Tracking of old and new equipment via serial and model numbers to assist in determining actual energy savings
 - Equipment size and efficient
 - Location of installation
 - Hours of operation
 - Seasonality of equipment
 - Load shape of equipment
 - Anticipated project savings,
 - Project audit/verification status and date
 - Incentive amount and paid date

ADMINISTRATIVE REQUIREMENTS

EAI will be responsible for developing the implementation contractor RFP, contractor selection, approving final program design and marketing strategy, and monitoring contractor performance goals. EAI account managers will market the program to managed accounts.

The implementation contractor responsibilities include working with EAI on final program design, marketing materials development, program marketing and outreach activities, project management and QA/QC activities, customer and contractor dispute resolution, tracking and reporting, and program element goal achievement.

ESTIMATED BUDGET

Incremental annual and total program budgets for 2011-2013 are shown below.

Program Cost Summary	Annual Budget		Annual Budget		Annual Budget		Year Budget	
	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$3,092	0.7%	\$6,184	0.7%	\$9,277	0.7%	\$18,553	0.7%
Marketing & Delivery	\$77,305	16.6%	\$154,609	16.6%	\$231,914	16.6%	\$463,827	16.6%
Incentives / Rebates	\$309,218	66.2%	\$618,436	66.2%	\$927,654	66.2%	\$1,855,308	66.2%
Evaluation, Measurement, & Verification	\$30,922	6.6%	\$61,844	6.6%	\$92,765	6.6%	\$185,531	6.6%
Administration	\$46,383	9.9%	\$92,765	9.9%	\$139,148	9.9%	\$278,296	9.9%
Total Budget	\$466,919	100.0%	\$933,838	100.0%	\$1,400,758	100.0%	\$2,801,515	100.0%

COST-EFFECTIVENESS

Test	Results	
Participant Cost	NPV (all participants)	\$ 2,186,975
	Benefit-cost ratio	2.38
	NPV (average participant)	\$825
Ratepayer Impact Measure (RIM)	NPV	\$ (891,851)
	Benefit-cost ratio	0.78
	Lifecycle revenue impact per kWh	\$0.000005
	2011 revenue impact per kWh	\$0.000023
	2012 revenue impact per kWh	\$0.000023
	2013 revenue impact per kWh	\$0.000022
Total Resource Cost (TRC)	NPV	\$ 766,753
	Benefit-cost ratio	1.33
	Levelized cost per kWh	\$0.112
Program Administrator Cost (PAC)	NPV	\$ 766,753
	Benefit-cost ratio	1.33
	Levelized cost per kWh	\$0.112

Savings Targets & Participation

Key Program Modeling Assumptions and Outputs	2011	2012	2013	Total
Coincident peak kW savings per installation	0.46	0.46	0.46	0.46
Annual kWh savings per installation	1,366	1,366	1,366	1,366
Annual kWh savings as a % of base usage	1.96%	1.96%	1.96%	1.96%
Estimated Participants	442	883	1,325	2,650
Annual MW Savings	0.2	0.4	0.6	1.2
Annual MWh Savings	603	1,207	1,810	3,620

OVER-SUBSCRIPTION PLAN

Over-subscription will be managed by suspending marketing and outreach. Once the budget for the current year is expended, a waiting list will be established for program participation in the following program year.

3.2.4. CitySmart

PROGRAM DESCRIPTION

The CitySmartSM Program will assist local public entities in making cost-effective energy-efficiency improvements. By providing energy performance benchmarking, technical assistance, and cash and non-cash incentives, this program will help local government officials and facilities managers understand the technical and financial benefits of investing in EE upgrades.

The CitySmartSM Program is designed to minimize the following market barriers to EE implementation for EAI's public sector customers:

- Budget constraints that typically rule out energy efficient technologies and its higher "first costs";
- Lack of customer understanding about measure payback; and
- Lack of awareness of, and technical assistance for, energy efficient technologies.

Under this program, EAI will use CitySmartSM, a program that is being implemented with local governments in other states and is currently a Quick Start Program in EAI, to help eligible customers reduce energy use. The implementation process for CitySmartSM includes the following steps:

1. Benchmarking energy use;
2. Training and guidance for developing an Energy Master Plan;
3. Technical assistance to help identify energy savings opportunities;
4. Help in securing program cash incentives and financing to underwrite the cost of the improvements; and
5. Assistance in receiving recognition for energy reduction achievements, both within their organizations and in the community at large.

In addition, EAI will promote the use of energy-saving performance contracts and grants to fund the implementation of improvements. EAI will further leverage the program's incentive dollars and encourage the participation of trade allies that can deliver energy efficient products and services in a cost-effective manner.

TARGET MARKET

The CitySmartSM program is targeted to public sector facilities, including those run by counties, cities, towns, as well as primary and secondary schools, and junior colleges and universities in EAI's service territory.

MARKET SIZE

There are approximately 540 public sector customers in EAI's territory.

ELIGIBLE MEASURES & INCENTIVE STRATEGY

Any measure with deemed savings, or that has savings that can be measured and verified, will be eligible, provided it is cost-effective. Examples of efficient technologies include:

- Energy efficient HVAC equipment, including AC / Gas Packaged Units, Packaged Terminal Air Conditioners (PTACs), and Chillers/Boilers;
- Lighting equipment and controls;
- Electronic Commutating Motors (ECMs), Fans, and Pumps.

EAI will provide rebate incentives for approved measures. If deemed savings have not been established for a particular qualifying EE measure, then incentives may be paid on the basis of verified peak demand reductions and/or energy savings using Performance Measurement and Verification Protocols. EAI will establish reasonable minimum and maximum project or application sizes in the final program design.

In addition, EAI will provide significant technical assistance for CitySmartSM customers, including the energy benchmarking and energy master planning.

FEDERAL & STATE INCENTIVES

A Federal tax deduction of up to \$1.80 per square foot is available to owners or designers of new or existing commercial buildings that save at least 50% of the heating and cooling energy of a building that meets ASHRAE Standard 90.1-2001. Partial deductions of up to \$.60 per square foot can be taken for measures affecting any one of three building systems: the building envelope, lighting, or heating and cooling systems. These tax deductions are available for systems "placed in service" from January 1, 2006 through December 31, 2013.

DELIVERY STRATEGY

An implementation contractor, by EAI, will help EAI administer the CitySmartSM Program.

Key elements of the City Smart Program implementation strategy include:

1. *Trade ally recruitment and training:* Program offerings will be promoted to some key segments of the trade ally market (e.g., engineering firms, energy service providers) so they can promote participation and available incentives to the public sector. Trade allies will be recruited to participate in training sessions regarding program incentives, and participation processes and requirements.
2. *Public sector customer recruitment:* Customers will be recruited primarily through direct outreach activities. Referrals by EAI managed account representatives will also be a key element of customer recruitment. To ensure that C&I customers perceive EAI's EE programs as a seamless set of offerings, cross-referrals from other programs will also be provided where appropriate.
3. *Program implementation:* Using EPA's ENERGY STAR Portfolio Manager or other benchmarking tool, the implementation contractor will work with customers to collect and review building and energy use data, benchmark performance against similar buildings, and develop an Energy Master Plan. The plan will then be used to recommend upgrades that are eligible for rebates and technical assistance. The implementation contractor will guide customers and trade allies through the participation process to minimize confusion and barriers to participation.
4. *QA/QC review:* Incentive applications will be subject to a quality assurance review by program technical staff to ensure accuracy of gross savings and incentive calculations.

To minimize errors in this process there will be a 100 % review on all applications for verification of equipment efficiency rating, proper installation, etc. on the part of the Company.

5. *Project verification:* EAI reserves the right to site-verify installations prior to project approval and incentive payment. The implementation contractor will perform site verification on a statistically significant number of installations to verify the performance of work completed.

PROGRAM TRACKING REQUIREMENTS

The Company is in the process of developing a robust program data tracking system. The minimum data collection requirements for this program are expected to include:

1. Contractor information
2. For each project:
 - o A unique project ID
 - o Characteristics of measures installed, including but not necessarily limited to, where appropriate
 - Deemed savings
 - Tracking of old and new equipment via serial and model numbers to assist in determining actual energy savings
 - Equipment size and efficient
 - Location of installation
 - Hours of operation
 - Orientation of building surfaces treated
 - Seasonality of equipment
 - Load shape of equipment
 - o Anticipated project savings,
 - o Project audit/verification status and date
 - o Incentive amount and paid date

ADMINISTRATIVE REQUIREMENTS

ESTIMATED BUDGET

Incremental annual and total program budgets for 2011-2013 are shown below.

Program Cost Summary	2011		2012		2013		Total 3	
	Annual Budget	% of Budget	Annual Budget	% of Budget	Annual Budget	% of Budget	Year Budget	% of Budget
Type	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$2,650	0.6%	\$10,602	0.6%	\$15,903	0.6%	\$29,155	0.6%
Marketing & Delivery	\$119,270	26.3%	\$477,079	26.3%	\$715,619	26.3%	\$1,311,968	26.3%
Incentives / Rebates	\$265,044	58.5%	\$1,060,176	58.5%	\$1,590,264	58.5%	\$2,915,484	58.5%
Evaluation, Measurement, & Verification	\$26,504	5.8%	\$106,018	5.8%	\$159,026	5.8%	\$291,548	5.8%
Administration	\$39,757	8.8%	\$159,026	8.8%	\$238,540	8.8%	\$437,323	8.8%
Total Budget	\$453,225	100.0%	\$1,812,901	100.0%	\$2,719,351	100.0%	\$4,985,478	100.0%

COST-EFFECTIVENESS

Test	Results	
Participant Cost	NPV (all participants)	\$ 5,584,689
	Benefit-cost ratio	2.13
	NPV (average participant)	\$19,155
Ratepayer Impact Measure (RIM)	NPV	\$ (26,120)
	Benefit-cost ratio	1.00
	Lifecycle revenue impact per kWh	<\$0.000000
	2011 revenue impact per kWh	\$0.000023
	2012 revenue impact per kWh	\$0.000046
	2013 revenue impact per kWh	\$0.000042
Total Resource Cost (TRC)	NPV	\$ 4,132,645
	Benefit-cost ratio	1.68
	Levelized cost per kWh	\$0.058
Program Administrator Cost (PAC)	NPV	\$ 6,071,686
	Benefit-cost ratio	2.46
	Levelized cost per kWh	\$0.039

SAVINGS TARGETS & PARTICIPATION

Key Program Modeling Assumptions and Outputs	2011	2012	2013	Total
Coincident peak kW savings per installation	8.68	8.68	8.68	8.68
Annual kWh savings per installation	65,096	65,096	65,096	65,096
Annual kWh savings as a % of base usage	10.16%	10.16%	10.16%	10.16%
Estimated Participants	27	106	159	292
Annual MW Savings	0.2	0.9	1.4	2.5
Annual MWh Savings	1,725	6,901	10,352	18,979

OVER-SUBSCRIPTION PLAN

Over-subscription will be managed by suspending marketing and outreach. Once the budget for the current year is expended, a waiting list will be established for program participation in the following program year.

3.2.5. Agricultural Energy Solutions

PROGRAM DESCRIPTION

According to the University of Arkansas, the contribution of the Agriculture Sector as a percentage of state GDP in Arkansas equals 12% -- twice the national average.⁴⁸ It only follows that farms and related business in the state are strong candidate for a targeted EE program.

Through a mixture of farm audits, custom and prescriptive incentives, and education of agricultural suppliers, this program will help farms and other agriculture customers overcome the primary barriers to EE within this sector:

- Lack of easy access to qualified vendors and installers;
 - Farmers rely on farm (agricultural) suppliers to help them make decisions about equipment replacement. The extent to which a farmer replaces his or her farm equipment with energy efficient equipment is driven by the extent to which his or her farm supplier stocks and recommends this equipment.
- Lack of EE information and awareness of energy and non-energy benefits;
- The perception that energy efficient technologies have high "first costs";
- Lack of customer understanding about measure payback;
- Lack of awareness of energy efficient technologies;
- Absence of tools to quantify savings;
- Lack of access to capital.

TARGET MARKET

The target markets are farms and production agriculture operations. The program will also target businesses (agricultural suppliers, electrical contractors) that provide farm equipment sales and service.

Note that all agribusiness (e.g., food processing) customers are eligible to also participate in EAI's the Prescriptive & Custom programs.

MARKET SIZE

There are approximately 17,000 accounts in EAI's territory on a farm tariff.

ELIGIBLE MEASURES & INCENTIVE STRATEGY

Any measure that can improve an agricultural customer's electric EE will be eligible, provided it is cost-effective.⁴⁹ Examples of efficient technology types that may be incorporated in an agricultural EE project include:

- High efficiency ventilation fans/box fans
- High volume low speed fans

⁴⁸ University of Arkansas. Economic Impact of Arkansas Agriculture (2010).

⁴⁹ Under the Total Resource Cost Test

- Variable frequency drives
- Tractor heater timers
- Greenhouse heat curtains
- Infrared film for greenhouses
- Low pressure sprinkler nozzles
- Lighting measures
- Other custom measures based on cost-effectiveness analysis

Incentive levels are anticipated to equal between 25% and 75% of project incremental costs, or a buy-down to a 1.5 year simple payback, whichever is less.

Bonus incentives will be paid for qualified Tier 2 Comprehensive Custom projects as described under the Custom Program plan.

Results of agriculture programs elsewhere in the country show that most savings in this sector are achieved through calculated/custom projects. This reflects how technologies can vary from farm to farm (e.g., from high-efficiency milk pumps to micro-irrigation). Therefore, the Company anticipates serving the efficiency needs of this sector primarily through the custom projects. Two Tiers of Custom incentives will be available to participants – the same Tiers described under the Custom program. Over time more commonly installed measures with predictable savings may be added to the deemed savings database and rebated as prescriptive measures.

FEDERAL & STATE INCENTIVES

The USDA Rural Energy for America Program (“REAP”) provides grants for energy audits and renewable energy development assistance. It also provides funds to agricultural producers and rural small businesses to purchase and install renewable energy systems and make EE improvements. To the extent possible, Agricultural Energy Solutions will coordinate program incentive and service delivery with REAP and assist qualified customers in applying for REAP grants.⁵⁰

DELIVERY STRATEGY

An implementation contractor selected through a by EAI will administer Agricultural Energy Solutions.

Key elements of EAI's implementation strategy for both the Tier 1 and Tier 2 Custom tracks include:

⁵⁰ The grants are awarded on a competitive basis and can be up to 25% of total eligible project costs. Grants are limited to \$500,000 for renewable energy systems and \$250,000 for energy efficiency improvements. Grant requests as low as \$2,500 for renewable energy systems and \$1,500 for energy efficiency improvements will be considered. At least 20% of the grant funds awarded must be for grants of \$20,000 or less.

1. *Supplier Education & Training:* Farms rely on agricultural suppliers to help them make decisions about equipment replacement. Often this farmer/supplier relationship is longstanding and in such cases the farmer puts complete trust in suppliers' recommendations. Therefore, the extent to which a farmer replaces his or her farm equipment with energy efficient equipment is driven by the extent to which his or her farm supplier stocks and recommends this equipment. This program will capitalize on this farmer/supplier relationship by working with suppliers to ensure they are educated about energy efficient equipment, and are stocking it to the extent possible.
2. *Energy Audits:* Free energy audits for qualified agricultural customers, recommending equipment that's available for incentives, and encouraging farmers to work with their suppliers to replace this equipment.
3. *Tier 1 and Tier 2 Custom Project Delivery.* As described under the Custom Program implementation plan.
4. *Application submittal:* Farm auditors will assist participants with incentive applications and required documentation.
5. *QA/QC review:* Incentive applications will be subject to a quality assurance review by program technical staff to ensure accuracy of savings and incentive calculations. To minimize errors in this process there will be a 100 % review on all applications for verification of equipment efficiency rating, proper installation, etc. on the part of the Company.
8. *Project verification:* EAI reserves the right to site-verify installations prior to project approval and incentive payment. The implementation contractor will perform site verification on a statistically significant number of installations to verify the performance of work completed. All projects over a certain incentive threshold (the threshold will be determined as part of the final program design with implementing contractor) and all Comprehensive projects will require site verification.
6. *Incentive payment:* To minimize barriers to participation, the program will seek to expedite incentive payments to participating C&I customers. As discussed above, incentive payment is subject to approval of project documentation and on-site verification. A fraction of the incentive will be paid after initial project approval and the remainder following project verification.

PROGRAM TRACKING REQUIREMENTS

The Company is in the process of developing a robust program data tracking system. The minimum data collection requirements for this program are expected to include:

1. Business NAICS and Tax ID code
2. Contractor information
3. For each project:
 - o A unique project ID

EAI's Comprehensive Portfolio

- Characteristics of measures installed, including but not necessarily limited to, where appropriate
 - Equipment size and efficient
 - Location of installation
 - Hours of operation
 - Orientation of building surfaces treated
 - Seasonality of equipment
 - Load shape of equipment
 - Deemed savings for Prescriptive measures
- Anticipated project savings
- Pre- and post-project diagnostic and performance measurements,
- Project audit/verification status and date
- Incentive amount and paid date

ADMINISTRATIVE REQUIREMENTS

EAI will be responsible for identifying and selecting the implementation contractor, approving final program design and marketing strategy, and monitoring contractor performance goals. EAI account managers will market the program to managed accounts as part of the Business Solutions offering.

The implementation contractor responsibilities include working with EAI on final program design, marketing materials development, program marketing and outreach activities, project management and QA/QC activities, customer and contractor dispute resolution, tracking and reporting, and program element goal achievement.

ESTIMATED BUDGET

Incremental annual and total program budgets for 2011-2013 are shown below.

Program Cost Summary	2011		2012		2013		Total 3	
	Annual Budget		Annual Budget		Annual Budget		Year Budget	
Type	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget	Total Budget	% of Budget
Research & Development	\$751	0.5%	\$1,502	0.5%	\$3,004	0.5%	\$5,257	0.5%
Marketing & Delivery	\$48,812	33.2%	\$97,625	33.2%	\$195,249	33.2%	\$341,686	33.2%
Incentives / Rebates	\$75,096	51.0%	\$150,192	51.0%	\$300,383	51.0%	\$525,671	51.0%
Evaluation, Measurement, & Verification	\$7,510	5.1%	\$15,019	5.1%	\$30,038	5.1%	\$52,567	5.1%
Administration	\$15,019	10.2%	\$30,038	10.2%	\$60,077	10.2%	\$105,134	10.2%
Total Budget	\$147,188	100.0%	\$294,376	100.0%	\$588,751	100.0%	\$1,030,314	100.0%

COST-EFFECTIVENESS

Test	Results	
Participant Cost	NPV (all participants)	\$ 888,621
	Benefit-cost ratio	1.99
	NPV (average participant)	\$3,381
Ratepayer Impact Measure (RIM)	NPV	\$ (74,893)
	Benefit-cost ratio	0.96
	Lifecycle revenue impact per kWh	<\$0.000000
	2011 revenue impact per kWh	\$0.000007
	2012 revenue impact per kWh	\$0.000007
Total Resource Cost (TRC)	2013 revenue impact per kWh	\$0.000009
	NPV	\$ 585,532
	Benefit-cost ratio	1.48
Program Administrator Cost (PAC)	Levelized cost per kWh	\$0.095
	NPV	\$ 935,940
	Benefit-cost ratio	2.09
	Levelized cost per kWh	\$0.067

SAVINGS TARGETS & PARTICIPATION

Key Program Modeling Assumptions and Outputs	2011	2012	2013	Total
Coincident peak kW savings per installation	2.60	2.60	2.60	2.60
Annual kWh savings per installation	8,679	8,679	8,679	8,679
Annual kWh savings as a % of base usage	1.35%	1.35%	1.35%	1.35%
Estimated Participants	38	75	150	263
Annual MW Savings	0.1	0.2	0.4	0.7
Annual MWh Savings	326	652	1,304	2,281

OVER-SUBSCRIPTION PLAN

Over-subscription will be managed by suspending marketing and outreach. Once the budget for the current year is expended, a waiting list will be established for program participation in the following program year.

3.2.6. *Agricultural Irrigation Load Control*

This Commission-approved peak load control pilot program provides incentives to qualified agricultural customers for allowing EAI to interrupt electric service to well pumps during the summer. Service is interrupted through Company-installed AML meters. Each weekday during the program period, EAI may interrupt the power to the well meter for up to three hours. In return for participation, EAI will apply a credit (equal to \$4.16/kW) to the customer's bill for the service month for up to 30% of the base electricity charge.

By the end of 2013 the Company anticipates 2,200 accounts will be enrolled in the Pilot with a projected gross demand reduction of 44 MWs. The three year program budget is approximating \$14 million.

The approved program and subsequent reporting and resulting adjustments are within Docket No. 08-072-TF.

4. Implementation & Administration

4.1. Portfolio Level

Implementation planning at the portfolio level involves an ongoing assessment of program mix and timing to assure that the portfolio remains aligned with EAI's objectives and the Commission's goals. Specific implementation activities associated with the whole portfolio include program planning (as informed by evaluation and market research), tracking system development and management, market research and assessment, development and management of an overall marketing and communications strategy, and design and management of a back office. The back office activities include processes for incentive fulfillment, procurement of implementation services, and integration with broader corporate services such as billing, accounting and web services.

Portfolio Planning. EAI has developed this plan to satisfy statutory objectives and provide superior EE and service to its customers. Once the plan has been approved, its implementation will be accompanied by a process that includes continual review and incorporation of feedback. First, EAI will coordinate development of the final program designs and implementation plans to ensure that Commission and Company objectives continue to be achieved. Second, EAI will begin tracking program progress against the goal, identifying performance issues and coordinating design or implementation changes to resolve these issues. EAI will also begin coordination of the evaluation process. Once the plan is approved, EAI will begin working to develop the EM&V process, as well as select an EM&V contractor. More detail on the EM&V plan is included in the next section.

Continue to Develop the Trade Ally Network. An essential component to the successful implementation of these programs is continuing to build out the trade ally network, including contractors, vendors, and distributors, and energy service companies (ESCOs), within the EAI service territory. These trade allies typically provide the final link to most customers and therefore represent EAI's EE programs in the field. Through the Quick Start Programs and EEA, this formation of this network has begun; but an aggressive expansion of the network and increased training activities will be needed to successfully implement the Comprehensive programs. In addition to delivering short-term impacts, changing the way these contractors do business will lead to a transformation in the delivery of EE to EAI's customers.

Back-Office Systems and Record-keeping. EAI will work with its chosen implementation contractors and IT department to inform the best process for tracking, reporting, and fulfilling incentives of the Comprehensive programs. In accordance with the Rules, EAI will keep records of EE programs in sufficient detail to permit a full EM&V process and audit of costs and performance. To do this, the tracking system will keep detailed information on customer and participant contact, participant measures and energy savings, and program costs by category.

Resources. While EAI expects to use third-party implementation contractors, internal staff will be important to provide overall administration of the programs, ensure contractor performance, and coordinate and integrate the various implementation efforts. To accomplish this, EAI expects and has budgeted in this plan to bring on additional full-time staff. It is expected at this time that six additional staff will be added in the first year to perform the duties associated with

the implementation of this portfolio, and additional staff will be added over time as needed to manage the increasing size of the programs. The funding for these positions is allocated across the budgets within the programs. The costs for full-time staff will be included as costs to be recovered through the conservation and EE programs and not in EAI base rates.

Flexibility. In order to achieve the energy savings and demand reduction targets set out in this Plan, EAI must retain flexibility to allocate resources across the portfolio to meet the challenges and changes that will be presented as the Comprehensive programs launch and grow over time. Changing market conditions, the performance of technologies, and the lag associated with formal evaluations all present risks to EAI's achievement of these targets. These risks have been taken into account in the design of this Plan, and addressed by designing a diversified set of programs that are simple and have performed well in other jurisdictions.

However, risk changes over time. For example, changes in the overall economy can have an effect on the demand for energy-efficient products and services – and the longer the time horizon, the more change can be expected relative to the initial design stage. For this reason, EAI reserves the right to move program funding between programs to maximize the Company's opportunity to reach and exceed portfolio targets. As set out in the Energy Efficiency Cost Recovery rider, EAI reserves the right to notify the commission if portfolio budgets are expected to differ by +/- 10% from the approved levels. Further if any program is projected to differ from approved budgets by more than +/- 20% EAI will notify the Commission. This practice of retaining flexibility to re-allocate resources is commonly accepted among states with long-standing EE programs including California and Massachusetts. Both states have adopted this practice after early EE plans were found to be less effective without this flexibility. The key measure for these jurisdictions is to ensure that the portfolio remains cost-effective.

Throughout the implementation period, EAI will remain vigilant to ensure that programs continue to meet the Benefits and Objectives laid out in the Rules and are implemented to be cost-effective.

4.2. Program Level

The program plans presented in Section 3 are intended to provide sufficient detail on program design, implementation and evaluation to support Commission review of EAI's portfolio. However, actual implementation must be based on much more detailed program designs and implementation plans. EAI will develop these detailed plans in close cooperation with the contractors selected to implement the programs.

Selection of Implementation Contractors. In most cases, EAI envisions that implementation will be provided by implementation contractors hired through competitive solicitations. EAI anticipates that the contracts produced by this process will begin to include, or signal a future move towards, performance incentives related to achievement of program and program element metrics. This type of contract structure, however, requires that the implementation contractors be given the opportunity to propose detailed program designs and implementation plans that they believe provides them with the best opportunity to deliver proposed savings. Such proposals can provide a basis for cooperatively developing a final design prior to program launch.

Upon approval of this Plan, EAI will begin the Implementation Contractor selection process from qualified implementation contractors for implementation services. EAI anticipates contracts for the following programs:

- Residential Home Energy Solutions
- The Multifamily program
- Manufactured Homes
- ENERGY STAR New Homes
- Efficient Cooling Solutions
- Lighting & Appliances program
- Direct Load Control
- Business Solutions (Prescriptive Program, Custom, Small Business, CitySmartSM and Agricultural Energy Solutions)

The final program designs developed by the implementation contractors and EAI will describe the final proposed structure of the program element, specific incentive levels or methods for calculating incentives, and marketing and recruiting strategies to ensure that goals are met. The final design will incorporate any revisions to the original assumptions, and provide more detail on the types and costs of measures to be included, the level of incentives, and specific program costs.

As a result, the final step in each program design will be a recalculation of program cost-effectiveness to ensure that the program continues to pass the TRC test. The implementation plans will provide detailed roadmaps for program rollout and management, including customer qualification, incentive fulfillment, customer care, data capture and tracking, reporting, and quality control processes. They will also ensure that each program continues to satisfy all the benefits and objectives set out in the Rules.

4.3. Portfolio Implementation Schedule

The proposed program launch schedule below is relevant to all programs in the plan, with the exception of:

- EEA
- AR Weatherization
- Irrigation Load Control
- ENERGY STAR New Homes⁵¹

Based on conversations with utility managers in other jurisdictions, this schedule is extremely aggressive by industry standards. It reflects time to launch starting the day the PSC approves EAI's plan. Some tasks are at the portfolio level, aspects of program marketing and IT, for example. Schedules for program level tasks, such as trade ally training, may vary somewhat by program but have similar timelines.

⁵¹ Note that this timeline does not reflect ENERGY STAR New Homes, which will launch in January 2012 for reasons stated in the implementation plan. Therefore, for this program there will be a longer, more reasonable period of time to carry out the tasks below.

Costs and other factors unique to transitioning Quick Start Programs to corresponding Comprehensive programs are addressed in Appendix B.

Figure 2. Proposed Implementation Schedule for Comprehensive Programs

PROGRAM LAUNCH TASK	Months following program approval by PSC				
	Month 1	Month 2	Month 3	Month 4	Month 5 < LAUNCH >
Implementation Contractor Selection & Program Kickoff					
Develop final implementation plans, manuals and procedures - for each program this typically includes, at a minimum					
Finalizing measures and incentive levels					
Develop project requirements					
Developing customer eligibility criteria					
Developing contractor participation criteria and agreements					
Developing application & incentive payment processes					
Developing a QA/QC process					
Determining data needs for program management and reporting					
Developing program manuals					
<i>Feedback and continuous improvement</i>					Ongoing→
Recruit and train retailers, contractors, distributors and manufacturers ("trade allies")					Ongoing→
Develop training plans					
Develop training materials					
Recruit trade allies					
Conduct trainings					Ongoing→
<i>Market feedback and continuous improvement</i>					Ongoing→
IT/Program Tracking System selection and build-out - typical functionality includes:					
Web content management					
Program application, impact and incentive management					
QC System					
Invoicing & rebate processing					
Rebate processing					
Budgeting					
Goal Tracking					
Reporting					
Call tracking					
<i>Maintenance</i>					Ongoing→
Develop marketing plan and materials					
Market research					
Develop program messaging					
Customer collateral					
Trade ally collateral					
Web Site content					
Advertisement content					
Program launch events					< LAUNCH >
<i>Market feedback and continuous improvement</i>					Ongoing→
First projects completed and incentives paid					Ongoing→

Appendix A: Avoided Costs

The avoided costs used in this analysis include the following input assumptions:

- Natural Gas price starting at \$4.61 per MMBtu in 2010
- Price on Carbon Dioxide (CO₂) starting at \$15 per ton in 2013
- Avoided Capacity Costs of \$153.09 per kW-yr, based on the following inputs:
 - Baseline Capital Cost (2008\$) of \$918 per kW
 - Levelized Fixed Charge Rate of \$119.85
 - Line Loss of 8.49%
 - Reserve Margin of 16.80%
 - Avoided Transmission & Distribution cost of \$2.93 per kW-yr
- The avoided costs for natural gas are based on forecasts from the Energy Information Administration of the Department of Energy.⁵²

These assumptions were developed by EAI's Supply Planning Organization with input from ICF International.

⁵² Energy Information Administration. "Natural Gas Prices." Accessed at http://tonto.eia.doe.gov/dnav/ng/ng_pri_sum_dcu_nus_m.htm

Appendix B: Calendar Year Costs

EAI will be closing and transitioning Existing 2010 - June 2011 programs into comprehensive programs. This transition will require:

- 1) Continuing 2010 - June 2011 programs ("QSP") for at least 4 months before the comprehensive plans will be available to EAI customers. Assuming the comprehensive Plan can be approved by June 1, 2011, then the existing programs will need to operate until around October 1, 2011.
- 2) A transition cost to close projects on QSP will occur that will last longer than the 4 month period above. Projects within the Large C&I programs are the ones that will take longer to complete during the transition period.
- 3) Since transition budgets are difficult to estimate and EAI has a desire to grow the energy savings, then the transition budget will be based upon the comprehensive budgets and prorated for 4 months.

Table 1 - Transition Budgets for 2011

Program Name	Table 2, Column 2011 Annual MWH Savings Divided by 3	Table 2, Column 2011 Annual MW Savings Divided by 3	Table 2, Column 2011 Budget (\$000) Divided by 3
	Annual MWH Savings Due to Transition	Annual MW Savings Due to Transition	Transition Budget (\$000)
CFL's	7,003	0.9	\$ 1,028
Residential Energy Solutions	535	0.3	\$ 567
Weatherization	-	-	\$ -
A/C Tune-up	461	0.2	\$ 215
Small Commercial Energy Solutions	201	0.1	\$ 156
C&I Energy Solutions	4,219	0.3	\$ 667
C&I Standard Offer	933	0.7	\$ 470
Cities	-	-	\$ -
Irrigation Load Control	-	-	\$ -
Totals	13,352	2.4	\$ 3,104

Table 2 - Comprehensive Programs 2011

EAI Programs	Annual MWh Savings 2011	Annual MW Savings 2011	Annual Budget (\$000) 2011
Residential Lighting and Appliances	21,010	2.7	\$3,085
Residential & Small Commercial Cooling Solutions	1,383	0.6	\$646
Home Energy Solutions	1,604	0.9	\$1,702
Energy Efficiency Arkansas	0	0.0	\$1,000
AR Weatherization	2,890	0.8	\$1,200
Benchmarking	12,656	4.3	\$996
ENERGY STAR Homes	0	0.0	\$90
Direct Load Control	0	3.1	\$518
Mobile Homes	214	0.2	\$290
Multifamily Direct Install	273	0.1	\$210
C&I Prescriptive	8,400	2.0	\$1,411
City Smart	1,725	0.2	\$453
C&I Custom	5,176	0.9	\$2,001
Agricultural Irrigation Load Control	0	19.1	\$5,263
Small Commercial	603	0.2	\$467
Agricultural Energy Solutions	326	0.1	\$147
Total Portfolio	56,262	35.2	\$19,479