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Ms. Elizabeth O'Donnell
Executive Director
Kentucky Public Service Commission
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March 30, 2007

RE: *Joint Application of Kentucky Utilities Company, Kentucky Association for Community Action, Inc., and Community Action for Lexington-Fayette, Bourbon, Harris, and Nicholas County, Inc., for Establishment of a Home Energy Assistance Program,* Case No. 2004-00303
and
Joint Application of Louisville Gas and Electric Company, Metro Human Needs Alliance, Inc., People Organized and Working for Energy Reform, and Kentucky Association for Community Action, Inc. for Establishment of a Home Energy Assistance Program, Case No. 2004-00304

Dear Ms. O'Donnell:

Enclosed please find and accept for filing the original and ten (10) copies of Kentucky Utilities Company's and Louisville Gas and Electric Company's Home Energy Assistance Assessments as ordered in the aforementioned proceedings.

Should you have any questions concerning the enclosed, please do not hesitate to contact me.

Sincerely,

Rick E. Lovekamp

Rick E. Lovekamp

cc: Parties of Record

RLW ANALYTICS

Thursday, March 29, 2007

To the HEA Program Parties:

I want to thank all of you from Louisville Gas and Electric Company ("LG&E"), Kentucky Utilities Company ("KU"), the Community Action Council for Lexington-Fayette, Bourbon, Harrison, and Nicholas Counties Inc. ("CAC"), the Kentucky Association for Community Action, Inc. ("KACA"), Metro Human Needs Alliance ("MHNA"), Affordable Energy Corporation ("AEC"), and People Organized and Working for Energy Reform ("POWER") for all your help with the HEA Program Evaluations. It has been a pleasure working with all of you over the past months.

As a core business philosophy, *RLW* recognizes that the choice of the right consultant is paramount to the success of your analysis project. As part of his "14 Points of Management" Edward Demming promoted the idea that businesses would benefit from skipping the competitive bid process, and establish long term, stable relationships with trusted suppliers. His idea is that suppliers, in order to maintain long term relationships, have a natural vested interest in striving to minimize costs while providing quality services. *RLW* supports this notion, and practices it with our clients. *RLW* wants to become your supplier of statistical and analytical services. We work hard to maintain client satisfaction, minimize your costs, and deliver high quality products.

Any errors or omissions in the KU or LG&E HEA Program Evaluations are the responsibility of *RLW Analytics*. In case of questions please call me at the following number (517) 529-6277.

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RLW Analytics, Inc.
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Kentucky Utilities Company
Home Energy Assistance (HEA)
Program Evaluation

Final Report

March, 2007

Prepared for:
Kentucky Utilities Company,

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Table of Contents

Table of Tables

Table of Figures

1. Executive Summary

In June 2006 E.ON U.S. Services Inc. contracted RLW Analytics, Inc. to perform an evaluation of the Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E") Home Energy Assistance ("HEA") Programs. This report presents those findings including sections detailing the program and tracking system review, metrics analysis, and program delivery interviews. Also included as appendix are a KU and LG&E area demographic comparison, a comparison of other low income programs, and the program delivery survey instruments.

The HEA Program is designed to assist the poorest households who are least able to afford to pay their energy bills. The KU HEA Program is for eligible customers who use electric heat. The participants have received a not to be exceeded amount of $294 per year in seven monthly installments of $42 that were applied to their current bill. The credit is applied to bills during peak heating and cooling months and cannot be used to reduce arrearages. Some additional funding is available as a one time "crisis" payment for KU customers that do not heat with electricity. This benefit amount was increased to $439 prior to the commencement of the 2006 – 2007 heating season. This increase in the benefit amount will further assist customers in the HEA program to more easily afford their utility bills.

The HEA Program helps make low-income customers energy bills more affordable.

The success of the HEA Program can be measured in whether or not program participants are able to make their bill payments on time.

Statistical results show that customer participation in the HEA Program significantly improves service continuity by reducing brown bills (disconnection notices), disconnections for non-payment and account closure rates. Additionally, a noticeable reduction in the average KU debt occurs with program participation.

By reducing the financial stress for poor families and the number of utility disconnects that they must endure, the HEA program also has indirect benefits for the entire community. Some of these benefits being: Homes with disabled, elderly, or young children have additional ability to stay warm in the winter and cooler in the summer to remain healthier, schools have better attendance, fewer homeless people, and parents have more funds to focus on their children's needs.

The KU HEA Program administrative budget is comparable with other similar programs. Partnership with the utilities and agencies have allowed HEA staff to direct more time to case management and client communications.

RLW would like to thank the KU, the Community Action Council for Lexington-Fayette, Bourbon, Harrison, and Nicholas Counties Inc. ("CAC"), and the Kentucky Association for Community Action, Inc. ("KACA") for their assistance in this evaluation. The detailed chapters follow.

2. Program Overview

The KU-HEA Program is a three year pilot program that has been allowed implementation by the Kentucky Public Service Commission ("KPSC") in their November 24, 2004 orders to the utility. As directed in the Orders, the HEA Program is funded through a 10 cents per meter charge per month, which raises approximately $433,000 annually and plans to serve about 1,300 households. The PSC gave approval for the KU HEA program on November 24, 2004 with a commencement date of December 1, 2004.

The goal of the KU HEA program is to make electric service more affordable for low income families and individuals. Additional goals are to reduce customer disconnects, arrears and uncollectibles through a combination of subsidies and energy conservation initiatives.

When the HEA program was first developed customers with household incomes at or below 110 percent of federal poverty guideline (was the eligibility level for LIHEAP assistance) were eligible for the program. Since then, the Commonwealth has raised the LIHEAP eligibility level to 130% of poverty, causing some confusion for the HEA beneficiaries and providers. Kentucky is discussing a further change in the eligibility level for LIHEAP, likely a reduction beginning in 2007 – 2008, due to an anticipated decline in available funds.

KU requires participants to enroll in LIHEAP and apply for and accept any available weatherization assistance. KU has a weatherization program called WeCare available to low-income residents. In addition to the KU weatherization program, the 18 agencies in the KU HEA Program area also operate the federal Weatherization Assistance Program, which is funded by the U.S. Department of Energy ("DOE"). DOE studies have shown that the Federal weatherization program typically reduces home energy consumption by approximately 20%.

2.1. Available Data

The following information sources were used for the evaluation:

- HEA Customer Benefits Literature
- HEA Customer Sign-up and Recertification Documents
- HEA Staff Info, Program Fact Sheets and Training Documents
- Interagency Letters and Agreement
- KU HEA Program Budget
- HEA Demographics Database
- HEA Monitoring Plus WX Database
- Program Delivery Interviews
- KACA LIHEAP Database
- KACA Weatherization Database

3. Statement of the Project

3.1. Evaluation Objectives

The overall evaluation objective was to examine and evaluate the effectiveness of the HEA program within KU's service territories. In the RFP, 11 researchable metrics were cited for analysis of the HEA program in KU's service territory.

Table 1 below presents an overview of the required metrics. Table 2 next breaks out the metrics further into the researchable questions, the baseline for the metric (if appropriate), the evaluation procedure, and what the positive indicators were estimated to be.

Metrics	**KU**
1. Reduction in LIHEAP Crisis Assistance, i.e., the percentage of HEA enrollees freed from the need for LIHEAP Crisis Assistance.	X
2. Reduction in Arrearages, i.e., HEA Enrollees able to reduce arrearages.	X
3. Reduction in Loss-of-Service due to Non-Payment, i.e. HEA enrollees did not experience Loss-of-Service during program's term.	X
4. Increased energy savings through weatherization programs, i.e. HEA enrollees simultaneously enrolled in Weatherization Programs experienced reductions in energy costs.	X
5. Total households served.	X
6. Total amount of assistance provided.	X
7. Program availability: a) KU customers in KU's 77-county service territory, and proposed allocation of 1,300 participants across the territory, Did the allocations across the respective counties occur?	X
8. Movement of HEA enrollees in and out of the KU HEA program, i.e. are HEA program benefits short-term or long term	X
9. Demographic characteristics of the KU HEA program enrollees vs. LG&E HEA program enrollees, i.e. are demographic differences, if any, an impediment to "mirror-image" programs in both the KU and LG&E Service territories?	X
10. Impact of excluding arrearage pay-down, i.e. does excluding arrearage payments in the KU HEA program have any impact on the program?	X
11. Review KU's HEA program involvement, i.e. what was KU's level of involvement and has it been adequate to provide "active monitoring of the program"?	X

Table 1- Evaluation Metrics

Metrics	Researchable Question	Baseline	Evaluation Procedure	Positive Indicators
Reduction in LIHEAP Crisis Assistance, Arrearages and Loss-of-Service due to Non-Payment	How does the program impact the level of Crisis Assistance needed in the respective utility territories?	Each enrollee is matched against his/her history of Crisis Assistance for the previous three years	Compare receipt of Crisis Assistance requested and approved during enrollment in the program	Analysis shows correlation of decline in Crisis Assistance with advent of program
	How does the program impact the rate of disconnection notices and actual disconnects?	Data match of enrollees to number of disconnect notices and actual disconnections for one year prior to enrolling	Same data match for duration of time enrollee began program	Reduction in disconnect notices and actual disconnections for enrollees
Increased energy savings through weatherization programs	How does the program impact participation in the weatherization program?	Match enrollee to previous year's energy consumption after he/she accepts weatherization program	Match enrollee to one year of energy consumption after beginning program	Enrollees show a reduction in energy consumption after weatherization program participation (after normalization)
Total households served	How many households were served?	Estimated population of eligible customers	Actual count of enrollees	--
Total amount of assistance provided	How much assistance has been provided?	Projected program dollars	Actual dollars used	--
Program availability	Has the program been equitably distributed among the counties each utility serves?	Estimated distribution of eligible customers	Recorded distribution of enrollees	a) Targeted number of enrollees are met through the program; b) Ratio of enrollees with counties are similar to estimated ratios
Movement of HEA enrollees in and out of the KU HEA program	Does the program have short-term or long-term effects?	--	Analyze enrollment activities	--
Demographic characteristics of the KU HEA program enrollees vs. LG&E HEA program enrollees	Are the types of customers served in the KU funded program similar to those served under the LG&E funded program	--	Analyze demographics of enrollees according to available data	Characteristics are similar
Impact of excluding arrearage pay-down	How does the opportunity to use the HEA credit to pay down arrearage affect overall payment behavior and activity among enrollees?	--	Analyze and compare payment activities of LG&E enrollees against KU enrollees	
Active monitoring of the program	Does each utility fulfill the expectations of what is considered as sufficient "active monitoring"?	--	Measure utility resources and activities directly attributable to program monitoring	Measured resources and activities meet or exceed expectations

Table 2 - Research Outline

3.2. Methodology

This section discusses the methodology used for addressing each task required for the successful completion of this study.

3.2.1. Task 1: Project Initiation Meeting

Prior to the launch of the evaluation work plan, RLW had a conference call with key personnel from both utilities, representatives of the KPSC, and representatives of the key community action agencies involved in the program on January 10, 2006. The invited list of attendees was left to the choice of the utility sponsors. During the meeting, RLW reviewed the various evaluation issues and finalized the evaluation schedule.

Specifically, at the time of project initiation, we:

- Reviewed the evaluation objectives;
- Reviewed the approach, finalized the schedule, and identified data requirements;
- Decided methodological issues, including data requirements and analytic techniques.

RLW discussed the detailed work plan regarding each of the above elements, and also reviewed project deliverables, costs, responsibilities, completion dates, and a proposed outline for the final report. A discussion of the implementation of the stakeholder interviews also took place.

Detailed notes were taken by RLW staff during the project initiation meeting. These notes were transcribed into a formal memo for submission to all attendees of the meeting, and were used as the source for determining final task details in the work plan.

During the kick-off meeting key items were raised concerning the evaluation. RLW identifies these agreed upon items in the evaluation.

- RLW understood that it is important to each of the utilities that each utility's impact on the HEA program be reviewed both jointly and separately.
- RLW understood that the HEA team is interested in understanding the long-term outlook for the HEA programs.
- The HEA team is interested in identifying what challenges and benefits exist should the programs be combined, particularly in program administration, delivery, and cost savings due to pre-existing infrastructure.
- The HEA team identified that RLW is to review whether or not there is sufficient monitoring of the programs overall and of how rate-payers' money is spent. The team requested that RLW provide examples of how other similar programs accomplish this goal. RLW agreed to meet these terms by providing a qualitative assessment of comparable programs.
- The HEA team requested that the participant interviews be conducted through the Attorney General's Office as opposed to the KPSC.

Having reviewed the aforementioned objectives, timeline, data requirements, and ancillary items raised during the kickoff meeting, RLW proceeded forward with the proposed work.

3.2.2. Task 2: Develop and Finalize Work Plan

The project initiation meeting, together with the proposal and RFP, laid the groundwork for the project work plan. Specifically, the work plan was developed based upon the RFP and any changes to the evaluation that resulted from the project initiation meeting. The final work plan included the following:

1. A timeline that delineates key milestones,
2. A budget that shows the projected costs for the project,
3. A discussion of all tasks included in the study and the approach to each task,
4. A discussion of the methodology to be used in the study, including sampling and analytic techniques to be used, data requirements, sample sizes, and program issues and questions that would be addressed, and a proposed outline for the final report.

3.2.3. Task 3: Interviews of Program Delivery Participants

Program delivery participants were considered to include Program Administrators, key collaborating parties, and executive staff for the community action agencies. The interview participants and sample sizes that were determined are shown in Table 3.

Proposed Groups	**Sample Size**
Program Administrators	2
Collaborating Parties in Implementation	2
Community Action Agencies	6

Table 3 - Sampling Strategy

These interviews were intended to be brief, and were conducted to meet the following objectives:

- Obtain an understanding of the program data collection process.
- Determination of whether or not utility involvement and activity in the program is sufficient to meet the expectations of "active monitoring of the program" requested by the KPSC.

3.2.4. Task 4: Review Program Documentation and Tracking System

RLW received all program materials and program datasets including:

- Program plans, and forms,
- Marketing plans and materials,
- Available regulatory reports,
- Tracking system descriptions and datasets

These materials were reviewed to better understand the program and how data, relevant to the metrics, is currently documented. The tracking system was also reviewed in order to determine the variables of interest for the study.

Tracking systems typically monitor the following types of information: participant demographics, participant levels, pre- and post-site conditions, measures installed, incentive levels, estimated energy and demand savings, milestone dates, quality control information, and program costs.

The key elements of the tracking system review were:

- ***Review of the database information; identification of inconsistencies and potential misinformation.*** Sanity and logic checks were performed to ensure consistent and meaningful data.

- ***Recommend data quality control procedures necessary for ensuring accuracy and consistency; recommend improvements for database structures and data inconsistency, entry, and quality.*** Based on the personal interviews and the analysis of data quality and content, recommendations were made for improvements to tracking quality control procedures.

3.2.5. Task 5: Metrics Analysis

The intent of this analysis is to provide an update of program impacts through the determination of movements among selected program indicators. To accomplish this, the data obtained from the various data collection tasks has been used to assess activity among each of the metrics. As presented in Table 2 earlier, we have made an effort to outline an approach to each metric update that makes their determination as quantifiable as possible. The results of the metric analysis can be used to illustrate movement in the market, ideally in the desired and program-intended direction.

One important item to consider in metric updates is the determination of causality or attribution of the changes to the program. Central to this assessment of causality is a thorough understanding of the stimulus or intervention that the program has implemented since inception. It is clear from the various metrics provided in the RFP that the program to date has initiated intervention at various points in the market, some or all of which may be causing movement observed in the metric updates. RLW reviewed the various program interventions as part of the program review phase and inquired about their influence in the various metric areas.

The first step in the process was obtaining the HEA Team's tracking databases that contain each metric. The HEA Team provided databases for a little more than a one year period.

The first six metrics listed are simple frequencies and cross tabulations from the tracking database.

1. Reduction in LIHEAP Crisis
This metric was used to quantify the percentage of participants who no longer require federal funds through the LIHEAP Crisis Assistance Program. It was calculated as the following ratio:

$$\frac{\textit{HEA enrollees that apply for LIHEAP Crisis Assistance}}{\textit{HEA enrollees in the HEA program only}}$$

2. Reduction in Arrearages
This metric was used to determine the percentage of participants who were able to reduce their debt, which could be attributed to the program. This metric was calculated as the following ratio:

$$\frac{\textit{HEA enrollees that were able to reduce arrearages}}{\textit{Total HEA enrollees}}$$

3. Reduction in Loss-of-Service due to Non-Payment
This metric was used to determine the percentage of participants who were subjected to a loss-of-service calculated as the following:

$$\frac{\textit{HEA enrollees experiencing loss-of-service}}{\textit{Total HEA enrollees}}$$

4. Increased Energy Savings through Weatherization Programs
This metric was used to determine the percentage of participants who were simultaneously enrolled in weatherization programs. This provided an indication of the crossover in funds between the two programs and how effectively they are leveraged for low-income participants.

5. Total Households Served
This metric was used to determine the penetration of the KU HEA program in the low income population.

6. Total Amount of Assistance Provided
This metric was used to determine the total dollar amount of the assistance provided.

7. Program Availability
This metric was used to determine if KU's implementation of the program penetrated all of the counties in their electric service territories. RLW tabulated the quantity of customers in each county in the HEA program and compared the counts to the total number of low income customers in each county served by KU.

8. Movements of HEA Enrollees In and Out of Program
This metric was used to determine the length of the program benefits. RLW calculated the average length of time each participant is enrolled in the program and aggregate this to the program level.

9. Demographic Characteristics
This metric was used to determine any demographic differences that exist between the KU and LG&E program populations. Cross-tabulations were performed to determine any statistical differences between the two programs.

10. Impact of excluding arrearage pay-down
Did excluding arrearage payments have an impact on the KU HEA program?

11. Review of KU HEA Program Involvement
RLW provided an assessment of what type of involvement KU had in the program implementation and monitoring, and whether it was adequate to provide "active monitoring of the program" as specified by the KPSC.

3.2.6. Task 6: Draft Reports

RLW submitted a draft report following the analysis. This report conforms to the final report format included in the RFP. The draft report includes sections that incorporate the following evaluation information:

- An executive summary,
- A summary of the evaluation goals, objectives, methodology, and activities,
- A background description of the program evaluated,
- A detailed review of all major findings based on the researchable metrics,
- Conclusions and
- A prioritized list of recommendations for implementation by the utilities pertinent to the achievement of the stated program goals.

3.2.7. Task 7: Final Reports

Following the internal and external review of the draft report, *RLW* will issue the final report. The schedule provides a week and a half for review of the draft report by the utilities and other parties. The final report will be delivered with all comments and changes resulting from the draft report phase on or before March 29, 2007.

4. Key Findings

4.1. Introduction

This section highlights the key findings for the KU HEA Evaluation. The first section looks at the results from the program documentation and tracking system reviews. Next are the findings for the program design analysis, the metrics analysis, the program interview results and communication findings.

4.2. Program Tracking System

In our experience, tracking systems typically monitor the following types of information: key dates, participant demographics, participation levels, pre and post site conditions, program related data, measures installed, incentive levels, estimated energy and demand savings, milestone dates, quality control information, program costs, and other data.

The main purpose of a tracking system review is to ensure consistent tracking, reporting and collection of all necessary program data. RLW examined the tracking system for system structure, function, content and extent of field population.

The KU tracking systems cover customer participation well. KU's tracking system shows whether the customer received some form of cash assistance from the local CAA towards their KU bill. The assistance a customer receives from one of the 18 participating CAA's may include funds from LIHEAP Subsidy, LIHEAP Crisis, the WinterCare Energy Fund, local government funds, private funds, and/or in some instances, a customer co-pay as a condition of some types of assistance.

Additionally, the database shows if a customer has been enrolled in a KU WX or Federal (WAP) program and when the home was completed but no indication of what measures were completed, cost of measures installed, or energy savings estimates. The WeCare weatherization info was provided in a separate database and was incorporated into the analysis.

4.3. Documentation Review

4.3.1. Training Document

The HEA Program training document does a good job of introducing the program and its customer benefits and associated costs. It informs the reader of the length of the program and the number and types of customers it is intended to serve. The document also clearly states how the program is administered and monitored, how customer eligibility is determined, how the customers are enrolled and what they need to do to stay enrolled, how the subsidy benefit is distributed, and program participation requirements for the customer to follow.

4.3.2. Program Budget

The budget (shown in Table 13) reflects the 3 year KU HEA Program budget. Administrative expenses account for approximately 10% of the budget, with the remaining 90% going to low-income participants enrolled in the HEA Program.

4.4. Program Design

4.4.1. Issues

- Orientation without conservation training to the HEA Program occurs at the point of enrollment. Since HEA customers are often participants in other energy assistance and weatherization services that frequently include conservation training operated by the same CAA's that participate in HEA, it was determined that separate HEA training would often be redundant and of only incremental value.
- Payments are only provided for the 7 peak heating and cooling months of the year. The benefit matrix was designed by the company and the CAA's to take into account that most of the participating customers were not enrolled in budget billing.
- Very little case management funding is available for the HEA Program. However, the participating CAA's provide "case management" type services through the Community Services Block Grant, Head Start and other Federal, State, Local and privately funded programs. At the time that the HEA Program was initiated it was agreed that the very small amount of administrative dollars (approximately $44,000 per year allocated among 18 CAA's) made the provision of "case management" with HEA funds infeasible.

4.4.2. Recommendations

- Set in place additional screening for energy usage, household size and poverty levels to have a stepped benefit structure. (If substantial increases in program and administrative funding become available)
- Provide mandatory conservation classes that participants must attend or have conducted in their homes if not able to attend. (If substantial increases in program and administrative funding become available)
- Consider making it a 12 month year round program providing largest payments in the peak heating and cooling months and minimal payments during other times of the year. This could help keep customers actively involved in the program and promote good payment habits. This recommendation might be better served to wait until funding of a year round program can approach the current monthly funding with the 7 peak months being subsidized.
- We recommend better coordination of the existing case management services

- Include weatherization measures, costs and savings estimates. (If substantial increases in program and administrative funding become available) Otherwise continue to use the Federal WAP program estimate of about 20% average reduction in energy consumption per home weatherized.

4.5. Metrics Analysis

This section goes over the specific findings for the metrics analysis.

4.5.1. Reduction in LIHEAP Crisis

In the 2003 – 2004 heating season 815 of the 1,300 households enrolled in the HEA Program received LIHEAP Crisis assistance. In the 2006 – 2007 LIHEAP heating season only 567 of the 1,300 households received LIHEAP Crisis assistance, resulting in a 19% reduction in the need for LIHEAP Crisis assistance. This would indicate that those customers that have remained in the HEA Program have less need for LIHEAP Crisis assistance.

4.5.2. Reduction in Arrearages

Analyzing the KU HEA data from 2005 revealed that only 1% of those customers enrolled in the HEA Program had 90 day arrears while 2.8% of the customers removed from the HEA Program still had 90 day arrears.

Table 4 represents the data from the 2005 KU HEA database and shows customer data for the average current balance and customer arrears for 30, 60 and 90 days. Those customers still enrolled in the program have a lower average amount in arrears than those that are no longer in the HEA program or are still awaiting enrollment. If we look at the current balance and compare Enrolled participants vs. participants Removed from the program we can see that customers that have been removed from the program have an average current balance of $90.66 whereas the customers actively enrolled in the program have an average current balance of $85.28, a difference of $5.38 average per customer. This would suggest that continued enrollment in the HEA program helps to keep customer arrears lower.

KU-HEA Database (Duplicate Entries Removed)					
Database Average	**All**	**Enrolled**	**Remove**	**Removed**	**Wait List**
Current Balance	$ 87.24	$ 85.28	$ 109.12	$ 90.66	$ 91.56
Arrears (30 day)	$ 16.12	$ 11.85	$ 23.20	$ 24.19	$ 32.50
Arrears (60 day)	$ 3.96	$ 3.69	$ 6.33	$ 4.46	$ -
Arrears (90 day)	$ 0.96	$ 0.85	$ -	$ 1.23	$ -

Table 4 – KU HEA Customer Balance and Arrears (2005)

Table 5 similarly shows the current customer balance of their utility bills. KU HEA Program enrolled customers show a significant decrease in large amounts in arrears. Only 4.8% of KU HEA Program enrolled customers versus 6.2% to 8.3% for those that have been removed or wait listed have arrears in excess of $200.

KU-HEA Customer Balance Owed					
Current Balance	**All**	**Enrolled**	**Remove**	**Removed**	**Wait List**
Negative Balance	3.8%	4.0%	0.0%	3.6%	0.0%
<$20	15.1%	16.0%	14.3%	13.7%	8.3%
$21-$50	12.1%	11.7%	14.3%	13.0%	16.7%
$51-$100	29.9%	30.3%	21.4%	28.9%	33.3%
$101-$200	33.7%	33.1%	42.9%	34.5%	33.3%
>$200	5.3%	4.8%	7.1%	6.2%	8.3%

Table 5 – Comparison of Customer Balance Owed

4.5.3. Reduction in Loss-of-Service due to Non-Payment

The HEA Program greatly helps customers get their bills under control and significantly reduces the amount of disconnect notices that they receive.

Table 6 shows the comparison of the number of disconnect notices for customers in the program. Customers enrolled in the KU HEA Program have received significantly fewer brown bill notices than those that are not in the program.

KU-HEA Database (Duplicate Entries Removed)				
Disconnect (Brown Bill) Notices	**All**	**Enrolled**	**Remove**	**Removed**
None Received	1,759	1117	20	499
Received 1 or more Notice	199	77	3	117
% With Disconnect Notice	11.3%	6.9%	15.0%	23.4%

Table 6 – KU HEA Customer Brown Bill Notices

Table 7 shows the comparison of the number of disconnects for customers in 2005. If we look at KU HEA Enrolled customers vs. Removed customers we can see that customers still enrolled in the KU HEA program have much lower rates of disconnects (19.3%) than those who have been removed from the program (31.8%). This would indicate that those actively enrolled in the KU HEA Program (which provides assistance for 7 months out of the year) are less likely to have disconnection of services.

KU-HEA Database (Duplicate Entries Removed)					
# of Disconnects	**All**	**Enrolled**	**Remove**	**Removed**	**Wait List**
0 Disconnects	1,484	963	18	420	83
1-2 Disconnects	348	192	4	149	3
3-4 Disconnects	72	32	1	39	0
5-6 Disconnects	13	6	0	7	0
Greater than 6 Disconnects	2	1	0	1	0
% With Disconnect	22.2%	19.3%	21.7%	31.8%	3.5%

*Note: Blank spaces within the database were considered 0's

Table 7 – KU HEA Customer Disconnects (2005)

Similarly, Table 8 shows a comparison of customer disconnects for customers in 2006. It shows a strong argument that those KU customers that participate in the KU HEA program are less likely to experience service disconnects. Only 16% of KU HEA enrolled customers experienced a service disconnect compared with 40% for removed clients and an unsettling 61% for those customers that have not yet participated in the KU HEA program and have been put on the wait list.

KU-HEA 2006 Data				
# of Disconnects	**All**	**Enrolled**	**Removed**	**Wait List**
0 Disconnects	1395	878	479	38
1-2 Disconnects	426	148	238	40
3-4 Disconnects	98	17	67	14
5-6 Disconnects	25	2	17	6
Greater than 6 Disconnects	4	3	1	0
% with a Disconnect	28.4%	16.2%	40.3%	61.2%

Table 8 – KU HEA Customer Disconnects (2006)

4.5.4. Increased Energy Savings through Weatherization Programs

Table 9 shows data for the number of customers enrolled in the weatherization program. It is important to note that KU customers are only eligible for weatherization every 10 years. The customers enrolled in the KU HEA Program show a higher percentage of enrollments in the weatherization program than those customers that have been removed, are waiting to be removed or are still on the wait list.

KU-HEA Database (Duplicate Entries Removed)					
	All	**Enrolled**	**Remove**	**Removed**	**Wait List**
Enrolled In Weatherization	377	257	2	108	6
Not Enrolled In Weatherization	1581	937	21	508	80
% Enrolled in Weatherization	19.3%	21.5%	8.7%	17.5%	7.0%

Table 9 – KU HEA Customers Enrolled in Weatherization Program

108 of the 1,194 (9%) KU customers that have been enrolled in the 2005 KU HEA program have received weatherization through the WeCare program. Table 10 shows that nearly $127,000 has been spent weatherizing HEA program homes through the WeCare program and that the average spent per home has been $1,175 with the minimum being $144 and the maximum expenditure having been $1,867. A review of the KACA database shows that another 135 households have been weatherized in the Federally funded Department of Energy Weatherization Assistance Program (WAP), meaning about 20% of the households participating in the HEA Program have been weatherized. DOE studies show that households receiving weatherization assistance have their energy usage reduced by 20%. The average cost to weatherize a home through the federal program was approximately $2,700 with a maximum of $3,600 and a minimum of approximately $400.

KU HEA Receiving WX Service (108)		
Total $ Spent	$	126,922.80
Average $ per Site	$	1,175.21
Minimum $ per Site	$	144.75
Max $ per Site	$	1,866.95

Table 10 – Weatherization Services

Home weatherization through the WeCare program measures have included: refrigerator replacements, faucet aerators, air sealing measures, attic insulation, air conditioner tune-up, CFL lamps, crawl space wall insulation, duct sealing and wrap, energy audits, energy education, safety repairs, heating system repairs and tune-ups, hot water pipe insulation, hot water tank wrap, mattress pads, rim joist insulation, roof vents, low flow showerheads, setback thermostat, vapor barriers, water heater temperature reduction and replacement of inefficient window air-conditioners with high efficiency units.

Weatherization tracking savings estimates have not been provided by the HEA program. However, savings estimates from an RLW Kentucky AEP TEE Program evaluation completed in 2005 reported an average home savings of 1,390 kWh for low income homes receiving weatherization. If we take the 108 homes and use the conservative savings estimate of 1,390 kWh we see an annual savings of 150,120 kWh. At an average cost of $.05 per kWh this would represent customer annual savings of about $7,506 per year or about $70 per account. Table 11 reports the estimated annual kWh savings by measure type.

Measure Type	Electric Heat Tracking Savings/Measure (kWh)	Non-Electric Heat Tracking Savings/Measure (kWh)
CFL (per site)	401	325
Air Sealing Measures (per home)	1,726	na
Attic insulation (per home avg.)	1,973	na
Sidewall insulation (per home avg.)	1,924	na
Floor insulation (per home avg.)	3,107	na
Water Heater Tank Wrap (per wrap)	110	115
Hot Water Temperature Reduction	513	660
Low-Flow Showerhead	901	901
Pipe Insulation (per linear foot)	0.88	0.92
Heat Pumps	1,887	na
Waterbed Cover	na	na

Table 11 - Estimated Average kWh Savings by Measure Type

4.5.5. Total Households Served

Figure 1 shows the KU Service area as well as the other electric distribution service areas.

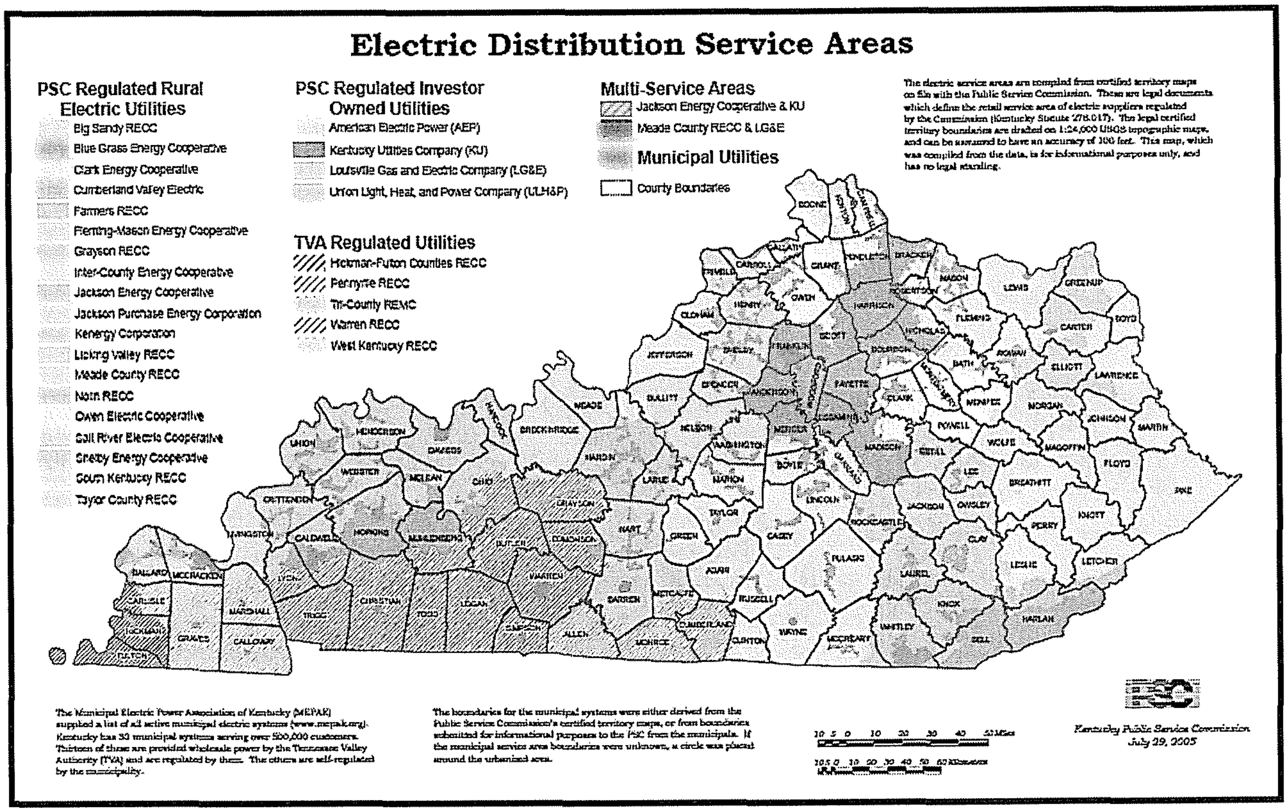

Figure 1 – Kentucky Electric Distribution Service Areas

Table 12 shows that 70 of the 77 Counties in the KU territory have members in the HEA program. There are 1,194 members currently enrolled in the program. The original target for program enrollment was 1,300 slots. Thus, 92% of the slots are being served at the time of this writing with the remainder being filled as possible. Some members had been removed from the program however, thus program enrollment was initially much closer to 100% of the allotted slots.

County	# in HEA	County	# in HEA
Adair	7	Knox	9
Anderson	19	Larue	9
Ballard	3	Laurel	28
Barren	2	Lincoln	11
Bath	5	Livingston	1
Bell	42	Lyon	7
Bourbon	12	Madison	54
Boyle	30	Marion	15
Bracken	6	Mason	12
Bullitt	2	McCreary	3
Caldwell	1	Mclean	8
Carroll	8	Mercer	20
Casey	4	Montgomery	22
Christian	2	Muhlenberg	38
Clark	34	Nelson	4
Clay	5	Nicholas	17
Crittenden	6	Ohio	9
Estill	9	Oldham	2
Fayette	324	Owen	2
Fleming	6	Pendleton	1
Franklin	8	Pulaski	27
Gallatin	4	Robertson	1
Garrard	13	Rockcastle	7
Grant	1	Rowan	13
Grayson	11	Russell	7
Green	3	Scott	29
Hardin	44	Shelby	19
Harlan	37	Spencer	9
Harrison	16	Taylor	10
Hart	10	Trimble	3
Henderson	7	Union	13
Henry	8	Washington	3
Hickman	3	Webster	10
Hopkins	36	Whitley	6
Jessamine	12	Woodford	25

Table 12 – KU HEA Homes Served by County

4.5.6. Total Amount of Assistance Provided

The KU HEA budget is shown in Table 13. Actual program expenditures were not available at this writing. The program budget allows for 10% administrative expenses which is comparable with many programs nationwide. Approximately 90% of the HEA Program revenues that have been collected from KU customers have been paid out in client subsidies.

KU HEA Program (3 Year Budget)	
Revenue	$ 1,433,166
Client Benefits	$ 1,289,857
Administrative Expenses	$ 143,309

Table 13 – KU HEA Budget

4.5.7. Program Availability

This metric was used to determine if KU's implementation of the HEA Program penetrated all of the counties in their electric service territories. RLW tabulated the quantity of customers in each county and CAA in the HEA program and compared the counts to the total number of low income customers in each county served by KU.

Table 14 shows HEA Program enrollment by Community Action Agency (CAA). The largest enrollment numbers were at Community Action Council for Lexington-Fayette, Bourbon, Harrison and Nicholas Counties (CAC) with 368 of 1,194 (31%) of the HEA members signing up at its centers.

Enrollment By CAA	
AUDUBON AREA	47
BELL-WHITLEY	48
BLUEGRASS CAC	167
CENTRAL KY	87
DANIEL BOONE DEV C	40
COMMUNITY ACTION COUNCIL FOR LEXINGTON-FAYETTE, BOURBON, HARRISON AND NICHOLAS COUNTIES	368
GATEWAY CAA	40
HARLAN COUNTY	37
KCEOC	9
KY RIVER FOOTHILLS DC	97
LAKE CUMBERLAND	61
LICKING VALLEY CA	25
MULTI-PURPOSE	30
NORTHERN KY CAC	16
PENNYRILE	91
SOUTHERN KY	12
TRI-COUNTY	13
WEST KY	6
Total	1194

Table 14 – KU HEA Enrollment by CAA

Table 15 further breaks out the information for KU HEA Program Enrollees by giving information on the county served, agency that signed them up, total number of customers in the county, the number of slots originally designated in the program design, the number of customers actually enrolled in the HEA Program, the difference in program vs. original planned slots taken and the last column shows the percentage of customers for each county in the HEA Program.

Most of the counties are near their program enrollment targets. The largest differences are 40 less enrollees in Fayette and 12 more enrollees in Nicholas. The largest percentage of low-income customers in a county enrolled in the HEA program is Nicholas with an estimated 7.7% of the counties low-income residents enrolled. The average percentage of enrollment for all counties is around 2% of residents.

Enrollment By County								
County	Agency	KU Customers in County	Estimated % of Population below Poverty Level (2003)	Estimated Number of Low Income Households	# of Slots Originally Designated	# in HEA Program	# Difference in Program vs. Original Slots	% of Low-Income Customers in HEA Program (By County)
Adair	Lake Cumberland	2,002	20.0%	400	7	7	0	1.7%
Anderson	Bluegrass	5,071	9.2%	467	17	19	2	4.1%
Ballard	West KY	1,884	13.6%	256	6	3	-3	1.2%
Barren	Southern KY	1,016	15.3%	155	3	2	-1	1.3%
Bath	Gateway	1,949	18.5%	361	6	5	-1	1.4%
Bell	Bell Whitley	11,903	25.9%	3,083	39	42	3	1.4%
Bourbon	CAC Lexington	4,362	13.6%	593	14	12	-2	2.0%
Boyle	Bluegrass	8,843	13.3%	1,176	29	30	1	2.6%
Bracken	Licking Valley	2,138	11.7%	250	7	6	-1	2.4%
Bullitt	Multi-Purpose	588	9.5%	56	2	2	0	3.6%
Caldwell	Pennyrile	1,039	14.4%	150	3	1	-2	0.7%
Campbell	Northern KY	432		-	1	0	-1	0.0%
Carlisle	West KY	16		-	0	0	0	0.0%
Carroll	Northern KY	2,789	13.2%	368	9	8	-1	2.2%
Casey	Lake Cumberland	1,347	21.2%	286	4	4	0	1.4%
Christian	Pennyrile	738	15.8%	117	2	2	0	1.7%
Clark	Foothills	11,175	12.4%	1,386	37	34	-3	2.5%
Clay	Daniel Boone	1,613	30.5%	492	5	5	0	1.0%
Crittenden	Pennyrile	2,364	16.8%	397	8	6	-2	1.5%
Daviess	Audobon	Not Reported			0	0	0	0.0%
Edmonson	Southern KY	18		-	0	0	0	0.0%
Estill	Foothills	2,591	21.2%	549	8	9	1	1.6%
Fayette	CAC Lexington	111,055	13.0%	14,437	364	324	-40	2.2%
Fleming	Licking Valley	1,672	16.8%	281	5	6	1	2.1%
Franklin	Bluegrass	2,345	11.0%	258	8	8	0	3.1%
Fulton	West KY	43		-	0	0	0	0.0%
Gallatin	Northern KY	1,157	15.3%	177	4	4	0	2.3%
Garrard	Bluegrass	3,037	13.7%	416	10	13	3	3.1%
Grant	Northern KY	199	12.5%	25	1	1	0	4.0%
Grayson	Central	2,810	16.1%	452	9	11	2	2.4%
Green	Lake Cumberland	1,074	17.2%	185	4	3	-1	1.6%
Hardin	Central	15,566	11.2%	1,743	51	44	-7	2.5%
Harlan	Harlan	12,089	26.8%	3,240	40	37	-3	1.1%
Harrison	CAC Lexington	3,243	12.7%	412	11	16	5	3.9%
Hart	Southern KY	2,888	19.5%	563	9	10	1	1.8%
Henderson	Audobon	2,272	13.3%	302	7	7	0	2.3%
Henry	Tri County	3,310	12.7%	420	11	8	-3	1.9%
Hickman	West KY	787	14.8%	116	3	3	0	2.6%
Hopkins	Pennyrile	10,445	15.3%	1,598	34	36	2	2.3%
Jessamine	Bluegrass	3,872	12.2%	472	13	12	-1	2.5%
Knox	KY Communities	2,928	26.5%	776	10	9	-1	1.2%
Larue	Central	2,408	14.4%	347	8	9	1	2.6%
Laurel	Daniel Boone	8,822	18.7%	1,650	29	28	-1	1.7%
Lee	Middle KY River	566		-	2	0	-2	0.0%
Lincoln	Bluegrass	3,306	17.5%	579	11	11	0	1.9%
Livingston	Pennyrile	434	11.7%	51	1	1	0	2.0%
Lyon	Pennyrile	2,062	13.0%	268	7	7	0	2.6%
Madison	Foothills	17,127	15.0%	2,569	56	54	-2	2.1%
Marion	Central	3,323	15.7%	522	11	15	4	2.9%
Mason	Licking Valley	5,448	15.9%	866	18	12	-6	1.4%
McCracken	West KY	807		-	3	0	-3	0.0%
McCreary	Lake Cumberland	1,466	27.5%	403	5	3	-2	0.7%
Mclean	Audobon	2,032	13.8%	280	7	8	1	2.9%
Mercer	Bluegrass	6,220	12.7%	790	20	20	0	2.5%
Montgomery	Gateway	6,640	14.5%	963	22	22	0	2.3%
Muhlenberg	Pennyrile	11,729	17.3%	2,029	38	38	0	1.9%
Nelson	Central	2,349	11.8%	277	8	4	-4	1.4%
Nicholas	CAC Lexington	1,534	14.3%	219	5	17	12	7.7%
Ohio	Audobon	3,813	16.1%	614	12	9	-3	1.5%
Oldham	Tri County	4,506	5.8%	261	15	2	-13	0.8%
Owen	Northern KY	1,751	14.7%	257	6	2	-4	0.8%
Pendleton	Northern KY	660	12.1%	80	2	1	-1	1.3%
Pulaski	Lake Cumberland	7,917	17.1%	1,354	26	27	1	2.0%
Robertson	Licking Valley	298	17.4%	52	1	1	0	1.9%
Rockcastle	Daniel Boone	2,543	19.7%	501	8	7	-1	1.4%
Rowan	Gateway	4,042	18.8%	760	13	13	0	1.7%
Russell	Lake Cumberland	2,001	19.9%	398	7	7	0	1.8%
Scott	Bluegrass	12,667	10.0%	1,267	41	29	-12	2.3%
Shelby	Multi-Purpose	9,270	9.9%	918	30	19	-11	2.1%
Spencer	Multi-Purpose	1,477	8.3%	123	5	9	4	7.3%
Taylor	Lake Cumberland	3,625	16.6%	602	12	10	-2	1.7%
Trimble	Tri County	1,155	12.8%	148	4	3	-1	2.0%
Union	Audobon	4,475	14.1%	631	15	13	-2	2.1%
Washington	Central	1,486	13.9%	207	5	3	-2	1.5%
Webster	Audobon	2,205	13.8%	304	7	10	3	3.3%
Whitley	Bell Whitley	2,779	23.1%	642	9	6	-3	0.9%
Woodford	Bluegrass	9,438	9.1%	859	31	25	-6	2.9%
Totals		**397,051**		**58,205**	**1,301**	**1,194**	**(107)**	

Table 15 – KU HEA Percentage Enrollment by County/Agency

4.5.8. Movements of HEA Enrollees In and Out of Program

This metric was used to examine the enrollment activities. The average length of time in the program for those customers that are still actively enrolled was approximately 639 days or about 1 year and 9 months, those that have been removed was approximately 250 days or a little over 8 months, those on the remove list averaged 308 days.

4.5.9. Demographic Characteristics

Table 17 below shows KU customer demographics. Information provided for each of the service territories includes: estimated percentage of population below the poverty level, the median household income, median income for families with children, median income for single mother families, median home value, and info on children receiving Medicaid, KCHIP, KTAP or SSI.

The KU service territory average for percent living below the poverty level was 15.5% in 2003, the estimated median income was nearly $34,000 (over $37,000 for families with children, and nearly $15,000 for single mother families). The median home value in 2000 was $72,050.

KU Service Area Demographic Information									
County	Estimated % of Population below Poverty Level (2003)	Estimated Median Household Income (2003)	Median Income for Families with Children (2000)	Median Income for Single Mother Families (2000)	Median Home Value (2000)	Number of Children Receiving Medicaid (July 2004)	Number of Children Receiving KCHIP (2004)	Number of Children Receiving KTAP (2004)	Number of Children Receiving SSI December (2003)
Adair	20.0%	$ 25,266	$ 32,122	$ 14,688	$ 60,800	1,765	555	154	124
Anderson	9.2%	$ 47,435	$ 51,358	$ 24,432	$ 89,500	1,054	335	83	52
Ballard	13.6%	$ 35,052	$ 43,453	$ 13,750	$ 58,800	684	155	71	42
Barren	15.3%	$ 32,932	$ 37,776	$ 15,453	$ 77,900	3,309	831	496	202
Bath	18.5%	$ 28,484	$ 31,675	$ 12,313	$ 65,000	1,388	309	154	98
Bell	25.9%	$ 21,257	$ 22,010	$ 8,802	$ 52,500	4,857	1,000	602	351
Bourbon	13.6%	$ 36,768	$ 39,529	$ 13,725	$ 84,500	1,449	322	146	81
Boyle	13.3%	$ 36,750	$ 41,684	$ 16,250	$ 86,400	2,117	502	221	219
Bracken	11.7%	$ 37,379	$ 42,180	$ 15,000	$ 69,000	727	172	87	59
Bullitt	9.5%	$ 48,192	$ 48,775	$ 19,121	$ 105,100	4,176	1,202	198	165
Caldwell	14.4%	$ 31,393	$ 39,276	$ 13,640	$ 53,600	1,070	317	110	73
Carroll	13.2%	$ 38,807	$ 42,167	$ 11,220	$ 79,900	922	246	41	70
Casey	21.2%	$ 24,201	$ 26,238	$ 16,944	$ 49,500	1,862	543	111	105
Christian	15.8%	$ 31,108	$ 31,790	$ 16,446	$ 72,500	6,042	1,367	714	514
Clark	12.4%	$ 41,627	$ 43,462	$ 16,272	$ 93,700	2,824	643	431	163
Clay	30.5%	$ 18,835	$ 18,864	$ 8,801	$ 43,800	3,954	827	720	447
Crittenden	16.8%	$ 30,043	$ 34,612	$ 12,604	$ 48,300	706	213	101	31
Estill	21.2%	$ 25,660	$ 26,192	$ 12,500	$ 50,200	1,884	417	285	137
Fayette	13.0%	$ 40,896	$ 51,198	$ 19,535	$ 110,800	14,649	2,885	2,605	1,064
Fleming	16.8%	$ 29,857	$ 34,286	$ 16,211	$ 63,600	1,409	404	174	71
Franklin	11.0%	$ 42,265	$ 46,967	$ 17,120	$ 91,600	2,909	578	226	252
Gallatin	15.3%	$ 34,999	$ 40,054	$ 14,167	$ 87,100	782	164	56	46
Garrard	13.7%	$ 37,900	$ 37,614	$ 15,233	$ 81,300	1,285	356	141	84
Grant	12.5%	$ 41,213	$ 41,815	$ 17,463	$ 93,100	2,163	487	217	115
Grayson	16.1%	$ 29,315	$ 32,643	$ 11,605	$ 65,600	2,660	654	229	131
Green	17.2%	$ 27,378	$ 31,500	$ 10,536	$ 52,500	1,057	330	58	54
Hardin	11.2%	$ 42,184	$ 41,002	$ 17,361	$ 88,300	6,768	1,699	611	595
Harlan	26.8%	$ 21,802	$ 22,800	$ 10,894	$ 43,000	5,073	1,175	784	387
Harrison	12.7%	$ 37,776	$ 41,250	$ 15,563	$ 83,100	1,388	390	141	94
Hart	19.5%	$ 26,637	$ 30,806	$ 15,216	$ 60,100	1,878	493	168	97
Henderson	13.3%	$ 38,247	$ 41,870	$ 15,534	$ 76,600	3,592	771	572	264
Henry	12.7%	$ 38,359	$ 42,367	$ 15,909	$ 82,100	1,181	299	122	63
Hickman	14.8%	$ 32,621	$ 35,996	$ 12,895	$ 49,200	411	119	74	20
Hopkins	15.3%	$ 33,341	$ 35,806	$ 13,570	$ 57,200	4,298	1,063	723	352
Jessamine	12.2%	$ 41,257	$ 43,085	$ 17,756	$ 102,100	3,027	742	395	166
Knox	26.5%	$ 22,239	$ 23,205	$ 9,183	$ 59,400	5,340	1,049	1,092	338
Larur	14.4%	$ 34,241	$ 36,569	$ 13,917	$ 72,100	1,222	354	105	65
Laurel	18.7%	$ 29,581	$ 30,521	$ 12,675	$ 77,300	6,777	1,652	648	355
Lincoln	17.5%	$ 29,023	$ 31,932	$ 16,685	$ 65,100	2,458	715	232	167
Livingston	11.7%	$ 33,605	$ 41,275	$ 13,841	$ 58,200	714	198	88	41
Lyon	13.0%	$ 33,975	$ 40,903	$ 12,500	$ 80,700	355	115	27	16
McCreary	27.5%	$ 20,843	$ 20,651	$ 9,294	$ 46,300	3,293	512	569	175
McLean	13.8%	$ 31,825	$ 34,960	$ 13,929	$ 58,200	895	341	87	142
Madison	15.0%	$ 35,586	$ 39,000	$ 15,176	$ 93,500	5,168	604	666	92
Marion	15.7%	$ 33,210	$ 36,567	$ 12,819	$ 70,300	1,553	316	211	113
Mason	15.9%	$ 33,143	$ 37,941	$ 14,583	$ 71,900	1,537	253	241	39
Mercer	12.7%	$ 37,616	$ 42,684	$ 17,554	$ 83,800	1,563	391	168	99
Montgomery	14.5%	$ 34,426	$ 34,531	$ 16,250	$ 82,100	2,333	560	355	147
Muhlenberg	17.3%	$ 30,458	$ 32,191	$ 11,727	$ 58,200	3,197	877	374	243
Nelson	11.8%	$ 42,742	$ 42,813	$ 15,474	$ 87,100	2,957	818	337	167
Nicholas	14.3%	$ 31,233	$ 35,640	$ 19,500	$ 62,000	685	198	107	43
Ohio	16.1%	$ 32,194	$ 33,813	$ 14,408	$ 56,600	2,580	709	234	148
Oldham	5.8%	$ 66,174	$ 73,331	$ 28,845	$ 158,600	1,404	412	77	64
Owen	14.7%	$ 33,783	$ 38,519	$ 21,875	$ 72,800	953	230	48	43
Pendleton	12.1%	$ 39,075	$ 41,782	$ 18,627	$ 77,700	1,183	290	126	74
Pulaski	17.1%	$ 29,591	$ 30,893	$ 13,324	$ 74,100	6,438	1,805	734	435
Robertson	17.4%	$ 30,014	$ 38,125	$ 15,375	$ 58,500	212	68	31	15
Rockcastle	19.7%	$ 25,983	$ 30,865	$ 13,030	$ 57,000	1,882	409	146	105
Rowan	18.8%	$ 30,471	$ 35,513	$ 12,478	$ 80,000	1,866	451	199	134
Russell	19.9%	$ 24,635	$ 27,965	$ 11,213	$ 62,000	2,076	566	269	131
Scott	10.0%	$ 49,974	$ 54,217	$ 20,556	$ 107,900	2,445	506	213	109
Shelby	9.9%	$ 47,066	$ 52,895	$ 18,729	$ 114,600	2,072	453	188	107
Spencer	8.3%	$ 51,991	$ 51,488	$ 12,000	$ 122,400	721	236	35	30
Taylor	16.6%	$ 30,407	$ 34,632	$ 12,938	$ 70,700	2,135	602	245	182
Trimble	12.8%	$ 38,851	$ 42,015	$ 20,750	$ 82,500	813	221	86	41
Union	14.1%	$ 35,791	$ 36,978	$ 12,554	$ 59,400	1,230	313	143	75
Washington	13.9%	$ 34,783	$ 39,100	$ 16,250	$ 72,000	833	262	72	43
Webster	13.8%	$ 34,210	$ 37,838	$ 19,457	$ 45,800	1,132	310	141	98
Whitley	23.1%	$ 23,970	$ 28,411	$ 11,012	$ 62,100	5,729	1,298	721	443
Woodford	9.1%	$ 48,515	$ 59,622	$ 26,298	$ 117,100	1,113	256	168	45
Averages	**15.5%**	**$ 34,407**	**$ 37,909**	**$ 15,191**	**$ 74,376**				
Median	14.5%	$ 33,694	$ 37,807	$ 14,844	$ 72,050				
Min	5.8%	$ 18,835	$ 18,864	$ 8,801	$ 43,000				
Max	30.5%	$ 66,174	$ 73,331	$ 28,845	$ 158,600				

*Sources:
Census 2000
Medicaid : MS-264 Medicaid in Kentucky Report (http://www.chfs.ky.gov/dms/provider/Statistics/default.htm)
KCHIP Kentucky Cabinet for Health and Family Services, Department for Medicaid Services (Kentucky Children's Health Insurance Program, KCHIP)
K-TAP: PA-264 Report: Public Assistance in Kentucky Fiscal Year, 2004 (Kentucky's Transitional Assistance Program, KTAP)
SSI: http://www.ssa.gov/policy/docs/statcomps/ssi_sc/2003/ (Supplemental Security Income, SSI)
Kentucky Cabinet for Health & Family Services, processed by Kentucky Population Research at the University of Louisville Urban Studies Institute.

Table 16 – KU Customer Demographic Information

Table 17 shows additional demographic information for KU HEA program participants.

KU Customer Demographics	All	Enrolled	Remove List	Removed	Wait List
Avg. Monthly Reported Income	$ 649.53	$ 677.48	$ 484.57	$ 606.35	$ 627.14
Avg. # of Family Members	2.32	2.15	2.78	2.61	2.33
3+ Person Households	38.5%	33.6%	52.2%	46.3%	39.5%
Avg. House Payment	$ 237.27	$ 211.54	$ 343.14	$ 275.86	$ 238.12
Avg. Amount Food Stamps	$ 149.34	$ 130.23	$ 255.59	$ 178.26	$ 139.76
Avg. Annual kWh	15,233	15,545	17,089	14,642	14,332
Education					
< or = to 6th Grade	6.6%	6.9%	0.0%	5.6%	12.0%
6th to 8th	14.3%	16.0%	4.3%	11.0%	16.9%
9th	5.0%	5.2%	4.3%	5.1%	2.4%
10th	8.0%	8.0%	8.7%	7.9%	8.4%
11th	9.7%	9.0%	8.7%	10.5%	8.4%
12th	15.3%	17.2%	8.7%	11.6%	22.9%
GED	6.8%	6.7%	8.7%	6.7%	7.2%
HS Diploma	16.7%	15.0%	34.8%	19.8%	15.7%
Some College	11.2%	10.4%	8.7%	13.1%	4.8%
Associates Degree	2.5%	2.5%	8.7%	2.5%	1.2%
Bachelors Degree	1.6%	1.4%	0.0%	2.5%	0.0%
Masters	0.5%	0.5%	4.3%	0.5%	0.0%
Doctorate	0.1%	0.0%	0.0%	0.3%	0.0%
No School	1.9%	1.4%	0.0%	3.1%	0.0%
Housing					
Own Home	37.1%	45.2%	38.9%	20.9%	57.0%
Public Housing	1.1%	1.2%	0.0%	1.1%	0.0%
Rent Housing	35.0%	25.5%	50.0%	50.4%	29.1%
Subsidized	26.6%	28.0%	11.1%	27.5%	13.9%
Disabled					
Disabled	33.4%	40.0%	69.5%	22.4%	29.0%
Healthcare Source					
K-Chip	1.9%	1.3%	0.0%	3.4%	0.0%
Medicaid	40.2%	40.8%	34.8%	39.3%	39.0%
Medicare	21.2%	26.3%	8.7%	13.4%	19.5%
None	31.6%	26.5%	52.2%	39.0%	36.6%
Private Insurance	5.0%	5.1%	4.3%	4.8%	4.9%
Family Type					
Adults/No Children	47.7%	54.8%	44.4%	35.3%	49.4%
Single Parent/Female	37.3%	32.3%	27.8%	46.6%	28.6%
Single Parent/Male	1.8%	1.1%	0.0%	2.8%	3.9%
Two Parents	13.3%	11.7%	27.8%	15.2%	18.2%

Table 17 – KU HEA Customer Demographic Information

4.5.10. Impact of excluding arrearage pay-down

This metric was used to determine the monetary impact on the participants if the arrearage pay-down benefit was added to the program. Customers are admitted to the HEA Program whether or not they have an arrearage at the time of application. These customers might be helped with an HEA program arrearage payment plan that could help them pay off past arrears that they have had a hard time catching up on.

4.5.11. Review of KU HEA Program Involvement

RLW provided an assessment of what type of involvement KU had in the program implementation and monitoring, and whether it was adequate to provide "active monitoring of the program" as specified by the KPSC. The Interviews section details the program involvement.

4.6. Interviews

The primary intent of the interviews was to:

- Obtain an in-depth understanding of the program data collection process
- Determine the level of utility involvement and activity in the HEA Program
- Identify if the collection of program participation data is adequate

4.6.1. Interview Participants

The interviewees were first asked to describe their current position, title and their general responsibilities and role in the HEA Program. The following is a list of those involved with the KU HEA Program that completed interviews.

Kip Bowmar – Executive Director of KACA (Kentucky Association of Community Action)
Judy Dennis – Manager of Emergency Services for CAC (Community Action Council), Lexington, KY
Julie Carmack – Family Services Supervisor for Bullitt, Spencer, and Shelby Counties.
Lynne Robey – Program Director for LIHEAP and community services for Central KY community action.
Pam Craig – County Coordinator for Tri-County, oversees all programs in county.
Vikki Embry – Director of Community Services for Audubon area

4.6.2. Program Questions

This section highlights answers to questions relating to the utility involvement in the program, and on how participation is documented.

Those respondents familiar with how the program was developed and launched were asked: "Could you describe what were the expectations on how much the utilities would be actively monitoring the program?" The following are some of the thoughts shared:

- An agreement was reached and the program was created offering a subsidy to KU customers who need help paying their bills. We have agreements with other community action agencies within the state. Enrollment applications are entered into the IRIS database and people are put on a waiting list. As openings are available, the wait list containing account numbers is electronically submitted to KU. KU verifies the applicant (account number) is an active KU customer and enrolls their customer in HEA. We provide training to other agencies so that they know how to work the IRIS database.

- HEA personnel can go into the database and monitor who is part of the program and anyone who doesn't pay is dropped and HEA will directly communicate back with us so that we can fill the slot so that people aren't receiving only a small number of the incentives based on the remainder of the year.

Next they were asked: "Are they meeting those expectations nowadays? What differences have you seen?"

- They monitor what we submit to them to be sure that the client is in fact their customer and they also submit back to us the client usage history, which is maintained in IRIS.

- We worked closely with them in a rate settlement case. There are slight differences between the LGE and KU model and LGE model I think is more complex. The utilities perceived that we would be managing the program and we have helped to provide client information and financial data (client data and characteristics); LGE and KU have built in records and so it is a self-sufficient program by its nature. There's not much for admin because this is relatively self-sufficient.

- Everything works very well.

- KU is doing a good job but in beginning it was difficult to get budget reports in the same format that KU was comfortable with. We went around and around trying to get the reports in correct format. We made the changes they were looking for and that they were comfortable with.

The interviewees were next asked: "Specifically, what information do the utilities normally request, and how often are these requests?" They mentioned:

- They don't specifically request information from us, it goes the other way. (see above for process details)

- Usually information requests flow in other direction because we take applications; we might occasionally check to see if they are eligible but when we need information they are good about being very responsive and helpful; they've been responsive to us when we needed something.

The next question asked was: "Are you familiar with how program participation information gets collected and processed?" Responses included:

- Finding the person to enroll, coordinators in each of the 7 counties work with the IRIS system database (income eligibility, household info, etc.); clients apply for the weatherization program and our agency also does the weatherization program and forward it on to a central location in KY and we let the utilities and HEA program know that the client has applied for weatherization. If they meet the requirements of HEA program they are requested to participate in the weatherization program.

- To be eligible for the program the clients have to be eligible for LIHEAP. The Community Action Agencies (CAA's) verify income of clients and maintain the file documentation. To determined eligibility for our program, we factor in household income, house size, and energy usage.

"Then from your viewpoint, is the participation information thorough, and consistently documented? Are there any particular gaps?" The responses were:

- Our intake process is very thorough and from my perspective there isn't any missing information; everything is consistently documented.

- We've had a higher rate of program drop outs than was initially expected and part of the concern is that we didn't know if the initial benefit level would have enough of an impact - and it has been discussed that this level might be increased; as the benefits increase customers will likely stay involved and enrolled. We have proposed and submitted to commission that the benefit level be raised and are awaiting a ruling. The information gathered is sufficient enough as we are able to monitor improvements needed and made in the household.

- Collected through the IRIS database and then that is submitted. No gaps, but only complaint is that it is a very lengthy process and for some, it is difficult.

- The only problem is that even though we pledge an amount and it is posted to the account the consumer is still responsible for the bill until the utility company receives our payment, which in some cases could cause the consumer to be disconnected.

- I think it's consistent and thorough; there is an intake sheet that tells you about the families. We collect our own program information which requires more information than IRIS.

- I think everything is fine. The data for HEA is very much like data required for other programs and other programs ask for similar information on heating assistance and the block grant.

Lastly the interviewees were asked: "Are there any other issues relating to the previous questions that you'd like to bring up?" This question prompted the following responses:

- We're in fairly good shape and the program is moving along well.

- Maybe there should be a time limit on the program so that others can participate in the program, maybe only 2 years. I would like to add that anytime we get to help families I like to do that, but we only have so many resources to make use of and the more programs we get the more people we can serve.

- The program is going great; from my 5 years experience it has come a long way and the utilities and agencies are working together with their focus truly on the consumer no matter what their situation may be (elderly, disabled, etc).

- For those of us who don't know how the program got started perhaps KU could describe as to how the program got started.

> I think HEA is a fabulous program and would like to get more people into it. The program runs itself and is low maintenance. I don't have to spend much time or money on it.

4.6.3. Interviewees Suggested HEA Program Improvements

The following are some of the improvements that one or more of the interviewees would like to see considered:

- Additional utility sponsorship in the form of financial contributions, especially arrearage help if the program received additional funding to make this possible
- Have the utilities be involved in the training sessions

4.6.4. Interview Conclusions

KU and LG&E has done a good job of communicating program changes and needs to the agencies. The utilities are very responsive and helpful whenever the HEA team members require information. KU and LG&E participates in quarterly meetings with the KU and LG&E HEA programs and the reps generally attend board meetings. All of the HEA Program members work well together and share information willingly. The program is doing great and has come a long way and truly focuses on the consumer and their needs.

5. Challenges and Benefits to HEA program Merger

Currently LG&E manages one of the HEA programs focused around the Louisville area with AEC as its administrator. The KU HEA program is managed by KU and is community action based and covers 77 counties.

Some benefits as well as challenges would result in the merging of the two HEA programs. Some of the challenges include:

- Developing a software solution that would be able to be implemented for use by both programs would be a major expense (Both programs have different structures in place and a common software solution would be expensive, lengthy to implement and increase administrative costs)
- Finding additional funding sources to help more customers
- Dealing with demographic differences in serving customers
- If arrearage payoff plans are to be used to make sure that credit is applied appropriately

Some benefits might include:

- Both utilities could benefit from each others lessons learned
- May lead to improved levels of service by taking the best traits from each program

6. Recommendations

- At the next filing the company should seek a change from a specific percentage of the poverty guideline (currently 130% with the recent change) for the HEA eligibility to simply state "the LIHEAP income eligibility guideline." This would allow for HEA enrollment criteria to respond to the latest guidelines without confusion.

- Ensure the distribution of energy conservation materials at the point of HEA application to compliment and likely enhance the CAA's other energy conservation training and information activities
- Apply a tiered payment structure based on need. Current funding levels, size and complexity for the HEA program make this impractical at this time, however, if additional funding becomes available this item should be considered at that time. Currently the participating CAA's do work to compensate for differences in household income and energy burden by targeting those in greatest need for additional assistance from the various resources available to them
- Increase benefits amounts: Note that this has occurred with funding increasing from up to $294 annually to up to $439 annually. This increase was the result of funds not being disbursed and this increase was to make up for distributing the collected revenue.
- Work closely with the CAA's to provide additional case management services to help clients with payment options and referrals to community resources.
- Consider additional utility sponsorship in the form of financial contributions, especially arrearage help and additional money for monthly customer benefits
- Have the utilities be involved in the training sessions
- Petition the state to allow additional points in the weatherization priority scoring system to allow for additional points for households enrolled in an HEA to help increase the likelihood those households receive those services.

7. Conclusions

The HEA Program helps make low-income customers energy bills more affordable.

The success of the HEA Program can be measured in whether or not program participants are able to make their bill payments on time.

Statistical results show that customer participation in the HEA Program significantly improves service continuity by reducing brown bills (disconnection notices), disconnections for non-payment and account closure rates. Additionally, a noticeable reduction in the average KU debt occurs with program participation.

By reducing the financial stress for poor families and the number of utility disconnects that they must endure, the HEA program also has indirect benefits for the entire community. Some of these benefits being: Homes with disabled, elderly, or young children have additional ability to stay warm in the winter and cooler in the summer to remain healthier, schools have better attendance, fewer homeless people, and parents have more funds to focus on their children's needs.

8. Appendix A – KU and LG&E Demographic Comparison

Table 18 shows the demographic comparison between the KU service territory and the LG&E service territory. The utility area average, median, minimum and maximum values are shown. The represented data includes: estimated percentage of the population below the poverty level, estimated median household income for 2003, the median income for families with children (2000), median income for single mother families (2000) and the year 2000 median home value.

As the table indicates there are some demographic differences between KU and LG&E customers.

- 15.5% for KU and 13.0% for LG&E population below the poverty level (a 2.5% difference)
- A $5,634 difference between the LG&E and KU median household income.
- A $4,570 difference between the LG&E and KU median income for families with kids.
- A small difference of $1,252 for the median income of single mother families.
- A sizeable difference of $13,077 in the median home value.

KU vs. LG&E Demographic Comparison					
Utility Counties	Estimated % of Population below Poverty Level (2003)	Estimated Median Household Income (2003)	Median Income for Families with Children (2000)	Median Income for Single Mother Families (2000)	Median Home Value (2000)
KU Average	**15.5%**	**$ 34,407**	**$ 37,909**	**$ 15,191**	**$ 74,376**
KU Median	14.5%	$ 33,694	$ 37,807	$ 14,844	$ 72,050
KU Minimum	5.8%	$ 18,835	$ 18,864	$ 8,801	$ 43,000
KU Max	30.5%	$ 66,174	$ 73,331	$ 28,845	$ 158,600
LG&E Average	**13.0%**	**$ 40,041**	**$ 42,479**	**$ 16,443**	**$ 87,453**
LG&E Median	12.8%	$ 39,932	$ 41,002	$ 15,909	$ 82,500
LG&E Minimum	5.8%	$ 25,471	$ 29,971	$ 10,536	$ 52,500
LG&E Max	19.5%	$ 66,174	$ 73,331	$ 28,845	$ 158,600

Table 18 – KU vs. LG&E Demographic Comparisons

In Table 19 below we compare KU and LG&E HEA program customers. There is a small difference in average monthly income ($23.30), a 0.56 average household family member difference, and an annual kWh difference of 4,000 kWh. The kWh difference can be attributed to electric hot water and space heating for the KU customers.

HEA Enrolled Customer Demographics				
Utility	Average Monthly Reported Income	Average Number of Family Members	Average Annual kWh	Average Annual CCF
KU	$ 677.48	2.15	15,545	NA
LG&E	$ 700.78	2.71	11,545	879

Table 19 – HEA Enrolled Customer Demographic Comparisons

9. Appendix B – Other Low Income Program Comparisons

9.1. Cost Effectiveness

Table 20 reports the findings of various low income program cost effectiveness analysis studies. The program budget is shown and if calculated: the utility cost test, total resource cost test, modified participant test and the benefit cost ratio test results for the various programs are presented.

	Budget	Utility cost test (UC)	Total Resource Cost (TRC)	Modified Participant (MP)	Benefit/Cost Ratio (B/C)
PG&E Energy Partners Program 2004	$ 56,530,000	0.41	0.41	0.67	
SCE Low Income EMA Program 2005 (2004 budget)	$ 16,000,000	0.75	0.61	0.98	
NHSAVES@Home Energy Assistance Prog. 2004	$ 2,390,373				1.97
WarmChoice 2004	$ 5,590,000				1.08
Energy $avings Partners (2004 budget)	$ 13,204,849		1.12*		
Mass Low Income Energy Affordability Network 2002	$ 3,400,000				>1.0
Indiana Low-Income WX and Refr. Replacement Program	$100,000 to $200,000		1.87		
Targeted Home Performance with ENERGY STAR 2005	$ 1,944,612				1.11

*(Includes both energy and non-energy benefits (debt reduction and arrearage savings)

Table 20 – Various Low Income Program Cost Effectiveness Results

Table 21 reports the LIHEAP program highlights for Kentucky and eight other states in the region. The data represented shows the LIHEAP 2006 fiscal year funding, the income eligibility level required for participation, the minimum and maximum electric and gas benefits, average LIHEAP customer benefits, the number of households served, average annual funding per household, and the LIHEAP program dates of operation. Kentucky compares favorably on a national basis with the average customer on LIHEAP receiving $396 annually compared with $318 for the national average. However, they only exceed West Virginia in payments for those states in the region.

LIHEAP Program Highlights By State											
State	LIHEAP FY 2006 Funding	LIHEAP Income Eligibility Level	LIHEAP Electric Benefits (Min)	LIHEAP Electric Benefits (Max)	LIHEAP Natural Gas Benefits (Min)	LIHEAP Natural Gas Benefits (Max)	LIHEAP Average Benefits	LIHEAP Households Served	Average Annual Funding Per Household	LIHEAP Program Dates
Kentucky	$ 44,347,089	130% of Federal	$ 70	$ 130	$ 80	$ 147		112,000	$ 396	Nov. 1 - Dec. 22 (Crisis until Apr. 15)
Illinois	$ 145,958,602	150% of Federal	$ 100	$ 1,045	$ 100	$ 1,045	$ 400	294,671	$ 495	Nov. 1 - May 31 (Seniors Sept 1 until May 31)
Indiana	$ 53,979,565	150% of Federal	$ 75	$ 350	$ 75	$ 350	$ 225	126,500	$ 427	Heating Nov. 2 - May 31, Cooling June 1 - Sept. 30
Michigan	$ 108,028,072	60% of State Median		$ 972		$ 972	$ 178	381,580	$ 283	Jan. 1 - Sept. 30
Missouri	$ 59,540,905	125% of Federal	$ 65	$ 292	$ 65	$ 292		113,162	$ 526	Heating Oct. 1 - March 31 (Seniors Sept. 1 - March 31)
Ohio	$ 122,258,598	175% of Federal	$ 57	$ 344	$ 57	$ 344	$ 214	257,170	$ 475	Heating Sept. 1 - April 28, Cooling June 1 - Aug. 31
Tennessee	$ 46,362,940	125% of Federal	$ 175	$ 350	$ 200	$ 350		59,566	$ 778	Heating Aug. 1 until exhausted, Cooling May 1 - June 28
Virginia	$ 71,258,558	130% of Federal	$ 90	$ 200	$ 90	$ 330	$ 220	100,000	$ 713	Heating Oct. 11 - Nov. 14, Cooling June 15 - Aug. 15
West Virginia	$ 23,818,279	130% of Federal	$ 80	$ 500	$ 80	$ 500	$ 210	70,000	$ 340	Dec. 5 - Dec. 9, Eligible customers receive 20% off bills
Averages	**$ 75,061,401**		**$ 89**	**$ 465**	**$ 93**	**$ 481**	**$ 241**	**168,294**	**$ 493**	
National Average									$ 318	

http://www.liheapch.acf.hhs.gov/sp.htm

Table 21 – LIHEAP Program Highlights by State

9.2. State Low Income Program Highlights

Figure's 2 through 9 show State low income program highlights for the 8 states listed in Table 21.

The following is a short list of some programs highlights:

- Illinois - 10% discount for customers aged 62 or older who meet income guidelines
- Indiana – Up to $400 towards arrearages, Monthly bill reductions of 9% to 32%
- Michigan – A state tax credit and shutoff protection
- Missouri – Qualified elderly, age 60 or older, or disabled pay 50% of their electric bill
- Ohio – Rate assistance, arrearage payoff help, energy credit up to 30% for those qualified
- Tennessee – Extended payment plans to help pay down arrearages
- Virginia – Waive state sales tax on fuel deliveries, waive security deposits for those eligible
- West Virginia – Reduced rate of 20% for eligible gas or electric customers

Below for comparison sake is a more complete picture of each states policy.

Illinois

State/Local

Low-Income Rate Assistance and Energy Efficiency

Effective 1998, the Supplemental Low-Income Energy Assistance Fund (SLEAF) was authorized through electric utility restructuring legislation. The law directed gas and electric utilities to assess a monthly surcharge from customers and deposit it into a state fund, which the General Assembly appropriates yearly to the state Department of Commerce and Community Affairs, the LIHEAP and weatherization grantee. Annually, about 80 percent of the fund, $65 million, goes for low-income bill payment assistance, and 10 percent, about $7.6 million, supplements the state's weatherization program. LIHEAP makes payments from the fund directly to utilities. SLEAF funds may be used only for assistance to low-income customers of the utilities that assess the surcharge.

Good Samaritan

Local gas companies allow low-income customers to get their heat reconnected by paying 20 percent of their past-due amount, or $250, whichever is less. To qualify for this program, a utility customer must have an annual income that does not exceed 150 percent of the federal poverty line. Peoples Energy, Nicor Gas, Mid American Energy and Ameren are participating in the program.

City Of Chicago

Emergency Housing Assistance Program

emergency roof repairs and other energy saving conservation activities. For more information on these and other programs, call the Department of Housing at 1-312-747-9000.

Emergency Housing Assistance Program

emergency roof repairs and other energy saving conservation activities. For more information on these and other programs, call the Department of Housing at 1-312-747-9000.

Utility

A 10% discount for customers 62 years of age or older with a total household income no greater than 250% of the Federal Poverty Guidelines.

Figure 2 – Illinois Low Income Programs

Indiana

State/Local

Legislation, since 1894, requires Indiana's 1,008 towns and townships to provide "poor relief" that can include housing, utility, food, and medical assistance. Townships are local governmental units within counties and cities, with elected boards and trustees. Property taxes fund "poor relief"; each local entity establishes spending guidelines for the funds. Contact: township offices

Universal Service Program

Beginning January 1, 2005, eligible customers of Citizens Gas and Vectren, who have applied for the state's LIHEAP through local community action agencies, will automatically be enrolled in the new USP and will receive bill reductions in addition to LIHEAP. Monthly bill reductions will range from 9 percent to 32 percent of the total bill (not including LIHEAP benefits), depending on the consumer's income level and utility provider. The pilot USP will also provide additional funding to both utilities' weatherization programs.

Utility

Low-Income Rate Assistance

Northern Indiana Public Service Co. (NIPSCO)
Winter Warmth

LIHEAP eligible customers or customers with a financial hardship can receive up to $400 that can be applied to both the payment of delinquent utility bills and natural gas deposits. Additionally, NIPSCO will limit natural gas deposit payments for LIHEAP eligible customers to $150 and $300 for other non-LIHEAP eligible customers determined to have a financial hardship.

Contact Community Action Agencies

www.nipsco.nisource.com/news/2004/12-16-04.htm

Low-Income Energy Efficiency

Duke Energy
Low-Income Weatherization Program

Offered through a partnership with the state of Indiana, the program is designed to provide energy-saving installations and energy education at no cost to our customers who qualify for the weatherization or heating bill assistance as part of the state or federal programs. Contact Indiana's local Community Action Agencies for more information or call Duke Energy at 1-800-521-2232.

www.cinergypsi.com/inres/savings/free_services/

Figure 3 – Indiana Low Income Programs

Michigan

State

Low-income Rate Assistance

Home Heating Credit

A state tax credit that can help offset the costs of natural gas or electricity used to heat homes in the winter. The Credit is based on household income, the number of exemptions claimed and the home's actual heating costs. Special exemptions may be available to customers 65 and older and to people with disabilities. Obtain forms in late January from: Your tax preparer or wherever other tax forms are provided; Download the forms from the Michigan Department of Treasury Web site at michigan.gov/heatingassistance or call The Michigan Department of Treasury at 800.367.6263. DTE customers can file over the phone between January 9 and September 22, 2006 by calling DTE Energy's Home Heating Credit Hotline at 800.411.4348. Have your household income information and Social Security Numbers for yourself and your dependents available before calling.

www.michigan.gov/heatingassistance/0,1607,7-215-33210---,00.html

Low-income Rate Assistance

Arrearage forgiveness and deposit and fee waivers are provided by utilities that participate in the state's automated positive billing system and other payment plans. Under positive billing, a participating household must pay a percentage of its monthly assistance grant to its utility.

Winter Protection Plan

This plan protects senior and low-income customers of Commission-regulated natural gas and electric companies, rural electric cooperatives and alternative electric suppliers from electric or natural gas service shut-off and high utility payments between December 1 and March 31. Persons qualify for the plan if they meet any of the following criteria:

are age 65 or older, or

receive Michigan Family Independence Agency cash assistance, or

receive Food Stamps or Medicaid, or

have a household income at or below 150% of poverty level.

Winter Protection allows eligible low income customers to make monthly payments of at least 7% of their estimated annual bill, along with a portion of any past-due amount, December through March, and avoid shut-off during that time even if their bills are higher. Eligible senior citizens participating in Winter Protection are not required to make specific monthly payments between December 1 and March 31, but are encouraged to do so to avoid higher bills when the protection period ends. At the end of the protection period, both low-income and senior citizens taking part in the plan must pay off any money owed in installments between April and November.

Figure 4 – Michigan Low Income Programs

Missouri

Utility

Low-Income Rate Assistance

Empire District Electric Company

Empire's Action to Support the Elderly (EASE)

Provides late fee and deposit waivers for elderly (age 60 and older) and handicapped customers.

Independence Power & Light Department

Independence Rate Assistance Program (IRAP)

Qualified elderly, 60 years or older, or disabled customers pay 50% of the electric charges on their bill.

Figure 5 – Missouri Low Income Programs

Ohio
State
Low-Income Rate Assistance

Percentage of Income Payment Plan (PIPP)

Qualifed customers pay 10 percent of their gross monthly household income to the utility company providing their main heating source and five percent to the utility company providing their secondary heating source. Customers can choose to join PIPP for only one utility service. If the company provides both gas and electric services or if the customer has an all-electric home, the payment is 15 percent of the gross monthly income. To qualifiy:

Your utility company must be regulated by the PUCO;
You must apply for all energy assistance for which you are eligible; and,
You must have a gross yearly household income at or below 150 percent of the federal poverty level

If a household is at or below 50 percent of the federal poverty level and the household uses electricity as its secondary source of heat, the household would pay 3 percent instead of 5 percent in the winter heating season only. The Three Percent PIPP payments are not available at Cleveland Electric Illuminating and Toledo Edison due to an existing low-income rate.

Arrearage Crediting Program

Available to PIPP customers who are no longer income eligible for PIPP, the program assists you with gradually paying off your total arrearage amount. Current and former PIPP customers should contact their local utility company for specific information on the rules and regulations of arrearage crediting. Once a customer begins paying the current bill and arrearage payment, they will be eligible to receive matching credit equal to the arrearage payment. Cleveland Electric Illuminating, Dayton Power & Light, and Toledo Edison are excluded from this crediting system. However, all of these companies have crediting systems somewhat similar to the one described above.

www.puco.ohio.gov/PUCO/Consumer/information.cfm?doc_id=93#PIPP

Winter Reconnect Program

Allows most households that have been disconnected or are threatened with disconnection due to non-payment of a utility bill to have service restored during the winter months by paying either the total amount they owe or $175, whichever is less, plus a reconnection fee of no more than $20. Consumers can use the winter reconnect program through April. There is no income eligibility requirement for the winter reconnect program. Income-eligible households can use Emergency Home Energy Assistance Program (E-HEAP) funds for the $175 payment. Consumers can apply for the winter reconnect program in person at a local community action agency or by calling their utility company.

www.puco.ohio.gov/PUCO/Consumer/information.cfm?doc_id=604

Ohio Energy Credit (OEC) Program

Taxation, toll-free, at 1-800-282-4310.

Low-Income Rate Assistance

Dayton Power & Light

937-331-3900 or 1-800-433-8500; TTY-TTD (hearing impaired) 1-800-750-0750

www.waytogo.com/cs/csps.phtml

Percentage of Income Payment Plan Credit Program

Customers who have been on the PIPP program for one year and have more than 12 months PIPP arrears may be eligible for PIPP credits. The amount of credit is based on the total 12 months arrears. This credit is applied to the outstanding balance and not to the current installment.

Fresh Start

An arrearage-crediting program for customers no longer on PIPP.

Figure 6 – Ohio Low Income Programs

Tennessee

Arreage Payoff help...

Memphis Light Gas and Water

On Track

A payment program designed to help customers with limited incomes to manage debt and pay off their bills over a period of time. The program focuses on education, financial management and social services. To qualify for the program customers must have a steady, but limited, income and owe more than $400 to MLGW. Participants may receive Extended Payment Plans (EPP) for up to three years; minor home repairs for homeowners; and deposit credited back to the account after completion of program. Applications and more information are available on the website.

www.mlgw.com/SubView.php?key=res_ontrack

Figure 7 – Tennessee Low Income Programs

Virginia

State

All participating vendors for the LIHEAP Fuel and Crisis Assistance components agree to waive charging the State Sales Tax on all fuel deliveries. Eligible households receive the amount that would be paid to the State for sales tax in the total amount of fuel delivered.

Utility

Low-Income Rate Assistance

Four major utilities in Virginia waive security deposits for LIHEAP eligible customers.

Figure 8 – Virginia Low Income Programs

West Virginia

Utility

All gas and electric utilities offer a reduced rate of 20% from December - April. Eligible customers must receive either SSI, WV WORKS, or Food Stamps AND be 60 years of age or older. Customers must be a recipient of one of these programs during November, December, January, February, and March to get the discount for that month. The discount is a Commission Order, dated March 10, 1984.

www.psc.state.wv.us/utilities/default.htm for list of electric and gas utilities.

Allegheny Power

1-800-255-3443

Dominion Hope

Twenty percent discount on gas bill December through April for SSI or Food Stamp recipients who are 60 years of age or older.

Clarksburg, WV 304-623-8600

Morgantown, WV 304-296-3481

Fairmont, WV 304-363-6300

Parkersburg, WV and all others 1-800-688-4673

TDD for Hearing Impaired Customers: 1-800-395-3490

www.dom.com/customer/wvres_eaprograms.jsp

Figure 9 – West Virginia Low Income Programs

10. Appendix C – Program Delivery Interview Guide

RLW Analytics
HEA Program
Interview Guide

Verbal introduction to interviewee: Our goal in this interview is to gather information relating to your connection to the HEA program. In particular, we are looking at getting an in-depth understanding of how the program data is gathered, and how much utility activity and monitoring takes place on behalf of the program.

The questions I'll pose are all meant to be open-ended. There are no right or wrong answers.

All answers are strictly confidential. Our notes are not shared with anyone else with the utilities or the Public Utilities Commission. In our report, anecdotal answers are either paraphrased or identified in a generic way, ex. "several respondents said…", "one respondent noted…", etc.

1. Background

This is just to get a quick snapshot to put your answers in context.

1. Can you please first briefly describe your current professional position – title and general responsibilities?

2. What is your role in relation to the HEA program, and how long have you been in this role?

2. Program Questions

These are questions relating to the utility involvement in the program, and on how participation is documented.

3. a. Are you familiar with how this program was developed and launched by the utilities?
   __Y __N

   b. IF YES > Could you describe what were the expectations on how much the utilities would be actively monitoring the program?

c. Are they meeting those expectations nowadays? What differences have you seen?

4. a. Are you familiar with how program participation information gets collected and processed?
__ Y __N

b. IF YES > From your viewpoint, is the participation information thorough, and consistently documented? Are there any particular gaps?

5. Are there any other issues relating to the previous questions that you'd like to bring up?

RLW ANALYTICS

Thursday, March 29, 2007

To the HEA Program Parties:

I want to thank all of you from Louisville Gas and Electric Company ("LG&E"), Kentucky Utilities Company ("KU"), the Community Action Council for Lexington-Fayette, Bourbon, Harrison, and Nicholas Counties Inc. ("CAC"), the Kentucky Association for Community Action, Inc. ("KACA"), Metro Human Needs Alliance ("MHNA"), Affordable Energy Corporation ("AEC"), and People Organized and Working for Energy Reform ("POWER") for all your help with the HEA Program Evaluations. It has been a pleasure working with all of you over the past months.

As a core business philosophy, *RLW* recognizes that the choice of the right consultant is paramount to the success of your analysis project. As part of his "14 Points of Management" Edward Demming promoted the idea that businesses would benefit from skipping the competitive bid process, and establish long term, stable relationships with trusted suppliers. His idea is that suppliers, in order to maintain long term relationships, have a natural vested interest in striving to minimize costs while providing quality services. *RLW* supports this notion, and practices it with our clients. *RLW* wants to become your supplier of statistical and analytical services. We work hard to maintain client satisfaction, minimize your costs, and deliver high quality products.

Any errors or omissions in the KU or LG&E HEA Program Evaluations are the responsibility of *RLW Analytics*. In case of questions please call me at the following number (517) 529-6277.

David F. Duda
Project Manager
RLW Analytics, Inc.
2 Hyde Road
Clark Lake, MI 49234
dave@rlw.com

Louisville Gas and Electric Company
Home Energy Assistance (HEA)
Program Evaluation

Final Report

March, 2007

Prepared for:
Louisville Gas and Electric Company

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Table of Contents

Table of Tables

Table of Figures

1. Executive Summary

In June 2006, E.ON U.S. Services Inc. contracted RLW Analytics, Inc. to perform an evaluation of the Louisville Gas and Electric Company ("LG&E") Home Energy Assistance (HEA) Program. This report presents those findings including sections detailing the program and tracking system review, metrics analysis, and program delivery interviews. Also included as appendix are a Kentucky Utilities Company ("KU") and LG&E area demographic comparison, a comparison of other low income programs, and the program delivery survey instruments.

The LG&E HEA Program is operated as a year-round program to assist low income households with relatively high utility bills. The Program is modeled after the All Seasons Assurances Plan ("ASAP") Program and is operated by Affordable Energy Corporation (AEC). The Program is available to electric and gas customers. They receive a subsidy based on income and weather adjusted use that varies each month. The customer benefits are paid out monthly.

The HEA Program helps make low-income customers energy bills more affordable.

The program goals are to make energy more affordable, to promote timely payments, and to allow customers continuous service.

Statistical results show that customer participation in the HEA Program significantly improves service continuity by reducing brown bills (disconnection notices), disconnections for non-payment and account closure rates. Additionally, a noticeable reduction in the average LG&E debt occurs with program participation.

By reducing the financial stress for poor families and the number of utility disconnects that they must endure, the HEA Program contributes to indirect benefits for the entire community. Some of these benefits being: reduced service disconnect threats, customers are able to be more self-sufficient, homes with disabled, elderly, or young children have additional ability to stay warmer in the winter and cooler in the summer to help stay healthier, and parents have more funds to focus on their children's needs.

The LG&E HEA Program administrative budget is comparable with other similar programs. AEC has done a good job administering the program for LG&E and has served as a strong advocate for the low income families in the HEA Program.

RLW would like to thank the LG&E, KU, the various Community Action Councils ("CAC"), the Kentucky Association for Community Action, Inc. ("KACA"), Metro Human Needs Alliance ("MHNA"), AEC, and People Organized and Working for Energy Reform ("POWER") for their assistance in this evaluation. The detailed chapters follow.

2. Program Overview

The LG&E HEA Program is a three year pilot program that has been allowed implementation by the Kentucky Public Service Commission ("KPSC") in their November 24, 2004 orders to the utility. This program is modeled after the ASAP and operated by AEC. As directed in the Orders, the LG&E HEA Program is funded through a 10 cents per electric and/or gas meter charge per month, which raises approximately $750,000 annually and plans to serve about 900 LG&E households. The PSC gave preliminary approval to the programs at the end of September and allowed the utility to begin collecting the surcharge on October 1, 2004.

The goal of the LG&E HEA program is to make electric and gas service more affordable for low income families and individuals. Additional goals are to reduce service disconnections, late fees, arrears and uncollectibles through a combination of subsidies and energy conservation initiatives.

When the HEA program was first developed customers with household incomes at or below 110 percent of federal poverty guideline (was the eligibility level for LIHEAP assistance) were eligible for the program. Since then, the Commonwealth has raised the LIHEAP eligibility level to 130% of poverty, causing some confusion for the HEA beneficiaries and providers. Kentucky is discussing a further change in the eligibility level for LIHEAP, likely a reduction beginning in 2007 – 2008, due to an anticipated decline in available funds.

Applicants must also have a minimum monthly income of $100 and cannot have arrears in excess of $700 to participate.

LG&E requires participants to be enrolled in LIHEAP and apply for and accept any available weatherization assistance. LG&E has a weatherization program called WeCare and Project Warm is available to low-income residents in the LG&E service territory.

The HEA program under LG&E is for eligible customers who use electric or gas heat. They receive a subsidy benefit that is based on income and weather adjusted use and varies each month. During 2005 customers had a portion of the credit applied to reduce arrearages. Since that time the credit is only applied to the current bill. As a benefit to clients, LG&E has put HEA clients on a deferred payment arrangement DFAC for 12 months if there is a past-due amount at the time of HEA enrollment. The KPSC has stipulated that the arrearage assistance from the HEA program can not exceed 50% or $350.

The current formula for customer eligibility considers the following factors: income, household size, energy usage for the past 12 months, natural gas prices and price and weather correction factors. In 2006, AEC allowed for a 60% increase in natural gas prices. In 2007, the program allowed for a 40% decrease in natural gas prices which made a lot of people ineligible for recertification. One of the best features of this program is that every LIHEAP eligible client is **not** eligible for the HEA program. It is calculated that about 30-35% of the LIHEAP clients do not need HEA annual assistance. The HEA program considers each client and the specific data available for each. This may be one of the best features of the program as it is committing funds to those with the lowest of income with the greatest need.

2.1. Available Data

The following information sources were used for the evaluation:

- HEA Customer Benefits Literature
- HEA Customer Sign-up and Recertification Documents
- HEA Staff Info, Program Fact Sheets and Training Documents
- Interagency Letters and Agreement
- LG&E-HEA Administrative Budget
- HEA Demographics Database

- HEA Monitoring Plus WX Database
- ASAP Program Data Files – Calculation Table 2005, ASAPOUT 1-3-06, Current Participant Records for 2005 and 2006, 2006 Recertified Calculation table, 2006 Terminated and Withdrawn Client Tables, New Client Calculation Table 2006,
- LG&E Receive Archive

Note: Some program tracking data was lost when an AEC computer was stolen in October 2005, and the backup data disks did not work as intended.

3. Statement of the Project

3.1. Evaluation Objectives

The overall evaluation objective was to examine and evaluate the effectiveness of the HEA program within the LG&E service territories. In the RFP, 12 researchable metrics were cited for the HEA program in the LG&E service territory.

Table 1 below presents an overview of the required metrics. Table 2 next breaks out the metrics further into the researchable questions, the baseline for the metric (if appropriate), the evaluation procedures, and what the positive indicators were estimated to be.

Metrics	**LGE**
1. Reduction in LIHEAP Crisis Assistance, i.e., the percentage of HEA enrollees freed from the need for LIHEAP Crisis Assistance.	X
2. Reduction in Arrearages, i.e., HEA Enrollees able to reduce arrearages.	X
3. Reduction in Loss-of-Service due to Non-Payment, i.e. HEA enrollees did not experience Loss-of-Service during program's term.	X
4. Increased energy savings through weatherization programs, i.e. HEA enrollees simultaneously enrolled in Weatherization Programs experienced reductions in energy costs.	X
5. Total households served.	X
6. Total amount of assistance provided.	X
7. Program availability: a) LG&E's 9-county electric service territory and 17-county gas service territory, and proposed allocation of 900 participants across the territories. Did the allocations across the respective service territories occur?	X
8. Cross subsidization between LG&E Electric and LG&E Gas customers, i.e. did any cross-subsidization between separate LG&E HEA electric funds and LG&E HEA gas funds occur?	X
9. Movement of HEA enrollees in and out of LG&E HEA program, i.e. are HEA program benefits short-term or long term	X
10. Demographic characteristics of the KU HEA program enrollees vs. LG&E HEA program enrollees, i.e. are demographic differences, if any, an impediment to "mirror-image" programs in both the KU and LG&E Service territories?	X
11. Impact of excluding arrearage pay-down, i.e. does excluding arrearage payments in the LG&E HEA programs have any impact?	X
12. Review LG&E's HEA program involvement, i.e. what was LG&E's level of involvement and has it been adequate to provide "active monitoring of the program"?	X

Table 1- Evaluation Metrics

Metrics	Researchable Question	Baseline	Evaluation Procedure	Positive Indicators
Reduction in LIHEAP Crisis Assistance, Arrearages and Loss-of-Service due to Non-Payment	How does the program impact the level of Crisis Assistance needed in the respective utility territories?	Each enrollee is matched against his/her history of Crisis Assistance for the previous three years	Compare receipt of Crisis Assistance requested and approved during enrollment in the program	Analysis shows correlation of decline in Crisis Assistance with advent of program
	How does the program impact the rate of disconnection notices and actual disconnects?	Data match of enrollees to number of disconnect notices and actual disconnections for one year prior to enrolling	Same data match for duration of time enrollee began program	Reduction in disconnect notices and actual disconnections for enrollees
Increased energy savings through weatherization programs	How does the program impact participation in the weatherization program?	Match enrollee to previous year's energy consumption after he/she accepts weatherization program	Match enrollee to one year of energy consumption after beginning program	Enrollees show a reduction in energy consumption after weatherization program participation (after normalization)
Total households served	How many households were served?	Estimated population of eligible customers	Actual count of enrollees	--
Total amount of assistance provided	How much assistance has been provided?	Projected program dollars	Actual dollars used	--
Program availability	Has the program been equitably distributed among the counties each utility serves?	Estimated distribution of eligible customers	Recorded distribution of enrollees	a) Targeted number of enrollees are met through the program; b) Ratio of enrollees with counties are similar to estimated ratios
Movement of HEA enrollees in and out of the respective KU and LG&E HEA programs	Does the program have short-term or long-term effects?	--	Analyze enrollment activities	--
Demographic characteristics of the KU HEA program enrollees vs. LG&E HEA program enrollees	Are the types of customers served in the KU funded program similar to those served under the LG&E funded program	--	Analyze demographics of enrollees according to available data	Characteristics are similar
Impact of excluding arrearage pay-down	How does the opportunity to use the HEA credit to pay down arrearage affect overall payment behavior and activity among enrollees?	--	Analyze and compare payment activities of LG&E enrollees against KU enrollees	
Active monitoring of the program	Does each utility fulfill the expectations of what is considered as sufficient "active monitoring"?	--	Measure utility resources and activities directly attributable to program monitoring	Measured resources and activities meet or exceed expectations

Table 2 - Research Outline

3.2. Methodology

This section discusses the methodology used for addressing each task required for the successful completion of this study.

3.2.1. Task 1: Project Initiation Meeting

Prior to the launch of the evaluation work plan, RLW had a conference call with key personnel from both utilities, representatives of the KPSC, and representatives of the key community action agencies involved in the program on January 10, 2006. The invited list of attendees was left to the choice of the utility sponsors. During the meeting, RLW reviewed the various evaluation issues and finalized the evaluation schedule.

Specifically, at the time of project initiation, RLW:

- Reviewed the evaluation objectives;
- Reviewed the approach, finalized the schedule, and identified data requirements;
- Decided methodological issues, including data requirements and analytic techniques.

RLW discussed the detailed work plan regarding each of the above elements, and also reviewed project deliverables, costs, responsibilities, completion dates, and a proposed outline for the final report. A discussion of the implementation of the stakeholder interviews also took place.

Detailed notes were taken by RLW staff during the project initiation meeting. These notes were transcribed into a formal memo for submission to all attendees of the meeting, and were used as the source for determining final task details in the work plan.

During the kick-off meeting key items were raised concerning the evaluation. RLW identifies these agreed upon items in the evaluation.

- RLW understood that it is important to each of the utilities that each utility's impact on the HEA program be reviewed both jointly and separately.
- RLW understood that the HEA team is interested in understanding the long-term outlook for the HEA programs.
- The HEA team is interested in identifying what challenges and benefits exist should the programs be combined, particularly in program administration, delivery, and cost savings due to pre-existing infrastructure.
- The HEA team identified that RLW is to review whether or not there is sufficient monitoring of the programs overall and of how rate-payers' money is spent. The team requested that RLW provide examples of how other similar programs accomplish this goal. RLW agreed to meet these terms by providing a qualitative assessment of comparable programs.
- RLW recognizes that data availability has presented some difficulty for the HEA team, in that a computer, with necessary data, was stolen. Both the HEA team and RLW acknowledged that the remaining data would be sufficient for analysis.

Having reviewed the aforementioned objectives, timeline, data requirements, and ancillary items raised during the kickoff meeting, RLW proceeded forward with the proposed work.

3.2.2. Task 2: Develop and Finalize Work Plan

The project initiation meeting, together with the proposal and RFP, laid the groundwork for the project work plan. Specifically, the work plan was developed based upon the RFP and any changes to the evaluation that resulted from the project initiation meeting. The final work plan included the following:

1. A timeline that delineates key milestones,
2. A budget that shows the projected costs for the project,
3. A discussion of all tasks included in the study and the approach to each task,
4. A discussion of the methodology to be used in the study, including sampling and analytic techniques to be used, data requirements, sample sizes, and program issues and questions that will be addressed, and a proposed outline for the final report.

3.2.3. Task 3: Interviews of Program Delivery Participants

Program delivery participants were considered to include Program Administrators, key collaborating parties, and executive staff for the community action agencies. The interview participants and sample sizes were determined and are shown in Table 3.

Proposed Groups	**Sample Size**
Program Administrators	2
Collaborating Parties in Implementation	2
Community Action Agencies	6

Table 3 – Interviews Sampling Strategy

These interviews were intended to be brief, and were conducted to meet the following objectives:

- Obtain an in-depth understanding of the program data collection process.
- Determination of whether or not utility involvement and activity in the program is sufficient to meet the expectations of "active monitoring of the program" requested by the KPSC.

3.2.4. Task 4: Review Program Documentation and Tracking Systems

RLW received all available program materials and program datasets including:

- Program plans, and forms,
- Marketing plans and materials,
- Available regulatory reports,
- Tracking system descriptions and datasets

These materials were reviewed to better understand the program and how data, relevant to the metrics, is currently documented. The tracking system has also been reviewed in order to determine the variables of interest for the study.

Tracking systems typically monitor the following types of information: participant demographics, participant levels, pre- and post-site conditions, measures installed, incentive levels, estimated energy and demand savings, milestone dates, quality control information, and program costs.

The key elements of the tracking system review were:

- ***Review of the database information; identification of inconsistencies and potential misinformation.*** Sanity and logic checks were performed to ensure consistent and meaningful data.
- ***Recommend data quality control procedures necessary for ensuring accuracy and consistency; recommend improvements for database structures and data inconsistency, entry, and quality.*** Based on the personal interviews and the analysis of data quality and content, recommendations were made for improvements to tracking quality control procedures.

3.2.5. Task 5: Metrics Analysis

The intent of this analysis is to provide an update of program impacts through the determination of movements among selected program indicators. To accomplish this, the data obtained from the various data collection tasks has been used to assess activity among each of the metrics. As presented in Table 2 earlier, we have made an effort to outline an approach to each metric update that makes their determination as quantifiable as possible. The results of the metric analysis can be used to illustrate movement in the market, ideally in the desired and program-intended direction.

One important item to consider in metric updates is the determination of causality or attribution of the changes to the program. Central to this assessment of causality is a thorough understanding of the stimulus or intervention that the program has implemented since inception. It is clear from the various metrics provided in the RFP that the program to date has initiated intervention at various points in the market, some or all of which may be causing movement observed in the metric updates. RLW reviewed the various program interventions as part of the program review phase and inquired about their influence in the various metric areas.

The first step in the process was obtaining the HEA Team's tracking databases that contain each metric. The HEA Team provided databases for approximately a one year period.

The first six metrics listed are simple frequencies and cross tabulations from the tracking database.

1. Reduction in LIHEAP Crisis

This metric was used to quantify the percentage of participants who no longer require federal funds through the LIHEAP Crisis Assistance Program. It was calculated as the following ratio:

$$\frac{\textit{HEA enrollees that apply for LIHEAP Crisis Assistance}}{\textit{HEA enrollees in the HEA program only}}$$

2. Reduction in Arrearages

This metric was used to determine the percentage of participants who were able to reduce their debt, which could be attributed to the program. This metric was calculated as the following ratio:

$$\frac{\textit{HEA enrollees that were able to reduce arrearages}}{\textit{Total HEA enrollees}}$$

3. Reduction in Loss-of-Service due to Non-Payment
This metric was used to determine the percentage of participants who were subjected to a loss-of-service calculated as the following:

$$\frac{\textit{HEA enrollees experiencing loss-of-service}}{\textit{Total HEA enrollees}}$$

4. Increased Energy Savings through Weatherization Programs
This metric was used to determine the percentage of participants who were simultaneously enrolled in weatherization programs. This provided an indication of the crossover in funds between the two programs and how effectively they are leveraged for low-income participants.

5. Total Households Served
This metric was used to determine the penetration of the LG&E-HEA program in the low income population.

6. Total Amount of Assistance Provided
This metric was used to determine the total dollar amount of the assistance provided.

7. Program Availability
This metric was used to determine if LG&E's implementation of the program penetrated all of the counties in their electric and gas service territories. RLW tabulated the quantity of customers in each county in the HEA program and compared the counts to the total number of low income customers in each county served by LG&E.

8. Cross-Subsidization
This metric has been used to determine whether there were cross-subsidies between LG&E gas customers and its electric customers.

9. Movements of HEA Enrollees In and Out of Program
This metric was used to determine the length of the program benefits. RLW calculated the average length of time each participant is enrolled in the program and aggregated this to the program level.

10. Demographic Characteristics
This metric was used to determine any demographic differences that exist in the KU and LG&E program populations. Cross-tabulations were performed to determine any statistical differences between the two programs.

11. Impact of Excluding Arrearage Pay-Down
This metric was used to determine the monetary impact on the participants if the arrearage pay-down benefit were removed from the program.

12. Review of LG&E HEA Program Involvement
RLW provided an assessment of what type of involvement LG&E had in the program implementation and monitoring, and whether it was adequate to provide "active monitoring of the program" as specified by the KPSC.

3.2.6. Task 6: Draft Reports

RLW submitted a draft report following the analysis. This report conforms to the final report format included in the RFP. The draft report includes sections that incorporate the following evaluation information:

- An executive summary,
- A summary of the evaluation goals, objectives, methodology, and activities,
- A background description of the program evaluated,
- A detailed review of all major findings based on the researchable metrics,
- Conclusions and
- A prioritized list of recommendations for implementation by the utilities pertinent to the achievement of the stated program goals.

3.2.7. Task 7: Final Reports

Following the internal and external review of the draft report, *RLW* will issue the final report. The schedule provides a week and a half for review of the draft report by the utilities and other parties. The final report will be delivered with all comments and changes resulting from the draft report phase on or before March 29, 2007.

4. Key Findings

4.1. Introduction

This section highlights the key findings for the LG&E-HEA Evaluation. The first section looks at the results from the program documentation and tracking system reviews. Next are the findings for the program design analysis, the metrics analysis, the program interview results and the program communication findings.

4.2. Program Tracking System

In our experience, tracking systems typically monitor the following types of information: key dates, participant demographics, participation levels, pre and post site conditions, program related data, measures installed, incentive levels, estimated energy and demand savings, milestone dates, quality control information, program costs, and other data.

The main purpose of a tracking system review is to ensure consistent tracking, reporting and collection of all necessary program data. RLW examined the tracking system for system structure, function, content and extent of field population.

The LG&E tracking systems cover customer participation well with the following exceptions: It appears that the Weatherization (WX) Program tracking info has not been available for LG&E in the HEA Program database. Later the WeCare and Project Warm WX data was provided in separate databases.

4.3. Documentation Review

4.3.1. Training Document

The HEA Program training document does a good job of introducing the program and its customer benefits and associated costs. It informs the reader of the length of the program and the number and types of customers it is intended to serve. The document also clearly states how the program is administered and monitored, how customer eligibility is determined, how the customers are enrolled and what they need to do to stay enrolled, how the subsidy benefit is distributed, and program participation requirements for the customer to follow.

4.3.2. Program Budget

The budget (shown in Table 13) reflects a thorough accounting of program expenditures by category. Actual administrative expenses for 2005 came in 14% under budget and 2006 came in 9% under budget.

4.4. Program Design

The program is currently modeled after the ASAP and is operated by AEC. AEC monitors the program and reports to LG&E.

4.4.1. Issues

- Some clients that are on budget billing are getting large credits on their accumulator. It seems that the clients are getting a bill but that in some cases LG&E has not deducted the HEA payment from the billed amount. The HEA payment, which is made before the bill is printed, is being credited to the accumulator and the client is being required to pay the entire budget amount. Therefore the accumulator is growing at a quicker pace. For other clients on the budget plan the accumulators are too high at the end of their anniversary month and they owe as much as $600. This would suggest that the budget plans may have not been very accurate when first set up and may need to be adjusted.

- Similarly, payments from clients that are on a DFAC (deferred payment arrangement) are often not credited to the DFAC and are often left as a credit on their account. Unless the client or the AEC representative calls LG&E and requests the correct posting, the client's account will appear delinquent when it is not. This triggers brown bill postings even though the account is actually current.

- The LG&E Model is more complex than the KU model.

4.4.2. Steps Taken and Further Recommendations

- Steps have been taken to correct the issue of large accumulators. Conversations with LG&E's IT staff has led to re-programming the AEC computer to allow them to make the payments after the bill has been printed for clients that are on budget billing. This allows the payment to be deducted from the amount due on the budget bill and not to be credited to the accumulator.

- It is important that LG&E continue to closely monitor the accumulator in customer bills. LG&E currently adjusts client payment plans every quarter. It is recommended that LG&E

continue to adjust the plans quarterly to allow low income clients the opportunity to make adjustments in a short time period.

- The KPSC and others have recommended that LG&E provide some additional funding. With additional funding more low-income clients might be served and additional program components to benefit customers might be created. These additional discretionary funds might help clients with temporary financial setbacks, such as, unemployment, illness, death, etc. Additionally, August and September are very difficult months for those low income families with school age children as the parents must purchase back to school items. There are currently no funds available for these types of situations and many clients are one paycheck away from a cut-off notice, eviction, etc.

- The LG&E model is more complex then the KU model but it does offer some specific advantages as noted below:

1) LG&E HEA benefits are client specific. Not every client that meets the LIHEAP guidelines is automatically accepted into the program. Income, household size, and energy usage of clients is examined. This helps to ensure that benefits are paid to individuals with the greatest need. Additionally, clients qualify for tiered benefits. In the first two years of the program these benefits ranged from $25-$1,000 and in year three the clients are eligible for tiered benefits of ($200, $400, $700 or $1,000).

2) Payments are provided year-around. This is an incentive for clients to keep current on their account and it helps to ensure that clients develop good paying habits as they are required to pay their bill in full and on time each month to continue in the program. It also helps LG&E with debt management of some of the most at-risk clients.

3) Clients are provided energy conservation training and automatic referrals to weatherization programs. Services are coordinated with three weatherization programs and the HEA program is structured to encourage clients to conserve energy. Clients are advised of payment amounts, so any energy that they conserve is "money" in their pockets. Hopefully the incentive to conserve will become a lifetime commitment to more efficient energy consumption.

4) AEC provides case management services to clients. This allows them to contact clients to encourage payment and to make referrals to community resources. This would include the community action agencies and community ministries. The case management service allows AEC to provide debt management assistance with some of the most at-risk clients.

5) AEC HEA Program clients are randomly selected by the computer allowing equal opportunity for all to be chosen to participate.

4.5. Metrics Analysis

This section goes over the specific findings for the metrics analysis. Some of the metric analysis methods have been updated to suit the available data.

4.5.1. Reduction in LIHEAP Crisis

Table 4 shows the number of LG&E-HEA customers enrolled in LIHEAP. Being "eligible" for LIHEAP is mandatory for enrollment in the HEA program which explains the high enrollment for invited and enrolled clients.

LGE-HEA Database (Calculation Table 2005) Entering Program				
Database Average	All	Enrolled	Invited	Rejected
Enrolled In LIHEAP	1614	490	327	797
Not Enrolled In LIHEAP	7	0	0	7
% Enrolled in LIHEAP	99.6%	100.0%	100.0%	99.1%

Table 4 – LG&E-HEA Customers Enrolled in LIHEAP When Entering HEA Program

Table 5 below shows the HEA Clients that remained in the program from 2004 through 2006. The total number of clients receiving LIHEAP assistance went from a high of 267 in 2004 down to only 77 in 2006. Those receiving a LIHEAP subsidy dropped from 204 in 2004 to 83 in 2005 and only 12 in 2006. The LIHEAP "CRISIS" payments did go up from 10 in 2004 to 65 in 2005 but then dropped back down to 53 in 2006. Overall the data proves that there was a significant reduction in the need for LIHEAP assistance for these HEA Program participants.

LG&E HEA Clients in Program 2004-2006 (327)			
	# of Clients Receiving		
Year	LIHEAP Subsidy	LIHEAP "CRISIS" Payment	Both Subsidy and Crisis
2004	204	10	53
2005	83	65	42
2006	12	53	12

Table 5 – LG&E-HEA Clients LIHEAP Data

4.5.2. Reduction in Arrearages

Enrollment in the HEA program helps keep customer arrears lower.

Using the data from 2005 and 2006 HEA Program Enrollees reveals that 16.8% of those that remained in the program were able to reduce their arrearages. The average reduction for those participants with an arrearage was found to be $102.93. In addition, the equal monthly payment plan amount was reduced by $14.07 for the average HEA Program customer.

Table 6 shows data for those customers that were active in the HEA Program for both 2005 and 2006 (345 accounts). There is significant decreases from 2005 to 2006 in the customer arrears and disconnect counts. These reductions can be directly attributed to the HEA program.

Comparison of Active Participants in Program for Both 2005 and 2006 (345 Accounts)							
	Total Amount Owed	Monthly Payment Arrangement	DFAC Balance	EMPP Amount	Number of Brown Bill Notifications	Disconnect Notice Count	Total Benefits
Max Amount	$ 454.93	$ 51.00	$ 454.93	$ 407.00	12	3	$ 1,192.00
2005 Active Participants (Average)	$ 17.48	$ 0.06	$ 0.24	$ 51.69	1.76	0.12	$ 792.28
2006 Active Participants (Average)	$ 1.92	$ 0.15	$ 1.32	$ 37.63	1.11	0.04	$ 793.40
Difference	$ 15.56	$ (0.09)	$ (1.08)	$ 14.06	0.65	0.08	$ (1.12)
% Difference	-810.4%	60.0%	81.8%	-37.4%	-58.6%	-200.0%	0.1%
DFAC Accounts	$ 154.46	$ 27.48	$ 97.68	$ 18.60	5.71	0.71	$ 753.44
NOTE: These are Active participants that have been in the program both 2005 and 2006							
DFAC - Deferred Payment Plan							
EMPP - Equal Monthly Payment Plan							

Table 6 – Comparison of Customer Arrears, Payments and Disconnects

If we look at Table 7 and the qualified customers who have not yet been enrolled in the HEA program we see that the customer arrears and disconnects are much higher for those that have not yet been allowed into the program.

Clients that were Qualified but not yet enrolled in 2006 (3,728 Accounts)					
	Customer Arrears	Monthly Payment Arrangement	DFAC Balance	EMPP Amount	Disconnect Count
Max Amount for Individual Customer	$ 696.29	$ 244.83	$ 696.29	$ 621.00	7.00
2006 Qualified Participants (Average)	$ 137.67	$ 1.04	$ 5.07	$ 49.09	0.63

Table 7 – Qualified but not yet Enrolled Customers

4.5.3. Reduction in Loss-of-Service due to Non-Payment

The HEA Program helps customers get their bills under control and reduces the amount of brown bill notifications and disconnections of service they receive.

Nearly all customer disconnects are for non-payment. Table 8 shows the comparison of the number of brown bill notifications and disconnects for customers in the program both 2005 and 2006. Customers had a higher incidence of brown bill notifications and disconnections in 2005. In 2006 the number of brown bill notifications for these customers fell nearly 59%. Even more dramatically the disconnections count for these customers dropped 200% from 2005 thru 2006. The number of customers with a service disconnect dropped significantly from 2005 (12%) to 2006 (4%) as the table shows.

For those clients that were invited into the HEA Program but chose not to participate, the disconnect count was over 33% higher than those that chose to participate in the program.

Active HEA Program Participants Brown Bills and Disconnects			
	Number of Brown Bill Notifications	Disconnect Count	Customers with a Disconnect
2005 Active Participants (Average)	1.76	0.12	38
2006 Active Participants (Average)	1.11	0.04	13
Difference	0.65	0.08	25
% Difference	-58.6%	-200.0%	-192.3%

Table 8 – LG&E-HEA Customer Disconnects

Table 9 shows a comparison of customer disconnects for all HEA customers in 2006. It shows a strong argument that those LG&E customers that participate in the HEA program are less likely to experience service disconnects even if they have only been in the program for a short time. Approximately 21% of HEA active customers experienced a service disconnect compared with 86% for closed (charged off, still owe money on previous account) accounts and 55% for those customers that have had their account finaled (no longer at address).

LGE-HEA Database 1 YR In Program				
# of Disconnects	**All**	**Active**	**Closed**	**Finaled**
0 Disconnects	677	646	3	28
1-2 Disconnects	195	157	15	23
3-4 Disconnects	26	12	4	10
5-6 Disconnects	2	1	0	1
Greater than 6 Disconnects	0	0	0	0
% With Disconnect	24.8%	20.8%	86.4%	54.8%

Table 9 – Customer Disconnect Counts

4.5.4. Increased Energy Savings through Weatherization Programs

Approximately 374 of the 490 or about 76% (participants we received data for) of the LG&E customers that have been enrolled in the 2005 HEA program have received WeCare weatherization. AEC serves clients in 10 surrounding counties and they coordinate efforts with 3 community action agencies in addition to Louisville Metro Community Action Agency. AEC coordinates with Tri, Multi and Central CAA's and each agency has weatherization programs. Most spend between $3,000-4,000 per home and provide insulation, weatherstripping, energy efficient appliances, etc. The exact number of homes that were weatherized by the CAA's is not available at this time. A home may only be weatherized once within a 10 year period. Table 10 shows that nearly $400,000 has been spent weatherizing HEA program homes and that the average spent per home has been $1,066 with the minimum being $144 and the maximum expenditure having been $2,073.

LG&E HEA Receiving WX Service (374)	
Total $ Spent	$ 398,763.03
Average $ per Site	$ 1,066.21
Minimum $ per Site	$ 144.75
Max $ per Site	$ 2,072.79

Table 10 – Weatherization Services

Home weatherization through the WeCare program measures have included: refrigerator replacements, faucet aerators, air sealing measures, attic insulation, air conditioner tune-up, CFL lamps, crawl space wall insulation, duct sealing and wrap, energy audits, energy education, safety repairs, heating system repairs and tune-ups, hot water pipe insulation, hot water tank wrap, mattress pads, rim joist insulation, roof vents, low flow showerheads, setback thermostat, vapor barriers, water heater temperature reduction and replacement of inefficient window air conditioners with high efficiency units.

Additional weatherization and training has been performed by the WAP agencies through the Project Warm Program. Project Warm provides one hour of energy conservation training and does basic weatherization such as caulking, plastic storm windows, etc. In 2005, 147 customers were served (attended workshop and received materials or had them installed by agency), an additional 13 customers had received weatherization through another program. In 2006, 194 customers were served with 44 having recently been weatherized.

Weatherization tracking savings estimates have not been provided by the utility. However, savings estimates from an RLW Kentucky AEP TEE (Targeted Energy Efficiency) Program evaluation completed in 2005 reported an average home savings of 1,390 kWh for low income homes receiving weatherization. Using the conservative savings estimate of 1,390 kWh for the 374 homes that have been weatherized, we estimate an annual savings of 519,860 kWh. At a cost of $.06 per kWh, this would represent program customer savings of $31,192 or about $83 per customer account. Table 11 reports the estimated savings by individual measure type.

Measure Type	Electric Heat Tracking Savings/Measure (kWh)	Non-Electric Heat Tracking Savings/Measure (kWh)
CFL (per site)	401	325
Air Sealing Measures (per home)	1,726	na
Attic insulation (per home avg.)	1,973	na
Sidewall insulation (per home avg.)	1,924	na
Floor insulation (per home avg.)	3,107	na
Water Heater Tank Wrap (per wrap)	110	115
Hot Water Temperature Reduction	513	660
Low-Flow Showerhead	901	901
Pipe Insulation (per linear foot)	0.88	0.92
Heat Pumps	1,887	na
Waterbed Cover	na	na

Table 11 - Estimated Average kWh Savings by Measure Type

4.5.5. Total Households Served

Figure 1 shows the LG&E service territory. Note that WKE is a non-regulated entity and is not part of the HEA Program.

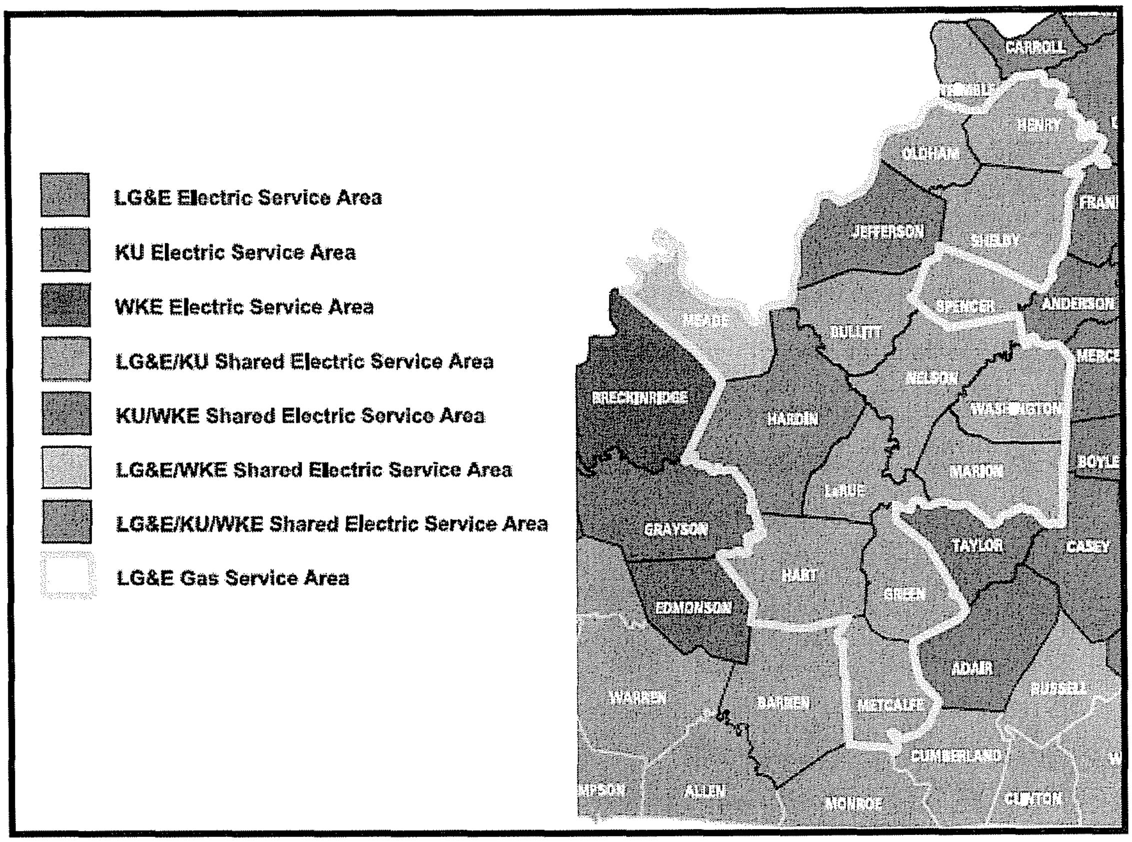

Figure 1 – LG&E Service Territory

Table 12 shows the number of LG&E-HEA program households served by County for years 2005 and 2006. LG&E has electric service available to 9 counties and gas service available to 17 counties. Looking at the table below reveals that the majority of customers served have been in Jefferson County with the largest amount of sign-ups (89% of the 900 noted in 2005 and 88% of the 949 noted in 2006).

Customers by County 2005		Customers by County 2006	
Bullitt	12	Bullitt	28
Hardin	22	Hardin	17
Henry	16	Henry	18
Jefferson	803	Jefferson	839
Meade	7	Meade	3
Nelson	22	Nelson	14
Oldham	17	Oldham	24
Trimble	1	Trimble	6
Total	900	Total	949

Table 12 – LG&E-HEA Homes Served by County

4.5.6. Total Amount of Assistance Provided

The LG&E HEA Program budget is shown in Table 13. A review of the year to date expenditures indicated that the program is in compliance with the amended budget, revised June 2005. Actual administrative expenses have been below 10% (10% is the norm for administrative expenses for low income programs) for the program years of 2005 and 2006. The 2005 actual administration expenses were $64,793, which was 14% less than the budgeted amount allowed for program administration. The 2006 actual administration expenses have totaled around $67,537, which is approximately 9% less than the $76,421 budgeted for the same time period. The HEA program has paid out over $1.3 million in subsidies to clients for the years 2005 and 2006.

LG&E HEA Program (3 Year Budget)	
Revenue	$ 2,365,595
Client Benefits	$ 2,129,036
Administrative Expenses	$ 228,887
Other	$ 7,672

Table 13 – LG&E-HEA Program 3 Year Budget

4.5.7. Program Availability

This metric was used to determine if LG&E's implementation of the program penetrated all of the counties in their electric and gas service territories. RLW tabulated the quantity of customers in each county in the HEA program and compared the counts to the total number of customers and estimated total amount of customers in poverty in each county served by LG&E.

The LG&E HEA Program was available for all of its service territory to qualified customers.

Table 14 reflects the estimated number of electric and gas customers by county paired with data of HEA Program enrollees and percentage of enrollees by county. Even though Jefferson County has the largest amount of enrollees (803 in 2005, 839 in 2006), the percentage of customers enrolled compared to total customers in the county is less than or equal to the 0.98% for all counties for both 2005 and 2006 with 0.94% and 0.98% respectively. The counties with the highest percentage of enrollments (based on low income customers in county) were Henry in 2005 (6.89%) and Trimble in 2006 (15.22%).

County	LG&E Electric Customers in County (2005)	LG&E Gas Customers in County (2005)	Estimated % of Population below Poverty Level (2003)	Estimated LG&E Electric Customers below Poverty Level	Estimated LG&E Gas Customers below Poverty Level	# in 2005 HEA Program	% of 2005 Customers in HEA Program (By County)	# in 2006 HEA Program	% of 2006 Customers in HEA Program (By County)
Barren	-	6	15.3%	0	1	-	-	-	-
Bullitt	9,143	16,939	9.5%	869	1609	12	0.48%	28	1.13%
Green	-	40	17.2%	0	7	-	-	-	-
Hardin	597	4,518	11.2%	67	506	22	3.84%	17	2.97%
Hart	-	40	19.5%	0	8	-	-	-	-
Henry	45	1,783	12.7%	6	226	16	6.89%	18	7.75%
Jefferson	365,419	279,399	13.3%	48601	37160	803	0.94%	839	0.98%
Larue	-	1,430	14.4%	0	206	-	-	-	-
Marion	-	240	15.7%	0	38	-	-	-	-
Meade	1,721	1,165	10.8%	186	126	7	2.25%	3	0.96%
Metcalf	-	132	19.5%	0	26	-	-	-	-
Nelson	-	3,331	11.8%	0	393	22	5.60%	14	3.56%
Oldham	16,590	11,142	5.8%	962	646	17	1.06%	24	1.49%
Shelby	47	874	9.9%	5	87	-	-	-	-
Spencer	3	3	8.3%	0	0	-	-	-	-
Trimble	5	303	12.8%	1	39	1	2.54%	6	15.22%
Washington	-	6	13.9%	0	1	-	-	-	-
Total	393,570	321,351		50,696	41,078	900	0.98%	949	1.03%

Table 14 – LG&E County Participation Summary

4.5.8. Cross Subsidization between LG&E Gas and Electric Customers

During the review of all program data there has been no evidence of cross subsidization occurring between gas and electric customer programs.

4.5.9. Movements of HEA Enrollees In and Out of Program

This metric was used to examine the enrollment activities.

In 2005, 900 clients were enrolled. In 2006, 454 of those 900 (50%) were recertified and 495 new clients were enrolled in 2006 for a total of 949 clients.

In 2007, 345 of the 949 (36%) were recertified. The program is anticipated to have 1,500 clients this year with 1,155 NEW clients. Recertification numbers were lower this year for several reasons, but the main factor seems to be the decrease in natural gas use.

- Total clients served for 2005 and 2006: 900 + 949 = 1849
- Anticipating serving 1,500 customers in 2007 (345 recertified from 2006, leaving 1,155 new clients to enroll).

4.5.10. Demographic Characteristics

Table 15 below shows the LGE-HEA service area customer demographics. Information provided for each of the 17 service territories includes: estimated percentage of population below the poverty level, the median household income, median income for families with children, median income for single mother families, median home value, and info on children receiving Medicaid, KCHIP, KTAP or SSI.

The LG&E service territory average for percent living below the poverty level was 13% in 2003, the estimated average income was over $40,000 (over $42,000 for families with children, and over $16,000 for single mother families). The average home value in 2000 was $87,453.

LG&E Service Area Demographic Information									
County	Estimated % of Population below Poverty Level (2003)	Estimated Median Household Income (2003)	Median Income for Families with Children (2000)	Median Income for Single Mother Families (2000)	Median Home Value (2000)	Number of Children Receiving Medicaid (July 2004)	Number of Children Receiving KCHIP (2004)	Number of Children Receiving KTAP (2004)	Number of Children Receiving SSI December (2003)
Barren	15.3%	$ 39,932	$ 37,776	$ 15,453	$ 77,900	3,309	831	496	202
Bullitt	9.5%	$ 48,192	$ 48,775	$ 19,121	$ 105,100	4,176	1,202	198	165
Green	17.2%	$ 27,378	$ 31,500	$ 10,536	$ 52,500	1,057	330	58	54
Hardin	11.2%	$ 42,184	$ 41,002	$ 17,361	$ 88,300	6,768	1,699	611	595
Hart	19.5%	$ 26,637	$ 30,806	$ 15,216	$ 60,100	1,878	493	168	97
Henry	12.7%	$ 38,359	$ 42,367	$ 15,909	$ 82,100	1,181	299	122	63
Jefferson	13.3%	$ 43,210	$ 46,880	$ 18,307	$ 103,000	55,180	11,752	11,027	4,405
Larue	14.4%	$ 34,241	$ 36,569	$ 13,917	$ 72,100	1,222	354	105	65
Marion	15.7%	$ 33,210	$ 36,567	$ 12,819	$ 70,300	1,553	316	211	113
Meade	10.8%	$ 40,269	$ 38,296	$ 16,434	$ 85,500	1,883	601	119	71
Metcalfe	19.5%	$ 25,471	$ 29,971	$ 12,407	$ 52,600	1,070	291	75	62
Nelson	11.8%	$ 42,742	$ 42,813	$ 15,474	$ 87,100	2,957	818	337	167
Oldham	5.8%	$ 66,174	$ 73,331	$ 28,845	$ 158,600	1,404	412	77	64
Shelby	9.9%	$ 47,066	$ 52,895	$ 18,729	$ 114,600	2,072	453	188	107
Spencer	8.3%	$ 51,991	$ 51,488	$ 12,000	$ 122,400	721	236	35	30
Trimble	12.8%	$ 38,851	$ 42,015	$ 20,750	$ 82,500	813	221	86	41
Washington	13.9%	$ 34,783	$ 39,100	$ 16,250	$ 72,000	833	262	72	43
Averages	**13.0%**	**$ 40,041**	**$ 42,479**	**$ 16,443**	**$ 87,453**				
Median	12.8%	$ 39,932	$ 41,002	$ 15,909	$ 82,500				
Min	5.8%	$ 25,471	$ 29,971	$ 10,536	$ 52,500				
Max	19.5%	$ 66,174	$ 73,331	$ 28,845	$ 158,600				

*Sources:
Census 2000
Medicaid : MS-264 Medicaid in Kentucky Report (http://www.chfs.ky.gov/dms/provider/Statistics/default.htm)
KCHIP Kentucky Cabinet for Health and Family Services, Department for Medicaid Services (Kentucky Children's Health Insurance Program, KCHIP)
K-TAP: PA-264 Report: Public Assistance in Kentucky Fiscal Year, 2004 (Kentucky's Transitional Assistance Program, KTAP)
SSI: http://www.ssa.gov/policy/docs/statcomps/ssi_sc/2003/ (Supplemental Security Income, SSI)
Kentucky Cabinet for Health & Family Services, processed by Kentucky Population Research at the University of Louisville Urban Studies Institute.

Table 15 – LGE Customer Demographic Information

Table 16 shows additional demographic information for 2005 LG&E HEA program participants.

LG&E HEA Program Customer Demographics (490 of the 2005 Participants that had data available)			
	Enrolled	Invited	Rejected
Avg. Monthly Reported Income	$ 700.78	$ 672.86	$ 654.15
Avg. # of Family Members	2.71	2.67	2.39
Homes with Members over 60 yrs old	16%	12%	5%
Homes with Members under 2 yrs old	13%	20%	17%
Homes with Members aged 3, 4 or 5 yrs old	24%	25%	25%
Homes with a Member with Disability	32%	23%	22%
Avg. Annual kWh	11,545	10,296	NA
Avg. Annual CCF	879	778	NA

Table 16 – LGE HEA Customer Demographic Information (2005 Participants)

A comparison analysis of LG&E to KU customers is provided in *Appendix A*.

4.5.11. Impact of excluding arrearage pay-down

This metric was used to determine the impact on the participants if the arrearage pay-down benefit was removed from the program. Omitting the arrearage payment benefit may exclude many customers from participating in the HEA Program.

Table 17 reports the comparison of 2005 active participants "with" versus "without" arrearage payments. The results are varied with the total arrears owed slightly higher for those with an arrearage payment; the monthly payment arrangement is also higher as is the DFAC balance and the number of brown bill notifications. However, the EMPP amount and disconnect count is lower for those active customers with an arrearage payment. It is also important to note that HEA clients on a DFAC are sent "budget reminders" which are counted as a brown bill. Clients are sent these reminders regardless of payment status. Additionally, if the customer service representative doesn't post the payment correctly, it appears as the account is delinquent when in fact it is not.

2005 Active Participants in Program (Comparison of those with vs without Arreage Payments)					
	Arrears Owed	Monthly Payment Arrangement	DFAC Balance	EMPP Amount	Disconnect Count
2005 Active without Arreage Payment	$ 13.57	$ 0.20	$ 0.62	$ 53.67	0.16
2005 Active with Arreage Payment	$ 15.36	$ 1.04	$ 2.32	$ 33.43	0.13

Table 17 – Comparison of 2005 Active Participants with vs. without Arrearage

Table 18 similarly reports the comparison of 2006 participants. Those customers without an arrearage payment have lower numbers of brown bills and disconnects.

2006 Active Participants in HEA Program (Comparison of with vs. without Arreage payments)						
	Arrears Owed	Monthly Payment Arrangement	DFAC Balance	EMPP Amount	Number of Brown Bill Notifications	Disconnect Count
2006 Active with Arreage Payment	$ 166.01	$ 29.77	$ 151.90	$ 9.02	4.35	0.40
2006 Active without Arreage Payment	$ 10.43	$ -	$ -	$ 38.79	1.96	0.15
Closed Accts					4.12	1.08
Finaled	95.73				4.25	0.62
All Active Accts	20.88	2	10.21	36.79	2.12	0.17

Table 18 – Comparison of 2006 Active Participants with vs. without Arrearage

4.5.12. Review of LG&E-HEA Program Involvement

RLW provided an assessment of what type of involvement LG&E had in the program implementation and monitoring, and whether it was adequate to provide "active monitoring of the program" as specified by the KPSC. The Interviews section details the program involvement.

4.6. Interviews

The primary intent of the interviews was to:

- Obtain an in-depth understanding of the program data collection process
- Determine the level of utility involvement and activity in the HEA Program
- Identify if the collection of program participation data is adequate

4.6.1. Interview Participants

The interviewees were first asked to describe their current position, title and their general responsibilities and role in the HEA Program. The following is a list of those involved with the LG&E HEA Program that completed interviews.

Paula Ratliff – HEA Program Manager, AEC
Julie Carmack – Family Services Supervisor for Bullitt, Spencer, and Shelby Counties.
Lynne Robey – Program Director for LIHEAP and community services for Central KY community action.
Pam Craig – County Coordinator for Tri-County, oversees all programs in county.
Rhonda Wooten – Social Service Program Specialist, oversees LIHEAP and coordinates staff training

4.6.2. Program Questions

This section highlights answers to questions relating to the utility involvement in the program, and on how participation is documented.

The interviewees were next asked if they were familiar with how the HEA Program was developed and launched by the utilities. Two of the respondents stated that they were familiar with the development of the program.

These two respondents were then asked: "Could you describe what were the expectations on how much the utilities would be actively monitoring the program?" The following are some of the thoughts shared:

- LG&E participates by having quarterly meetings with the 2 programs and the rep (Andi Martin) generally attends our board meetings.
- As to sponsorship, we have not received any additional sponsorship in the form of financial contributions
- The KPSC Order stated that LG&E should contribute to the program and we are hoping they will provide additional funding in the future and continue with the in-kind contributions.
- There are items of need including "free or reduced cost" energy audits for our clients, energy kits (valves for faucets, low-flow shower heads, energy saving light bulbs), etc. We have also requested LG&E to provide assistance to reduce arrearages.

Next they were asked: "Are they meeting those expectations nowadays? What differences have you seen?"

- Andi is great to work with and she tries to get information when needed and Allyson is great as well. I work a lot with the computer analysts (Steve and Jason) and they are very responsive to our requests. The daily operations are great.
- We would like to see LG&E contribute more to our program and to promote our program.

The five interviewees were next asked: "Specifically, what information do the utilities normally request, and how often are these requests?" They mentioned:

- We have quarterly meetings with LG&E and we send them an audit each year. They generally request information on the program and the budget. Additionally, when the AEC board meets, I provide copies of the minutes to Andi as a way of keeping the utilities informed.

- The utility wants us to fill out the application forms and we deal with Lexington community action and enter that data through the IRIS database. This work is constant because people drop out and we need to keep the spots filled all the time. IRIS is just used for HEA. We don't deal directly with KU, Lexington community action deals with KU directly; they are the go between for us, we contract with them. The staff from Lexington community action lets me know if there are slots that need to be filled. Slots must be filled right away because another agency could grab them and if you have a slot unfilled for a long time someone else could get it.

- General stuff such as pledges on accounts, certain reports that show anything that's not paid so that the records can be reconciled; I send the files daily and at the end of the seasonal program usually in April, we reconcile all accounts.

The next question asked was: "Are you familiar with how program participation information gets collected and processed?" Responses included:

- To be eligible for the program the clients have to be eligible for LIHEAP. The Community Action Agencies (CAA's) verify income of clients and maintain the file documentation. To determined eligibility for our program, we factor in household income, house size, and energy usage.

- LG&E is not particularly involved in the process, other than once we have a list of potential clients from CAA, we ask LG&E for additional information (i.e. energy usage.).

"Then from your viewpoint, is the participation information thorough, and consistently documented? Are there any particular gaps?" The responses were:

- LIHEAP involvement has been great. The first year had a few computer difficulties, but once they were resolved, it has been very good. They do a great job at providing and sharing information, and running the LIHEAP program. When working with the smaller communities, if I can't find clients on the phone, community action agencies will help me find the client. The smaller communities often know when someone has moved, is in the hospital, etc. We do a lot of "hands on" with the customers and work well together.

- The only problem is that even though we pledge an amount and it is posted to the account the consumer is still responsible for the bill until the utility company receives our payment, which can in some cases lead to the consumer being disconnected or being issued brown bills.

- I think it's consistent and thorough; there is an intake sheet that tells you about the families. We collect our own program information which requires more information than IRIS.

- I think everything is fine. The data for HEA is very much like data required for other programs and other programs ask for similar information on heating assistance and the block grant.

- I know it's not consistent state wide. We require 5 things while the state requires only 3; the state doesn't require a picture id. I bring in everyone's social security information, housing information (which should be gathered), and this plays a factor in the benefit amount awarded to the client; client's know this and they lie about it so this should be a major element of the client evaluation process.

- The items we collect again are a client's social security card, previous month income, and utility bill or proof that their utilities are included in rent.

- HEA is different than my program and my responses concern LIHEAP primarily. We work together in the winter time and we do the base payment and HEA does the co-payment amount and clients are required to come here before going to HEA.

Lastly the interviewees were asked: "Are there any other issues relating to the previous questions that you'd like to bring up?" This question prompted the following responses:

- We would like for LG&E to get more involved financially, we have asked that they provide assistance with arrearages. Shareholders could help with this to some limit and it could be prorated over 12 months; this might provide a way to help clients get their past due bills paid.

- Because we are trying to balance our services, we can provide up to $700 for arrearages ($350 by client and $350 by HEA) and up to $1,000 (on energy costs). We've had to limit the number of clients with arrearages. Additional funds could help us have a greater impact. Additionally, we would welcome having LG&E involved with our training sessions, etc. They have energy conservationists on staff that could help. This could reduce our costs and provide a positive public relations opportunity.

- One issue that may need to be addressed soon is the budget plans. In 2006, LG&E really encouraged individuals to go on the budget plans. They hired a vendor to make these phone calls to individuals. The plan may or may not have been accurately and thoroughly explained. I have found that many clients do not understand the budget plan and now that anniversary months are approaching, they are creating a hardship on clients. I have over 200 clients on the budget plan. Some have accumulators as high as $600. This is suggesting that LGE may not have monitored the budget payments closely as the goal is to be within $100 by the settlement month. For clients that are not within $100, we may need to find an option – such as allowing the accumulator balance to be factored in the monthly payment.

- Some clients want to get off of the plan but they can't get it paid down – we need to closely monitor the payments and energy usage. If they are using too much energy then we need an energy audit, and to have Project Warm, WeCare or Metro Louisville to assist in installing energy saving measures.

- We do have a great relationship with LG&E and enjoy working with them. I have been working with their accounting department on the client payments. I monitor each payment and expenditure and provide as much data as requested to LG&E.

- The program is going great; from my 5 years experience it has come a long way and the utilities and agencies are working together with their focus truly on the consumer no matter what their situation may be (elderly, disabled, etc).
- For those of us who don't know how the program got started perhaps KU could describe as to how the program got started.
- I think HEA is a fabulous program and would like to get more people into it. The program runs itself and is low maintenance. I don't have to spend much time or money on it.
- I don't feel like HEA is funded enough and they should change it to make it a percent of the poverty payment plan.

4.6.3. Interviewees Suggested HEA Program Improvements

The following are some of the improvements that one or more of the interviewees would like to see considered:

- Additional utility sponsorship in the form of financial contributions, especially arrearage help
- Have the utilities be more involved in the training sessions
- If the budget plans are to be kept in place they need to more accurately reflect the customers projected energy consumption. (Some have been grossly underestimated which is making the anniversary settlement amount that the customer owes to be very large and very difficult for the customer to pay off)

4.6.4. Interview Conclusions

LG&E has done a good job of communicating program changes and needs to AEC and the agencies. The utilities are very responsive and helpful whenever the HEA team members require information. LG&E participates in quarterly meetings with the KU and LG&E HEA programs and the reps generally attend board meetings. All of the HEA Program members work well together and share information willingly. The program is doing great and has come a long way and truly focuses on the consumer and their needs.

5. Challenges and Benefits to HEA program Merger

Currently LG&E manages one of the HEA programs focused around the Louisville area with AEC as its administrator. The Kentucky Utilities HEA program is managed by KU and is community action based and covers 77 counties.

Some benefits as well as challenges would result in the merging of the two HEA programs. Some of the challenges might include:

- Developing a software solution that would be able to be implemented for use by both programs (A merging of the two systems)
- Finding additional funding sources to help more customers
- Dealing with some demographic differences in serving customers
- If arrearage payoff plans are to be used to make sure that credit is applied appropriately to the customer account

- When setting up a customer on a budget plan care should be taken to be sure that the accumulator is flagged if it grows too large. (Would prevent customers from having an overly large payment due on their anniversary month). The utility could also look at and adjust customer plans monthly or quarterly.

Some benefits may include:
- A consistent program statewide for all KU and LG&E customers
- Both utilities could benefit from each others lessons learned
- May lead to improved levels of service by taking the best traits from each program

6. Recommendations

- Continue the LG&E program as a year round program to keep clients actively involved
- Provide energy conservation training and weatherization to any HEA Program customers that have not yet received these services
- Continue to provide case management services to help clients with payment options and referrals to community resources
- Consider additional utility sponsorship in the form of financial contributions
- Continue to streamline the application and participation needs for customers
- Perhaps increase customer benefit amounts as funds are available
- Have the utilities be involved in the customer training sessions
- If the budget plans are to be kept in place they need to more accurately reflect the customers projected energy consumption. (Some have been grossly underestimated which is making the anniversary settlement amount that the customer owes to be very large and very difficult for the customer to pay off)
- Keep the LG&E program and the KU program operating separately due to the large costs associated with merging the two computer data systems
- Strive to take the most successful elements from each program and integrate those elements into the other program
  - Consider making both year round programs
  - Continue to improve case management services

7. Conclusions

The HEA Program helps make customers energy bills more affordable.

The success of the HEA Program can be measured in whether or not program participants are able to make their bill payments on time.

Statistical results show that customer participation in the HEA Program significantly improves service continuity by reducing brown bills (disconnection notices), disconnections for non-payment and account closure rates. Additionally, a noticeable reduction in the average LG&E debt occurs with program participation.

By reducing the financial stress for poor families and the number of utility disconnects that they must endure, the HEA program also has indirect benefits for the entire community. Some of these benefits being: reduced service disconnect threats, customers are able to be more self-sufficient, homes with disabled, elderly, or young children have additional ability to stay warmer in the winter and cooler in the summer to help stay healthier, and parents have more funds to focus on their children's needs.

8. Appendix A – KU and LG&E Demographic Comparison

Table 19 shows the demographic comparison between the KU territory counties and the LG&E territory counties. The utility area average, median, minimum and maximum values are shown. The represented data includes: estimated percentage of the population below the poverty level, estimated median household income for 2003, the median income for families with children (2000), median income for single mother families (2000) and the year 2000 median home value.

As the table indicates there are some demographic differences between KU and LG&E customers.

- 15.5% for KU and 13.0% for LG&E population below the poverty level (a 2.5% difference)
- A $5,634 difference between the LG&E and KU median household income.
- A $4,570 difference between the LG&E and KU median income for families with kids.
- A small difference of $1,252 for the median income of single mother families.
- A sizeable difference of $13,077 in the median home value.

KU vs. LG&E Demographic Comparison					
Utility Counties	Estimated % of Population below Poverty Level (2003)	Estimated Median Household Income (2003)	Median Income for Families with Children (2000)	Median Income for Single Mother Families (2000)	Median Home Value (2000)
KU Average	**15.5%**	**$ 34,407**	**$ 37,909**	**$ 15,191**	**$ 74,376**
KU Median	14.5%	$ 33,694	$ 37,807	$ 14,844	$ 72,050
KU Minimum	5.8%	$ 18,835	$ 18,864	$ 8,801	$ 43,000
KU Max	30.5%	$ 66,174	$ 73,331	$ 28,845	$ 158,600
LG&E Average	**13.0%**	**$ 40,041**	**$ 42,479**	**$ 16,443**	**$ 87,453**
LG&E Median	12.8%	$ 39,932	$ 41,002	$ 15,909	$ 82,500
LG&E Minimum	5.8%	$ 25,471	$ 29,971	$ 10,536	$ 52,500
LG&E Max	19.5%	$ 66,174	$ 73,331	$ 28,845	$ 158,600

Table 19 – KU vs. LG&E Demographic Comparisons

In Table 20 below we compare KU and LG&E HEA program customers. There is a small $23.30 difference in average monthly income, a 0.56 average household family member difference, and an annual electric utility kWh difference of 4,000 kWh. The kWh difference can be most likely attributed to electric hot water and space heating for the KU customers.

HEA Enrolled Customer Demographics				
Utility	Average Monthly Reported Income	Average Number of Family Members	Average Annual kWh	Average Annual CCF
KU	$ 677.48	2.15	15,545	NA
LG&E	$ 700.78	2.71	11,545	879

Table 20 – HEA Enrolled Customer Demographic Comparisons

9. Appendix B – Other Low Income Program Comparisons

9.1. Cost Effectiveness

Table 21 reports the findings of various low income program cost effectiveness analysis studies. The program budget is shown and if calculated: the utility cost test, total resource cost test, modified participant test and the benefit cost ratio test results for the various programs are presented.

	Budget	Utility cost test (UC)	Total Resource Cost (TRC)	Modified Participant (MP)	Benefit/Cost Ratio (B/C)
PG&E Energy Partners Program 2004	$ 56,530,000	0.41	0.41	0.67	
SCE Low Income EMA Program 2005 (2004 budget)	$ 16,000,000	0.75	0.61	0.98	
NHSAVES@Home Energy Assistance Prog. 2004	$ 2,390,373				1.97
WarmChoice 2004	$ 5,590,000				1.08
Energy $avings Partners (2004 budget)	$ 13,204,849		1.12*		
Mass Low Income Energy Affordability Network 2002	$ 3,400,000				>1.0
Indiana Low-Income WX and Refr. Replacement Program	$100,000 to $200,000		1.87		
Targeted Home Performance with ENERGY STAR 2005	$ 1,944,612				1.11

*(Includes both energy and non-energy benefits (debt reduction and arrearage savings)

Table 21 – Various Low Income Program Cost Effectiveness Results

Table 22 reports the LIHEAP program highlights for Kentucky and eight other states in the region. The data represented shows the LIHEAP 2006 fiscal year funding, the income eligibility level required for participation, the minimum and maximum electric and gas benefits, average LIHEAP customer benefits, the number of households served, average annual funding per household, and the LIHEAP program dates of operation. Kentucky compares favorably on a national basis with the average customer on LIHEAP receiving $396 annually compared with $318 for the national average. However, they only exceed West Virginia in payments for those states in the region.

LIHEAP Program Highlights By State										
State	LIHEAP FY 2006 Funding	LIHEAP Income Eligibility Level	LIHEAP Electric Benefits (Min)	LIHEAP Electric Benefits (Max)	LIHEAP Natural Gas Benefits (Min)	LIHEAP Natural Gas Benefits (Max)	LIHEAP Average Benefits	LIHEAP Households Served	Average Annual Funding Per Household	LIHEAP Program Dates
Kentucky	$ 44,347,089	130% of Federal	$ 70	$ 130	$ 80	$ 147		112,000	$ 396	Nov. 1 - Dec. 22 (Crisis until Apr. 15)
Illinois	$ 145,958,602	150% of Federal	$ 100	$ 1,045	$ 100	$ 1,045	$ 400	294,671	$ 495	Nov. 1 - May 31 (Seniors Sept 1 until May 31)
Indiana	$ 53,979,565	150% of Federal	$ 75	$ 350	$ 75	$ 350	$ 225	126,500	$ 427	Heating Nov. 2 - May 31, Cooling June 1 - Sept. 30
Michigan	$ 108,028,072	60% of State Median		$ 972		$ 972	$ 178	381,580	$ 283	Jan. 1 - Sept. 30
Missouri	$ 59,540,905	125% of Federal	$ 65	$ 292	$ 65	$ 292		113,162	$ 526	Heating Oct. 1 - March 31 (Seniors Sept. 1 - March 31)
Ohio	$ 122,258,598	175% of Federal	$ 57	$ 344	$ 57	$ 344	$ 214	257,170	$ 475	Heating Sept. 1 - April 28, Cooling June 1 - Aug. 31
Tennessee	$ 46,362,940	125% of Federal	$ 175	$ 350	$ 200	$ 350		59,566	$ 778	Heating Aug. 1 until exhausted, Cooling May 1 - June 28
Virginia	$ 71,258,558	130% of Federal	$ 90	$ 200	$ 90	$ 330	$ 220	100,000	$ 713	Heating Oct. 11 - Nov. 14, Cooling June 15 - Aug. 15
West Virginia	$ 23,818,279	130% of Federal	$ 80	$ 500	$ 80	$ 500	$ 210	70,000	$ 340	Dec. 5 - Dec. 9, Eligible customers receive 20% off bills
Averages	**$ 75,061,401**		**$ 89**	**$ 465**	**$ 93**	**$ 481**	**$ 241**	**168,294**	**$ 493**	
National Average									$ 318	

http://www.liheapch.acf.hhs.gov/sp.htm

Table 22 – LIHEAP Program Highlights by State

9.2. State Low Income Program Highlights

Figure's 2 through 9 show State low income program highlights for the eight states listed in Table 22. These tables are meant to be a reference to see what other surrounding states are doing with their low income programs. The specific budgets for these programs were not available.

The following is a short list of some of the program highlights:

- Illinois - 10% discount for customers aged 62 or older who meet income guidelines
- Indiana – Up to $400 towards arrearages, Monthly bill reductions of 9% to 32%
- Michigan – A state tax credit and shutoff protection
- Missouri – Qualified elderly, age 60 or older, or disabled pay 50% of their electric bill
- Ohio – Rate assistance, arrearage payoff help, energy credit up to 30% for qualified
- Tennessee – Extended payment plans to help pay down arrearages
- Virginia – Waive state sales tax on fuel deliveries, waive security deposits for those eligible
- West Virginia – Reduced rate of 20% for eligible gas or electric customers

Below for comparison sake is a more complete picture of each states policy.

Illinois

State/Local

Low-Income Rate Assistance and Energy Efficiency

Effective 1998, the Supplemental Low-Income Energy Assistance Fund (SLEAF) was authorized through electric utility restructuring legislation. The law directed gas and electric utilities to assess a monthly surcharge from customers and deposit it into a state fund, which the General Assembly appropriates yearly to the state Department of Commerce and Community Affairs, the LIHEAP and weatherization grantee. Annually, about 80 percent of the fund, $65 million, goes for low-income bill payment assistance, and 10 percent, about $7.6 million, supplements the state's weatherization program. LIHEAP makes payments from the fund directly to utilities. SLEAF funds may be used only for assistance to low-income customers of the utilities that assess the surcharge.

Good Samaritan

Local gas companies allow low-income customers to get their heat reconnected by paying 20 percent of their past-due amount, or $250, whichever is less. To qualify for this program, a utility customer must have an annual income that does not exceed 150 percent of the federal poverty line. Peoples Energy, Nicor Gas, Mid American Energy and Ameren are participating in the program.

City Of Chicago

Emergency Housing Assistance Program

emergency roof repairs and other energy saving conservation activities. For more information on these and other programs, call the Department of Housing at 1-312-747-9000.

Emergency Housing Assistance Program

emergency roof repairs and other energy saving conservation activities. For more information on these and other programs, call the Department of Housing at 1-312-747-9000.

Utility

A 10% discount for customers 62 years of age or older with a total household income no greater than 250% of the Federal Poverty Guidelines.

Figure 2 – Illinois Low Income Programs

Indiana

State/Local

Legislation, since 1894, requires Indiana's 1,008 towns and townships to provide "poor relief" that can include housing, utility, food, and medical assistance. Townships are local governmental units within counties and cities, with elected boards and trustees. Property taxes fund "poor relief"; each local entity establishes spending guidelines for the funds. Contact: township offices

Universal Service Program

Beginning January 1, 2005, eligible customers of Citizens Gas and Vectren, who have applied for the state's LIHEAP through local community action agencies, will automatically be enrolled in the new USP and will receive bill reductions in addition to LIHEAP. Monthly bill reductions will range from 9 percent to 32 percent of the total bill (not including LIHEAP benefits), depending on the consumer's income level and utility provider. The pilot USP will also provide additional funding to both utilities' weatherization programs.

Utility

Low-Income Rate Assistance

Northern Indiana Public Service Co. (NIPSCO)
Winter Warmth

LIHEAP eligible customers or customers with a financial hardship can receive up to $400 that can be applied to both the payment of delinquent utility bills and natural gas deposits. Additionally, NIPSCO will limit natural gas deposit payments for LIHEAP eligible customers to $150 and $300 for other non-LIHEAP eligible customers determined to have a financial hardship.

Contact Community Action Agencies

www.nipsco.nisource.com/news/2004/12-16-04.htm

Low-Income Energy Efficiency

Duke Energy
Low-Income Weatherization Program

Offered through a partnership with the state of Indiana, the program is designed to provide energy-saving installations and energy education at no cost to our customers who qualify for the weatherization or heating bill assistance as part of the state or federal programs. Contact Indiana's local Community Action Agencies for more information or call Duke Energy at 1-800-521-2232.

www.cinergypsi.com/inres/savings/free_services/

Figure 3 – Indiana Low Income Programs

Michigan

State

Low-income Rate Assistance

Home Heating Credit

A state tax credit that can help offset the costs of natural gas or electricity used to heat homes in the winter. The Credit is based on household income, the number of exemptions claimed and the home's actual heating costs. Special exemptions may be available to customers 65 and older and to people with disabilities. Obtain forms in late January from: Your tax preparer or wherever other tax forms are provided; Download the forms from the Michigan Department of Treasury Web site at michigan.gov/heatingassistance or call The Michigan Department of Treasury at 800.367.6263. DTE customers can file over the phone between January 9 and September 22, 2006 by calling DTE Energy's Home Heating Credit Hotline at 800.411.4348. Have your household income information and Social Security Numbers for yourself and your dependents available before calling.

www.michigan.gov/heatingassistance/0,1607,7-215-33210---,00.html

Low-income Rate Assistance

Arrearage forgiveness and deposit and fee waivers are provided by utilities that participate in the state's automated positive billing system and other payment plans. Under positive billing, a participating household must pay a percentage of its monthly assistance grant to its utility.

Winter Protection Plan

This plan protects senior and low-income customers of Commission-regulated natural gas and electric companies, rural electric cooperatives and alternative electric suppliers from electric or natural gas service shut-off and high utility payments between December 1 and March 31. Persons qualify for the plan if they meet any of the following criteria:

are age 65 or older, or

receive Michigan Family Independence Agency cash assistance, or

receive Food Stamps or Medicaid, or

have a household income at or below 150% of poverty level.

Winter Protection allows eligible low income customers to make monthly payments of at least 7% of their estimated annual bill, along with a portion of any past-due amount, December through March, and avoid shut-off during that time even if their bills are higher. Eligible senior citizens participating in Winter Protection are not required to make specific monthly payments between December 1 and March 31, but are encouraged to do so to avoid higher bills when the protection period ends. At the end of the protection period, both low-income and senior citizens taking part in the plan must pay off any money owed in installments between April and November.

Figure 4 – Michigan Low Income Programs

Missouri

Utility

Low-Income Rate Assistance

Empire District Electric Company

Empire's Action to Support the Elderly (EASE)

Provides late fee and deposit waivers for elderly (age 60 and older) and handicapped customers.

Independence Power & Light Department

Independence Rate Assistance Program (IRAP)

Qualified elderly, 60 years or older, or disabled customers pay 50% of the electric charges on their bill.

Figure 5 – Missouri Low Income Programs

Ohio
State
Low-Income Rate Assistance

Percentage of Income Payment Plan (PIPP)

Qualifed customers pay 10 percent of their gross monthly household income to the utility company providing their main heating source and five percent to the utility company providing their secondary heating source. Customers can choose to join PIPP for only one utility service. If the company provides both gas and electric services or if the customer has an all-electric home, the payment is 15 percent of the gross monthly income. To qualifiy:

Your utility company must be regulated by the PUCO;
You must apply for all energy assistance for which you are eligible; and,
You must have a gross yearly household income at or below 150 percent of the federal poverty level

If a household is at or below 50 percent of the federal poverty level and the household uses electricity as its secondary source of heat, the household would pay 3 percent instead of 5 percent in the winter heating season only. The Three Percent PIPP payments are not available at Cleveland Electric Illuminating and Toledo Edison due to an existing low-income rate.

Arrearage Crediting Program

Available to PIPP customers who are no longer income eligible for PIPP, the program assists you with gradually paying off your total arrearage amount. Current and former PIPP customers should contact their local utility company for specific information on the rules and regulations of arrearage crediting. Once a customer begins paying the current bill and arrearage payment, they will be eligible to receive matching credit equal to the arrearage payment. Cleveland Electric Illuminating, Dayton Power & Light, and Toledo Edison are excluded from this crediting system. However, all of these companies have crediting systems somewhat similar to the one described above.
www.puco.ohio.gov/PUCO/Consumer/information.cfm?doc_id=93#PIPP

Winter Reconnect Program

Allows most households that have been disconnected or are threatened with disconnection due to non-payment of a utility bill to have service restored during the winter months by paying either the total amount they owe or $175, whichever is less, plus a reconnection fee of no more than $20. Consumers can use the winter reconnect program through April. There is no income eligibility requirement for the winter reconnect program. Income-eligible households can use Emergency Home Energy Assistance Program (E-HEAP) funds for the $175 payment. Consumers can apply for the winter reconnect program in person at a local community action agency or by calling their utility company.
www.puco.ohio.gov/PUCO/Consumer/information.cfm?doc_id=604

Ohio Energy Credit (OEC) Program

Taxation, toll-free, at 1-800-282-4310.

Low-Income Rate Assistance

Dayton Power & Light
937-331-3900 or 1-800-433-8500; TTY-TTD (hearing impaired) 1-800-750-0750
www.waytogo.com/cs/csps.phtml

Percentage of Income Payment Plan Credit Program
Customers who have been on the PIPP program for one year and have more than 12 months PIPP arrears may be eligible for PIPP credits. The amount of credit is based on the total 12 months arrears. This credit is applied to the outstanding balance and not to the current installment.

Fresh Start
An arrearage-crediting program for customers no longer on PIPP.

Figure 6 – Ohio Low Income Programs

Tennessee

Arreage Payoff help...

Memphis Light Gas and Water

On Track

A payment program designed to help customers with limited incomes to manage debt and pay off their bills over a period of time. The program focuses on education, financial management and social services. To qualify for the program customers must have a steady, but limited, income and owe more than $400 to MLGW. Participants may receive Extended Payment Plans (EPP) for up to three years; minor home repairs for homeowners; and deposit credited back to the account after completion of program. Applications and more information are available on the website.

www.mlgw.com/SubView.php?key=res_ontrack

Figure 7 – Tennessee Low Income Programs

Virginia

State

All participating vendors for the LIHEAP Fuel and Crisis Assistance components agree to waive charging the State Sales Tax on all fuel deliveries. Eligible households receive the amount that would be paid to the State for sales tax in the total amount of fuel delivered.

Utility

Low-Income Rate Assistance

Four major utilities in Virginia waive security deposits for LIHEAP eligible customers.

Figure 8 – Virginia Low Income Programs

West Virginia

Utility

All gas and electric utilities offer a reduced rate of 20% from December - April. Eligible customers must receive either SSI, WV WORKS, or Food Stamps AND be 60 years of age or older. Customers must be a recipient of one of these programs during November, December, January, February, and March to get the discount for that month. The discount is a Commission Order, dated March 10, 1984.

www.psc.state.wv.us/utilities/default.htm for list of electric and gas utilities.

Allegheny Power

1-800-255-3443

Dominion Hope

Twenty percent discount on gas bill December through April for SSI or Food Stamp recipients who are 60 years of age or older.

Clarksburg, WV 304-623-8600

Morgantown, WV 304-296-3481

Fairmont, WV 304-363-6300

Parkersburg, WV and all others 1-800-688-4673

TDD for Hearing Impaired Customers: 1-800-395-3490

www.dom.com/customer/wvres_eaprograms.jsp

Figure 9 – West Virginia Low Income Programs

10. Appendix C – Program Delivery Interview Guide

RLW Analytics
HEA Program
Interview Guide

Verbal introduction to interviewee: Our goal in this interview is to gather information relating to your connection to the HEA program. In particular, we are looking at getting an in-depth understanding of how the program data is gathered, and how much utility activity and monitoring takes place on behalf of the program.

The questions I'll pose are all meant to be open-ended. There are no right or wrong answers.

All answers are strictly confidential. Our notes are not shared with anyone else with the utilities or the Public Utilities Commission. In our report, anecdotal answers are either paraphrased or identified in a generic way, ex. "several respondents said…", "one respondent noted…", etc.

1. Background

This is just to get a quick snapshot to put your answers in context.

1. Can you please first briefly describe your current professional position – title and general responsibilities?

2. What is your role in relation to the HEA program, and how long have you been in this role?

2. Program Questions

These are questions relating to the utility involvement in the program, and on how participation is documented.

3. a. Are you familiar with how this program was developed and launched by the utilities?
__ Y __N

   b. IF YES > Could you describe what were the expectations on how much the utilities would be actively monitoring the program?

c. Are they meeting those expectations nowadays? What differences have you seen?

4. a. Are you familiar with how program participation information gets collected and processed?
__ Y __N

b. IF YES > From your viewpoint, is the participation information thorough, and consistently documented? Are there any particular gaps?

5. Are there any other issues relating to the previous questions that you'd like to bring up?