



T.W. Phillips
Energy Help Fund
Program Evaluation
Final Report

November 2004

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Executive Summary

This report presents the findings from the 2004 Evaluation of T.W. Phillips' Energy Help Fund Program. T.W. Phillips' Energy Help Fund assists eligible low-income residential customers to pay their gas bills. Based on annual household income, the household may receive a discounted gas bill and/or arrearage forgiveness.

Introduction

The Natural Gas Choice and Competition Act, effective July 1, 1999, restructured the natural gas utility industry. As a result, there were concerns that natural gas remain universally available to all customers in the state, and several provisions were included in this Act relating to universal service of natural gas service. Related to these requirements and a rate settlement, T.W. Phillips established a customer assistance program called the Energy Help Fund (EHF) as part of its universal service program.

T.W. Phillips' Energy Help Fund Program is a low-income assistance program designed to help eligible payment-troubled residential customers to pay their gas bills. Based on annual household income, three different levels of assistance are offered to customers. This assistance includes:

- A discounted Customer Charge and Volumetric Delivery Rate
- Monthly credits against outstanding arrearages up to a maximum of \$600 over three years
- Credits against the participant's current gas bill based on the amount of third-party assistance grants

In addition to the Energy Help Fund Program, T.W. Phillips offers a usage reduction program, called the Wise Choice Program. The Wise Choice program provides weatherization and conservation education services to low-income, high-usage, payment-troubled customers.

The Pennsylvania Public Utility Commission ordered that T.W. Phillips conduct an independent evaluation of the EHF program. The evaluation of T.W. Phillips' EHF program is designed to address the following issues:

1. Does the EHF program meet the goals of universal service?
2. What are the EHF program application procedures, how do they work, and do they result in barriers to program participation?

3. What is the EHF program retention rate?
4. What is the overall effectiveness of the joint administration link between the EHF and the Wise Choice programs?
5. To what extent does the EHF program participation improve the payment behavior of participants, reduce arrearages, and decrease service termination and collection costs attributable to EHF participants?
6. How can T.W. Phillips improve the cost-effectiveness of the EHF program?
7. What is the participant distribution by income category (0-50%, 51%-100%, 101-150%, and 151%-200% of Federal Poverty Level)?

To answer these questions, the evaluation consisted of the following activities.

1. Evaluation planning and background research
2. Manager and staff interviews
3. Customer interviews
4. Data analysis
5. Meetings and Reports

Energy Help Fund Program

T.W. Phillips provides universal service programs to assist low-income customers who have difficulty paying their gas bills. These programs include the Customer Assistance Referrals and Evaluation Services Program (CARES), the \$1 Energy Fund Program, the LIHEAP Cash and Crisis programs, and the Energy Help Fund. They also provide energy conservation through the Wise Choice Low Income Usage Reduction Program (LIURP).

This evaluation focuses on the Energy Help Fund (EHF) Program. Customers with income below 150 percent of the Federal Poverty Level are eligible for the EHF. Three different levels of assistance are provided, depending on the household's annual income.

- *Tier 1 Customers:* Customers with annual household income at or below 50 percent of the Federal Poverty Level are included in this group. These customers receive a 75 percent discount on their monthly Customer Service Charge and Volumetric Delivery Rate.
- *Tier 2 Customers:* Customers with annual household income between 51 percent and 100 percent of the Federal Poverty Level are included in this group. These customers receive a 50 percent discount on their monthly Customer Service Charge and Volumetric Delivery Rate.
- *Tier 3 Customers:* Customers with annual household income between 101 and 150 percent of the Federal Poverty Level are included in this group. These customers do not receive a discount.

All tiers of customers receive arrearage forgiveness on a monthly basis. The arrearage forgiveness is equal to 1/36 of their gas service account arrearage on the date of entry into EHF, up to a maximum arrearage forgiveness of \$600 over the 36-month period. Therefore, the maximum monthly arrearage forgiveness is \$16.67. Arrearage forgiveness is only provided in the months that customers pay their full EHF billed amount. Customers may re-enroll in the EHF after the first 36 months and continue to receive arrearage forgiveness. Tier 3 customers who have retired all of their arrears at the end of the 36-month period must wait one year to re-enter if there is a waiting list for the program.

Program Outreach

T.W. Phillips provides outreach for the EHF through its Customer Service representatives, CARES representatives, and field representatives; through bill inserts and program mailings; and through local agencies. The largest sources of referrals are the Customer Service Representatives and the mailings. T.W. Phillips has conducted agency workshops and provided program brochures to local agency staff to educate them on the Energy Help Fund and other programs offered by T.W. Phillips to assist low-income customers. Despite these efforts, local agency staff are not very knowledgeable about the EHF and do not provide many referrals for the program. This may be due to frequent staff turnover at the agencies.

EHF Application

Customers who express interest in joining the EHF are mailed an application and program explanation. Customers who have not received LIHEAP in the past 12 months are required to provide income verification with their EHF application. Customers may jointly apply for the Wise Choice program on the same application. This process provides an effective link between the two programs. Customers can also jointly apply for assistance from the Dollar Energy Fund.

EHF Administration

T.W. Phillips has a program administrator for the EHF who reviews daily reports listing customers who have not completed an EHF application that was mailed to them, EHF customers about to have a payment due, who have missed a payment, and who have been removed from the program. The EHF administrator calls all customers on these lists to provide reminders about payments and determine if they can meet the payment requirements with some flexibility from T.W. Phillips. The program administrator also calls EHF participants to let them know when energy assistance is available. The EHF program administrator is also responsible for taking new applications for the EHF by telephone and in person. The extensive contact that this administrator has with the participating customers is one of the strengths of the EHF.

EHF Enrollment and Expenditure Statistics

T.W. Phillips has an expenditure cap of \$400,000 and an enrollment cap of 1,500 customers. They currently have about 800 customers on the EHF, and annual expenditures of approximately \$200,000.

Data Analysis

T.W. Phillips provided APPRISE with demographic data; EHF program data; billing and payment data; terminations data; and collections data. These data were furnished for current EHF participants, past EHF participants, and a sample of low-income non-participants. APPRISE used these data to analyze the impact of the EHF on customers' retention in the EHF and the impact of the EHF on bill payment, collections actions, and service terminations.

Income Distribution of EHF Participants

The analysis in this report showed that approximately 25 percent of EHF participants had income below 50 percent of the Federal Poverty Level, 50 percent had income between 51 and 100 percent of the Federal Poverty Level, and 25 percent had income between 100 and 150 percent of the poverty level. The EHF Program is serving the poorest customers who are most in need of payment assistance.

Retention Rate

Approximately one-third of the customers who enrolled in the EHF since the inception of the program remain on the payment plan. Fifty-nine percent remained on for six months, 38 percent remained on for one year, and 30 percent remained on the plan for two years. Most of the customers who left the EHF Program did so due to non-payment.

Payment Behavior

Customers who participated in the EHF had significant improvements in their payment behavior, as compared to low-income non-participants and to customers who participated in the program at a later date and had not yet received EHF benefits. Participants experienced reduced bills, increased cash and assistance payments, increased cash and total coverage rates, and decreased levels of shortfall.

As expected, customers who stayed on the EHF for a full year or longer following enrollment experienced greater benefits than those who left the program prior to one full year of participation. However, participants who remained on the program for less than a full year also had more favorable changes in payment statistics than those who did not participate in the program. The main reason that these customers had more favorable outcomes than the comparison group was that they received greater dollars in assistance payments.

Customers in all three Tier levels experienced positive benefits from participating in the EHF. Customers in Tiers 1 and 2 had significant declines in their bills, accompanied by increases in cash payments. Customers in Tier 3 did not have significant reductions in their bills, but they had larger increases in cash payments, and also had significant increases in assistance payments.

Arrearages

Customers who participated in the EHF had no gross change in arrears, but a small statistically significant net decline in arrears. When examined by year of enrollment,

customers who enrolled in 2002 had a decline in arrears, and customers who enrolled in 2003 had an increase in arrears. Participants who remained on the program for a full year had a large decline in arrears and customers who did not remain on the program for a full year had a large increase in arrears. Tier 3 customers had a large and significant decline in arrears. This decline in arrears exceeded the amount of arrearage forgiveness received for the Tier 3 participants. One explanation for this decline in arrears is that the program has encouraged Tier 3 customers to make more regular gas payments.

Service Terminations

While the full group of customers who participated in the EHF did not experience a decrease in service terminations, customers who succeeded in remaining on the EHF for a full year had a gross decrease in service terminations and a net decline in service terminations as compared to low-income non-participants. While all three Tiers of customers had an insignificant gross increase in the rate of service terminations, non-participant Tier 1 customers had a large increase in service terminations. Therefore, Tier 1 customers had a large net decrease in the rate of service terminations.

Collections Actions

EHF participants experienced fewer of 17 of the 19 different types of collections actions in the year following enrollment than they did in the year preceding enrollment. Most of these reductions were statistically significant. The non-participants experienced an increase in all but one of the collections actions. The participants, therefore, experienced a significant net reduction in the number of each collections action, ranging from a nine to a 100 percent reduction in the number of actions.

Universal Service Goals

The analysis presented here showed that the EHF Program helped to increase customer payments and bill coverage rates. Bills declined significantly for customers in Tier 1 and Tier 2. However, it was shown that the majority of customers did not remain on the program for one year or more, and that customers must remain on the program to experience the full program benefits, including a reduction in arrearages. Additionally, only those customers who remained on the program for a full year experienced a reduction in the rate of service terminations. To fully realize the benefits of the program, T.W. Phillips would need to assist customers to further reduce their bills or increase their assistance payments.¹ However, the program as it currently stands, already produces significant benefits for many participants.

Customer Surveys

APPRISE conducted surveys with current EHF participants, past EHF participants, and low-income customers who had not participated in the program.

¹ Dollar Energy Fund assistance payments are targeted to restore gas service for low-income customers. As a result, EHF participants are unlikely to receive these benefits. Allocation of some of these benefits for EHF participants may help to make their bills more affordable and improve program retention rates.

Indicators of Need

Non-participants showed less of a need for EHF benefits than current or past participants. Non-participants are less likely to have a disabled household member, and they have higher income levels. They are more likely to receive employment income and are less likely to receive public assistance, non-cash benefits, or LIHEAP.

Participation in the EHF

Non-participants are likely to know about the EHF (62 percent reported that they were aware of the program) from customer service representatives or bill inserts. However, they do not enroll because they believe their income is too high or they do not understand the program requirements or enrollment procedures.

Current and past participants reported that they heard about the EHF through a customer service representative, an agency, or a friend or relative, and that they enrolled in the program to reduce their bills. They reported that the enrollment was not difficult and that the entire process took less than two months.

Understanding of the EHF

Most current and past participants reported that they understood the EHF, reported that their responsibility was to keep up with payments, and that they were required to notify T.W. Phillips if their income changed. Customers were less likely to know the duration of the program or to understand how their energy assistance benefits were credited to their account. However, customers were not likely to report that they had concerns about the benefit crediting procedures.

Current and past participants were most likely to state that lower energy bills were a benefit of participating in the program. The second most common benefit that customers cited was even payments or a budget bill. About 67 percent of current customers said that the arrearage forgiveness that they receive makes them more likely to pay their bills.

Financial Obligations and Bill Payment Difficulties

Current and past participants felt that the EHF had a large impact on their ability to pay their energy bills. While 64 percent of current participants said that it was very difficult to pay their gas bills prior to participating in the program, only 10 percent said that it was very difficult to pay their bills while participating in the program. Eighty percent of past participants said that it was very difficult to pay their bills prior to participating in the program, compared to 28 percent who said it was very difficult to pay their bills while participating in the program.

Current participants also reported that the EHF helped them to meet their other needs. While 59 percent of current participants said that they had to forego or delay spending on food prior to participating in the program, 21 percent said that they had to do so while participating in the program. They were less likely to say that they had to forego several other bills as well.

While non-participants were less likely than current and past participants to report bill payment difficulties, they also showed a need for the program. Twenty-one percent said that it was very difficult to pay their gas bills, 35 percent said that they had to forgo or delay spending on food, and three percent said that there was a time in the past year that they could not use their main source of heat.

EHF Impact

Respondents reported that the EHF has been very important in helping them to meet their needs. Seventy-nine percent of current participants reported that the program was very important, and 17 percent reported that it was somewhat important. Percentages were similar for past participants.

Respondents felt that they need additional assistance to pay their gas bills. Forty-three percent of current participants, 84 percent of past participants, and 56 percent of non-participants said that they need additional assistance.

Program Success

Past participants were most likely to report that they did not know why they were no longer participating in the EHF. They also reported that they were no longer participating because they missed a payment or they were no longer income-eligible. They felt that T.W. Phillips could help customers to stay on the program by providing greater flexibility with payments and lower payments. Most said that they would re-enroll in the program if they were eligible.

Most participants were very or somewhat satisfied with the program and most current participants said that they were very likely to continue to participate in the program and would do so as long as they were income-eligible.

Summary of Findings and Recommendations

This evaluation found that the EHF is a well-managed program that achieves significant bill payment impacts for participating customers and meets the Universal Service Program goals. Findings and recommendations from the evaluation are summarized below.

Program Administration

Interviews with program managers and administrators and a review of program documents and data showed that the EHF is an extremely well managed program. They have an efficient system to process and report data needed to oversee the EHF. They provide extensive contact with participants to remind them about payments coming due, payments overdue, and energy assistance that is available. Given this finding, we did not have any recommendations for the program to improve cost-effectiveness.

Program Procedures

A review of program procedures, interviews with managers and staff, data analysis, and interviews with customers showed no apparent barriers to enrollment and successful targeting of the most in need customers. However, interviews with local agencies showed

low awareness of the EHF despite education efforts made by T.W. Phillips, and suggested that T.W. Phillips could more frequently provide workshops and send brochures to the agencies so that program information is not lost with agency staff turnover.

Customer Perspectives

Customer interviews showed that participants value the EHF and they believe that it has had a large impact on their ability to pay their gas bills and to meet their needs. They report that they are more likely to pay their bill because of the arrearage forgiveness that they receive.

Program Impact

Data analysis provided information on EHF retention rates, and the impact of the EHF on bill payment behavior, arrearages, terminations, and collections actions. About 59 percent remain on the EHF for six months, 38 percent for one year, and 30 percent for two years. Customers who participated in the program had significant improvements in their bill payment behavior compared to low-income non-participants and to later participants. They experienced reduced bills, increased cash and assistance payments, increased cash and total coverage rates, and decreased levels of shortfall. Customers who participated in the EHF had a small decrease in the arrears. Customers who remained on the EHF for a full year and Tier 1 participants had a decrease in service terminations. Participants experienced fewer of almost all types of collections actions after participating in the EHF.

Universal Service Goals

The evaluation showed that the EHF program meets the Universal Service goals. The program lowered gas bills for participants, participants reported that their gas bills were more affordable when they participated in the program, and data analysis showed that service terminations were less likely some groups of participants.

I. Introduction

This report presents the findings from the 2004 Evaluation of T.W. Phillips' Energy Help Fund Program. T.W. Phillips' Energy Help Fund assists eligible low-income residential customers to pay their gas bills. Based on annual household income, the household may receive a discounted gas bill and/or arrearage forgiveness.

A. Background

The Natural Gas Choice and Competition Act, effective July 1, 1999, restructured the natural gas utility industry. As a result, there were concerns that natural gas remain universally available to all customers in the state, and several provisions were included in this Act relating to universal service of natural gas service. Related to these requirements and a rate settlement, T.W. Phillips established a customer assistance program called the Energy Help Fund (EHF) as part of its Universal Service program.

The goals of the Universal Service Programs are to:

- Protect low-income customers' health and safety by ensuring that natural gas service is obtained and/or maintained in accordance with the Pennsylvania Public Utility Code and Commission regulations;
- Help low-income customers to obtain and/or maintain service;
- Make available payment assistance programs to make natural gas service affordable to low-income customers;
- Assist low-income customers to conserve energy and reduce their residential natural gas bill; and
- Establish effective and efficiently-operated universal service and energy conservation programs.

T.W. Phillips' Energy Help Fund Program is a low-income assistance program designed to help eligible payment-troubled residential customers to pay their gas bills. Based on annual household income, three different levels of assistance are offered to customers. This assistance includes:

- A discounted Customer Charge and Volumetric Delivery Rate
- Monthly credits against outstanding arrearages up to a maximum of \$600 over three years

- Credits against the participant's current gas bill based on the amount of third-party assistance grants

In addition to the Energy Help Fund Program, T.W. Phillips offers a usage reduction program, called the Wise Choice Program. The Wise Choice program provides weatherization and conservation education services to low-income, high-usage, payment-troubled customers.

B. Evaluation

The Pennsylvania Public Utility Commission ordered that T.W. Phillips conduct an independent evaluation of the EHF program. The evaluation of T.W. Phillips' EHF program is designed to address the following issues:

1. Does the EHF program meet the goals of universal service?
2. What are the EHF program application procedures, how do they work, and do they result in barriers to program participation?
3. What is the EHF program retention rate?
4. What is the overall effectiveness of the joint administration link between the EHF and the Wise Choice programs?
5. To what extent does the EHF program participation improve the payment behavior of participants, reduces arrearages, and decrease service termination and collection costs attributable to EHF participants?
6. How can T.W. Phillips improve the cost-effectiveness of the EHF program?
7. What is the participant distribution by income category (0-50%, 51%-100%, 101-150%, and 151%-200% of Federal Poverty Level)?

To answer these questions, the evaluation consisted of the following activities.

1. *Evaluation planning and background research:* APPRISE collected and reviewed all documents related to the EHF program and other T.W. Phillips Universal Service Programs. The purpose of this research was to obtain a better understanding of program requirements, procedures, and operations.
2. *Manager and staff interviews:* APPRISE conducted interviews with the T.W. Phillips Universal Service Program manager, the EHF program administrator, internal CARES representatives, the external CARES consultant, and representatives at a sample of local community agencies that provide referrals to the programs. The purpose of these interviews was to obtain detailed descriptions of EHF policies and

procedures, how the EHF interacts with other universal service programs, and types of program outreach provided by local agencies.

3. *Customer interviews:* APPRISE conducted telephone interviews with a sample of customers who currently participate in the EHF, who previously participated in the EHF, and low-income customers who have never participated in the EHF. The purpose of these interviews was to assess barriers to participation, difficulties that low-income customers face when attempting to pay their gas bills, how program operations can be improved, the impact of the program on affordability, and whether and how retention rates can be improved.
4. *Data analysis:* T.W. Phillips provided APPRISE with data for customers who have participated in the EHF and for a sample of low-income customers who have not participated in the program. APPRISE used these data to analyze how long customers stay in the program; whether customers are successful at having their arrearages forgiven; the impact of the EHF on payment behavior, arrearages, service termination, and collection costs; and the distribution of participants by poverty level.

C. Organization of the Report

Four sections follow this introduction.

- 1) *Section II – Energy Help Fund Program:* Provides a detailed description of the Energy Help Fund Program.
- 2) *Section III – Data Analysis:* Provides analysis of participant demographics; EHF retention rates; and impact of the program on customers' bills, payments and arrearages.
- 3) *Section IV – Customer Survey Results:* Provides a summary of the findings from the survey of current participants, former participants, and low-income non-participants.
- 4) *Section V – Summary of Findings and Recommendations:* Provides a summary of the findings and recommendations from all of the evaluation activities.

APPRISE prepared this report under contract to T.W. Phillips. T.W. Phillips facilitated this research by furnishing program data to APPRISE. Any errors or omissions in this report are the responsibility of APPRISE. Further, the statements, findings, conclusions, and recommendations are solely those of analysts from APPRISE and do not necessarily reflect the views of T.W. Phillips.

II. Energy Help Fund Program

T.W. Phillips' Energy Help Fund assists eligible low-income residential customers to pay their gas bills. Based on annual household income, the household may receive a discounted gas bill and/or arrearage forgiveness. This section of the report provides a detailed description of program requirements, procedures, and implementation. The findings in this section are based upon reviews of program documents, analysis of program statistics, interviews with the EHF manager and program staff, and interviews with agency representatives.

A. Program Eligibility and Benefits

T.W. Phillips serves more than 56,000 residential customers living in seven counties in western Pennsylvania. T. W. Phillips estimates that approximately 5,300 of these customers are low-income, and about 3,700 are low-income payment-troubled.

T.W. Phillips provides Universal Service programs to assist low-income customers who have difficulty paying their gas bills. These programs include the Customer Assistance Referrals and Evaluation Services Program (CARES), the \$1 Energy Fund Program, the LIHEAP Cash and Crisis programs, and the Energy Help Fund. They also provide energy conservation through the Wise Choice Low Income Usage Reduction Program (LIURP).

This evaluation focuses on the Energy Help Fund (EHF) Program. Customers with income below 150 percent of the Federal Poverty Level are eligible for the EHF. Three different levels of assistance are provided, depending on the household's annual income.

- *Tier 1 Customers:* Customers with annual household income at or below 50 percent of the Federal Poverty Level are included in this group. These customers receive a 75 percent discount on their monthly Customer Service Charge and Volumetric Delivery Rate.
- *Tier 2 Customers:* Customers with annual household income between 51 percent and 100 percent of the Federal Poverty Level are included in this group. These customers receive a 50 percent discount on their monthly Customer Service Charge and Volumetric Delivery Rate.
- *Tier 3 Customers:* Customers with annual household income between 101 and 150 percent of the Federal Poverty Level are included in this group. These customers do not receive a discount.

All tiers of customers receive arrearage forgiveness on a monthly basis. The arrearage forgiveness is equal to 1/36 of their gas service account arrearage on the date of entry into EHF, up to a maximum arrearage forgiveness of \$600 over the 36-month period. Therefore, the maximum monthly arrearage forgiveness is \$16.67. Arrearage forgiveness is only provided in the months that customers pay their full EHF billed amount. Customers may re-

enroll in the EHF after the first 36 months and continue to receive arrearage forgiveness. Tier 3 customers who have retired all of their arrears at the end of the 36-month period must wait one year to re-enter if there is a waiting list for the program.

LIHEAP and other energy assistance grants are awarded to the customer's account at the time that T.W. Phillips receives the grant on the customer's behalf. Customers on the EHF have their budget bill adjusted by 1/12 of the energy assistance grant, so that the grant award impacts required EHF payments over the entire year. This process encourages customers to establish regular bill payment behavior, and a set amount in their budget that is allocated to gas costs on a monthly basis. It also encourages customers to re-apply for all types of assistance that they are eligible for.

Previously, T.W. Phillips included an anticipated LIHEAP grant when determining an EHF participant's budget. However, beginning in June 2002, T. W. Phillips moved to the current method where grants are applied forward to budget bills over a 12-month period. The change was made because customers' benefits were too variable, and the anticipation of grant awards sometimes caused an increase in arrears when the grant award was less than the previous year.

B. Program Outreach Procedures

T.W. Phillips employs several different methods to inform low-income customers about the EHF. These include:

- Bill inserts with program information.
- Targeted mailings of an information flyer and program application to residential customers who are believed to be eligible for the program.
- Provided informational workshops and sent brochures and flyers to assistance agencies operating in T.W. Phillips' service territory. The agency staff have been encouraged to refer qualified low-income residential customers to the program.
- LIHEAP and Dollar Energy recipients are contacted to encourage their participation in the EHF.
- Messages played for customers who call the Customer Service department
- Customer Service and Collections personnel inform customers about the program.
- Referrals from field representatives

Table II-1 displays the number and sources of referrals by EHF program year. This table shows that the majority of referrals came from T.W. Phillips Customer Service Representatives. The only other large source of referrals besides "other" was mailings.

**Table II-1
Source of Referral, By Year**

	2001	2002	2003	2004	TOTAL
Dollar Energy	1	7	2	0	10
Other Agency	0	15	28	24	67
CARES	5	25	8	4	42
Customer Service	69	571	1,184	506	2,331
Friend/Family	0	5	26	8	39
Mailing	109	812	2	0	923
Other	1	366	705	245	1,320
PUC	2	22	27	18	69
TOTAL	187	1,823	1,982	805	4,801

T.W. Phillips initially did numerous mailings for the EHF, but felt that they did not get a good response. They believe that there may have been too much information included in the package. These packets included program information and an application. They found that the bill inserts and postcards worked better.

The mailings were done mostly at the beginning of the program. T.W. Phillips has not sent out EHF information mailings lately because they are expensive and did not obtain the expected response. The bill insert obtained the best response, so they will have another bill insert this year.

T.W. Phillips Customer Service Representatives have been trained to recognize when customers are in need of assistance and to refer them to all energy assistance programs that are available. Interviews with these representatives showed a focus on and a genuine concern for the needs of low-income customers, and a desire to provide assistance with all available resources.

APPRISE attempted to conduct interviews with representatives at several agencies in T.W. Phillips' service territory to understand when they refer customers to the EHF, why they do not refer more customers, and whether more information is needed on the program. Contact was attempted at each of the 29 agencies in Allegheny, Butler, and Westmoreland counties. The following outcomes were attained.

- *Completed interviews:* Interviews were completed with representatives at three agencies. Two of the three individuals who were interviewed said that they did not feel comfortable with the program and would like more information. All three agencies said that they referred customers who were having trouble with their utility bills to the program. Agencies said that T.W. Phillips could provide more specific information about the EHF services, income guidelines, and the contact person; and do a presentation and send brochures about the program to increase the number of

referrals. One agency said that there was nothing T.W. Phillips could do to increase referrals from the agency.

- *No referrals or do not work on the EHF:* Nine of the agencies that were contacted said that they do not make referrals to the EHF or that they do not work on the program. Two of the agencies said that they do not know about the program, and would like more information. The lack of knowledge about the program may be related to the fact that agencies are not paid to refer customers to the EHF.
- *No contact:* Nineteen agencies could not be reached. Messages were left for specific personnel at three of these agencies, but there was no return call.

These interviews showed that there is little knowledge of the EHF among the local agency staff, despite T.W. Phillips' efforts to educate these staff. T.W. Phillips' education efforts have included invitations for all agencies in their service territory to attend informational workshops, as well as mailings and brochures.

C. Program Enrollment Procedures

Customers who call T.W. Phillips or are referred to the program administrator are pre-screened for the EHF. They are also screened for the Wise Choice program. Customers who have received LIHEAP in the past twelve months are not required to provide proof of income to enroll in the EHF or Wise Choice programs.

Customers who complete the pre-screening and have received LIHEAP in the past 12 months are sent a partially completed application and a letter describing the program benefits and the obligations of program participants. Customers who have not received LIHEAP are sent a blank application. Customers are asked to complete the application, provide current income information, and return the application and verification materials within ten days. Customers who do not complete the application are called to encourage them to complete it. If the program administrator cannot reach the customer by phone, he sends a letter to remind the customer about the application. The information provided by the customer is used to confirm eligibility for Wise Choice as well as for EHF.

Customers may submit the following forms of proof of income:

- Unemployment card
- Wage statements
- Social Security letter
- Copy of paycheck
- Welfare letter
- Tax return

The Customer Agreement form that must be signed and included with the application asks the customer to agree to the following terms:

- Verify gross monthly household income and household size
- Notify T.W. Phillips of any change in household income or size
- Pay the EHF payment in full by the due date every month
- Apply for LIHEAP and \$1 Energy Fund and direct payments to T.W. Phillips if eligibility requirements are met
- Notify T.W. Phillips of any change in residence
- Accept any changes to the program made by T.W. Phillips with Bureau of Consumer Services approval

The EHF program administrator felt that customers generally do not have problems with the EHF applications. Customers sometimes have questions about the income documentation that they are required to provide and they call the EHF administrator with these questions.

The EHF administrator determines if the customers are eligible for the EHF, and if they are eligible, which Tier they fall into. Letters of acceptance are sent to eligible customers with an explanation of the terms, conditions, and benefits of the program. Customers who are not eligible for the program receive a letter informing them of their status along with a brochure on Energy Saving Tips.

Table II-2 displays application statistics as of July 16, 2004. This table shows that 4,797 customers were referred for the EHF since the inception of the program. Fifty-eight percent of these customers were denied, 24 percent have been removed from the program, and 17 percent are active participants.

**Table II-2
Application Statistics**

Referral Source	Referrals	Denied	Removed	Pending	Active
Dollar Energy	10	4	4	0	2
Other Agency	67	31	17	1	18
CARES	41	15	15	0	11
Customer Service	2,330	1,448	526	23	333
Friend/Family	39	19	9	1	10
Mailing	923	658	204	0	61
Other	1,318	569	380	3	350
PUC	69	36	17	3	13
TOTAL	4,797	2,780	1,172	31	814

Table II-3 displays the reasons why customers were denied inclusion in the EHF, by year of application. This table shows that the vast majority of customers, 81 percent, were denied because they did not return the application. Other likely reasons for denial were that the customer's income was above the 150 percent threshold or that the customer did not have

the minimum \$200 in arrears. This requirement was removed in 2003 in order to allow for greater access to the program for those customers who sacrificed other basic needs in order to pay their gas bills. The program manager felt that this was the only barrier to program participation, and that removing this requirement has increased participation.

Table II-3
Application Statistics – Denial Reasons

	2001	2002	2003	2004	TOTAL
Above Income	1	44	109	36	190
Application Not Returned	86	1,015	850	292	2,243
Arrears Below Minimum	35	161	58	0	254
No Income Documentation	0	8	0	0	8
Other	0	43	29	15	87
TOTAL	122	1,271	1,046	343	2,782

Customers who return the application are processed for the EHF within two weeks. There is no waiting list for the EHF.

D. EHF Delivery and Cost Statistics

T.W. Phillips has set a maximum EHF program participation level of 1,500 participants or a maximum expenditure of \$400,000, whichever comes first. Funds from one program year will only be rolled over into the next year if the enrollment ceiling is reached before the expenditure ceiling.

The goal for enrollment is to utilize the allotment of funds. T.W. Phillips managers originally thought that they would use up the allotment of funds with 700 customers on the EHF. They now believe they could have around 1,000 on the EHF within the current budget.

Table II-4 displays EHF enrollment by year of enrollment and Tier level. The EHF was initiated in November 2001. The table shows that 30 customers were enrolled during the first two months of program implementation. Enrollment quickly picked up, and 532 customers were enrolled in 2002. Enrollment continued to grow in 2003. Complete data were not available for 2004 at the time this report was written.

Table II-4
Enrollment by Year and Tier

	2001	2002	2003	2004 ¹	TOTAL
Tier 1	7	114	214	116	451

	2001	2002	2003	2004 ¹	TOTAL
Tier 2	12	273	439	219	943
Tier 3	8	130	258	114	510
Tier Data Missing	3	15	27	8	53
TOTAL	30	532	938	457	1,957

¹Enrollees through the first week of August 2004.

Table II-5 displays EHF expenditures by year and category. This table shows that program expenditures increased from \$49,000 in 2001 to \$189,000 as the enrollment increased. Most of the increased cost was attributable to rate discounts and arrearage forgiveness.

Table II-5
Energy Help Fund Expenditures

	2001	2002	2003
Rate discounts	\$633	\$39,749	\$109,611
Arrearage forgiveness	\$249	\$22,110	\$44,040
Administrative costs	\$18,015	\$27,848	\$19,996
Evaluation cost reserve	\$15,000	\$15,000	\$15,000
Additional expenses¹	\$15,000	\$18,415	\$0
TOTAL	\$48,896	\$123,121	\$188,647

¹Additional expenses include program development costs and outreach costs.

E. Program Operations

The program administrator takes a very active role in encouraging customers to remain on the program. He has responsibilities in the following areas.

- *Applications:* Each morning, the program administrator reviews a report that lists customers who did not return the application. He calls these customers to determine whether they had a problem with the application. They sometimes need to wait another week for a paycheck so that they are able to document 30 days of pay. Or they may need to wait to receive documentation of their social security payments. If the program administrator does not reach the customer by phone, he will send a letter.
- *Bills:* Each afternoon, the program administrator reviews a report on customers whose bills are coming due. He gives these customers a reminder phone call.
- *Late payments:* Each morning, the program administrator reviews a report that lists EHF customers with late payments. He tries to reach each of these customers by telephone. Most of the customers know why he is calling. If the customer does not have the money for the payment, the administrator can extend the due date. The

customer may need extra time for a Social Security check or a paycheck to come in. If the program administrator cannot reach the customer by phone, he sends a letter.

- *Removals:* Each morning, the program administrator reviews a report that lists the customers who were removed from the EHF. He determines why they were removed. If T.W. Phillips received a payment from the customer the previous night, he makes sure that the customer is not removed from the program. If the customer is waiting for an unemployment check or a paycheck, he can extend the due date of the bill.
- *Energy assistance:* The EHF administrator calls EHF participants to tell them that the LIHEAP and Dollar Energy programs are opening. Information on program closing date and application sites are provided. The EHF administrator monitors customer accounts to ensure that arrearage credits are applied and that energy assistance grants are properly applied. He checks the crediting of arrearages and grants each time he calls a customer and accesses the account.

After one missed payment, the customer receives a phone call or a letter from the program administrator. If the customer can make up the payment, the program administrator can put the customer back on the program. If the customer does not make up the payment, the customer is removed from the program and enters normal collections procedures. The customer cannot then re-enter the program for another year. The customer will not receive a phone call to let him/her know that he/she is eligible to re-join the program.

Customers are not required to re-certify their income during the 36-month period unless they have \$0 in income or there is a question about their income. If the customer has \$0 in income, the customer must re-certify in six months.

Customers are required to notify T.W. Phillips if their income changes during the 36-month period. This is in the statement they sign when they join the program. If the customer's income changed and moved him/her to another Tier, program benefits would be adjusted. If the customer's income increased to more than 150 percent of the Federal Poverty Level, the customer would be removed from the EHF.

The EHF is approaching 36 months of operation. Customers who have been enrolled for 36 months will receive a call or a letter from the program administrator. Updated information and income verification will be required if they have not received LIHEAP in the past year.

III. Data Analysis

T.W. Phillips provided APPRISE with demographic data; EHF program data; billing and payment data; terminations data; and collections data. These data were furnished for current EHF participants, past EHF participants, and a sample of low-income non-participants. APPRISE used these data to analyze the impact of the EHF on customers' retention in the EHF and the impact of the EHF on bill payment, collections actions, and service terminations. This section describes the goals of the data analysis, the methodology that was used, and the results.

A. *Goals of the Data Analysis*

The analysis of customer data fulfills several of the evaluation goals. Below we describe the questions that are addressed, and the data that are used to furnish the desired information.

- *EHF participant distribution by income category:* We analyze the distribution of poverty levels for customers who have participated in the EHF program. The poverty levels are divided into the three Tiers that correspond to program benefits.
 - Tier 1 customers have income less than or equal to 50 percent of the Federal Poverty Level
 - Tier 2 customers have income between 51 and 100 percent of the Federal Poverty Level
 - Tier 3 customers have income between 101 and 150 percent of the Federal Poverty Level
- *Retention rate:* We analyze how long customers stay in the program, determine whether demographic variables and pre-program arrears are correlated with retention rates, and analyze the reasons that customers leave the program.
- *Payment behavior:* We compare payment behavior for program participants in the year preceding program enrollment and the year following program enrollment. Two different comparison groups are used to control for changes in behavior that are unrelated to the EHF.
- *Arrearages:* We compare customer balances just prior to program enrollment to those just after the customer has participated in the program for a full year. We use two different comparison groups to control for changes that are unrelated to the EHF.
- *Service termination and collection actions:* We compare the rate of service termination for customers who enrolled in the EHF program to that for two different comparison groups. We also compare the number and rate of collections actions associated with each group of customers.

- *Universal Service Goals:* We assess the extent to which the EHF meets the goals of Universal Service, including ensuring that natural gas service is maintained, making natural gas service affordable to low-income customers, and assisting customers to reduce their natural gas bills.

B. Data Analysis Methodology

This section describes the selection of participants for the evaluation, how evaluation data were obtained, and the use of a comparison group.

Study Group

All customers who joined the EHF program since the inception of the program were included as potential members of the study group. However, as one full year of post-program data is required for an analysis of program impacts, and customer data were obtained in August 2004, customers who joined the EHF after July 2003 could not be included in the payment impact analysis. Additionally, customers who did not have a full year of data prior to joining the program or a full year of data following the program start date were not included in the payment impact analysis. The subject of data attrition is addressed more fully below.

Evaluation Data

T.W. Phillips provided customer data, program data, billing and payment data, collections data, and usage data for all current and past EHF participants, as well as for a sample of identified low-income customers to serve as a comparison group. These data were provided in electronic format. Billing, payment, and usage data extended from July 1998 through August 2004, or as long as the household was a customer. Collections data extended from May 1994 through August 2004.² The data that were used in the analysis for the treatment group extended from one year before the customer joined the EHF to one year after the customer joined the EHF. The data that were used in the analysis for the comparison group of later participants extended two years before the customer joined the EHF. The data that were used in the analysis for the comparison group of non-participants included one year of data before the earliest participants to one year of data after the latest participants.

Comparison Group

When measuring the impact of an intervention, it is necessary to recognize other exogenous factors that can impact changes in outcomes. Changes in a client's payment behavior and bill coverage rate, between the year preceding EHF enrollment and the year following enrollment, may be affected by many factors other than program services received. Some of these factors include changes in household composition or health of family members, changes in gas prices, changes in weather, and changes in the economy.

The ideal way to control for other factors that may influence payment behavior would be to randomly assign low-income customers to a treatment or control group. The treatment

² The exceptional quality and thoroughness of the data that were provided by T.W. Phillips allowed for a rigorous and complete evaluation of the impacts of the EHF.

group would be given the opportunity to participate in the program first. The control group would not be given an opportunity to participate in the program until one full year later. This would allow evaluators to determine the impact of the program by subtracting the change in behavior for the control group from the change in behavior for the treatment group. Such random assignment is rarely done in practice because of a desire to include all eligible customers in the benefits of the program or to target a program to those who are most in need.

A comparison group is constructed for the program evaluation to control for exogenous factors. The comparison group is designed to be as similar as possible to the treatment group, those who received services and who we are evaluating, so that the exogenous changes for the comparison group are as similar as possible to those of the treatment group. In the evaluation of the EHF, we were able to obtain two good comparison groups. Each comparison group is described below.

- *Low-Income Non-Participants:* We obtained a sample of 311 customers who were identified as low-income, but did not enroll in the EHF, to utilize as a comparison group. The group of customers was replicated six times to represent customers who enrolled in the program in each quarter of 2002 and the first two quarters of 2003. A quasi intervention date of the middle of the quarter was chosen for each group to compare to the participating customers who enrolled in that quarter.
- *Later Program Participants:* We use customers who participated in the program at a later date as another comparison group. These participants serve as a good comparison because they are lower income households who were eligible for the program and chose to participate. We use data for these participants for the two years preceding EHF enrollment, to compare their change in payment behavior in the years prior to enrolling to the treatment group's change in payment behavior after enrolling.

In this evaluation, we examine pre and post-treatment payment statistics. The difference between the pre and post-treatment statistics for the treatment group is considered the gross change. This is the actual change in behaviors and outcomes for those participants who were served by the program. Some of these changes may be due to the program, and some of these changes are due to other exogenous factors, but this is the customer's actual experience. The net change is the difference between the change for the treatment group and the change for the comparison group, and represents the actual impact of the program, controlling for other exogenous changes.

C. Client Characteristics

The EHF program was initiated in November 2001. Between the time of the program initiation and the data download in the first week of August 2004, there were 2,006 EHF enrollments. Of those 2,006 enrollments, there were 1,957 unique account identification

numbers. For the analysis in this evaluation, we selected the account's first program enrollment for inclusion in the analysis.

Table III-1 displays statistics on different groups of customers that are analyzed in this report. As described above, there were 1,957 unique enrollments in the program. Approximately one quarter of the customers were in each of Tier levels 1 and 3, and approximately 50 percent were Tier level 2. About seven percent were classified as seniors and 13 percent with medical issues. The mean arrears at the time of enrollment in the EHF was \$493.

Table III-1 also displays data on customers who enrolled in the EHF prior to August 1, 2003. These customers were eligible to be included in the payment analysis, because they could have a full year of data following EHF enrollment. These customers were similar to the full sample of enrollees, except for the fact that they had higher arrearages. This is related to the program rule (that was eliminated in August 2003) that required customers to have \$200 in arrearages to join the EHF.

Table III-1 shows that 587 customers had complete payment data and could be included in the impact analysis. These customers were less likely to be Tier 1 and more likely to be in Tier 2. Mean arrears for these customers were higher than for the full group of enrollees, but were similar to the group who enrolled before August 1, 2003.

Table III-1 also displays demographic characteristics for 2002 enrollees, the non-participant comparison group, and the 2003 comparison group. The non-participants were less likely to be in Tier 1 and Tier 2, they were more likely to be in Tier 3, and they were more likely to have missing data on their Tier level. The non-participant comparison group and the 2003 comparison group with complete data had lower levels of arrears than the full sample and the 2002 enrollees.

**Table III-1
Demographics of the Sample**

	Full Sample			2002 Enrollees		Non-participant Comparison Group		2003 Comparison Group	
	All	Enrolled Before 8/1/03	With Complete Payment Data	All	With Complete Payment Data	All	With Complete Payment Data	All	With Complete Payment Data
Observations	1,957	1,141	587	532	318	1,866	1,172	938	446
Tier Level									
1 (<=50%)	23%	24%	18%	21%	17%	7%	3%	23%	17%
2 (51%-100%)	48%	47%	51%	51%	54%	24%	22%	47%	45%
3 (101%-150%)	26%	25%	27%	24%	26%	44%	50%	28%	35%
Missing	3%	4%	3%	3%	2%	26%	26%	3%	3%

	Full Sample			2002 Enrollees		Non-participant Comparison Group		2003 Comparison Group	
	All	Enrolled Before 8/1/03	With Complete Payment Data	All	With Complete Payment Data	All	With Complete Payment Data	All	With Complete Payment Data
Senior	7%	7%	9%	8%	10%	8%	9%	8%	11%
Medical	13%	13%	12%	14%	12%	5%	4%	13%	10%
Mean Arrears at Enrollment	\$493	\$581	\$575	\$632	\$650	\$222	\$101	\$476	\$192
<\$200	26%	11%	10%	5%	3%	61%	79%	47%	68%
\$200 - \$499	39%	47%	49%	47%	47%	21%	16%	17%	18%
\$500-\$999	23%	28%	28%	33%	33%	13%	5%	21%	10%
>\$1,000	12%	14%	14%	16%	17%	5%	1%	15%	4%

Table III-2 displays the reasons why customers could not be included in the payment analyses that follow in this report. The data that were provided were very complete. The vast majority of customers who could not be included in the analysis joined the program after July 2003, opened their account less than one year before EHF enrollment (or two years before for the 2003 comparison group), or had their account finaled less than one year after enrollment. Excluding customers who had their account finaled less than one year after enrollment is a cause of bias, as these customers may have had their accounts finaled due to their lack of bill payment. However, without full payment data, these customers cannot be included in the analysis. Bias caused by exclusion of these customers is not a significant concern, as these customers made up only six percent of the full sample.

**Table III-2
Data Attrition**

	Full Sample	2002 Enrollees	Non-participant Comparison Group	2003 Comparison Group
Number of Customers	1,957	532	1,866	938
Enrolled After July 2003	853	0	0	NA
Account Opened Less Than One Year Before Enrollment (Two Years for 2003 Comparison Group)	301	116	667	449
Account Final Less than One Year After Enrollment	127	49	1	NA
Other missing payment data	89	49	26	43
Number of Customers with Complete Payment data	587	318	1,172	446

D. Retention Rates

Table III-3 displays data on EHF retention rates. This table shows that overall, 33 percent of enrollees remained on the program at the time of the data download in the first week of August 2004. Customers in Tier 1 were somewhat less likely to remain on the program than customers in the other program tiers. Seniors were more likely to remain on the program than other customers. Customers with higher levels of arrears were less likely to remain on the program.

The table below also displays information on the percentage of eligible customers who remained on the program for 6 months, 12 months, and 24 months. Customers are defined as eligible if they were enrolled in the program for at least that length of time. For example, there were 1,616 customers who enrolled in the program at least six months ago. Of those customers, 59 percent remained on the program for at least six months. Again, customers in Tier 2 and Tier 3, seniors, and customers with lower arrears were more likely to remain on the EHF. Thirty-eight percent of eligible participants stayed on the program for twelve months and thirty percent stayed on for two years.

**Table III-3
EHF Retention Rates**

	Obs	Percent Remaining on EHF	# Who Enrolled At Least 6 Months Ago	% Who Remain on EHF for At Least 6 Months	# Who Enrolled At Least 12 Months Ago	% Who Remain on EHF for At Least 12 Months	# Who Enrolled At Least 24 Months Ago	% Who Remain on EHF for At Least 24 Months
All EHF Participants	1,957	33%	1,616	59%	1,115	38%	328	30%
Tier:								
1	451	24%	354	46%	256	30%	62	23%
2	943	36%	783	65%	533	44%	177	32%
3	510	38%	429	63%	287	38%	79	32%
Missing	53	2%	50	32%	39	15%	10	10%
Senior:								
No	1,812	32%	1,488	58%	1,035	37%	300	30%
Yes	145	42%	128	69%	80	48%	28	29%
Medical								
No	1,710	33%	1,405	59%	968	37%	281	29%
Yes	247	32%	211	63%	147	44%	47	34%
Arrears								
<\$200	440	53%	337	69%	0	--	0	--
\$200 - \$500	888	29%	768	59%	675	41%	175	33%
\$500-\$1,000	414	24%	338	53%	293	35%	99	29%

	Obs	Percent Remaining on EHF	# Who Enrolled At Least 6 Months Ago	% Who Remain on EHF for At Least 6 Months	# Who Enrolled At Least 12 Months Ago	% Who Remain on EHF for At Least 12 Months	# Who Enrolled At Least 24 Months Ago	% Who Remain on EHF for At Least 24 Months
>\$1,000	215	21%	173	51%	147	31%	54	19%

Table III-4 displays retention rates by quarter of enrollment. This table shows that six-month retention rates ranged from 40 percent, for those customers who enrolled in the last quarter of 2001, to 75 percent, for those customers who enrolled in the first quarter of 2002.

**Table III-4
Retention Rates By Quarter of Enrollment**

Enrollment Quarter	Number Enrolled	Percent Remaining on EHF			
		After 6 Months	After One Year	After 18 Months	After Two Years
Q4 2001	30	40%	30%	23%	13%
Q1 2002	80	75%	59%	48%	34%
Q2 2002	162	66%	50%	39%	31%
Q3 2002	200	65%	43%	34%	--
Q4 2002	90	56%	28%	21%	--
Q1 2003	291	48%	28%	--	--
Q2 2003	213	57%	40%	--	--
Q3 2003	191	52%	--	--	--
Q4 2003	243	69%	--	--	--
Q1 2004	235	--	--	--	--
Q2 2004	182	--	--	--	--
Q3 2004	40	--	--	--	--
TOTAL	1,957				

Table III-5 displays the reasons for customer removal. The majority of customers, 81 percent, were removed because they did not make their required EHF payments. Fourteen percent of customers were removed because their accounts were finaled. A few customers requested to be removed from the EHF, and a few customers had income increase to the point where it was over the limit for participating in the program.

**Table III-5
Reasons for Removal**

Reason for Removal	Number of Customers	Percent of Total
No payment	852	81%
Account finaled	142	14%
Customer request	39	4%
Income over limit	7	1%
Other	11	1%
TOTAL	1,051	100%

E. Payment Impacts

This section analyzes the impacts of the EHF on the payments of the program participants. As discussed in the methodology section, two different comparison groups are used: low-income customers who did not participate in the program, and later program participants.

Table III-6 displays the results for the full sample of customers with complete payment data, using the low-income non-participants as a comparison group. The table shows that the EHF had a positive impact on bills and payments for program participants.

- *Bills:* In the year preceding enrollment in the EHF, participants had total bills averaging \$1,194. Average bills increased to \$1,290 in the year following enrollment in the program. The gross change in bills was \$96. Bills increased by \$182 for the low-income non-participants between the two time periods. Therefore, the net change for the program participants was a decrease of \$86. We estimate that in the absence of the EHF, bills for participating customers would have increased by almost twice as much as they did.
- *Cash Payments:* Cash payments are defined as payments that are made directly by customers (as opposed to assistance payments). Participants' total cash payments averaged \$710 in the year preceding program enrollment. Their payments increased by \$182 to \$892 in the year following EHF enrollment. Cash payments for low-income non-participants increased by \$117 between the two time periods. Therefore, the net change for program participants was an increase in cash payments of \$65.
- *Assistance Payments:* Assistance payments include LIHEAP, crisis, Dollar Energy payments, and other agency payments. Participants' assistance payments increased from \$298 in the year preceding EHF enrollment to \$342 in the year following EHF enrollment, a \$44 increase. Assistance payments for low-income non-participants were essentially unchanged. Therefore, the net change in assistance payments for EHF participants was a \$43 increase in assistance payments.

- *Total Payments:* Participants' total payments increased due to an increase in cash payments and an increase in assistance payments. Participants' total payments increased from \$1,007 in the year preceding enrollment to \$1,233 in the year following enrollment. The gross change was an increase in total payments of \$226. Non-participants' total payments increased by \$118. Therefore, the net increase in total payments for EHF participants was \$108.
- *Cash Coverage Rate:* The cash coverage rate is defined as the total cash payments for the year divided by the total bills for the year. It is the average percentage of bills that are covered with cash payments. Participants' had an average cash coverage rate of 59 percent for the year preceding EHF enrollment and an average cash coverage rate of 70 percent for the year following EHF enrollment. The gross change in participants' cash coverage rate was 11 percentage points. Their cash coverage rate increased due to a decrease in total bills and an increase in cash payments. Non-participants had their cash coverage rate decrease by six percentage points, because cash payments did not increase as much as total bills. The net increase in the participants' cash coverage rate was 17 percentage points.
- *Total Coverage Rate:* The total coverage rate is defined as total payments (cash payments plus assistance payments) divided by total bills for the year. Participants had an average total coverage rate of 84 percent for the year preceding enrollment and an average total coverage rate of 99 percent for the year following enrollment. The gross change in the total coverage rate for program participants was 15 percentage points. The total coverage rate for non-participants decreased by seven percentage points. Therefore, the net change in the total coverage rate for participants was 22 percentage points.
- *Shortfall:* The shortfall is total bills minus total payments. A positive shortfall indicates that on average, customers do not pay their total bills. Participants had an average shortfall of \$187 in the year preceding EHF enrollment, and an average shortfall of \$56 in the year following enrollment. The gross change in shortfall was a decline of \$130. Non-participants increased their shortfall by \$64 in this time period. The net change in shortfall for participants was a decline of \$194.
- *Arrearage Forgiveness:* Customers who participate in the EHF receive monthly arrearage forgiveness up to a total of \$200 in a year, or \$600 over three years. Customers did not receive arrearage forgiveness in the year preceding EHF enrollment, but they received an average of \$60 in arrearage forgiveness in the year following EHF enrollment. Non-participants did not receive arrearage forgiveness; therefore both the gross and net change in arrearage forgiveness was an increase of \$60.
- *Balance:* We examine participants' balances immediately prior to enrolling in the EHF and after one year of participation in the EHF. Participants' balances averaged \$575 at the time of enrollment. These balances increased by \$11 during this time

period. Balances for non-participants increased by \$45. Therefore the net change in balances was a decline of \$35.

In the absence of budget billing, the change in the customer's balance would be equal to the difference between bills and payments (shortfall) minus arrearage forgiveness for the year following program enrollment. In this case, the gross change in the balance would have been a decline of \$4 (instead of an increase of \$11). However, because customers are on budget billing plans, their balance can differ from what they are asked to pay. Additionally, the EHF program initially reduced customers' budget billings by the anticipated assistance payments, equal to assistance payments received in the previous year. If assistance payments declined, customers may pay their entire bill, and still have their balance increase.

Table III-6 shows that program participants experienced positive benefits from program participation in all indicators of program success. All of these changes, except the balance, were statistically significant for both the gross and net effects. Bills declined, cash and assistance payments increased, cash and total coverage rates increased, shortfall declined, customers received arrearage forgiveness, and their balances declined.

**Table III-6
Payment Impacts
All Customers**

	Treatment Group			Non-participants Comparison Group	Net Change
	Baseline	Follow-Up	Change	Change	
Number of Customers	587	587		1,172	
Total Bills	\$1,194	\$1,290	\$96**	\$182**	-\$86**
Total Cash Payments	\$710	\$892	\$182**	\$117**	\$65**
Assistance Payments	\$298	\$342	\$44**	\$1	\$43**
Total Payments	\$1,007	\$1,233	\$226**	\$118**	\$108**
Cash Coverage Rate	59%	70%	11%**	-6%**	17%**
Total Coverage Rate	84%	99%	15%**	-7%**	22%**
Shortfall	\$187	\$56	-\$130**	\$64**	-\$194**
Arrearage Forgiveness	\$0	\$60	\$60**	\$0	\$60**
Balance	\$575	\$585	\$11	\$45**	-\$35*

**Denotes significance at the 99 percent level. *Denotes significance at the 95 percent level.

The previous analysis showed payment impacts for all customers, using the non-participant low-income comparison group. Below we display the net impacts for subgroups of customers, using both the non-participant comparison group and the later participant comparison group.

Table III-7 displays net payment impacts by year of enrollment. The first column displays the net payment impacts that were displayed in the table above, for the full group of participating customers with complete payment data. Payment impacts for customers who enrolled in the EHF in 2002 are shown in the next two columns. Impacts for this group of customers are shown using both the non-participant comparison group and the later participant comparison group.

Net impacts for the 2002 enrollees using the non-participant comparison group were very similar to the net impacts for all participants, as described above. Impacts for the 2002 enrollees, using the 2003 enrollee comparison group, were greater. The actual payment impacts for 2002 enrollees were probably somewhere between these two estimates. Comparing the participants to non-participants most likely understates the impact of the program because non-participants are those who are less likely to be payment troubled, and are less likely to experience payment difficulty without the help of the program. Comparing the participants to the later participants probably overstates the impact of the program, as many or most of these participants entered the program because they were having a difficult time paying their bills.

The payment impacts of the EHF were very positive for enrollees in both 2002 and 2003. The differences between the impacts for the two years was that 2003 enrollees did not significantly increase their cash payments, and therefore their coverage rates did not increase by as much and their shortfall did not decrease by as much. These customers also experienced a small increase in their balance, as compared to the decrease seen for the 2002 enrollees.

Table III-7
Net Payment Impacts
By Year of Enrollment

Sample	All	2002 Enrollees		2003 Enrollees
Comparison Group	Non-participants	Non-participants	2003 Enrollees	Non-participants
Number of Customers	587	318		268
Total Bills	-\$86**	-\$93**	-\$97**	-\$64**
Total Cash Payments	\$65**	\$84**	\$183**	\$23
Assistance Payments	\$43**	\$30	\$6	\$51**
Total Payments	\$108**	\$115**	\$189**	\$74*
Cash Coverage Rate	17%**	21%**	25%**	10%**
Total Coverage Rate	22%**	24%**	29%**	15%**
Shortfall	-\$194**	-\$208**	-\$286**	-\$138**
Arrearage Forgiveness	\$60**	\$71**	\$66**	\$48**
Balance	-\$35*	-\$110**	-\$222**	\$58*

**Denotes significance at the 99 percent level. *Denotes significance at the 95 percent level.

Table III-8 displays net payment impacts by year of EHF enrollment and by whether the participant remained on the EHF for a full year following program enrollment. This table shows that customers who remained on the EHF for a full year experienced the greatest benefits. While those who stayed on the EHF for a full year experienced a significant net decline in their balance, those who stayed on the EHF for less than a full year experienced a significant net increase in their balance (Their shortfall averaged \$138 for the post enrollment year and their arrearage forgiveness averaged only \$19.).

However, even participants who remained on the program for less than a full year had more favorable changes in other payment statistics than those who did not participate in the program. These customers had a net increase in assistance payments of \$106. Their coverage rates increased and their shortfall declined as compared to the changes experienced by the comparison group. These positive net changes resulted from improvements in the treatment groups' gross payment statistics, and a worsening of the comparison group's statistics.

Assistance payments increased for all groups of EHF participants who did not stay on the program for a full year, as compared to both comparison groups. This appears to be another benefit for customers who are enrolled in the EHF – they had more contact with T.W. Phillips through the EHF staff member who regularly contacts each participant, reminds them about their payments, and assists them in obtaining various forms of energy assistance.

Table III-8
Net Payment Impacts
By Year of Enrollment and Whether Removed in First Year

Sample	All		2002 Enrollees				2003 Enrollees	
	Non-participants		Non-participants		2003 Enrollees Who Stay on EHF for At Least One Year	2003 Enrollees Who Stay on EHF for Less than One Year	Non-participants	
Stay on EHF for 1 Year	Yes	No	Yes	No	Yes	No	Yes	No
Number of Customers	302	285	182	136	182	136	120	148
Total Bills	-\$150**	-\$18	-\$158**	-\$6	-\$97**	-\$5	-\$133**	-\$9
Total Cash Payments	\$116**	\$11	\$105**	\$56	\$321**	\$205**	\$125**	-\$59
Assistance Payments	-\$16	\$106**	-\$46**	\$133**	\$42	\$89*	\$27	\$69**
Total Payments	\$99**	\$118**	\$59	\$190**	\$364**	\$293**	\$152**	\$10
Cash Coverage Rate	24%**	10%**	25%**	16%**	34%**	22%**	22%**	0%
Total Coverage Rate	25%**	18%**	24%**	25%**	41%**	31%**	26%**	6%*
Shortfall	-\$249**	-\$136**	-\$217**	-\$195**	-\$461**	-\$298**	-\$285**	-\$19
Arrearage Forgiveness	\$99**	\$19**	\$106**	\$23**	\$97**	\$18**	\$89**	\$16**

Sample	All		2002 Enrollees				2003 Enrollees	
	Non-participants		Non-participants		2003 Enrollees Who Stay on EHF for At Least One Year	2003 Enrollees Who Stay on EHF for Less than One Year	Non-participants	
Stay on EHF for 1 Year	Yes	No	Yes	No	Yes	No	Yes	No
Balance	-\$171**	\$110**	-\$176**	-\$22	-\$408**	-\$189**	-\$162**	\$237**

**Denotes significance at the 99 percent level. *Denotes significance at the 95 percent level.

Table III-9 displays net payment impacts by quarter of enrollment. Customers who enrolled in the first two quarters of 2002 experienced the largest net declines in their bills, and the largest increases in cash payments. Customers who enrolled in the EHF in the first quarter of 2002 experienced large net declines in their assistance payments, averaging between \$194 and \$266. As a result, these customers did not experience an increase in total payments or coverage rates, or a decrease in shortfall or balance, as compared to non-participants.

Table III-9 showed that a large decrease in assistance payments drove the results for customers who enrolled in the EHF in the first quarter of 2002, and that a large increase in assistance payments had a significant impact on results for customers who enrolled in the EHF in the third and fourth quarters of 2002 and the first quarter of 2003. Assistance payments shown in the table include crisis assistance, LIHEAP assistance, Dollar Energy payments, and payments from other agencies.

Table III-9
Net Payment Impacts
By Quarter of Enrollment

Sample	2002 Q1 Enrollees		2002 Q2 Enrollees		2002 Q3 Enrollees		2002 Q4 Enrollees		2003 Q1 Enrollees	2003 Q2 Enrollees
	Non-Participants	2003 Q1 Enrollees	Non-Participants	2003 Q2 Enrollees	Non-Participants	2002 Q3 Enrollees	Non-Participants	2002 Q4 Enrollees	Non-Participants	
Number of Customers	46		115		114		43		150	108
Total Bills	-\$167**	-\$162**	-\$115**	-\$139**	-\$77**	-\$76*	-\$47	-\$58	-\$82**	-\$59
Total Cash Payments	\$179**	\$278**	\$142**	\$256**	\$68	\$142*	-\$25	\$71	-\$45	\$115*
Assistance Payments	-\$266**	-\$194**	-\$23	-\$41	\$154**	\$68	\$161**	\$92*	\$108**	-\$32
Total Payments	-\$88	\$84	\$119*	\$214**	\$222**	\$210**	\$136*	\$163**	\$63	\$82
Cash Coverage Rate	24%**	28%**	28%**	31%**	22%**	21%**	9%*	16%**	10%*	12%**
Total Coverage Rate	10%	20%**	27%**	35%**	34%**	33%**	20%**	21%**	18%**	11%**
Shortfall	-\$79	-\$246**	-\$234**	-\$353**	-\$299**	-\$286**	-\$183**	-\$221**	-\$145**	-\$141**
Arrearage Forgiveness	\$88**	\$81**	\$82**	\$75**	\$61**	\$57**	\$46**	\$44**	\$38**	\$64**
Balance	\$54	-\$162*	-\$69	-\$269**	-\$165**	-\$221**	-\$139**	-\$116*	\$64	\$26

**Denotes significance at the 99 percent level. *Denotes significance at the 95 percent level.

Table III-10 breaks down the types of assistance received into these four categories. This table shows that changes in the total assistance amount were driven largely by changes in the amount of crisis assistance received. This is true for all quarters in which there is a statistically significant change in the total dollars of assistance received.

Table III-10
Assistance Payments
By Quarter of Enrollment

Sample	2002 Q1 Enrollees		2002 Q2 Enrollees		2002 Q3 Enrollees		2002 Q4 Enrollees		2003 Q1 Enrollees	2003 Q2 Enrollees
Comparison Group	Non-Participants	2003 Q1 Enrollees	Non-Participants	2003 Q2 Enrollees	Non-Participants	2002 Q3 Enrollees	Non-Participants	2002 Q4 Enrollees	Non-Participants	
Number of Customers	46		115		114		43		150	108
Crisis Assistance	-\$235**	-\$163**	\$16	-\$33	\$132**	\$62	\$135**	\$103**	\$88**	-\$18
LIHEAP	-\$10	-\$16	-\$21	\$13	-\$16	-\$23	\$14	-\$17	\$5	-\$14
Dollar Energy	-\$2	\$4	-\$10	-\$9	\$43	\$44**	\$38	\$27*	\$21**	\$2
Other Agencies	-\$19	-\$20	-\$7	-\$12	-\$5	-\$14	-\$26	-\$21	-\$6	-\$2*
Total Assistance	-\$266**	-\$194**	-\$23	-\$41	\$154**	\$68	\$161**	\$92*	\$108**	-\$32

**Denotes significance at the 99 percent level. *Denotes significance at the 95 percent level.

Table III-11 displays payment impacts by EHF Tier level and year of enrollment. This table shows that customers in Tier level 1 and Tier level 2 had significant bill decreases, while customers in Tier 3 did not experience significant changes in their bills. This is due to the fact that customers in Tiers 1 and 2 received bill discounts and arrearage forgiveness, but customers in Tier 3 only received arrearage forgiveness.

Customers in Tier 1 did not have an increase in total cash payments as compared to non-participants, but they did have an increase in total cash payments as compared to later participants. This is because non-participants and participants in Tier 1 experienced about the same size increase in cash payments, while later participants had a decrease in cash payments.

Customers in Tiers 2 and 3 had a significant increase in cash payments, although the increase was much larger for Tier 3 customers. Customers in Tier 3 were the only group that had a significant increase in assistance payments.

All three groups of customers experienced positive impacts from the program, as compared to the comparison groups. Coverage rates increased, shortfall declined, and balances declined (except for Tier 1). All groups experienced comparable changes in most of the payment indicators because Tier 1 and Tier 2 customers had a large decrease in their bills accompanied by an increase in total payments, and Tier 3 customers had increases in both cash and assistance payments, for a larger increase in total payments.

Table III-11
Net Payment Impacts
By Program Tier and Year of Enrollment

Sample	All			2002 Enrollees						2003 Enrollees		
	Non-participants			Non-participants			2003 Enrollees			Non-participants		
EHF Tier	1	2	3	1	2	3	1	2	3	1	2	3
Number of Customers	106	301	162	55	173	83	55	173	83	50	128	79
Total Bills	-\$144*	-\$141**	\$20	-\$242**	-\$139**	\$46	-\$163**	-\$142**	\$30	-\$6	-\$140**	\$10
Total Cash Payments	-\$10	\$70*	\$186**	-\$4	\$81	\$192**	\$229**	\$161**	\$204**	\$29	\$30	\$131*
Assistance Payments	\$97	\$17	\$63**	\$51	-\$1	\$80**	-\$69	-\$14	\$89*	\$129	\$34	\$40
Total Payments	\$87	\$87*	\$249**	\$47	\$80	\$273**	\$160	\$147**	\$293**	\$158	\$63	\$171**
Cash Coverage Rate	14%*	23%**	20%**	21%*	25%**	23%**	30%**	26%**	19%**	6%	17%**	12%**
Total Coverage Rate	26%**	26%**	24%**	29%*	26%**	28%**	32%**	29%**	28%**	22%	21%**	14%**
Shortfall	-\$231*	-\$228**	-\$229**	-\$289*	-\$218**	-\$227**	-\$322**	-\$289**	-\$263**	-\$153	-\$204**	-\$161**
Arrearage Forgiveness	\$47**	\$67**	\$59**	\$62**	\$76**	\$67**	\$58**	\$71**	\$62**	\$32*	\$55**	\$52**
Balance	\$11	-\$38	-\$91**	-\$136	-\$72*	-\$141**	-\$275**	-\$186**	-\$242**	\$168	\$7	-\$34

**Denotes significance at the 99 percent level. *Denotes significance at the 95 percent level.

F. Terminations

This section examines whether participants in the EHF were less likely to have their account terminated in the year following EHF enrollment than they were in the year preceding enrollment. Table III-12 displays the percentage of customers who experienced a service termination in the year preceding enrollment and the year following enrollment. While the previous payment analyses included only those customers that had a full year of payment data in the year preceding and the year following EHF enrollment, this analysis includes all customers. There are two reasons for this distinction. First, payment analysis requires a full year of data to furnish an understanding of how well customers meet their payment obligations, as opposed to only determining whether or not there was a service termination. Second, in the termination analysis, it is important to include customers who do not have a full year of data, as customers may be missing data due to a service termination, and such a restriction would bias the results of the analysis.

Table III-12 shows that while the full group of participating customers did not experience a decrease in service terminations, customers who participated in the program for a full year had a gross decrease in terminations by 1.6 percentage points, and a net decrease in terminations by 4.3 percentage points. Customers who stayed on the EHF for less than a full year had a gross increase in terminations by 2.1 percentage points. As shown in this report, customers who left the EHF were most likely to do so because they did not pay their bills.

Table III-12 also shows that Tier 1 customers had a large net decrease in the rate of service terminations. While all three Tiers of customers had an insignificant gross increase in the rate of service terminations, non-participant Tier 1 customers had a large increase in service terminations. Therefore, the net change in service terminations for Tier 1 customers was a decrease of 15.3 percentage points. Non-participant Tier 1 customers show a great need for payment assistance services.

Table III-12
Impacts on Service Terminations

	Treatment Group				Comparison Group			Net Change
	# Of Customers	Percent with Terminations			Comparison Type	# Of Customers	Percent With Terminations	
		Baseline	Follow-Up	Change			Change	
All Customers	1,957	5.3%	6.5%	1.3%	Non-participants	1,866	2.7%**	-1.4%
Stay on EHF >= 1 Year	426	2.3%	0.7%	-1.6%*	Non-participants	1,866	2.7%**	-4.3%**
Stay on EHF < 1 Year	1,531	6.1%	8.2%	2.1%*	Non-participants	1,866	2.7%**	-0.6%
2002 Enrollees	532	5.3%	9.0%	3.8%*	Non-participants	1,244	2.3%**	2.7%
					2003 Enrollees	938	5.3%**	-1.6%
2003 Enrollees	938	4.7%	6.8%	2.1%*	Non-participants	622	3.5%**	-1.4%
2002 Enrollees/ Stay on EHF >= 1 Year	238	3.4%	0.8%	-2.5%	Non-participants	1,244	2.3%**	-4.8%**
					2003 Enrollees/ Stay on EHF >= 1 Year	179	1.1%	-3.6%*
2002 Enrollees/ Stay on EHF < 1 Year	294	6.8%	15.6%	8.8%**	Non-participants	1,244	2.3%**	6.6%**
					2003 Enrollees/ Stay on EHF < 1 Year	759	6.3%**	2.5%
2003 Enrollees/ Stay on EHF >= 1 Year	179	1.1%	0.6%	-0.6%	Non-participants	622	3.5%**	-4.1%**
2003 Enrollees/ Stay on EHF < 1 Year	584	6.2%	10.8%	4.6%**	Non-participants	622	3.5%**	1.1%
Tier 1	451	8.0%	9.3%	1.3%	Non-participants	126	16.7%**	-15.3%**
Tier 2	943	4.9%	6.0%	1.2%	Non-participants	444	2.0%*	-0.8%
Tier 3	510	3.3%	4.7%	1.4%	Non-participants	816	2.5%**	-1.1%
2002 Enrollees – Tier 1	114	7.0%	14.0%	7.0%	Non-participants	84	16.6%**	-9.6%
					2003 Enrollees – Tier 1	214	9.3%**	-2.3%
2003 Enrollees – Tier 1	214	7.0%	10.3%	3.3%	Non-participants	42	16.7%**	-13.4%*

**Denotes significance at the 99 percent level. *Denotes significance at the 95 percent level.

G. Collections Actions

This section analyzes the number of collections actions that customers experienced in the year prior to EHF enrollment and the year following EHF enrollment. As for the terminations analysis, all customers are included in the tables below, regardless of whether they have a full year of payment data available.

Table III-13 displays the number of each type of collection action for the treatment group and for the comparison group of non-participant low-income customers. With the exception of A9 and N3 collections actions, the participants experienced fewer of each collection action in the year following enrollment than they did in the year preceding enrollment. Most of these reductions were statistically significant. The non-participants experienced an increase in all but one of the collection actions. The participants, therefore, experienced a significant net reduction in the number of each collection action, ranging from nine to one hundred percent of the baseline number of occurrences. Participants experienced a net decline of at least 88 percent of the baseline number of actions for most of the collections actions.

Table III-13
Collections Impacts
Mean Number of Each Type of Collections Actions
All Customers

	Treatment Group			Non-participant Comparison Group		Net Change	Percentage Change	
	Baseline	Follow-Up	Change	Change				
Number of Customers	1,957			1,866				
A1	3.03	2.09	-0.94**	-31%	0.64**	49%	-1.57**	-52%
A2	0.91	0.79	-0.12*	-13%	0.51**	159%	-0.62**	-68%
A3	0.17	0.15	-0.02	-12%	0.14**	280%	-0.15**	-88%
A4	0.45	0.21	-0.24**	-53%	0.12**	200%	-0.35**	-78%
A5	0.10	0.04	-0.07**	-70%	0.02**	200%	-0.09**	-90%
A8	0.18	0.17	-0.01	-6%	0.08**	200%	-0.10**	-56%
A9	0.11	0.10	-0.00	0%	0.03**	100%	-0.04**	-36%
M2	0.33	0.04	-0.29**	-88%	0.05	15%	-0.33**	-100%
M3	0.67	0.13	-0.54**	-81%	0.46**	63%	-1.00**	-100%
M4	0.24	0.03	-0.21**	-88%	0.00	0%	-0.21**	-88%
M5	0.35	0.04	-0.30**	-86%	0.08	31%	-0.38**	-100%
M6	0.56	0.10	-0.46**	-82%	0.39**	81%	-0.85**	-100%
M7	0.17	0.02	-0.15**	-88%	0.03	16%	-0.18**	-100%
M8	0.28	0.04	-0.24**	-86%	0.09**	56%	-0.34**	-100%

	Treatment Group				Non-participant Comparison Group		Net Change	Percentage Change
	Baseline	Follow-Up	Change		Change			
M9	0.43	0.08	-0.35**	-81%	0.25**	83%	-0.60**	-100%
N1	0.12	0.01	-0.11**	-92%	0.04**	36%	-0.15**	-100%
N2	0.19	0.14	-0.05	-26%	0.02	25%	-0.07*	-37%
N3	0.35	0.38	0.04	11%	0.13**	93%	-0.03**	-9%
N4	0.10	0.09	-0.01	-10%	0.03**	75%	-0.04**	-40%

**Denotes significance at the 99 percent level. *Denotes significance at the 95 percent level.

H. Summary of Data Analysis Findings

This section summarizes the findings from the data analysis, and makes recommendations for possible changes to the EHF Program.

- *EHF Participant distribution by income category:* The analysis in this report showed that approximately 25 percent of EHF participants had income below 50 percent of the Federal Poverty Level, 50 percent had income between 51 and 100 percent of the Federal Poverty Level, and 25 percent had income between 100 and 150 percent of the poverty level. The EHF Program is serving the poorest customers who are most in need of payment assistance.
- *Retention rate:* Approximately one-third of the customers who enrolled in the EHF since the inception of the program remain on the payment plan. Fifty-nine percent remained on for six months, 38 percent remained on for one year, and 30 percent remained on the plan for two years. Most of the customers who left the EHF Program did so due to non-payment.

These retention rates are reasonable given the income level of the participants and the level of discounts that are awarded by the program. The retention rates are likely related to the level of effort that the T.W. Phillips' staff person extends to remind customers about due payments and energy assistance applications. The fact that nearly 60 percent of the customers remained on the program for six months indicates that these customers made a good faith effort to meet their payment obligations.

However, a large percentage of customers were not successful in remaining on the EHF. This may be due to the fact that their bills remained unaffordable³, or to the fact that these customers are not in the habit of paying their gas bills on a regular basis. To increase retention rates, T.W. Phillips may have to reduce customer bills by providing greater rate discounts or effective weatherization services, or increase energy assistance from other programs such as Dollar Energy. Allocation of Dollar Energy grants to EHF customers (rather than current targeting to customers who

³ The customer survey shows that the EHF increased bill affordability for the majority of the respondents.

need to have gas service restored) could improve affordability and increase EHF retention rates.

- *Payment behavior:* Customers who participated in the EHF had significant improvements in their payment behavior, as compared to low-income non-participants and to customers who participated in the program at a later date and had not yet received EHF benefits. Participants experienced reduced bills, increased cash and assistance payments, increased cash and total coverage rates, and decreased levels of shortfall.

As expected, customers who stayed on the EHF for a full year or longer following enrollment experienced greater benefits than those who left the program prior to one full year of participation. However, participants who remained on the program for less than a full year also had more favorable changes in payment statistics than those who did not participate in the program. The main reason that these customers had more favorable outcomes than the comparison group was that they received greater dollars in assistance payments.

Customers in all three Tier levels experienced positive benefits from participating in the EHF. Customers in Tiers 1 and 2 had significant declines in their bills, accompanied by increases in cash payments. Customers in Tier 3 did not have significant reductions in their bills, but they had larger increases in cash payments, and also had significant increases in assistance payments.

- *Arrearages:* Customers who participated in the EHF had no gross change in arrears, but a small statistically significant net decline in arrears. When examined by year of enrollment, customers who enrolled in 2002 had a decline in arrears, and customers who enrolled in 2003 had an increase in arrears. Participants who remained on the program for a full year had a large decline in arrears and customers who did not remain on the program for a full year had a large increase in arrears. Tier 3 customers had a large and significant decline in arrears. This decline in arrears exceeded the amount of arrearage forgiveness received for the Tier 3 participants as a whole and for Tier 3 2002 enrollees.
- *Service Termination:* While the full group of customers who participated in the EHF did not experience a decrease in service terminations, customers who succeeded in remaining on the EHF for a full year had a gross decrease in service terminations and a net decline in service terminations as compared to low-income non-participants. While all three Tiers of customers had an insignificant gross increase in the rate of service terminations, non-participant Tier 1 customers had a large increase in service terminations. Therefore, Tier 1 customers had a large net decrease in the rate of service terminations.

This analysis shows that Tier 1 customers who are not enrolled in the EHF have a great need for the program. Customer service representatives should work to enroll the identified Tier 1 customers into the Program. Even if they are not experiencing

payment difficulty at the current time, it is likely that one economic setback will threaten their payment ability.

- *Collections Actions:* EHF participants experienced fewer of 17 of the 19 different types of collections actions in the year following enrollment than they did in the year preceding enrollment. Most of these reductions were statistically significant. The non-participants experienced an increase in all but one of the collections actions. The participants, therefore, experienced a significant net reduction in the number of each collections action, ranging from a nine to a 100 percent reduction in the number of actions.

This analysis showed a large decline in collections actions for Program participants. Such declines should be factored into any analysis of the impact of the program on T.W. Phillips' bottom line.

- *Universal Service Goals:* The analysis presented here showed that the EHF Program helped to increase customer payments and bill coverage rates. Bills declined significantly for customers in Tier 1 and Tier 2. However, it was shown that the majority of customers did not remain on the program for one year or more, and that customers must remain on the program to experience the full program benefits, including a reduction in arrearages. Additionally, only those customers who remained on the program for a full year experienced a reduction in the rate of service terminations. To fully realize the benefits of the program, T.W. Phillips would need to assist customers to further reduce their bills or increase their income. However, the program as it currently stands, already produces significant benefits for many participants.

IV. Customer Survey Results

APPRISE conducted a survey with current EHF participants, past participants who had been removed from the program, and low-income customers who were never been enrolled in the EHF. The EHF customer survey was designed to measure the following:

- Household demographics
- Reasons for participation or nonparticipation
- Barriers to enrollment
- Understanding of the program
- Financial obligations and bill payment difficulties
- Program success
- Impacts of the EHF
- Satisfaction with the EHF

This section of the report describes the methodology employed when conducting the survey and the results from the analysis of survey data.

A. Customer Survey Methodology

Procedures for sample selection and survey implementation, and response rates that were obtained are described below.

1. Survey Implementation

An advance letter was sent to all customers who were selected for the survey. This letter notified customers that they would be called to participate in the survey, explained the purpose of the survey, and gave them the option to call into the phone center to complete the survey at their convenience.

APPRISE retained Braun Research to conduct the survey through its call center. A researcher from APPRISE trained Braun's employees on the survey instrument and monitored survey implementation. Braun's manager in charge of the survey instructed interviewers how to use the computerized version of the survey to record customer responses.

Interviewer training consisted of two hour-long sessions – one for daytime and one for evening interviewers. Training included an explanation of the Energy Help Fund, an introduction to the EHF customer population, anecdotal information gathered from a pre-test conducted in September 2004, an explanation of field codes included in the survey instrument, an overview of each question, and in-depth discussion of survey questions requiring special attention.

Interviewer monitoring allowed the APPRISE researcher to both listen to the way interviewers conducted surveys and see the answers they chose on the computerized data entry form. Braun's manager facilitated open communication between the monitor and interviewers, which allowed the monitor to further instruct interviewers on how to implement the survey and accurately record customer responses.

2. Sample Selection and Response Rates

The sample for the survey was comprised of current EHF participants, past EHF participants, and low-income customers who never participated in the EHF.

Table IV-1 details the number of customers selected to complete the survey, number of completed interviews, cooperation rates, and response rates for each of the three groups. The table presents the following information for each group and the total sample.

- *Number selected:* There were 99 current participants, 53 past participants, and 74 non-participants selected to complete the survey. The goal was to obtain 50 responses from current participants, 25 responses from past participants, and 25 participants from non-participants.
- *Unusable:* There were 44 cases deemed unusable because no one was present in the home during the survey who was able to answer questions related to the household energy bills and the EHF, or because phone numbers were unavailable, disconnected, or incorrect. These households are not included in the denominator of the response rate or the cooperation rate. They are included in the denominator of the completed interview rate.
- *Completed interviews:* The completed interviews are households that were reached and that answered the full set of survey questions. In total, 117 interviews were completed.
- *Cooperation rate:* The cooperation rate is the percent of eligible households contacted who completed the survey. This is calculated as the number of completed interviews divided by the interviews plus the number of non-interviews (refusals plus call backs). Overall, this survey achieved a 77 percent cooperation rate.
- *Response rate:* The response rate is the number of completed interviews divided by the number of completed interviews plus the number of non-interviews (refusals plus call backs) plus all cases of unknown eligibility (due to refusals, answering machines, and the respondent not remembering EHF participation). This survey attained a 67 percent response rate.
- *Completed Interview Rate:* The completed interview rate is the percentage of households selected that completed the survey. This survey attained a 52 percent completed interview rate.

As seen in Table IV-1, cooperation rates ranged from 67 percent for non-participants to 82 percent for current participants. Response rates varied from 63 percent for non-participants to 71 percent for current participants. Non-participants were more difficult to reach and interview, as evidenced by cooperation and response rates that are consistently lower than those for current and past participants.

While current and past participants have comparable cooperation and response rates, current participants have a higher completed interview rate than both past and non-participants.

**Table IV-1
Sample and Response Rates
By EHF Participation Group**

	Current Participants	Past Participants	Non- Participants	Total
Number selected	99	53	74	226
Unusable – wrong or missing telephone number	15	15	14	44
Unusable – no one home who could answer the survey	2	1	2	5
Non-Interviews	13	6	17	36
Unknown eligibility	11	6	7	24
Completed interviews	58	25	34	117
	Current Participants	Past Participants	Non- Participants	Total
Cooperation rate	82%	81%	67%	77%
Response rate	71%	68%	61%	67%
Completed interview rate	59%	47%	46%	52%

B. Demographics

This section examines the demographic characteristics of survey respondents. Customers were asked whether they own or rent their home. Table IV-2 shows that nearly two thirds of past participants rent their homes, compared to 41 percent of current and non-participants.

**Table IV-2
Home Ownership**

	Current Participants		Past Participants		Non-Participants	
	Number	Percent	Number	Percent	Number	Percent
Own	33	57%	9	36%	20	59%
Rent	24	41%	16	64%	14	41%

	Current Participants		Past Participants		Non-Participants	
Refused	1	2%	0	0%	0	0%

Table IV-3A shows the total number of household members, and Table IV-3B shows the percentage of customers that have a disabled member, an elderly member (60 years of age or older), or one or more children (18 years of age and younger). About 40 percent of current, past, and non-participants have one or two household members. Current and past participants are more likely to have at least one disabled member than non-participant households. More than half of current and past participant household have at least one disabled member, compared to only 21 percent of non-participants.

**Table IV-3A
Number of Household Members**

	Number of Household Members		
	Current Participants	Past Participants	Non-Participants
1	15%	24%	23%
2	24%	16%	15%
3	21%	16%	23%
4	24%	28%	18%
5	7%	12%	15%
6	9%	4%	6%

**Table IV-3B
Percent with Vulnerable Household Members**

	Percent With Vulnerable Household Members		
	Current Participants	Past Participants	Non-Participants
Elderly (60 or older)	33%	20%	29%
Disabled	53%	56%	21%
Children	60%	72%	59%

Table IV-4 shows that past participants are less likely to be married than current or non-participants. About 12 percent of past participants are married, compared to 41 percent of non-participants and 52 percent of current participants.

**Table IV-4
Marital Status**

	Current Participants		Past Participants		Non-Participants	
	Number	Percent	Number	Percent	Number	Percent
Married	30	52%	3	12%	14	41%
Single – divorced	9	15%	11	44%	5	15%
Single - separated	4	7%	2	8%	3	9%
Single – never married	8	14%	7	28%	6	18%
Widow	7	12%	2	8%	6	18%
Total	58	100%	25	100%	34	100%

Respondents were asked to report the highest level of education attained by any member of their household. Table IV-5 shows that most of the respondents do not have education past the high school level.

**Table IV-5
Highest Education Level Obtained in the Household**

	Current Participants		Past Participants		Non-Participants	
	Number	Percent	Number	Percent	Number	Percent
Less than high school	4	7%	3	12%	3	9%
High school diploma / GED	35	60%	15	60%	15	44%
Some college / Associates Degree	14	24%	4	16%	12	35%
Bachelor's Degree	3	5%	2	8%	2	6%
Master's Degree or higher	1	2%	0	0%	1	3%
Vocational training	1	2%	1	4%	1	3%
Total	58	100%	25	100%	34	100%

Table IV-6 displays the respondents' reported annual household income. The majority of current and past participants reported annual income below \$20,000. Non-participants were less likely than current and past participants to report annual income less than \$20,000. About 40 percent of non-participants reported income less than \$20,000, compared to 69 percent of current participants and 80 percent of past participants.

**Table IV-6
Annual Household Income**

	Current Participants		Past Participants		Non-Participants	
	Number	Percent	Number	Percent	Number	Percent
≤ \$ 10,000	18	31%	13	52%	4	12%
\$10,001 - \$20,000	22	38%	7	28%	10	29%
\$20,001 - \$30,000	7	13%	1	4%	6	18%
\$30,001 - \$40,000	5	9%	1	4%	7	21%
> \$40,000	1	2%	0	0%	2	6%
Don't know	2	3%	3	12%	2	6%
Refused	3	5%	0	0%	3	9%
Total	58	100%	25	100%	34	100%

T.W. Phillips' customer data were used to determine the Energy Help Fund Tier level of survey respondents. Individual EHF benefits are determined by the customer's tier level, which is based on the customer's federal poverty level. Tier 1 represents customers with the lowest incomes, below 50 percent of poverty, who receive the greatest benefits, while Tier 3 represents customers with higher incomes, between 100 and 150 percent of poverty, who receive lower benefits. Table IV-7 shows that non-participants were less likely than the other groups to be in the EHF Tier 1. Only 3 percent of non-participants were in Tier 1, while 14 and 20 percent of current and past participants, respectively, had incomes at the Tier 1 level. Twenty-four percent of non-participants did not have data on their Tier level.

**Table IV-7
Energy Help Fund Tier**

	Current Participants		Past Participants		Non-Participants	
	Number	Percent	Number	Percent	Number	Percent
Tier 1	8	14%	5	20%	1	3%
Tier 2	26	45%	13	52%	12	35%
Tier 3	24	41%	7	28%	13	38%
Missing	0	0%	0	0%	8	24%
Total	58	100%	25	100%	34	100%

Respondents were asked to report on several sources of income and benefits received by members of their household:

- Employment income from salaries and wages, or self-employment income from a business or farm
- Retirement income, including Social Security, pensions, and other retirement funds

- Public assistance benefits from TANF, SSI, AFDC, or general assistance or public assistance
- Non-cash benefits, including food stamps or public housing

Table IV-8 shows that non-participants were more likely than current and past participants to receive employment income. More than three-quarters of non-participants reported that at least one member of the household received employment income, compared to 52 percent of current and past participants. While about half of current and past participants reported that they received some form of public assistance or non-cash benefits, 15 percent of non-participants received each of these forms of assistance.

Table IV-8
Types of Income and Benefits Received

	Current Participants		Past Participants		Non-Participants	
	Number	Percent	Number	Percent	Number	Percent
Wages or self-employment income	30	52%	13	52%	26	77%
Retirement income	12	21%	4	16%	8	24%
Public assistance	25	43%	13	52%	5	15%
Non-cash benefits	35	60%	14	56%	5	15%

Table IV-9 displays whether respondents received energy assistance benefits from LIHEAP and the Dollar Energy Fund in the past 12 months. Current participants and past participants were more likely than non-participants to report that they received benefits from LIHEAP and the Dollar Energy Fund. More than two-thirds of current and past participants received LIHEAP, compared to only 15 percent of non-participants.

Table IV-9
Energy Assistance Received

	Current Participants		Past Participants		Non-Participants	
	Number	Percent	Number	Percent	Number	Percent
LIHEAP	37	64%	18	72%	5	15%
Dollar Energy Fund	6	10%	7	28%	1	3%

C. Enrollment and Reasons for Participation and Non-Participation

This section examines the reasons for participation and for nonparticipation in the Energy Help Fund, and experiences with the EHF enrollment process. Non-participants were asked whether they were aware of the EHF. Table IV-10 shows that 62 percent of non-participants knew about the EHF, while 29 percent were not aware of the program.

**Table IV-10
Non-Participants Know About the EHF**

	Number	Percent
Yes	21	62%
No	10	29%
Don't know	3	9%

Table IV-11 displays the ways in which respondents heard about the EHF. Respondents were most likely to say that they heard about the program from a customer service representative, through another agency, or from a friend or relative. Non-participants were also very likely to say that they had heard about the program through a bill insert. Answers total more than 100 percent because respondents could provide more than one answer.

**Table IV-11
How Respondent Became Aware of the EHF**

	Current Participants		Past Participants		Non-Participants ¹	
	Number	Percent	Number	Percent	Number	Percent
Customer service representative	18	31%	3	12%	7	33%
Other agency	12	21%	6	24%	2	10%
Friend or relative	9	16%	6	24%	2	10%
Bill insert	4	7%	0	0%	6	29%
Message on T.W. Phillips recording	4	7%	2	8%	0	0%
T.W. Phillips (general)	2	3%	2	8%	0	0%
EHF rep contacted the customer	2	3%	1	4%	0	0%
Informational mailing	1	2%	1	4%	1	5%
Newspaper	1	2%	1	4%	0	0%
Application mailed to home	1	2%	0	0%	0	0%
Other	0	0%	0	0%	2	10%
Don't know	5	9%	3	12%	1	5%

¹21 of the 34 non-participant respondents answered this question.

Current and past participants were asked why they enrolled in the EHF. The majority of respondents said that they decided to enroll in order to reduce their energy bills. Respondents also said that they enrolled to reduce arrearages, or because of low income, unemployment, or disability. Answers total more than 100 percent because respondents could provide more than one answer.

Table IV-12
Reason for Enrolling in the EHF

	Current Participants		Past Participants	
	Number	Percent	Number	Percent
Reduce energy bills	49	85%	23	92%
Reduce arrearages	3	5%	1	4%
Low-income	2	3%	1	4%
Unemployment	2	3%	0	0%
Disability	2	3%	0	0%
Don't know	2	3%	0	0%

Non-participants who reported that they knew about the EHF were asked why they had not enrolled in the program. Table IV-13 shows that 24 percent of non-participants said that their income was too high to be eligible, and 12 percent said that they did not understand the program requirements. Other non-participants said that they did not need or want assistance, they did not know how to enroll, and requirements other than income verification were difficult.

Table IV-13
Reason for Not Enrolling in the EHF
Non-Participants

	Number	Percent
Income is too high	8	24%
Do not understand program requirements	4	12%
Do not want assistance	1	3%
Do not need energy assistance	1	3%
Do not know how to enroll	1	3%
Program requirements are difficult	1	3%
Other	4	12%
Don't know	1	3%
Not asked	13	38%

Table IV-14 displays the length of time that it took for current and past participants to enroll in the EHF. More than half of the respondents reported that it took less than 1 month to complete the enrollment process. A large share of respondents, about 30 percent, reported that they did not know how long the enrollment process took.

Table IV-14
Length of Time to Enrollment in EHF

	Current Participants		Past Participants	
	Number	Percent	Number	Percent
Less than 2 weeks	16	28%	9	36%
2 weeks to 1 month	15	26%	5	20%
1 to 2 months	8	14%	1	4%
More than 2 months	3	5%	3	8%
Don't know	16	28%	8	32%

Respondents were asked about the difficulty of enrolling in the EHF. More than 90 percent of current and past participants said that the enrollment process was not too difficult or not at all difficult. Respondents who said that the enrollment process was somewhat or very difficult were asked which parts of the process were most difficult. These respondents said that providing proof of income, providing social security numbers, and completing the application were the most difficult parts of enrollment.

Table IV-15
Difficulty of Enrollment

	Current Participants		Past Participants	
	Number	Percent	Number	Percent
Very difficult	1	2%	0	0%
Somewhat difficult	3	5%	1	4%
Not too difficult	13	22%	7	28%
Not at all difficult	40	69%	16	64%
Don't know	1	2%	1	4%

D. Understanding of the Program

This section examines how well EHF participants understand the program. Current and past participants were asked whether they have a good understanding of the services provided by the EHF. Table IV-16 shows that the majority of respondents, 88 percent of current participants and 92 percent of past participants, said that they feel they have a good understanding of the program.

Table IV-16
Understanding of Services Provided by the EHF

	Current Participants		Past Participants	
	Number	Percent	Number	Percent
Yes	51	88%	23	92%
No	6	10%	2	8%
Don't know	1	2%	0	0%

Current and past participants were asked what their responsibility was in the EHF. As seen in Table IV-17, most respondents said that their responsibility was to keep up with their payments. Nine percent of current participants said that they do not know what their responsibility was in the program.

Table 17
Customer's Responsibility
In the EHF

	Current Participants		Past Participants	
	Number	Percent	Number	Percent
Keep up with payments	50	86%	23	92%
Apply for LIHEAP and/or Dollar Energy Fund	1	2%	0	0%
Other	2	3%	2	8%
Don't know	5	9%	0	0%

Current and past participants were asked what their responsibility was if their income changed while they were enrolled in the program. Table IV-18 shows that 88 percent of current participants and 100 percent of past participants said that they must notify T.W. Phillips if their income changed while they were enrolled in the EHF. Answers total to more than 100 percent because respondents could provide more than one answer.

Table IV-18
Customer's Responsibility if Income Changes

	Current Participants		Past Participants	
	Number	Percent	Number	Percent
Notify T.W. Phillips	51	88%	25	100%
Provide proof of income	3	5%	0	0%
Reapply for the EHF	1	2%	0	0%
Nothing	1	2%	0	0%
Don't know	4	7%	0	0%

Current and past participants were asked how long the EHF lasts. Table IV-19 displays the responses to this question. A large share of respondents said that the program lasts as long as their income does not increase or as long as the gas bill is paid on time. This is essentially correct, as participants may re-enroll in the program after the 3 years are completed. Other respondents said that the program lasts all year or all winter. The majority of respondents, 69 percent of current participants and 56 percent of past participants, said that they do not know how long the program lasts.

Table IV-19
Participants' Understanding of EHF Duration

	Current Participants		Past Participants	
	Number	Percent	Number	Percent
As long as income does not increase	10	17%	3	12%
All year	4	7%	1	4%
As long as bill is paid on time	1	2%	3	12%
All winter	1	2%	2	8%
Other	2	3%	2	8%
Don't know	40	69%	14	56%

Current and past participants were asked what they felt were the benefits of the EHF. Table IV-20A shows the responses to this question. As expected, the most common answer provided for both current and past participants was that the program provided lower energy bills. However, the second most common answer was that the EHF gave them budget billing or equal payments. This suggests that budget billing should be explained and encouraged to all low-income customers, regardless of whether they join the EHF program. Other benefits cited by participants were maintaining their gas service, or lower arrearages. Percentages sum to more than 100 percent, as respondents could provide more than one answer to the question.

Table IV-20A
Benefits of the EHF - Unprompted

	Current Participants	Past Participants
Lower energy bills	48%	60%
Even payments	29%	20%
Maintaining service	9%	16%
Reduced arrearages	14%	0%
Other	7%	4%
Don't know	9%	4%

After the unprompted question about program benefits, current and past participants were asked specifically whether they felt lower bills, reduced arrearages, and maintaining gas

service were benefits of participating in the EHF. Table IV-20B displays the responses to this question. About 90 percent of current and past participants agreed a lower energy bill was a benefit of the program, about 85 percent believed that keeping their gas service turned on was a benefit of the program, and 76 percent of current participants and 84 percent of past participants felt that reduced arrearages was a benefit of the program.

Participants were then asked what they felt was the most important benefit of the program. Table IV-20B shows that 40 percent of current participants said that a lower energy bill was the most important benefit, and 24 percent of past participants said this was the most important benefit. The largest share of past participants, 44 percent, said that keeping their gas service turned on was the most important benefit of the program. Twenty-one percent of current participants agreed that this was the most important benefit.

**Table IV-20B
Benefits of the EHF - Prompted**

	Respondents who agreed this was a benefit		"Most important benefit of the EHF"	
	Current Participants	Past Participants	Current Participants	Past Participants
Lower energy bills	90%	92%	40%	24%
Reduced arrearages	76%	84%	10%	8%
Keeping gas service	85%	88%	21%	44%
Budget billing			14%	12%
Other			12%	4%
Don't know			3%	8%

Respondents were asked how much they save on a typical monthly gas bill by participating in the EHF⁴. Table IV-21 displays the amount of money that respondents said they save on a typical monthly gas bill as a result of the EHF. Twenty-nine percent of current participants said that they saved between \$1 and \$50 on a typical bill, and 29 percent said that they saved more than \$50. In comparison, 16 percent of past participants said they saved between \$1 and \$50, and 44 percent said they saved more than \$50. This difference is consistent with the fact that past participants were more likely than current participants to be in Tiers 1 and 2. About 10 percent of all respondents said that they did not receive any savings on a typical monthly gas bill, and about 30 percent said they did not know how much money they saved.

⁴ This question was changed to ask customers how much they save in the winter, and how much they save in the summer, as respondents had difficulty answering the one question for the average savings. The midpoint of the two answers is presented in the table above.

Table IV-21
Money Saved on a Typical Gas Bill
As a Result of EHF Participation

	Current Participants		Past Participants	
	Number	Percent	Number	Percent
\$1 - \$25	6	10%	2	8%
\$26 - \$50	11	19%	2	8%
\$51 - \$100	15	26%	4	16%
\$101 or more	2	3%	7	28%
None	6	10%	3	12%
Don't know	18	31%	7	28%

Customers were asked to report their arrearages at the time they enrolled in the EHF, arrearages at the time of the survey, and arrearages at the time they were removed from the EHF. Table IV-22 displays the responses to these questions. This table shows that current participants perceive a decline in their arrears since the time that they began participating in the EHF.

Non-participants were most likely to report that they do not currently have an arrearage. Forty-seven percent of non-participants responded that they did not have an arrearage. However, 32 percent reported that they have an arrearage between \$100 and \$500, indicating a need for a payment assistance program.

Table IV-22
Customer Arrearages
At EHF Enrollment, Survey Response Date, and Program Removal

	Arrearages Prior to Enrolling in the EHF		Current Arrearages			Arrearages at Removal
	Current Participants	Past Participants	Current Participants	Past Participants	Non-Participants	Past Participants
\$1-100	3%	0%	23%	8%	9%	4%
\$101-500	47%	28%	13%	28%	32%	28%
\$501-1000	9%	20%	4%	12%	3%	4%
\$1001-2000	5%	4%	0%	12%	0%	4%
\$2001 or more	2%	0%	0%	0%	0%	0%
None	19%	16%	28%	32%	47%	16%
Don't Know	16%	32%	32%	8%	9%	44%

Current participants who reported that they currently have an arrearage were asked whether arrearage forgiveness makes them more likely to pay their gas bill. Table IV-23 shows that

67 percent of these participants said that arrearage forgiveness makes them more likely to pay their gas bill, seven percent said that it did not make them more likely to pay their gas bill, and seven percent said that they did not know whether it made them more likely to pay their gas bill.

Table IV-23
Impact of Arrearage Forgiveness on Bill Payment
Current Participants

	Number	Percent
Yes	39	67%
No	4	7%
Don't know	4	7%
Not asked	11	19%

LIHEAP benefits are credited to the EHF participants' accounts at the time of benefit award, but are subtracted from the 12 annual budget payments on an equal basis. This is a complicated concept for participants to understand, and the survey included a question to determine whether the participants understood this element of the Program. Current participants who received benefits from LIHEAP in the past 12 months were asked how their LIHEAP grants are credited to their gas accounts. Table IV-24 shows that 51 percent of current participants who received LIHEAP benefits said that their LIHEAP benefits are credited to their accounts as a one-time credit and three percent said that their LIHEAP benefits are credited to their accounts each month for a year. In total, 54 percent demonstrated some understanding of how the LIHEAP benefits are applied.

Table IV-24
LIHEAP Benefit Crediting
Current Participants

	Number	Percent
One-time credit	19	51%
Each month for a year	1	3%
Other	3	8%
Don't know	14	38%

The purpose of the EHF benefit crediting procedure is to allow customers to reduce their monthly payment as a result of receiving the benefit, but to maintain regular and constant monthly payments. While this is probably the best means to maintain regular payment behavior, it may be confusing or disconcerting to customers. Therefore, the survey asked whether current participants who received benefits from LIHEAP or the Dollar Energy Fund had any questions or concerns about the way that their benefits are credited. Only 13

percent said that they do have concerns about the procedure. Some respondents who reported concerns said that they did not understand how grants were applied to their gas bill and that they did not understand how grant dollars were allocated.

Table IV-25
Concerns About the Way in Which LIHEAP or
Dollar Energy Benefits are Credited to Account
Current Participants

	Number ¹	Percent
Yes	5	13%
No	34	87%

¹There were 39 respondents to this question.

E. Financial Obligations and Bill Payment Difficulties

Payment-troubled customers may not pay their gas bill in full, or they may pay their gas bill at the expense of other household necessities, such as food, mortgage or rent, or medical care. This section examines the financial difficulties that survey respondents reported.

Current and past participants were asked how difficult it was to make their monthly gas payments prior to enrolling and while they were enrolled in the EHF. Table IV-26A shows that 64 percent of current participants and 80 percent of past participants said that it was very difficult to pay their gas bills prior to participating in the EHF, compared to 10 percent of current participants and 28 percent of past participants who said it was very difficult to pay their gas bills while enrolled in the program. These data demonstrate that customers perceive that the EHF increased the affordability of their gas bills.

Non-participants were asked how difficult it was to make their monthly gas bill payments in the past 12 months. Twenty-one percent of non-participants said that it was very difficult to make their gas bill payments in the past 12 months, and 50 percent said it was somewhat difficult. This shows that non-participants do not perceive the same need for the EHF as current and past participants.

Table IV-26A
Gas Bill Payment Problems

	Current Participants		Past Participants		Non-Participants
	Prior to Enrolling in the EHF	While Enrolled in the EHF	Prior to Enrolling in the EHF	While Enrolled in the EHF	In the Past 12 Months
Very difficult	64%	10%	80%	28%	21%
Somewhat difficult	24%	41%	12%	40%	50%

	Current Participants		Past Participants		Non-Participants
	Prior to Enrolling in the EHF	While Enrolled in the EHF	Prior to Enrolling in the EHF	While Enrolled in the EHF	In the Past 12 Months
Not too difficult	9%	24%	0%	24%	21%
Not at all difficult	3%	24%	8%	8%	9%

Current and past participants were asked to report whether they had to forego paying for the following necessities in order to make ends meet:

- Food
- Medicine
- Medical or dental service
- Mortgage or rent
- Telephone or cable
- Credit card or loan
- Car payment

Table IV-26B shows that current participants were less likely to report that they had to forego or delay spending on these other bills while they were enrolled in the EHF than they were prior to participating in the program. While 59 percent of current participants said that they had to forego or delay spending on food prior to participating in the EHF, 21 said that they had to do so while participating in the program. Past participants did not perceive as large as an impact from the EHF.

Non-participants were asked whether they had to forego or delay paying for other household necessities in the past 12 months. Non-participants reported that they had to forego or delay these necessities at higher rates than current participants did while participating in the EHF, but not at the rates that current and past participants reported prior to enrolling in the EHF.

Table IV-26B
Other Bill Payment Problems

	Percent Who Had to Forego Each Bill:				
	Current Participants		Past Participants		Non-Participants
	Prior to Enrolling in the EHF	While enrolled in the EHF	Prior to Enrolling in the EHF	While Enrolled in the EHF	In the Past 12 Months
Food	59%	21%	72%	48%	35%
Medicine	22%	14%	24%	24%	21%
Medical or dental	26%	16%	32%	32%	35%
Mortgage or rent	22%	7%	32%	36%	27%
Telephone or cable	55%	29%	64%	64%	50%

	Percent Who Had to Forego Each Bill:				
	Current Participants		Past Participants		Non-Participants
	Prior to Enrolling in the EHF	While enrolled in the EHF	Prior to Enrolling in the EHF	While Enrolled in the EHF	In the Past 12 Months
Credit card or loan	24%	16%	28%	20%	29%
Car payment	10%	3%	28%	20%	18%

Customers who reported that they experienced a bill payment difficulty were asked how frequently they faced this problem. Table IV-26C shows that current and past participants reported that they experienced bill payment difficulties with lower frequency than they did prior to enrolling in the program.

Table IV-26C
Frequency of Bill Payment Difficulty

	Percent Who Had to Forego Each Bill:									
	Current Participants				Past Participants				Non-Participants	
	Prior to EHF enrollment		While enrolled in the EHF		Prior to EHF enrollment		While enrolled in the EHF		In the past 12 months	
	Always	Freq	Always	Freq	Always	Freq	Always	Freq	Always	Freq
Food	10%	14%	5%	2%	32%	20%	12%	12%	3%	15%
Medicine	3%	7%	0%	3%	4%	4%	0%	12%	3%	9%
Medical or dental	2%	7%	3%	2%	12%	8%	8%	12%	12%	9%
Mortgage or rent	2%	2%	0%	2%	8%	12%	8%	12%	6%	6%
Telephone or cable	0%	10%	0%	3%	20%	24%	16%	20%	0%	21%
Credit card or loan	0%	2%	0%	5%	8%	12%	8%	4%	3%	15%
Car payment	0%	0%	0%	0%	0%	16%	0%	12%	3%	3%

Respondents were asked whether they used their kitchen stove or oven to provide heat in the past year, a dangerous practice that is sometimes used by low-income customers who cannot afford to pay their gas bills or service their heating systems. Approximately 25 percent of current and past participants reported that they used their kitchen stove or oven to provide heat in the year prior to enrolling in the EHF, compared to about 10 percent who reported that they did so while they participated in the program. Ten percent of non-participants said that they used their stove or oven to provide heat in the past 12 months.

**Table IV-27
Use Kitchen Stove or Oven for Heat**

	Current Participants		Past Participants		Non-Participants
	Prior to enrolling in the EHF	While enrolled in the EHF	Prior to enrolling in the EHF	While enrolled in the EHF	In the Past 12 Months
Always	0%	0%	4%	0%	0%
Frequently	5%	0%	12%	4%	6%
Sometimes	21%	9%	8%	8%	3%
Never/No	74%	91%	76%	88%	91%

Respondents were asked whether there was a time that they could not use their main source of heat for one or more of the following reasons:

- Their heating system was broken and they were unable to pay for a repair or replacement
- The utility company discontinued their gas service because they were unable to pay their bill

Table IV-28 shows that current and past participants were less likely to report that they did not have heat at the time that they were enrolled in the EHF than they were to report that they did not have heat in the year prior to enrollment.

Fourteen percent of current participants and 20 percent of past participants reported that they were not able to use their main source of heat because their heating system was broken in the year prior to enrolling in the EHF, compared to 5 percent of current participants and 12 percent of past participants who reported that they faced this problem while they were enrolled in the program. Likewise, 17 percent of current participants and 24 percent of past participants reported that they were not able to use their main source of heat because their gas service was discontinued in the year prior to enrolling in the EHF, compared to none of current participants and 8 percent of past participants who reported that they faced this problem while enrolled in the program.

Three percent of non-participants said that in the past 12 months, there was a time when they could not use their main source of heat because the heating system was broken, and three percent said they could not use their main source of heat because their gas service was discontinued.

**Table IV-28
Main Source of Heat Was Not Available**

Could not use main source of heat because:	Current Participants		Past Participants		Non-Participants
	Prior to Enrolling in the EHF	While Enrolled in the EHF	Prior to Enrolling in the EHF	While Enrolled in the EHF	In the Past 12 Months
Heating system broken	14%	5%	20%	12%	3%
Gas service discontinued	17%	0%	24%	8%	3%

F. Program Impact

This section examines the impact the EHF has had on participants' lives. Current and past participants were asked how important the EHF has been in helping them meet their needs. Table IV-29 shows that 79 percent of current participants said the EHF was very important in helping them to meet their needs, and 17 percent said it was somewhat important, while 76 percent of past participants said the EHF was very important and 12 percent said it was somewhat important.

**Table IV-29
Importance of the EHF**

	Current Participants		Past Participants	
	Number	Percent	Number	Percent
Very important	46	79%	19	76%
Somewhat important	10	17%	3	12%
Of little importance	1	2%	2	8%
Not at all important	1	2%	1	4%

Respondents were asked whether their gas usage changed while they participated in the EHF. Table IV-30 shows that about 20 percent of current and past participants said that their gas usage decreased while they were participating in the program, about 5 percent said their usage increased, and more than 60 percent said that their gas usage had not changed.

Respondents who reported that their gas usage had changed were asked why it had changed. One respondent said that the household's usage had increased because the rate discount makes gas more affordable. Respondents said that their usage decreased because they tried to reduce or conserve energy, the EHF and budget billing arrangements, other services received, new equipment or home repair, weatherization, and the Wise Choice program.

Table IV-30
Change in Gas Usage

	Current Participants		Past Participants	
	Number	Percent	Number	Percent
Higher	4	7%	1	4%
Lower	12	21%	5	20%
No change	36	62%	16	64%
Don't know	6	10%	3	12%

All respondents were asked whether they need more assistance to pay their gas bill. Table IV-31 shows that past participants were more likely than current or non-participants to say that they need more assistance to pay their gas bill. Eighty-four percent of past participants said that they need more assistance, compared to 43 percent of current participants and 56 percent of non-participants.

Table IV-31
Need Additional Assistance

	Current Participants		Past Participants		Non-Participants	
	Number	Percent	Number	Percent	Number	Percent
Yes	25	43%	21	84%	19	56%
No	30	52%	4	16%	14	41%
Don't know	3	5%	0	0%	1	3%

G. Program Success

This section examines the extent of program success among current and past EHF participants. Table IV-32 displays the reasons that past participants said they are no longer enrolled in the program. Thirty-two percent of respondents said that they are no longer enrolled because they missed a payment and were removed from the EHF. Eight percent said that they are no longer income-eligible and another eight percent said that they had problems with summer billing. However, the largest share of respondents, 40 percent, reported that they did not know why they were no longer enrolled in the program.

Table IV-32
Reason No Longer Participating

	Number	Percent
Missed payment	8	32%
No longer income-eligible	2	8%
Problems with summer billing	2	8%

	Number	Percent
Other	3	12%
Don't know	10	40%

T.W. Phillips employs a full-time staff person whose responsibility is to assist customers with the Universal Service programs, including the Energy Help Fund. This individual spends a large amount of time calling and writing EHF participants to remind them to pay gas bills and apply for energy assistance. The survey attempted to assess the extent to which participants felt these contacts were helpful.

Current and past participants were asked how helpful reminder phone calls were in assisting them to stay on the EHF. Table IV-33 shows that 40 percent of current participants said that reminder phone calls were very helpful, and 14 percent said that they were somewhat helpful. In comparison, 28 percent of past participants said that reminder phone calls were very helpful, and 20 percent said that they were somewhat helpful. About 10 percent of current and past participants said that reminder phone calls were not at all helpful, and about 35 percent said that they did not receive reminder phone calls while participating in the program.

Table IV-33
Helpfulness of Reminder Phone Calls

	Current Participants		Past Participants	
	Number	Percent	Number	Percent
Very helpful	23	40%	7	28%
Somewhat helpful	8	14%	5	20%
Of little help	1	2%	1	4%
Not at all helpful	6	10%	2	8%
Did not receive reminder phone calls	20	35%	9	36%
Don't know	0	0%	1	4%

Respondents were also asked about the helpfulness of reminder letters. Table IV-34 shows that 29 percent of current participants and 24 percent of past participants said that reminder letters were very helpful, and 19 percent of current participants and 20 percent of past participants said that they were somewhat helpful. Ten percent of current participants and 4 percent of past participants said that reminder letters were not at all helpful, and about 35 percent of current and past participants said that they did not receive reminder letters.

**Table IV-34
Helpfulness of Reminder Letters**

	Current Participants		Past Participants	
	Number	Percent	Number	Percent
Very helpful	17	29%	6	24%
Somewhat helpful	11	19%	5	20%
Of little help	4	7%	3	12%
Not at all helpful	6	10%	1	4%
Did not receive reminder letters	20	35%	9	36%
Don't know	0	0%	1	4%

Respondents were asked whether there were any other things that T.W. Phillips has done that helped them stay on the EHF. Table IV-35 shows that a large share of respondents, 5 percent of current participants and 20 percent of past participants, said that flexibility in payment arrangements helped them stay on the EHF. Other assistance that respondents said helped them stay on the program included help from the EHF representative, weatherization or energy savings programs, and assistance with completing forms. Seventy-nine percent of current participants and 64 percent of past participants said that there was nothing else that T.W. Phillips did to help them stay on the program or they did not provide an answer.

**Table IV-35
Other Helpful Actions**

	Current Participants		Past Participants	
	Number	Percent	Number	Percent
Flexibility with payments	3	5%	5	20%
EHF rep has helped	4	7%	0	0%
Weatherization/help with energy savings	3	5%	0	0%
Reminders	3	5%	0	0%
Help completing forms	2	3%	0	0%
Other	0	0%	3	12%
Nothing/No answer	46	79%	16	64%
Refused	0	0%	1	4%

Past participants were asked whether there was anything else that T.W. Phillips could have done to help them stay on the EHF. Forty-four percent of respondents said that there was something else that T.W. Phillips could have done. Table IV-36 shows that 16 percent said that they could have been more flexible with payment arrangements and that they could have lowered payments. Fifty-six percent of past participants said there was nothing else that T.W. Phillips could have done or did not provide a specific action that could have been taken.

Table IV-36
How T.W. Phillips Could Help Customers to Stay on the EHF
Past Participants

	Number	Percent
Flexibility with payments	4	16%
Lower payments	4	16%
Reminders	2	8%
Other	1	4%
Nothing/No answer	14	56%

Past participants were asked whether they would re-enroll in the EHF if they were eligible. Table IV-37 shows that 88 percent said they would re-enroll, 4 percent said they would not re-enroll, and 8 percent said they did not know whether they would re-enroll.

Table IV-37
Would You Re-Enroll in EHF if Available
Past Participants

	Number	Percent
Yes	22	88%
No	1	4%
Don't know	2	8%

Current participants were asked whether they would continue to participate in the EHF. Table IV-38 shows that the majority of respondents, 91 percent, said that they are very likely to continue to participate, and 7 percent said that they are somewhat likely to continue.

Table IV-38
Likelihood of Continued Participation in the EHF
Current Participants

	Number	Percent
Very likely	53	91%
Somewhat likely	4	7%
Not too likely	0	0%
Not at all likely	0	0%
Don't know	1	2%

Current participants were asked how long they would continue to participate in the EHF. Table IV-39 shows that 72 percent of respondents said that they would continue to participate as long as they were income eligible, 5 percent said that they would continue to

participate for more than 12 months, and another 5 percent said they would continue to participate until the program ends. Seventeen percent of respondents did not know how long they would continue to participate.

Table IV-39
How Long You Will Participate in the EHF
Current Participants

	Number	Percent
As long as income-eligible	42	72%
More than 12 months	3	5%
Until the program ends	3	5%
Don't know	10	17%

H. Customer Satisfaction with the EHF

This section examines current and past participants' satisfaction with the EHF. Table IV-40 shows that 96 percent of current participants and 88 percent of past participants said that they are somewhat satisfied or very satisfied with the program. Overall, about 5 percent of respondents said that they are dissatisfied with the EHF.

Table IV-40
Customer Satisfaction with the EHF

	Current Participants	Past Participants	Current and Past Participants
Very satisfied	75%	60%	71%
Somewhat satisfied	21%	28%	23%
Somewhat dissatisfied	3%	4%	4%
Very dissatisfied	0%	4%	1%
Don't know	0%	4%	1%

Current and past participants were asked whether they had any recommendations for improvement to the EHF. About 10 percent of respondents said that the program could be improved by lowering monthly payments. Other recommendations included increasing flexibility in payment arrangements, explaining the program and benefits better, providing weatherization and energy efficiency services, and maintaining a fixed budget payment amount. Answers total more than 100 percent because respondents could provide more than one answer.

Table IV-41
Customer Recommendations for EHF Improvement

	Percent
Lower payments	10%
Flexibility in payment arrangements	6%
Explain program and benefits better	5%
Weatherization/energy efficiency services	4%
Fix budget payment amount	2%
Other	12%
No recommendations	61%

I. Summary of Customer Survey Findings

Key findings from the customer survey are summarized below.

- *Indicators of Need for the EHF:* Non-participants showed less of a need for EHF benefits than current or past participants. Non-participants are less likely to have a disabled household member, and they have higher income levels. They are more likely to receive employment income and are less likely to receive public assistance, non-cash benefits, or LIHEAP.
- *Participation in the EHF:* Non-participants are likely to know about the EHF (62 percent reported that they were aware of the program) from customer service representatives or bill inserts. However, they do not enroll because they believe their income is too high or they do not understand the program requirements or enrollment procedures.

Current and past participants reported that they heard about the EHF through a customer service representative, an agency, or a friend or relative and that they enrolled in the program to reduce their bills. They reported that the enrollment was not difficult and that the entire process took less than two months.

- *Understanding of the EHF:* Most current and past participants reported that they understood the EHF, reported that their responsibility was to keep up with payments, and that they were required to notify T.W. Phillips if their income changed. Customers were less likely to know the duration of the program or to understand how their energy assistance benefits were credited to their account. However, customers were not likely to report that they had concerns about the benefit crediting procedures.

Current and past participants were most likely to state that lower energy bills were a benefit of participating in the program. The second most common benefit that customers cited was even payments or a budget bill. About 67 percent of current

customers said that the arrearage forgiveness that they receive makes them more likely to pay their bills.

- *Financial Obligations and Bill Payment Difficulties:* Current and past participants felt that the EHF had a large impact on their ability to pay their energy bills. While 64 percent of current participants said that it was very difficult to pay their gas bills prior to participating in the program, only 10 percent said that it was very difficult to pay their bills while participating in the program. Eighty percent of past participants said that it was very difficult to pay their bills prior to participating in the program, compared to 28 percent who said it was very difficult to pay their bills while participating in the program.

Current participants also reported that the EHF helped them to meet their other needs. While 59 percent of current participants said that they had to forego or delay spending on food prior to participating in the program, 21 percent said that they had to do so while participating in the program. They were less likely to say that they had to forego several other bills as well.

While non-participants were less likely than current and past participants to report bill payment difficulties, they also showed a need for the program. Twenty-one percent said that it was very difficult to pay their gas bills, 35 percent said that they had to forego or delay spending on food, and three percent said that there was a time in the past year that they could not use their main source of heat.

- *EHF Impact:* Respondents reported that the EHF has been very important in helping them to meet their needs. Seventy-nine percent of current participants reported that the program was very important, and 17 percent reported that it was somewhat important. Percentages were similar for past participants.

Respondents felt that they need additional assistance to pay their gas bills. Forty-three percent of current participants, 84 percent of past participants, and 56 percent of non-participants said that they need additional assistance.

- *Program Success:* Past participants were most likely to report that they did not know why they were no longer participating in the EHF. They also reported that they were no longer participating because they missed a payment or they were no longer income-eligible. They felt that T.W. Phillips could help customers to stay on the program by providing greater flexibility with payments and lower payments. Most said that they would re-enroll in the program if they were eligible.

Most participants were very or somewhat satisfied with the program and most current participants said that they were very likely to continue to participate in the program and would do so as long as they were income-eligible.

J. Recommendations from Customer Survey Research

Recommendations based on the customer survey research are described below.

- *Current Participants:* Current participants reported that the EHF was very important in helping them meet their needs, that they were much less likely to experience gas bill payment difficulty while participating in the program, and that they were much less likely to have difficulty meeting their other expenses while participating in the program. The survey showed that the EHF has had a great impact on these households. The program should continue to offer discounted bills and arrearage forgiveness.
- *Past Participants:* Past participants reported that the EHF had been very important in helping them to meet their needs and they were less likely to say that their gas bills were very difficult to pay while participating in the EHF. They were also very likely to say that they would re-enroll in the program if they were eligible. These customers should be given the opportunity to re-enroll in the EHF.
- *Non-Participants:* Non-participants showed less of a need for the EHF than current and past participants, but they did report that they had difficulty paying their gas bills and that they had to forgo spending on other household necessities. Efforts should be made to recruit non-participating low-income customers into the EHF.

V. Summary of Findings and Recommendations

This section of the report summarizes the findings and recommendations from all of the evaluation activities. Findings and recommendations are grouped into the categories of program administration, program procedures, program benefits, and program impacts.

A. *Program Administration*

Interviews with program managers and administrators and a review of program documents and data showed that the EHF is an extremely well managed program. As such, there were no recommendations to improve the cost-effectiveness of the program.

1. **Thorough and accurate program and customer data**

T.W. Phillips has an efficient and organized system to process and report data needed to manage the EHF. Their existing management reports covered referral sources, participant status, reasons for denial of entry into the EHF, and reasons for removal from the program. They were able to quickly provide APPRISE with a download of data needed to analyze the payment impacts of the program. These data were more complete and consistent than many other utilities the evaluator has worked with.

2. **Extensive contact with participants**

The program administrator regularly contacts participants, by mail and phone, to remind them that they have an outstanding application for the program, that energy assistance is available, that a payment is about to come due, that a payment deadline has passed, or that they have been removed from the program. Each day a series of reports is run to inform the administrator of which participants fall into each category. This extensive contact with participants is likely to increase receipt of energy assistance and to increase EHF retention rates.

3. **Program costs and enrollment**

T.W. Phillips has set a maximum EHF program participation level of 1,500 participants or a maximum expenditure of \$400,000, whichever comes first. T.W. Phillips managers originally thought that they would use up the allotment of funds with 700 customers on the EHF. They now believe they could have around 1,000 on the EHF within the current budget. However, they may be able to increase participation more significantly with the current budget. T.W. Phillips should recruit more low-income customers to participate in the program.

B. Program Procedures

A review of program procedures, interviews with managers and staff, data analysis, and interviews with T.W. Phillips provided information on program procedures. This review found no apparent barriers to enrollment and successful targeting of the most in need. However, it appears that T.W. Phillips could provide additional information to local agencies about the EHF to improve program outreach.

1. No apparent barriers to enrollment

Interviews with the EHF manager and administrator, the review of program documents, and interviews with current and past participants revealed no apparent barriers to enrollment in the EHF. Customers reported that the enrollment was not difficult and that the entire process took less than two months.

2. Program targeting

The data analysis showed that non-participants had less of a need for EHF benefits than current or past participants. Non-participants are less likely to have a disabled household member, and they have higher income levels. They are more likely to receive employment income and are less likely to receive public assistance, non-cash benefits, or LIHEAP.

The customer survey found that non-participants were less likely than current and past participants to report bill payment difficulties. However, these customers also showed a need for the program. Twenty-one percent said that it was very difficult to pay their gas bills, 35 percent said that they had to forgo or delay spending on food, and three percent said that there was a time in the past year that they could not use their main source of heat.

T.W. Phillips appears to be targeting the program to those customers who are most in need. However, they should attempt to recruit more low-income customers into the program.

3. Former participants would like to re-join the EHF

Customers are eligible to re-join the EHF one year after they have been removed. Most of the previous participants said that they would re-enroll in the EHF if they were eligible. T.W. Phillips could increase enrollment by contacting former participants and providing them with another chance to participate in the program.

4. Agency staff are not knowledgeable about the EHF

Contact attempts with local agencies showed that agencies were unlikely to be aware or knowledgeable about the EHF. T.W. Phillips has provided agencies with information

about the program through workshops and brochures, but there may have been staff turnover since the time that the information was provided. T.W. Phillips should more frequently provide agencies with information about the program to make sure that new staff receive the EHF information.

C. Customer Perspectives

The customer interviews showed that they value the EHF and believe that it has a large impact on their ability to pay their gas bills and meet their needs.

1. Participants value the budget bill

The customer survey showed that current and past participants valued the budget bill. While they were most likely to state that lower energy bills were a benefit of participating in the program, the second most common benefit that customers cited was even payments or a budget bill. T.W. Phillips currently offers this service to all customers to assist them in equalizing their budgets and making regular gas bill payments.

2. Bill payment

Current and past participants reported that the EHF had a large impact on their ability to pay their energy bills. While 64 percent of current participants said that it was very difficult to pay their gas bills prior to participating in the program, only 10 percent said that it was very difficult to pay their bills while participating in the program. Eighty percent of past participants said that it was very difficult to pay their bills prior to participating in the program, compared to 28 percent who said it was very difficult to pay their bills while participating in the program.

3. Arrearage forgiveness

Customers reported that they were more likely to pay their bills because of the arrearage forgiveness associated with the EHF. About 67 percent of current EHF participants said that the arrearage forgiveness that they receive makes them more likely to pay their bills.

4. Importance of the EHF

EHF participants reported that the EHF has been very important in helping them to meet their needs. Seventy-nine percent of current participants reported that the program was very important, and 17 percent reported that it was somewhat important. Percentages were similar for past participants.

Respondents felt that they need additional assistance to pay their gas bills. Forty-three percent of current participants, 84 percent of past participants, and 56 percent of non-participants said that they need additional assistance.

5. Satisfaction with the EHF

Most participants were very or somewhat satisfied with the EHF and most current participants said that they were very likely to continue to participate in the program and would do so as long as they were income-eligible.

D. Program Impacts

The data analysis showed that the EHF positively impacts the payment behavior of low-income participants. Participants were less likely to have their service terminated and they had fewer collections actions.

1. EHF retention rates

Approximately one-third of the customers who enrolled in the EHF since the inception of the program remain on the payment plan. Fifty-nine percent remained on for six months, 38 percent remained on for one year, and 30 percent remained on the plan for two years. Most of the customers who left the EHF Program did so due to non-payment.

These retention rates are reasonable given the income level of the participants and the level of discounts that are awarded by the program. The retention rates are likely related to the level of effort that the T.W. Phillips' staff person extends to remind customers about due payments and energy assistance applications. The fact that nearly 60 percent of the customers remained on the program for six months indicates that these customers made a good faith effort to meet their payment obligations.

However, a large percentage of customers were not successful in remaining on the EHF. This may be due to the fact that their bills remained unaffordable, or to the fact that these customers are not in the habit of paying their gas bills on a regular basis. To increase retention rates, T.W. Phillips may have to reduce customer bills by providing greater rate discounts or effective weatherization services, or increase energy assistance from other programs such as Dollar Energy. Allocation of Dollar Energy grants to EHF customers (rather than current targeting to customers who need to have gas service restored) could improve affordability and increase program retention rates.

2. Payment Behavior

Customers who participated in the EHF had significant improvements in their payment behavior, as compared to low-income non-participants and to customers who participated in the program at a later date and had not yet received EHF benefits.

Participants experienced reduced bills, increased cash and assistance payments, increased cash and total coverage rates, and decreased levels of shortfall.

Customers in all three Tier levels experienced positive benefits from participating in the EHF. Customers in Tiers 1 and 2 had significant declines in their bills, accompanied by increases in cash payments. Customers in Tier 3 did not have significant reductions in their bills, but they had larger increases in cash payments, and also had significant increases in assistance payments.

3. Energy Assistance

As expected, customers who stayed on the EHF for a full year or longer following enrollment experienced greater benefits than those who left the program prior to one full year of participation. However, participants who remained on the program for less than a full year also had more favorable changes in payment statistics than those who did not participate in the program. The main reason that these customers had more favorable outcomes than the comparison group was that they received greater dollars in assistance payments.

4. Arrearages

Customers who participated in the EHF had no gross change in arrears, but a small statistically significant net decline in arrears. When examined by year of enrollment, customers who enrolled in 2002 had a decline in arrears, and customers who enrolled in 2003 had an increase in arrears. Participants who remained on the program for a full year had a large decline in arrears and customers who did not remain on the program for a full year had a large increase in arrears. Tier 3 customers had a large and significant decline in arrears. This decline in arrears exceeded the amount of arrearage forgiveness received for the Tier 3 participants. One explanation for this decline in arrears is that the program has encouraged Tier 3 customers to make more regular gas payments.

5. Service Terminations

While the full group of customers who participated in the EHF did not experience a decrease in service terminations, customers who succeeded in remaining on the EHF for a full year had a gross decrease in service terminations and a net decline in service terminations as compared to low-income non-participants. While all three Tiers of customers had an insignificant gross increase in the rate of service terminations, non-participant Tier 1 customers had a large increase in service terminations. Therefore, Tier 1 customers had a large net decrease in the rate of service terminations.

This analysis shows that Tier 1 customers who are not enrolled in the EHF have a great need for the program. Customer service representatives should work to enroll the identified Tier 1 customers into the Program. Even if they are not experiencing

payment difficulty at the current time, it is likely that one economic setback will threaten their payment ability.

6. Collections Actions

EHF participants experienced fewer of 17 of the 19 different types of collections actions in the year following enrollment than they did in the year preceding enrollment. Most of these reductions were statistically significant. The non-participants experienced an increase in all but one of the collections actions. The participants, therefore, experienced a significant net reduction in the number of each collections action, ranging from a nine to a 100 percent reduction in the number of actions. These declines should be factored into any analysis of the impact of the program on T.W. Phillips' bottom line.

7. Universal Service Goals

The analysis presented here showed that the EHF Program helped to increase customer payments and bill coverage rates. Bills declined significantly for customers in Tier 1 and Tier 2. However, it was shown that the majority of customers did not remain on the program for one year or more, and that customers must remain on the program to experience the full program benefits, including a reduction in arrearages. Additionally, only those customers who remained on the program for a full year experienced a reduction in the rate of service terminations. To fully realize the benefits of the program, T.W. Phillips would need to assist customers to further reduce their bills or increase their assistance payments⁵. However, the program as it currently stands, already produces significant benefits for many participants.

⁵ One way to increase assistance payments would be to redirect some of the Dollar Energy funds from restoration of service to EHF participants. This would increase affordability for participants and may improve program retention rates.

Appendix