



NJ Comfort Partners Process Evaluation Final Report

Prepared for the New Jersey Comfort Partners Working Group
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Executive Summary

This report presents the findings from the Process Evaluation of the Comfort Partners Program. In this evaluation, we documented the procedures used in the Comfort Partners Program, assessed the extent to which service delivery adhered to program procedures, and assessed the program's procedures. Recommendations for refining and improving the Comfort Partners Program are made based on this research. The Process Evaluation is the third component of the evaluation of the Comfort Partners Program.

Introduction

The New Jersey Clean Energy Collaborative consists of Public Service Electric and Gas, Jersey Central Power and Light, Conectiv Power Delivery, Rockland Electric Company, New Jersey Natural Gas, NUI Elizabethtown Gas, and South Jersey Gas. The Collaborative has designed eight Residential Energy Efficiency Programs and three Nonresidential Energy Efficiency Programs to reduce the total amount of electricity and natural gas used in New Jersey and to reduce the summer peak demand for electricity. The Residential Low Income Program Working Group designed the Comfort Partners Program to meet the Collaborative's usage reduction goals and to improve energy affordability for low-income customers.

The Comfort Partners Program was designed to overcome the market barriers affecting energy usage and energy affordability for low-income customers. The program delivers comprehensive usage reduction and energy education services to low-income customers. The program also includes an arrearage forgiveness component designed to assist customers in retiring outstanding arrears.

The Residential Low Income Program Working Group commissioned a comprehensive evaluation "to determine the extent to which Program goals are being achieved and to provide feedback on how the Program might be modified to better achieve these goals." The Working Group contracted with APPRISE to conduct this evaluation. The evaluation team includes APPRISE, MaGrann Associates, Blasnik and Associates, and Renaissance Consulting and Analysis.

Comfort Partners Program

The New Jersey Comfort Partners Program is complex, involving seven gas and electric utilities, two implementation contractors, two third party quality control inspectors, and several subcontractors.

Program Administration

The New Jersey Comfort Partners Program is administered by the Residential Low Income Program Working Group (Working Group), the seven electric and gas utilities, and the two implementation contractors.

The Working Group is comprised of representatives from the seven electric and gas utilities, a utility senior manager, and a collaborative advisor who represents the interests of the Natural Resource Defense Council (NRDC). The Working Group is responsible for designing the Comfort Partners Program, including program materials, program training, and quality control systems.

The Working Group was instructed by the BPU to implement the Comfort Partners Program within 60 days following the date of the order to implement the program. Because of the limited time to meld different programs together and to begin service delivery for those utilities who had not previously provided comprehensive usage reduction programs, the Working Group began the process of program design by starting with the most critical program elements. The first elements that were resolved included agreeing on contractors, procedures to be used in the field, and cost sharing.

The Working Group decided to delay going out for bid for service delivery contractors when the Comfort Partners Program was implemented. All of the utilities had used HDMC either for some aspect of service delivery or for inspection of work, and they felt that using the same contractor across the state would create efficiencies. PSE&G went out for competitive bid for its portion of the program in January 2002. A final decision was pending when the BPU ordered on April 23 that no awards be made on pending RFP's. The Working Group had planned to go out for bid again in 2002. However, they delayed this, pending final BPU decision on whether the Collaborative will continue to administer the program.

The Working Group has developed a set of materials to be used in the field. These materials include a Comfort Partners folder that provides the contact number for the program and that holds the program application, the landlord permission form, a Partnership Agreement Form, and an Action Form. The Working Group also developed an energy education notebook and purchased energy education cards from the education consultants.

The Working Group has been discussing how to conduct joint inspections and how to move toward a uniform quality control process for the Comfort Partners Program. A flow chart for the quality control procedures as well as a format for a monthly quality control report are under development.

The New Jersey electric and gas utilities participating in the Comfort Partners Program have taken different approaches to administering the program. Some of the utilities have maintained more responsibility for program administration within the utility, and some of the utilities have hired HDMC to provide more of the program administration services. Part of the division of responsibilities has to do with the structure of the utility and part has to do with the individual utility's experience with previous low-income usage reduction programs.

The table below displays the administrative functions that HDMC provides for the utilities as part of the Comfort Partners Program.

HDMC Administrative Services Provided For Utilities

	Conectiv	Elizabethtown Gas/NUI	JCP&L	NJ Natural Gas	PSE&G (Rockland)	South Jersey Gas
Marketing/ Recruiting	X	X			X	X
Enrolling	X	X			X	X
Scheduling	X	X	X	X	X	X
Data tracking system	X	X		X	X	X
Data reporting	X	X	X	X	X	X
Arrearage intake	X	X		X	X	X
Arrearage counseling/ late payment notification	X	X		X		X

Training

The Working Group provided two training sessions to program contractors: an initial training in July 2001 that covered program procedures, and a second training in April 2002 that covered energy education. Additionally, contractors provide ongoing training to their staff in order to increase the effectiveness of service delivery.

Data Coordination

There are several reasons why the utilities and the service delivery contractors need to exchange data:

- *Targeted marketing list:* Utilities need to target the marketing of the Comfort Partners Program to those customers who are most likely to be eligible and to those customers who are likely to obtain large energy savings as a result of program services. Therefore, utilities that are using HDMC to market their program must send HDMC this targeted customer list.
- *Enrolled customer list:* JCP&L and NJ Natural Gas recruit and screen customers on their own. They must have a means to transfer the list of recruited customers to the service delivery contractor for scheduling.
- *Customer usage data:* In order to calculate the measure allowance and to determine which services the customer should receive, the service delivery contractor must obtain the customer's monthly usage history from the utilities.

- *Customer payment and arrearage data:* In order to determine if the customer should be targeted for the Arrearage Reduction component and to calculate the customer's monthly payment and arrearage forgiveness, the service delivery contractor needs to obtain the customer's payment history and current balance.

Each of the utilities has developed a means to transfer these data to the service delivery contractors.

Program Eligibility

Households with income below 150 percent of the federal poverty guideline or who participate in one of the following programs are eligible for Comfort Partners:

- Lifeline
- LIHEAP
- Temporary Assistance to Needy Families (TANF)
- Supplemental Security Income (SSI)
- Pharmaceutical Assistance to the Aged and Disabled (PAAD)
- General Welfare Assistance
- Section 8

Targeting, Recruitment, Enrollment, and Scheduling

The utilities have different methods for conducting outreach and marketing for the Comfort Partners Program. The utilities felt that these functions needed to differ by utility because of the differing characteristics of the populations that the utilities serve. The Working Group decided that whatever marketing system worked in the utility's area should be used or continued. With joint delivery, both companies would benefit if there was overlap, because the Comfort Partners name is the same and the program message is consistent.

Some of the participating utilities have worked to target high use customers. High use customers are targeted because these customers have the greatest potential for cost-effective energy savings.

Four main types of different designs are used for targeting, recruitment, and outreach:

- *JCP&L* provides their own targeting and outreach, and provides contractors with a list of customers who have already been enrolled in the program. Bill Busters and HDMC are only responsible for scheduling these customers for service delivery.
- *NJ Natural Gas* does marketing to their customers and screens interested customers for program eligibility. They provide a list of screened customers to HDMC, but HDMC must still enroll the customers in the program and schedule the customers for service delivery.

- *Conectiv, South Jersey Gas, and Elizabethtown Gas* provide HDMC with lists of customers who are targeted for program services. HDMC is responsible for marketing the program to customers on this list, enrolling the customers in the program, and scheduling service delivery.
- *PSE&G* provides HDMC with direct access to their customer system. HDMC accesses the system and downloads a list of LIHEAP participants above a gas usage threshold.

These systems were designed to work within each utility's infrastructure and to target high use customers who have participated in other low-income programs that make them likely to be eligible for Comfort Partners Program services.

Service Delivery

The two service delivery contractors each have their own method for service delivery, based on their staff's skills and their infrastructure.

- *Bill Busters* spends about one half day conducting the first Comfort Partners visit. During this visit, they tend to install only a few items. Bill Busters usually schedules a second visit within days of the audit. All of the work on the home is completed in one to three days, depending on the complexity of the job. Bill Busters does their own insulation work.
- *HDMC* has recently begun implementing their new method of service delivery where a team leader provides the first diagnostic visit, and then schedules one of two crews for the measures visit while at the customer's home. The crew returns to the home later in the week. The crew providing the measures visit is an HDMC crew if no insulation is required, and is a subcontractor crew if insulation is required.

Data Review, Data Tracking, and Reporting

There are two main systems for data review, data tracking, and reporting:

- All of the utilities use HDMC's system except for JCP&L. HDMC's system tracks services received for each customer. HDMC provides detailed invoices to the utilities each month, and ad hoc reports as requested.
- JCP&L uses their WARM2 system for data tracking and reporting. The system tracks detailed job information and generates reports that allow program managers to review jobs based on a number of different characteristics. JCP&L's invoices are created through this system.

Quality Control

Quality control is conducted both by third party quality control inspectors and by the service delivery contractors. Quality control by the third party inspectors provides a systematic and

objective view of the completed work and can identify health and safety problems, measures installed incorrectly, and missed opportunities. On-site quality control by contractors during service delivery can more specifically identify problems with service delivery and training needs. Quality control by the third party inspectors and the service delivery contractors is described briefly below.

- *Third party quality control contractors* have been hired by some of the utilities to provide systematic inspection of the work done on the homes. The Working Group is finalizing procedures whereby all utilities would be required to have third party quality control inspectors review ten percent of their completed jobs and report on the results.
- *Bill Busters* provides ongoing quality control as the company's owner is always on-site delivering services with the crews and providing training at the same time.
- *HDMC* provides quality control both through on-site observation by field supervisors, and through post completion inspection by quality control specialists.

Arrearage Reduction

The Arrearage Reduction component is one aspect of the Comfort Partners Program that differs substantially between the different utilities, both in terms of the program parameters, and in terms of the way the program is implemented and delivered. The Working Group did not know if the Arrearage Reduction could be the same across utilities because of differing customer information systems. The utilities also have different budgets for the Debt Reduction.

The table below provides an overview of the eligibility requirements for the utility Arrearage Reduction components, including the minimum and maximum arrearage levels that qualify customers for the program, the type of accounts customers must have to qualify, and HEAP assistance requirements.

Arrearage/Debt Reduction Program Eligibility Criteria

	Arrearage Level		Account Type	HEAP Assistance
	Minimum	Maximum		
Conectiv	\$300	\$1500	Customer of record with active residential account	None
JCP&L	None	None	Customer must be ratepayer of record and in permanent residence	Participants who meet the program guidelines for HEAP must apply for benefits annually and, if possible, designate JCP&L as the recipient
NJ Natural Gas	\$250	\$750	Customer has account in his/her name and is responsible for bill payment	Customer has received funds or has applied for assistance from one or more of the available programs
NUI	None	\$1500	Customer of record in a	Customer must receive funds

	Arrearage Level		Account Type	HEAP Assistance
	Minimum	Maximum		
Elizabethtown Gas			residential gas-heated dwelling	or have applied for assistance from one or more available funding sources for energy assistance. Customer must designate NUI Elizabethtown Gas as the recipient of any energy assistance funds received by the customer, if NUI Elizabethtown Gas is their heating fuel provider.
PSE&G	\$300	\$2000	Customer is a PSE&G heating customer of record, or an oil heat customer with PSE&G electric	None
South Jersey Gas	None	None	Customer is a South Jersey Gas customer of record, residing in a residential natural gas heated dwelling	None

Evaluation Activities

A statewide evaluation of the Comfort Partners Program is a goal in the program that was approved by the BPU in its Decision and Order of August 15, 2001. The key objective of the evaluation is to determine how well program goals are being met and to recommend program refinements that will allow for improved attainment of program goals.

The Working Group proposed Process, Energy Impact, and Affordability Evaluations in order to meet the evaluation objectives.

The Process Evaluation assessed the program's design and delivery, and the usefulness and quality of services. It provides context for the interpretation of the Energy Impact and Affordability findings. Five tasks were included in the Process Evaluation to meet these objectives.

Task 1 – Core Program Operations and Costs: Due to the participation of seven utilities, two implementation contractors, and two quality control inspectors, the Comfort Partners Program is administratively complex. Effective and efficient procedures for program operations are crucial to program success. The purpose of this task was to develop a detailed understanding of how the program is designed to operate, to assess whether it is operating according to the prescribed guidelines, to identify organizational barriers to program effectiveness, and to capture information on program costs. There were five activities included in this task:

- Activity 1: Interviews and Document Review
- Activity 2: On-Site Observations

- Activity 3: Database Analysis
- Activity 4: Client Case Studies
- Activity 5: Measurement of Program Costs

Task 2 – Program Delivery Staff Training, Performance, and Feedback: Program delivery staff are an integral part of the Comfort Partners Program. In order for the program to achieve its goals, program delivery staff must have sufficient skills and experience, must understand program goals and design, and must be able to effectively implement program protocols. The purpose of this task was to document the service delivery staff training and certification procedures, and to understand how the performance of individual crew members is tracked and enhanced. There were two activities included in this task:

- Activity 1: Interviews and Document Review
- Activity 2: On-Site Observations

Task 3 – Education Program Effectiveness: Energy education is an important component of the program. In order for education to be effective, educators must understand where gaps in client knowledge exist and be able to impart knowledge that will have a lasting impact on the client. The purpose of this task was to develop an in-depth understanding of the client education protocols, to assess whether the protocols are being implemented consistently, to develop an understanding of the key education concepts and behavioral objectives, to identify barriers to the effectiveness of the client education, to assess the extent to which the program has affected client knowledge and behavior, and to assess persistence of knowledge, behaviors, and measures. There were five activities included in this task:

- Activity 1: Baseline Assessment
- Activity 2: Interviews and Document Review
- Activity 3: On-Site Observations
- Activity 4: Client Quantitative Interviews
- Activity 5: Database Analysis

Task 4 – Arrearage Program Operations and Costs: The Arrearage Reduction program aims to improve energy affordability by providing clients with an opportunity to eliminate past due balances. The purpose of this task was to develop a detailed understanding of how the individual utility arrearage reduction programs are designed to operate, to assess whether they are operating according to the prescribed guidelines, to identify organizational barriers to program effectiveness, to capture information on program costs, and to assess participant understanding of responsibilities. There were four activities included in this task:

- Activity 1: Interviews and Document Review
- Activity 2: On-Site Observations
- Activity 3: Client Quantitative Interviews
- Activity 4: Measurement of Program Costs

Task 5 – Process Evaluation Reports: The Process Evaluation studied all aspects of the program. Each activity has an associated deliverable, but it is important to draw together all of the information in a single analysis. The purpose of this task was to report on all Process Evaluation findings and draw essential conclusions regarding suggested program improvements. There were two activities included in this task:

- Activity 1: Draft Process Evaluation Report
- Activity 2: Final Process Evaluation Report

Process Evaluation Findings

The Working Group and the seven member utilities faced great challenges in implementing the Comfort Partners Program within sixty days following the BPU order. While some of the utilities had previous comprehensive low-income usage reduction programs, these programs had implementation procedures that were significantly different from one another. Additionally, some of the utilities did not have experience with such a complex program prior to Comfort Partners. The Working Group resolved many issues to develop a coordinated statewide low-income usage reduction program. These issues included development of uniform program procedures, agreement on cost-sharing procedures, agreement on contractors and statewide pricing, and program training.

The program was implemented, as required, within sixty days after the BPU's order. While many accomplishments were made, there are several areas of the program that need improvement.

- 1) *Program achievements are extensive:* As noted above, the Comfort Partners Program was successfully implemented within the time frame set by the BPU. The Working Group made many important decisions and pushed the program forward in order to achieve this goal. HDMC's administrative systems were instrumental to the utilities being able to implement the program. JCP&L's system allowed for their program implementation, and has provided them with the added benefit of direct access to customer information. Utilities have successfully provided the implementation contractors with the information necessary to serve the customers, and the implementation contractors have implemented the new program procedures. Many of the utilities met their 2001 goal for production.
- 2) *Improvements over the E-TEAM Partners Program:* APPRISE has noted significant improvements in the Comfort Partners Program over PSE&G's previous E-TEAM Partners Program. These include improvements in:
 - Program specification and documentation
 - Tools that allow field staff to select and prioritize measures
 - Communication between service delivery staff and customers
 - Communication among auditors, measure crews, and insulation crews
 - Allocation of responsibility between insulation crews and measure crews
 - Average time to complete service delivery

- Data tracking systems
 - Reporting and invoicing systems
 - Quality control systems
- 3) *Uncertainty of future program administration:* Achievement of program goals has been impacted by the uncertainty of how the program will be administered in the future. The Collaborative has been reluctant to make long-term commitments with current contractors and to hire additional contractors to help meet program production goals. The installation contractors have been reluctant to purchase additional trucks and hire new staff. The uncertainty is also impeding the Collaborative's implementation of a statewide tracking system and their long-term planning process, including working with State Weatherization Assistance Program providers.
- 4) *Production rates:* While many of the utilities met their 2001 production goal, this was due to an intense effort by HDMC to begin service delivery for many customers at the end of 2001. As a result, the beginning part of 2002 was used to complete the services for these customers. Therefore, at the midpoint of the year, analysis of program data shows that the production goal is not being achieved. In order to meet the annual production goal of over 6,000 homes, HDMC will have to significantly ramp up services in the next few months.
- 5) *Training:* Review of training materials, attendance at the education training, observation of service delivery, and customer interviews show that program and education training were not sufficient to provide technicians with complete information and instruction on program procedures. Additional training in measure and education procedures is needed.
- 6) *Targeting:* Some of the utilities are targeting high use customers. Barriers to targeting these customers include the fact that customers requesting services must be served, high electric users may not be high gas users and vice versa, and the market for some of the utilities may be saturated.
- 7) *Recruitment and outreach:* Observation of recruitment and enrollment, and interviews with customers showed that marketing and enrollment staff are not initiating the partnership with the customer. The customer receives only limited program information at the time of enrollment.
- 8) *Education:* Education is an integral component of the Comfort Partners Program. Technicians must communicate with the customer to understand usage in the home and to identify opportunities for reducing energy usage. The technician must furnish the customer with an understanding of the program and the measures, and assist the customer in discovering his or her self-interest for reducing energy usage.

APPRISE undertook many research activities in order to assess the implementation of education as part of the Comfort Partners Program. These activities included on-site

observation of service delivery, interviews with program participants, and review of education forms used in delivery.

During the observations, we found that education protocols were not completely and consistently followed. The auditors generally did a good job of educating the customer during the walk through about the work that was being done and potential energy-saving actions. However, the auditors were less consistent in providing education at the introduction and conclusion of the visit. The approach used was generally not successful in establishing and confirming the partnership with the customers. During customer interviews, we found that customers did not understand the partnership or their responsibility for reducing energy usage.

The following elements of the education implementation need to be improved:

- *Partnership agreement:* The partnership nature of the program should be explained at the beginning of the visit. This should include an explanation of the fact that both the utility and the customer have responsibilities in the program, and that one of the customer's responsibilities is to take actions to reduce energy usage.
 - *Energy education notebook:* The auditor should use the energy education notebook to explain the program and energy use in the home.
 - *Explaining the steps of weatherization:* At the beginning of the visit, the auditor should explain the steps of weatherization, including intake/eligibility, the energy survey, energy education, installation, inspection, and follow-up.
 - *Reviewing and explaining bills:* At the beginning of the visit, the auditor should request a copy of the customer's bills, explain how to read the bills, and discuss the customer's usage.
 - *Co-developing an action plan:* The auditors should work with the customer to determine the high energy users in the home, and the actions that the customer is willing to take to reduce energy use. The auditor should develop a written action plan with the customer that lists the actions that the customer has committed to take.
 - *Summarizing and reviewing and encouraging the customer's active participation:* At the end of each visit, the auditor should review the work that was done on the home, any actions that the customer needs to take to maintain the work, the energy-saving actions the customer has committed to take, and other commitments the customer has made. The auditor should also explain other visits that the customer will receive and what the customer should expect to happen during these visits.
- 9) *Quality control:* Third party quality control contractors reported that they do not randomly select jobs for inspection. On the jobs they do inspect, they check for health and safety problems, comprehensive measure selection, and quality of installation. They also provide some customer education.

- 10) *Effect of the program:* The Comfort Partners Program appears to have positively impacted the customers. Thirty-six percent of the customers surveyed in the quantitative interviews felt that their bills had already declined since receipt of program services. Fifty-four percent felt that their home is more comfortable, sixty-eight percent felt that the home is warmer in the winter, sixty-seven percent felt that the home is less drafty in the winter, and seventy-three percent felt that the home is more comfortable in the summer since receiving program services.
- 11) *Customer satisfaction:* Most of the customers expressed very positive feelings toward the providers who came to their homes. Almost all of the customers stated that the providers were on time, knowledgeable about energy use, responsive to questions, and courteous and professional. Almost all of the customers were very satisfied with the work done on the home. The customers stated that the providers were neat and considerate of their homes. Eighty-six percent were very satisfied with measures, ninety percent were very satisfied with the education, and eighty-eight percent were very satisfied overall.
- 12) *Arrearage reduction:* Interviews with the utilities revealed that the utilities have different arrearage programs and different management procedures. Substantial progress was made in getting these complex programs up and running in a short time period. Many of the utilities use some manual systems for implementing the program. HDMC provides intake for all of the utilities except JCP&L. During observation of customer intake, HDMC technicians did not provide information on how other low-income assistance payments would be credited to the customer's account if the customer participated in the program.

Process Evaluation Recommendations

There are many recommendations for program improvement. These recommendations, relating to program administration; staff training; targeting, recruitment, and outreach; service delivery; quality control; and the Arrearage Reduction component, are summarized below.

Recommendations for Program Administration

The two main goals of the evaluation of administrative functions are to determine how utility program administration and delivery contractor administration facilitate efficient and effective service delivery.

Several evaluation activities have provided information on program administration. These activities included interviews with utility managers and staff, interviews with service delivery contractor management and staff, review of data collection forms, and observation of program processes, both at JCP&L and HDMC.

The three main recommendations for administration of the Comfort Partners Program are to develop a joint review of HDMC's work, to develop a service delivery infrastructure, and to increase coordination of Comfort Partners delivery with other low-income programs.

1. The Working Group should conduct joint review of HDMC

JCP&L has a systematic procedure in place to assess and provide feedback on contractor performance. Given the fact that HDMC is currently providing services for all of the utilities, the Working Group should develop procedures to systematically provide feedback to HDMC on a periodic basis regarding all program performance issues.

2. The Working Group should develop the service delivery infrastructure

An analysis of program production, in the Service Delivery section, shows that the current program contractors are not meeting production goals. Utilities have found during their procurement processes that there are only a few qualified contractors in the state. Utilities should work to further develop the service delivery infrastructure in the state. One method is to provide a service delivery contractor with a long-term contract, subject to acceptable performance, and encourage their investment in increased capacity. Another method is through long-term support of WAP agencies. A third potential method for increasing capacity is to hire other small independent contractors to deliver program services. Their services could be managed either by HDMC, or by the individual utilities.

3. The contractors should increase coordination of service delivery with other low-income programs

Members of the Working Group and HDMC managers have worked towards coordinating the Comfort Partners Program with other low-income programs. However, progress in this area has been limited. We recommend that the service delivery contractors and the Working Group increase efforts to coordinate delivery of Comfort Partners services with the WAP program or with housing renewal programs in order to increase efficiency of delivery.

Recommendations for Staff Training

The goal of the training is to provide staff with the information necessary to efficiently and effectively implement the Comfort Partners Program according to prescribed program procedures.

Training evaluation activities included review of training materials, attending the education training, and interviews with utility managers, contractor managers, and contractor field supervisors.

The recommendations for training include that an additional formal training focused on the workflow of the audit and the education process should be held, and that ongoing regular opportunities for auditors to meet and discuss technical, education, and programmatic issues should be facilitated.

1. *An additional formal training focusing on the workflow of the audit and the education process should be held*

In order to consistently and systematically apply the program procedures for educating clients and have the technical knowledge to do so, the auditors need an additional formal training. This training should emphasize the workflow of the audit and the education procedures.

Such training might include detailed review of the following:

- The audit/education workflow
- The education notebook and how it should be used
- The education cards and how they should be used
- What information the auditor should provide as an introduction to the program
- How the customer's utility bills should be reviewed
- How potential savings from changes in energy use should be calculated
- How the partnership agreement should be described
- How the action form should be discussed and completed

The Comfort Partners education training provided core communication and energy information that auditors needed to provide education in the context of the New Jersey Comfort Partners Program. More specific review and exercises around the areas listed above may help auditors effectively use the program procedures that are believed to influence customer energy use.

2. *Ongoing regular opportunities for auditors to meet and discuss technical, education, and programmatic issues should continue*

Once the auditors understand the aspects of the Comfort Partners education procedures, they will be able to modify the presentation of the material to a way that best fits their own style. It is expected that this is a process that will evolve over time. Training should be an ongoing process where educators meet on a regular basis to discuss technical issues, education methods that have been working well with the customers, and how program procedures should be revised. As auditors gain experience and skill, and with this opportunity to share learnings, the auditors will increase each other's knowledge, and improve the delivery of energy education. Ongoing opportunities for sharing experiences will help the education delivery to improve as the program matures. HDMC has noted that such a process is underway.

Recommendations for Targeting, Recruitment, and Outreach

The goal of targeting, recruitment, and outreach is to identify a set of customers who are eligible for program services and whose homes provide opportunities for energy saving measures.

Evaluation activities that provided information on targeting, recruitment, and outreach included interviews with utility managers, HDMC and Bill Busters managers, HDMC staff, and JCP&L staff. The evaluation also included HDMC office observation, JCP&L office observation, and analysis of data for served customers.

The recommendations for improving targeting, recruitment, outreach, and enrollment are to increase targeting of high use customers and begin the partnership development at the time of program enrollment.

1. Utilities should increase targeting of high use customers

The greatest potential for cost-effective energy savings is found in the homes of high use customers. Currently, four of the utilities are targeting high use customers. Efforts to target these customers should be increased in order to achieve goals for energy savings. However, there are several barriers toward such targeting, including coordination of joint delivery jobs, saturation of the market, and the program's mandate to serve any eligible customer.

2. Intake representatives should begin the partnership development at the time of enrollment

The philosophy of the Comfort Partners Program, as a partnership between the customer, the utility, and the contractors, is not developed during the marketing or enrollment contacts with the customer. The partnership development should begin at this time, with a description of what the contractor will do, and a commitment from the customer to take actions to save energy.

Recommendations for Service Delivery

The goals for service delivery are to achieve both the production and energy saving impact goals that were submitted to the BPU. In order to achieve these goals, the contractors must serve over 6,000 customers and provide them with effective energy measures and energy education.

Seven evaluation activities provide information for the evaluation of service delivery. These include direct observation of service delivery, interviews with service delivery contractors, interviews with utility managers, interviews with education program designers, review of documentation of program procedures, interviews with customers, and data analysis.

Recommendations for improving service delivery include providing additional training on customer education and the flow of the audit, providing additional training on program procedures, and placing increased emphasis on consistent delivery that follows prescribed procedures.

1. Additional training on customer education and the flow of the audit should be provided

The auditors are not consistently following the workflow of the audit as described in the education notebook. Procedures for using the partnership agreement form and the action form is the area in which the most instruction is needed. Additional training should be provided on the steps that are expected as part of the audit procedure.

2. Additional training on program procedures should be provided

The auditors are not consistently following procedures for working with the client to select measures that meet the clients needs in a way that is consistent with the specified procedures. Auditors need additional training on providing cost-effective energy saving measures to customers as options, rather than using their current procedures of telling the customer that something will be replaced, or replacing something and then telling the customer what was done.

3. There should be increased emphasis on consistent delivery that follows prescribed program procedures

HDMC managers emphasize the fact that auditors are individuals and customers are individuals and that each home and each interaction is different. While the audit visit cannot be scripted, there is a set of procedures that has been documented and that should be followed. Following the prescribed set of procedures can lead to the most consistent delivery and results. The fact that most of the auditors are omitting many of the required steps in the workflow of the audit is evidence that more emphasis needs to be placed on following procedures that have been defined by the program managers.

Recommendations for Quality Control

There are several goals for quality control. First, quality control should ensure that there are no health and safety problems that are found in the home that are not either addressed by the program or referred for correction, and that the contractors do not cause health and safety problems in the home. Second, quality control should ensure that program procedures are followed and that service delivery is effective. Third, quality control should allow for the provision of training in the field when problems are seen. Fourth, quality control should identify training needs. And last, quality control should identify program procedures that need revision or clarification.

Five main evaluation activities provided information on quality control plans and implementation, and on what quality control is needed. These activities included

interviews with utility managers, interviews with third party quality control providers, observation of quality control by third party quality control providers, review of reports from third party quality control providers, and interviews with service delivery contractor management.

The evaluation recommendations relating to quality control are that a uniform statewide process and guideline for quality control should be developed, jobs should be randomly selected for inspection, and quarterly quality control reports should be developed.

1. A uniform set of third party inspection guidelines should be developed and implemented

Currently, Pure Energy and CMC appear to have different standards for failing jobs. The Working Group should agree on common standards for inspecting Comfort Partners jobs. Utilities that want to place additional requirements on the contractors should have a separate grade, indicating that the job passed the Comfort Partners guidelines, but still requires additional work for acceptance by that utility. The Working Group appears to be moving toward such a framework.

2. Jobs should be randomly selected for inspection

Jobs should be randomly selected for third party quality control, rather than being inspected based on the amount or type of work done on the home. This method for selecting jobs will allow for analysis of whether all homes are receiving comprehensive services. If utilities wish to have the flexibility to inspect certain jobs that appear to have potential for problems, they should designate a minimum percentage of jobs to be randomly selected, and the remaining jobs could be chosen based on job characteristics.

3. Quarterly quality control reports should be developed

Third party quality control inspectors should prepare quarterly reports that document the contractors' performance over the quarter and analyze changes in performance. These reports should summarize the percent of jobs that have failed and the reasons for those failures. (WARM2 has the capability for generating reports that contain this information.)

Recommendations for Arrearage Reduction

The goal of the Arrearage Reduction component is to assist customers to exit an arrearage status by providing them with arrearage forgiveness.

Five evaluation activities provided information on the Arrearage Reduction Component. These included interviews with utility managers and staff, review of enrollment forms, interviews with HDMC managers and staff, observation of HDMC Arrearage Reduction enrollment, and observation of CBO enrollment.

The main recommendations relating to the Arrearage Reduction component are that HDMC field staff and CBO intake workers need to provide customers with more information about the program, utilities should automate procedures, and utilities should compare and contrast their procedures.

1. *Field staff and CBO intake representatives should provide participants with information on how other assistance payments will be credited toward their accounts*

If the customer participates in the Arrearage Reduction component, HDMC field staff and CBO intake representatives should provide participants with information on how other payment assistance programs will affect their accounts and their payments.

2. *Utilities should automate procedures*

As the number of arrearage participants grows, utilities' manual procedures for managing the program will become more burdensome. Utilities should work to automate these procedures.

3. *Utilities should compare and contrast their procedures*

Utilities have different procedures for managing their programs. They should work together to determine which procedures are the most effective and make changes to improve their programs.

I. Introduction

This report presents the findings from the Process Evaluation of the Comfort Partners Program. In this evaluation, we documented the procedures used in the Comfort Partners Program, assessed the extent to which service delivery followed program procedures, and assessed the program's procedures. Recommendations for refining and improving the Comfort Partners Program are made based on this research. The Process Evaluation is the third components of the comprehensive evaluation of the Comfort Partners Program.

A. *Background*

The New Jersey Clean Energy Collaborative consists of Public Service Electric and Gas, Jersey Central Power and Light, Conectiv Power Delivery, Rockland Electric Company, New Jersey Natural Gas, NUI Elizabethtown Gas, and South Jersey Gas. The Collaborative has designed eight Residential Energy Efficiency Programs and three Nonresidential Energy Efficiency Programs to reduce the total amount of electricity and natural gas used in New Jersey and to reduce the summer peak demand for electricity. The Residential Low Income Program Working Group designed the Comfort Partners Program to meet the Collaborative's usage reduction goals and to improve energy affordability for low-income customers.

The Comfort Partners Program was designed to overcome the market barriers affecting energy usage and energy affordability for low-income customers, including:

- Lack of information on how to improve energy efficiency and on the benefits of energy efficiency,
- Lack of capital to upgrade energy efficiency and, in many cases, to keep up with regular bills,
- Inadequate targeting of low-income customers by market-based residential service providers, and
- Split incentives between renters and landlords.

The Comfort Partners Program addresses the market barriers through:

- Direct installation of all cost-effective energy efficiency measures (addressing all fuels),
- Comprehensive, personalized customer energy education and counseling, and
- Arrearage forgiveness for participants who agree to payment plans.

The Comfort Partners Program is targeted to customers with income at or below 150% of the federal poverty income guidelines or who are receiving benefits from certain public assistance programs.

B. Evaluation

The Residential Low Income Program Working Group commissioned a comprehensive evaluation “to determine the extent to which Program goals are being achieved and to provide feedback on how the Program might be modified to better achieve these goals.” The Working Group contracted with APPRISE to conduct this evaluation. The evaluation team includes APPRISE, MaGrann Associates, Blasnik and Associates, and Renaissance Consulting and Analysis.

The comprehensive evaluation of the Comfort Partners Program consists of seven evaluation components.

- 1) *Tracking System Evaluation*: Assessment of the consistency of information tracked by the utilities, the sufficiency of the data for management and reporting, the accuracy of the data in the system, and the efficiency of the tracking system procedures
- 2) *Comprehensiveness Evaluation*: Examination of the appropriateness of Comfort Partners protocols and practices, and the comprehensiveness of service delivery
- 3) *Process Evaluation*: Review of the effectiveness of the Program design and implementation, measurement of customer reactions to the energy component and customer satisfaction with program services, and identification of barriers to program delivery and low-income customer participation
- 4) *Baseline Affordability Impact Projections*: Projections of the affordability impacts of the program using baseline usage data, program service delivery data, and engineering models of program impacts
- 5) *Baseline Usage Impact Projections*: Projections of the usage impacts of the program using baseline usage data, program service delivery data, and engineering models of program impacts
- 6) *Affordability Impact*: Analysis of affordability impacts of the program for 2002 based on customer billing and payment data, service delivery data, and affordable payment program data
- 7) *Usage Impact*: Analysis of usage impacts of the program for 2002 based on customer billing and payment data and service delivery data

The Tracking System Evaluation was completed by 3/15/02. The Comprehensiveness Evaluation and the Process Evaluation will be completed by 8/15/02. The Baseline Affordability Impact Projections and the Baseline Usage Impact Projections will be completed by 12/31/02. The Affordability Impact and the Usage Impact analyses will be completed by 2/28/04.

C. Organization of the Report

Four sections follow this introduction.

- 1) *Section II – Comfort Partners Program*: Provides a description of the program's mandate, goals, and program design and implementation.
- 2) *Section III - Evaluation Activities*: Provides a description of the activities included in the Process evaluation.
- 3) *Section IV - Program Procedures and Implementation*: Provides a description of the goals, design and rationale, evaluation goals, evaluation activities, findings, and recommendations for each aspect of the program.
- 4) *Section V - Customer Participation and Response*: Provides an analysis of the results from customer interviews and surveys.

APPRISE prepared this report under contract to the participating utilities of the New Jersey Clean Energy Collaborative. The service delivery contractors (HDMC, Bill Busters, Pure Energy, and CMC) facilitated this research by meeting with the evaluation contractors, furnishing extensive amounts of data, and making their staff available for observation and interviews. The Working Group facilitated this research by meeting with evaluation contractors and furnishing program data. 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 the Collaborative or the member utilities.

II. Comfort Partners Program Design and Implementation

The Electric Discount and Energy Competition Act of 1999 and the March 1, 2001 Final Decision and Order by the NJ Board of Public Utilities made the New Jersey electric and gas utilities and representatives of the Natural Resources Defense Council responsible for implementing programs to reduce the amount of electricity and natural gas used in New Jersey and to reduce the summer peak demand for electricity. The Residential Low Income Program Working Group designed the Comfort Partners Program to contribute to the Collaborative's usage reduction goals and to improve energy affordability for low-income customers.

The Comfort Partner Program goals are to:

- Obtain the maximum level of cost-effective energy savings in each home.
- Allow for persistence of savings through the use of appropriate protocols and the provision of energy education.
- Improve utility bill payment capability and behavior among participants.
- Improve comfort, health, and safety for participants.

The Comfort Partners Program is designed to offer New Jersey low-income customers:

- Common eligibility requirements, joint delivery for dual utility customers, and seasonal measures for homes with bulk fuel for heating.
- Comprehensive measure installation with common measure selection procedures and common installation standards throughout the state.
- Comprehensive customer education with common education materials.
- Arrearage reduction plans.

In the Comfort Partners 2002 program filing, the Collaborative committed to explicit program goals, including:

- *Participation Goals:* Each utility commits to participation goals for its gas and/or electric customers. The total commitment for 2002 is 6656 homes.
- *Energy Savings Goals:* The overall program savings goals in 2002 are “to achieve 10% average electric savings for participants with electric space heat and 15% average natural gas savings for participants with natural gas heat.”

The minimum requirement in the filing is to “reach a minimum of 60% of the program goals,” including both the participation and performance goals. The program service delivery

procedures were designed to achieve at least the target level of energy savings for participating customers.

In this section of the report, we describe the Comfort Partners Program design and implementation. For additional information on the program data tracking system, see the *Comfort Partners Tracking System Evaluation Report (March 2002)*. For more information on procedures for selecting and installing energy saving measures, see the *Comfort Partners Comprehensiveness Evaluation Report (August 2002)*.

A. Administration

The New Jersey Comfort Partners Program is administered by the Residential Low Income Program Working Group (Working Group), the seven electric and gas utilities, and the two implementation contractors. This section describes how program responsibilities are divided between these parties, and how communication and coordination of information and activities is designed.

1. Residential Low Income Program Working Group

The Working Group is comprised of representatives from the seven electric and gas utilities, a utility senior manager, and a collaborative advisor who represents the interests of the Natural Resource Defense Council (NRDC). Fred Lynk, from PSE&G, serves as the senior manager on the Working Group. He serves in an advisory role and has a responsibility to ensure that policies that have been set by the senior management team are disseminated to the working groups. He attends meetings and is active in deliberations. Ken Tohinaka serves as the collaborative advisor. Maria Frederick from JCP&L serves as the convener. She develops the agenda, ensures that decisions are followed up on, and organizes information for monthly reports.

Rockland Electric has a small low-income population, a small budget for the low-income program, and a small administrative budget. Therefore, PSE&G has been representing Rockland at the Working Group meetings.

The Working Group meets every month, alternating between telephone and in-person meetings. Members of the Working Group, at times, have formed sub-committees to take responsibility for working on different aspects of the program.

The Working Group is responsible for designing the Comfort Partners Program, including program materials, program training, and quality control systems.

Program Design

The Working Group was instructed by the BPU to implement the Comfort Partners Program within 60 days following the date of the order to implement the program. Because of the limited time to meld different programs together and to begin service

delivery for those utilities who had not previously provided comprehensive usage reduction programs, the Working Group began the process of program design by starting with the most critical program elements. The first elements that were resolved included agreeing on contractors, procedures to be used in the field, and cost sharing.

The Working Group developed a Comfort Partners education notebook, procured education conversation cards, and provided education training in the spring of 2002. Prior to this time the contractors used education procedures based on the utilities' previous programs. The education process has not changed dramatically with the new Comfort Partners procedures.

Health and Safety Procedures

The Working Group has not yet formally agreed upon a set of health and safety procedures. However, HDMC is using the standard that has been approved by some of the utilities and by experts around the country. Bill Busters is using JCP&L's previous Warm standards. The major places where there are differences between the utilities are the contractor's communication of gas leaks and CO problems to the utilities and the level of response by the utilities to the problems. In general, cost-effectiveness standards are not applied to health and safety measures. Rather, guidelines have been established for what should be fixed by the contractor, by the utilities, and by the homeowner. Statewide procedures are consistent, based on HDMC's interpretation of the guidelines provided by the Working Group.

Contractors

The Working Group decided to delay going out for bid for service delivery contractors when the Comfort Partners Program was implemented. All of the utilities had used HDMC either for some aspect of service delivery or for inspection of work, and they felt that using the same contractor across the state would create efficiencies. PSE&G went out for competitive bid for its portion of the program in January 2002. A final decision was pending when the BPU ordered on April 23 that no awards be made on pending RFP's. The Working Group had planned to go out for bid again in 2002. However, they delayed this, pending final BPU decision on whether the Collaborative will continue to administer the program.

All of the utilities agreed on a statewide pricing model for HDMC. PSE&G joined the statewide pricing for joint delivery jobs, but retained their own pricing for PSE&G only jobs.

JCP&L had also been using Bill Busters to provide some of their Warm program services. They continued to use Bill Busters for electric and oil heat homes, and to use HDMC for electric, oil heat, and joint delivery jobs. Other companies had expressed interest in using Bill Busters for service delivery, but Bill Busters did not have the capacity to handle even the volume of service delivery required by JCP&L.

Cost Sharing

The Working Group negotiated a plan for sharing costs between electric and gas utilities on cost-share jobs for those services that affected the usage of both fuels. The table below summarizing the services for which cost-sharing is applicable.

Table II-1
Cost-Sharing Agreement

Category	Gas Share	Electric Share
Audit gas and electric eligible with seasonal electric use	50%	50%
Audit gas and electric eligible without seasonal electric use	70%	30%
Blower door test with seasonal electric use	50%	50%
Blower door test without seasonal electric use	100%	0%
Energy education	50%	50%
CO detector	100% if gas heat	100% if oil heat

The initial plan for cost-sharing on space conditioning measures for gas heat customers with air conditioning was that 55 percent of the costs would be paid by the gas utility and 45 percent of the costs would be paid by the electric utility. However, with the initiation of joint delivery jobs, there were concerns about this cost division. A new agreement for cost sharing and invoicing for space conditioning measures was made, where the utilities would be billed according to their fuel's share of the calculated total allowance for electric seasonal plus the gas measure allowance.

An additional area of discussion was the cost-sharing for oil heat homes. The BPU ruled that since the electric companies previously paid for oil heat homes, they should bear the cost of these homes in the Comfort Partners Program. Under the cost-share agreement, the electric company pays for bulk fuel heated homes, even if the homes use natural gas water heat.

While JCP&L was always responsible for oil heat homes, there had previously been a \$1000 limit on these homes. With Comfort Partners, oil heat homes are to be treated the same as electric heat homes, and receive all cost-effective measures.

Program Materials

The Working Group has developed a set of materials to be used in the field. These materials include a Comfort Partners folder that provides the contact number for the program and that holds the program application, the landlord permission form, a Partnership Agreement Form, and an Action Form. The Working Group also developed an energy education notebook and purchased energy education cards from the education consultants.

Additional materials that they Working Group plans to develop include program brochures, and educational materials that may be left with the customer.

Program Training

The Working Group is responsible for designing and planning program training sessions in order to ensure that contractors have the information and skills necessary to implement the Comfort Partners Program procedures. The Working Group arranged for a contractor and utility manager training in May 2001, a contractor staff training in July 2001, and an education training for office staff and field staff in April/May 2002. Detailed information on the content of these training sessions is provided below.

Quality Control

The Working Group has been discussing how to conduct joint inspections and how to move toward a uniform quality control process for the Comfort Partners Program. A flow chart for the quality control procedures as well as a format for a monthly quality control report are under development.

The guidelines for quality control that are currently being discussed are as follows:

- A minimum of ten percent of all work done for a given Comfort Partners utility must receive a third party quality control inspection.
- Unless there are compelling and documented reasons to the contrary, all joint delivery work should be inspected during the same visit to minimize the number of site visits made to a given customer.
- The third party quality control inspections will cover documentation of work, installation of efficiency measures, and customer education.
- There will be no action necessary if:
 - Invoicing is accurate
 - All documentation is complete
 - No clear and present health and safety issues are correctable under Comfort Partners
 - The contractor has provided referrals for any other health and safety issues
 - Measures installed are appropriate
 - Installation quality is appropriate
- Immediate correction will be required if:
 - There is clear or potential fire, CO, or other danger that is correctable under the Comfort Partners Program.
- Correction is required within thirty days if:
 - There is inaccurate billing

- There is insufficient or incorrect documentation
 - There is unacceptable installation of efficiency measures
 - There is an important missed opportunity for installation of efficiency measures
- Correction should be applied to future work if:
 - There is inadequate documentation
 - There is potential danger not correctable under Comfort Partners that should be referred elsewhere
 - The installation of efficiency measures is marginally acceptable
 - There is a missed opportunity for installation of efficiency measures

A utility may contract for more specific quality control inspection procedures and specifications, but such requirements beyond the scope of those described above must be restricted to work directly paid for by that utility, unless the overlapping utility agrees to the same scope of work.

2. Utilities

The New Jersey electric and gas utilities participating in the Comfort Partners Program have taken different approaches to administering the program. Some of the utilities have maintained more responsibility for program administration within the utility, and some of the utilities have hired HDMC to provide more of the program administration services. Part of the division of responsibilities has to do with the structure of the utility and part has to do with the individual utility's experience with previous low-income usage reduction programs. This section describes each utility's experience with previous programs, each utility's approach to administering the Comfort Partners Program, and coordination between the utilities.

Utility Experience

Each of the utilities' experience with low-income usage reduction programs is described below:

- Conectiv had a predecessor program to Comfort Partners, called Comfort Connection. This program was very similar to the Comfort Partners Program, but it did not include an arrearage reduction component.
- Elizabethtown Gas had a predecessor program to Comfort Partners, the Low Income Weatherization Program. This program had a prescriptive approach, and was not as individualized to the home.
- JCP&L's predecessor to the Comfort Partners Program was the JCP&L Warm program. The Jersey Central Weatherization Assistance program began in 1988/1989 with a focus on weatherization and water heating. The baseload element of began in 1995/1996. The program served all electric account customers,

including customers with electric baseload use and oil heat homes. The program was renamed Warm beginning in 1999. Since 1993, the programs have served 9700 customers.

- NJ Natural Gas had a DSM low-income weatherization program prior to the NJ Comfort Partners Program. This program differed from Comfort Partners in that limited measures were installed, and the ceiling on measures was \$1000 per customer. Additionally, the program had no energy education component and no arrearage reduction component.
- PSE&G's predecessor to the Comfort Partners Program was the E-Team Partners program. This program was a comprehensive usage reduction program that included an arrearage reduction component.
- South Jersey Gas had a Low Income Seal-Up Program that provided up to \$200 of free measures to low-income households, and a WAP Supplement Program where low-income customers could receive up to \$250 to supplement the WAP services.
- Rockland previously had a low-income insulation program for electrically heated homes. However, there were very few customers that were eligible given that Rockland only has about 2500 customers with electrically heated homes and very few low-income customers. In the last few years the program didn't serve any customers.

Utility Administrative Role

The utilities have chosen to provide some of the administrative services and to contract out some of the administrative services. This section describes the division of administrative responsibilities between the utility and service delivery contractors.

- Conectiv has one manager for all of the CRA programs. Because of the size of the utility and the small number of staff members to manage the CRA programs, virtually all of the work for the programs is contracted out. HDMC is responsible for most of Conectiv's Comfort Partners Program administration. Two of Conectiv's staff members were responsible for sending a targeted recruitment customer list to HDMC, and fax usage and payment data to HDMC when requested. These same staff members in Conectiv's Customer Care department, work with HDMC to monitor arrearage plan participants. They track the number of arrearage plan participants and the amount credited for arrearage reduction. HDMC is responsible for all remaining Comfort Partners administrative functions.
- Elizabethtown Gas has one staff member responsible for the Comfort Partners Program, and an additional staff member in the collections department who provides support for the arrearage reduction component. Therefore, Elizabethtown Gas has also hired HDMC to provide most of their administrative services. Elizabethtown Gas provides HDMC with leads for the program and coordinates management of the

debt reduction portion of the program with HDMC. Elizabethtown Gas provides leads for the arrearage reduction component, processes the enrollments, and monitors payments. HDMC is responsible for all remaining administrative functions.

- JCP&L invested heavily in the Warm program, designing their own database system to assist in program administration and to capture detailed program data. This database has helped JCP&L to understand the level and type of services that have been provided and to assess the extent to which problems have been identified in quality control work. JCP&L has four staff members who work on the Comfort Partners Program (in addition to low-income programs for other First Energy subsidiaries), and they have maintained the use of their WARM2 database system to administer the program. JCP&L has maintained the following administrative responsibilities for the Comfort Partners Program:
 - Recruiting: JCP&L recruits customers for the Comfort Partners Program
 - Enrollment: JCP&L enrolls customers in the Comfort Partners Program
 - Data management: JCP&L uses their WARM2 database to track program data
 - Invoicing: JCP&L uses their WARM2 database to create invoices for the service delivery contractors
 - Procurement: JCP&L procures refrigerators
 - Program statistics: JCP&L uses their WARM2 database to analyze program production and other program statistics
 - Arrearage Reduction Enrollments: JCP&L reviews enrollments
 - Arrearage Reduction payments: JCP&L tracks customer payments for the Arrearage Reduction component
 - Arrearage Reduction payment notification: JCP&L notifies customers if they have missed a payment for the Arrearage Reduction Component

JCP&L has contracted with HDMC and Bill Busters to schedule appointments with customers and to provide energy service delivery. JCP&L has contracted with Community Based Organizations (CBO's) to enroll customers in the Arrearage Reduction component.

- NJ Natural Gas has maintained responsibility for recruiting customers into the Comfort Partners Program and screening customers for eligibility. They provide HDMC with customer usage and payment data. NJ Natural Gas reviews enrollment forms for the debt reduction program, and monitors the status of these accounts. HDMC is responsible for all remaining administrative functions.
- PSE&G provides HDMC with access to their customer system to obtain leads for the program and usage and payment data for these customers. PSE&G is responsible for reviewing the arrearage enrollment forms from HDMC, reviewing customer payments, notifying customers when they have missed payments, and

suspending/removing customers from the program when they do not meet their agreed to obligations.

- South Jersey Gas provides HDMC with leads for the Comfort Partners Program, provides HDMC with usage and payment data on these customers, and coordinates management of the debt reduction portion of the program with HDMC. South Jersey Gas provides leads for the arrearage reduction component, processes the enrollments, and monitors payments. HDMC is responsible for all remaining administrative functions.
- Rockland Electric Company has a very small low-income population and they have a 2002 Comfort Partners production goal of only 56 homes. About 70% of Rockland electric customers are PSE&G gas customers. Therefore, they have hired PSE&G to implementing Rockland's Comfort Partners' program. HDMC will provide the same services for Rockland as they do for PSE&G.

Utility Coordination

For the most part, the gas company targets the gas heat customers and the electric company targets the electric heat customers. The table below displays the utilities that share service territories:

Table II-2
Joint Service Delivery Territories

		Gas Utility			
		Elizabethtown Gas	NJ Natural Gas	PSE&G	South Jersey Gas
Electric Utility	Conectiv		*	*	*
	JCP&L	*	*	*	*
	PSE&G	*		*	*
	Rockland	*		*	

An interim problem that JCP&L encountered at the beginning of the program occurred when HDMC received a lead from a gas company for a customer who had recently been served by JCP&L's Warm program. JCP&L decided to err on the side of caution and check the customer's refrigerator while HDMC was in the home to see if it should be replaced.

3. Bill Busters

Background

Bill Busters is a small service delivery contractor run by the company's owner and a few staff members. Bill Busters provided services for JCP&L's previous Warm program.

Given Bill Buster's current infrastructure, the owner's goal is to have a staff of ten. He would have two schedulers, two evaluators (auditors), and two three-person crews.

Administrative Role

Mike Omasta, the owner of Bill Busters, takes responsibility for all aspects of the program. This includes retrieving targeting customers from the JCP&L WARM2 database, scheduling these customers for appointments, providing service delivery and collecting program data, entering program data into the WARM2 system, and conducting quality control. Under the JCP&L system, Bill Busters is responsible for entering data into the WARM2 database system, but is not required to develop or maintain the system.

4. HDMC**Background**

HDMC was selected as the primary service delivery contractor for the Comfort Partners Program due to their experience with these utilities on predecessor programs. HDMC provided the following services to the utilities under predecessor programs:

- Conectiv: HDMC implemented Conectiv's Comfort Connection program, a similar comprehensive program, without an arrearage reduction component.
- Elizabethtown Gas: HDMC conducted audits for their previous low-income program. They also provided limited (\$200) prescriptive seal-up in early 2001.
- JCP&L: HDMC was a contractor for JCP&L's Warm Program, a similar comprehensive program.
- NJ Natural Gas: HDMC conducted the energy audit (including energy education) to sign customers up for the seal-up component that was implemented by REEP.
- PSE&G: HDMC implemented PSE&G's E-TEAM Partners Program, a similar comprehensive program.
- Rockland: HDMC did not work for Rockland on a previous specifically low-income program.
- South Jersey Gas: HDMC did inspections for their previous low-income seal-up program.

Administrative Role

HDMC plays different administrative roles for the different utilities. Conectiv, Elizabethtown Gas/NUI, PSE&G, Rockland, and South Jersey Gas rely on HDMC to provide most of the necessary program administrative functions. JCP&L and NJ Natural Gas do their own marketing and enrollment for the program, and JCP&L also provides

their own tracking system, conducts intake for the arrearage program through their CAA's, and does their own payment counseling or notification.

Table II-3 displays the administrative functions that HDMC provides for the utilities as part of the Comfort Partners Program.

Table II-3
HDMC Administrative Services Provided For Utilities

	Conectiv	Elizabethtown Gas/NUI	JCP&L	NJ Natural Gas	PSE&G (Rockland)	South Jersey Gas
Marketing/ Recruiting	X	X			X	X
Enrolling	X	X			X	X
Scheduling	X	X	X	X	X	X
Data tracking system	X	X		X	X	X
Data reporting	X	X	X	X	X	X
Arrearage intake	X	X		X	X	X
Arrearage counseling/ late payment notification	X	X		X		X

B. Training

The section describes the training provided by the Working Group to the service delivery contractors, and by the service delivery contractors to their staff members.

1. Program training

The initial Comfort Partners training was conducted by Maria Frederick and Ken Tohinaka for HDMC and Bill Busters supervisors, managers, inspectors on May 7, 2001 in order to meet May 9 implementation deadline.

This training included overviews of the following:

- Technical service delivery, including an explanation of how program procedures had changed from the previous utility programs.
- Review of baseload measure allowances and their calculation
- Lighting measures
- Refrigerator measures
- Other baseload measures
- Space conditioning measure allowances and their calculation

- Building envelope measures
- Heating and cooling system measures
- Accessing consumption histories and invoicing

A Comfort Partners Program training for all crew members, as well as some managers and supervisors was held in July 2001. Half of the crew members attended on July 25, 2001 and half attended on July 26, 2001. An identical training was held on two separate days to avoid pulling all crew members out of the field. This training was conducted by Ken Tohinaka. Prior to this training, Neal Gale from HDMC and his staff went out into the field and tested the procedures and took pictures of the homes. A visual tour was created with these to be used during the training sessions.

This training included the following:

- Introduction to Comfort Partners and program overview
- Virtual tours of homes
- Run through of homes including consumption history disaggregation, measures allowance calculation, electric baseload measure selection, electric seasonal measure selection, and gas measure selection.

2. Education training

The initial Comfort Partners training included some education elements, but a coordinated set of education materials had not yet been developed, and therefore education procedures and strategies were not focused on at this time. For the first year of program implementation, auditors provided education based on their previous experience and training in other low-income usage reduction programs.

A Comfort Partners education training was provided in the Spring of 2002 by acknowledged experts in the field, Rana Belshe and Lydia Gill Polley. Training for HDMC schedulers was held on April 29, 2002, and training for program delivery staff was held April 30 and May 1, 2002. The same training was provided to another group of providers on May 2 and May 3, 2002. The education training worked to address the challenges of providing education under the Comfort Partners Program. The objectives of this education training were to:

- Increase the effectiveness of staff-customer interactions
- Review the theory and examples of the most effective customer education methods
- Share technical and education successes and learnings with the group

- Foster personal action plans to maximize benefits of the training

In order to meet these objectives, as well as additional objectives that the service delivery providers articulated, the education had three main areas of focus: communication with the customer, technical energy concepts, and program procedures. The majority of the training was focused on the communication aspect of the education session. Information was presented and discussed, with most topics including trainee participation. The main topics covered in the communication section of the training were:

- Description of partnership-based education and why it is important
- Communication theory
- Active listening practice - paraphrasing, open-ended questions, and emphatic listening
- Communication exercises and discussion - how to relay accurate information
- Video taping of auditors practicing to establish a partnership with the customer

The main topics covered on energy were also often focused around communicating with the client. These topics included:

- Energy misconceptions - discussion of misconceptions and practice changing the customer's mind
- Technical accuracy for the energy misconceptions
- Video taping of auditors practicing to change customer's ideas where they have misconceptions
- Energy uses and costs, and opportunities for saving

The main topics covered on program issues included:

- Sharing program success stories
- Understanding of the job process - group discussion and reporting on the audit process, materials and equipment needed, and the purpose of the visit
- Review of the education notebook and cards
- Program issues - Neal Gale's (HDMC technical manager) response to challenges the auditors indicated that they faced

3. Bill Busters training

Mike Omasta is onsite and takes responsibility for direct training of his field crews.

4. HDMC training

HDMC has had several internal follow-up training sessions. They have brought the crews in for training as refinements were made to the program, and they plan to bring in other expertise to further train their crews. There are three types of ongoing training provided by HDMC to staff: periodic scheduled training with a specific agenda, field training with a crew and a supervisor, and voluntary skill improvement sessions. HDMC has noted that several training sessions were held following implementation of Comfort Partners. However, the evaluators were not given the opportunity to observe this training.

Following implementation of the Comfort Partners Program, HDMC recognized that new service delivery procedures needed to be developed to better provide program services. HDMC altered the system for delivering program services and concentrated on training their staff in the new service delivery mechanism.

Training provided to HDMC staff included training on how to use their new Comfort Partners data collection forms. HDMC also does quality control on the forms. The supervisors review the forms to identify what is not being done well. Supervisors also go on site and observe the work as it is being done. HDMC found that there were some problems in implementing the forms, and they provided additional line by line training on the data collection for all staff members. The forms have been changed based on feedback from staff on what order the information is collected.

Each field staff member receives an annual review from his or her direct supervisor. The feedback goes directly to the employee and a development plan is established. The field supervisor is responsible for the quality of his team. He identifies skills that need to be developed for the employees and conducts in-field skill enhancement. Neal Gale collects information from field staff and field supervisors to define training that is needed. All quality control failures are identified to the supervisors, and are taken to the staff if a pattern is seen.

C. Data Coordination Between Utilities and Contractors

There are several reasons why the utilities and the service delivery contractors need to exchange data:

- *Targeted marketing list:* Utilities need to target marketing of the Comfort Partners Program to those customers who are most likely to be eligible and to those customers who are likely to obtain large energy savings as a result of program services. Therefore,

utilities that are using HDMC to market their program must send HDMC this targeted customer list.

- *Enrolled customer list:* JCP&L and NJ Natural Gas recruit and screen customers on their own. They must have a means to transfer the list of recruited customers to the service delivery contractor for scheduling.
- *Customer usage data:* In order to calculate the measure allowance and to determine which services the customer should receive, the service delivery contractor must obtain the customer's monthly usage history from the utilities.
- *Customer payment and arrearage data:* In order to determine if the customer should be targeted for the Arrearage Reduction component and to calculate the customer's monthly payment and arrearage forgiveness, the service delivery contractor needs to obtain the customer's payment history and current balance.

Each of the utilities has developed a means to transfer these data to the service delivery contractors. Data transfer between Bill Busters and JCP&L and between HDMC and all of the utilities is described below.

1. Data transfer between Bill Busters and JCP&L

Bill Busters logs on to JCP&L's WARM2 system to obtain a list of customers who have been enrolled in the Comfort Partners Program. He also used the WARM2 system to enter data on service delivery, and check on quality control reporting. Bill Busters logs on to JCP&L's Human Services web site to obtain 12 months of usage data.

2. Data transfer between HDMC and Utilities

- *Conectiv:* Conectiv provided HDMC with an electronic list of approximately 15,000 LIHEAP and LIFELINE customers in the fall of 2001. HDMC faxes a request to Conectiv for usage and payment histories and arrearage data for each customer who is recruited. Conectiv staff send a return fax with the requested information within 48-72 hours. In most cases, the fax furnishes at least 12 months of usage and payment data. Two years or more of data may be available.
- *Elizabethtown Gas/NUI:* Elizabethtown Gas/NUI sent a list of LIHEAP and LIFELINE customers to HDMC to meet their 2001 production goals. Elizabethtown Gas/NUI emails a list of moratorium customers each day to HDMC. Prior to sending the list to HDMC, they check to see if the customer participates in LIHEAP or LIFELINE, what their arrears are, if they are hard to reach, and if there is a language barrier. HDMC has access to Elizabethtown's web site where they can obtain 12 months of usage data. Payment data are sent by Elizabethtown to HDMC on a case by case basis. These data show the total amount owed and if the household has made a payment. They do not show the bill for each month and the

payment for each month. However, HDMC does not need these data, as Elizabethtown Gas representatives calculate the Arrearage Reduction payment and forgiveness.

- JCP&L: HDMC logs onto JCP&L's WARM2 system to obtain the list of customers to serve. They also enter service delivery information into the WARM2 system.

HDMC can download customer data from JCP&L's Human Services web site. These screens contain 24 months of pre use if the customer has been in the home that long. These screens also contain the customer's last 3 months of bills, last 3 payments, level of arrears, whether the customer is on CAP, whether on zip check – automatic deduction from checking account, what rate the customer is on – time of day or not. Other information includes whether the customer has electric heat or electric water heat, social security number, account number, account status - whether active or final, service and mailing address, alternate supplier or not, distribution or supply customer, last meter reading date, days of use, average bill, actual or estimated reading, and a load chart.

- NJ Natural Gas: NJ Natural Gas faxes a list of screened customers to HDMC about twice per month. NJ Natural Gas faxes 12 months of the account billing histories to HDMC. Information sent includes the customer's budgeted bill, the customer's current balance, the account statement, and address information.
- PSE&G: HDMC has access to PSE&G's customer account system, and they periodically access the system to obtain a list of LIHEAP customers to recruit from. HDMC accesses the system between every 1 and 3 months, depending on their backlog. HDMC obtains 12 months of usage and payment data, as well as arrearage data directly from PSE&G's customer system.
- Rockland: Rockland has not provided a list of customers for HDMC to market to, and HDMC is targeting their joint PSE&G customers. Rockland sends HDMC usage data on an ad hoc basis by fax or email to HDMC since there are so few customers.
- South Jersey Gas: South Jersey Gas provided HDMC with a list of thousands of LIHEAP and LIFELINE recipients along with their usage levels in August 2001. South Jersey Gas also supplied HDMC with a list of about 75 arrearage customers (who also participated in LIHEAP or LIFELINE) with arrears between \$150 and \$600. South Jersey provided usage for these customers on the marketing list. HDMC faxes a list of customers that they have screened, and South Jersey Gas faxes back updated usage and arrearages. They do not send payment data.

D. Program Eligibility

Households with income below 150 percent of the federal poverty guideline or who participate in one of the following programs are eligible for Comfort Partners:

- Lifeline
- LIHEAP
- Temporary Assistance to Needy Families (TANF)
- Supplemental Security Income (SSI)
- Pharmaceutical Assistance to the Aged and Disabled (PAAD)
- General Welfare Assistance
- Section 8

E. Targeting, Recruitment, Enrollment, and Scheduling

The utilities have different methods for conducting outreach and marketing for the Comfort Partners Program. The utilities felt that these functions needed to differ by utility because of the differing characteristics of the populations that the utilities serve. For example, JCP&L's large senior base of customers read the bill inserts, but PSE&G's customers in Newark work long hours and are less likely to have the time. PSE&G has enough customers coming in to the program through telemarketing, but JCP&L has not been as successful with telemarketing. The Working Group decided that whatever marketing system worked in the utility's area should be used or continued. With joint delivery, both companies would benefit if there was overlap, because the Comfort Partners name is the same and the program message is consistent.

The section describes the utility and contractor procedures for handling targeting, recruitment, enrollment, and scheduling.

1. Utility systems and procedures

Conectiv

Conectiv targets customers who are LIHEAP or LIFELINE recipients. In addition to the list of these customers that Conectiv provided to HDMC, Conectiv's collections department, and social service agencies provide referrals to HDMC.

Elizabethtown Gas/NUI

Elizabethtown Gas/NUI initially targeted LIHEAP and LIFELINE customers for the Comfort Partners Program by providing HDMC with a list of these customers to serve in 2001. They are currently targeting moratorium-protected customers. In addition social service agencies refer customers to the program and Elizabethtown Gas provides these referrals to HDMC.

In addition to recruitment of these targeted and referred customers, Elizabethtown Gas/NUI implemented three types of marketing efforts for 2002:

- A bill insert
- Messages on bills about the program.
- Information on the Elizabethtown Gas/NUI web site.

Customers who contact Elizabethtown Gas/NUI for more information on the Comfort Partners Program are mailed the application and a postage-paid envelope addressed to HDMC.

NJ Natural Gas

NJ Natural Gas uses bill inserts and other publications mailed to all customers to market the Comfort Partners Program. The bill insert explains the program and its eligibility guidelines, and provides an 800 number for the customer to call. In addition to the bill insert, NJ Natural Gas' collections department sends out information on the Comfort Partners Program when they send out final bills with the moratorium notice. NJ Natural Gas screens customers who call for more program information in order to ensure eligibility. They then provide HDMC with information on the interested and eligible customers.

NJ Natural Gas plans to direct market to customers who have received other types of assistance if the response to the bill inserts is not sufficient to meet program production goals.

JCP&L

JCP&L has several methods that they use to generate interest in the Comfort Partners Program:

- *Bill Stuffers*: During the spring and winter months, residential customers are sent a program brochure with their electric bill. The insert lists the program benefits and eligibility guidelines, and provides a business reply card that can be used to request more information on the program.
- *Moratorium Letters*: During the winter, JCP&L sends a letter to moratorium protected customers requesting that they fill out an enclosed Comfort Partners screening application. This letter states that eligible households must participate in the Comfort Partners Program. However, it is up to these households to call JCP&L and express interest in the program. JCP&L cannot call all of these households because of the number – last year letters were sent to 19,000 customers, and many will not qualify for the Comfort Partners Program based on income.

- *CAP program:* JCP&L's CAP program may help provide more customers for the Comfort Partners Program, as CAP participants are required to participate in Comfort Partners.
- *Internal Referrals:* The JCP&L call center identifies customers who may qualify for the program and, with their permission, passes along their contact information to the Comfort Partners customer service center. A customer service representative will call these customers to determine eligibility. Approximately five referrals are made per week. JCP&L has an internal program information system which describes all low-income programs and eligibility, as well as how to refer customers. Customer service representatives use this system when they are working with a low-income customer.
- *Targeted Mailings:* When needed, and up to several times during a given program year, JCP&L pulls lists of customers enrolled in HEAP, Lifeline, and SSI out of a state data file. JCP&L screens these lists to ensure that the customers are not currently being served by the Comfort Partners Program, and then sends information about the Comfort Partners Program to these customers.
- *Social Service Agency Referrals:* Local community agencies may refer customers to the Comfort Partners customer service center.
- *Contractors:* While out in the field, technicians speak with neighbors interested in the program and pass along the Comfort Partners contact number. Some technicians may have applications available to distribute.
- *Clean Energy for New Jersey Website:* JCP&L receives approximately five e-mail requests each month for information and applications through this BPU web site.

Many of these activities generate telephone calls to the Comfort Partners Customer Service Center. When calls are received, the JCP&L customer service representatives (CSR's) employ the following procedures with the customers:

- The CSR asks the caller what type of heat is used in the home. If the caller identifies the heat type as gas, the service representative discusses joint delivery of services.
- The CSR describes the refrigerator metering process and energy-saving improvements that could potentially be installed in the customer's home, as well as the educational component of the program.
- The CSR informs the customer that work is free and that high quality work is guaranteed.
- The CSR informs the customer that JCP&L does not promise to install all of the items that were described, and that the contractor who comes to the home will inform the customer what work will be done upon completion of the audit.

- The CSR explains that if the customer rents the home a landlord agreement form must be signed by the owner of the building prior to receipt of services. The CSR also explains that all changes to the landlord's property are free of charge and that the landlord may contact Comfort Partners for more information.
- The CSR explains that the customer is responsible for implementing certain energy-saving practices covered during the educational portion of the visit.

If the customer is interested in the program, the CSR will screen the caller for program eligibility using the standard application form. The CSR also screens all mailed applications for eligibility.

The CSR will first determine if the customer is currently enrolled in Lifeline, HEAP, TANF, SSI, PAAD, or General Welfare Assistance. If so, the customer automatically qualifies for the program. If not, the customer service representative will ask for the household income and size, and determine if the household is below 150 percent of the federal poverty guideline.

Income eligibility does not guarantee program acceptance. The CSR first verifies that the household has not been served in the last few years under Warm or another residential energy assistance program. Second, the CSR reviews the household's consumption history. An electric-only customer is automatically accepted and entered into WARM2. A joint delivery customer is automatically accepted and entered if the household uses 7200 kWh or more per year for baseload consumption. A joint delivery household with lower baseload consumption is set aside and is accepted and entered when the pile of electric-only and high consumption, joint delivery applications runs low¹. Currently, all applications that have been set aside have eventually been enrolled into the program. Regulations require New Jersey utilities to serve all eligible participants and to not "reject" applications.

Customers with high gas usage will be given priority by the gas companies, and will be served by JCP&L through the joint program.

If an application has missing information, it is returned to the customer along with a letter requesting that the customer fills in the missing sections. A note regarding the returned application is recorded in the customer's file. No further follow-up is performed unless the customer returns the application.

If eligibility is confirmed, the CSR will then enter the application into the WARM2 system. The CSR will then write a premise ID, heat type, municipality and county at the top of the application, create a folder and file it under the contractor responsible for the work. If the customer doesn't qualify, the application is placed in a separate folder and filed away. No follow-up is planned for these customers.

¹ Low consumption baseload cases set aside in JCP&L's office are often enrolled by HDMC because they have a high gas consumption history.

PSE&G

Targeting of PSE&G customers is done by HDMC with their direct access to PSE&G's customer account system. In addition to the direct telemarketing done by HDMC, PSE&G's collections department provides some referrals for the Comfort Partners Program to HDMC. This method does not provide a large number of participants. PSE&G also sends the names of customers (usually about twenty-five per month) who have requested more information on the Comfort Partners Program at the PSE&G web site to HDMC.

CAP agencies also refer PSE&G customers to the Comfort Partners Program, but these referrals have dwindled from the level initially seen in the E-Team Partners program. Currently only 2 or 3 CAPS are active, and they bring in less than two percent of the customers served by the program.

South Jersey Gas

In addition to the targeted marketing list that South Jersey Gas sent to HDMC, South Jersey Gas uses an Energy Notes bill insert that includes information on the Comfort Partners Program. The insert provides information on the program and the SJG conservation toll free phone number.

South Jersey Gas does not have regular procedures for the collections department to refer customers with payment problems to the Comfort Partners Program. They are planning to get a download of these customers to recruit into the program.

Rockland

In the past, Rockland used a direct mail campaign to those customers who were identified as low-income. PSE&G is managing Rockland's program and has suggested that they use HMDc to market over the telephone, so Rockland will initially use this method for marketing.

Rockland customer service representatives are aware of the Comfort Partners Program and have the 800 number that connects the customer to the program. The 800 number is identified as NJ Clean Energy, rather than as PSE&G or Rockland Electric.

2. Bill Busters

Bill Busters only provides services for JCP&L, so they are not very involved in Comfort Partners marketing and recruitment. The Warren County Office on Aging has provided Bill Busters with some referrals for the program. When customers contact Bill Busters directly, Mike Omasta will visit the customers in their homes and work with them to complete the required application forms. He will then receive a referral fee. Once the application is approved by JCP&L, Mike Omasta explicitly looks for the application in the WARM2 database so that he can follow through on the referral.

BBI generally spends two weeks each month on the NJ Comfort Partners Program. Mike Omasta downloads the names of about ten potential clients and contacts them the week prior to service delivery. He sets up a series of audit visits for the two-week period and attempts to complete all work on the scheduled customers during the two week period.

3. HDMC

Targeting

- Conectiv: HDMC worked with Conectiv to develop a list of targeted customers for the Comfort Partners Program. HDMC targets the higher use customers on the provided list.
- Elizabethtown Gas/NUI: Elizabethtown Gas/NUI provided HDMC with a list of targeted customers, and emails HDMC additional targeted customers. Therefore, HDMC does not do further targeting within the provided list and emails.
- JCP&L: JCP&L does all targeting for the Comfort Partners Program.
- NJ Natural Gas: NJ Natural Gas does all targeting for the Comfort Partners Program.
- PSE&G: HDMC directly accesses PSE&G customer system and ranks the LIHEAP customers by usage and takes those at the top of the ranking. HDMC pulls a new list of customers from HDMC's system when they get near the bottom of their usage ranked list. The threshold for gas usage is 1200 therms, and there is no electric threshold. HDMC also communicates with PSE&G's billing department and tries to target customers with arrears.
- HDMC screens the customers to verify they meet all program requirements including that they are a PSE&G heating customer, and that the name on the account is the same as the LIHEAP recipient.
- Rockland: Rockland plans to send HDMC a list of targeted customers, and HDMC will not be targeting within the list. Rockland has not provided a list to date, so HDMC has been targeting their joint delivery customers.
- South Jersey Gas: HDMC targets the high use customers from the large list of LIHEAP and LIFELINE customers that South Jersey provided.

Marketing and Enrollment

HDMC conducts marketing for Conectiv, Elizabethtown Gas/NUI, PSE&G, and South Jersey Gas using the leads that these companies have provided. Even though NJ Natural Gas has already screened their interested customers for eligibility, HDMC must call

these customers to fill out an application and enroll them in the program. They employ the following procedures:

- HDMC CSR's place marketing calls to the targeted customers. HDMC's tracking system checks for prior participation in the program or in another weatherization program, and CSR's only see those customers who have not previously been served.
- The CSR introduces himself/herself and informs the customer that he/she may be eligible to participate in a program that is sponsored by their utility which will help them reduce energy consumption and their energy bills.
- The CSR explains that the program includes a home visit that will provide energy education, review of health and safety and comfort issues, and the possible installation of energy saving measures.
- When a message is left on the answering machine or the household cannot be reached, a note is recorded in HDMC's system and up to five or six additional attempts are made.

Customers who have filled out an application for the program will receive, in most cases, a contact from HDMC within days. If they are on a list in the database, they are contacted in order of priority, so they may not be contacted for a while. HDMC prioritizes the arrearage customers and direct referrals from utilities. Customers who are prioritized will be contacted within days. The referral activity level rises in the heating season, when a bill insert is sent out, and when the moratorium is over. The delay in serving customers rises with the referral activity level. Customers who have actively applied for the program are usually contacted within 30 days. HDMC's system ranks the backlog by method of application and how long ago they enrolled in the program.

Applications

Unless eligibility verification is received directly from the utility or from a CAP agency, the CSR will create an application for the customer.

- If the customer is interested in the program, the HDMC representative asks if the customer has a few minutes to fill out the Comfort Partners application. If the customer agrees, the CSR first confirms the customer's address, and then collects all of the information on the application form. The information collected includes:
 - Whether the customer owns or rents the home. If the customer rents the home, the application is automatically put on hold until landlord permission for the program is received.
 - The customer's primary heating fuel.
 - The customer's primary language. HDMC will send a Spanish-speaking technician if appropriate.

- The customer's type of dwelling.
 - Whether the customer participates in any assistance programs.
 - The customer's electric utility.
 - The customer's hot water heating fuel.
 - Whether the customer pays the bill directly. If the customer does not pay the utility bills directly, then the customer does not qualify for the program.
 - Whether the customer is a winter moratorium protected customer.
 - Whether the customer's service is active. If the customer's service is not active, the customer is put on hold until HDMC finds out why.
 - Whether the customer received a shutoff notice. These customers are given priority for services.
 - How the customer heard about the program if the customer called in.
- The CSR ends the calls by explaining that someone from HDMC will contact the customer within two to three business days to inform him/her of program acceptance. She then thanks the customer for his/her time and ends the call.
 - The CSR reviews the application for eligibility. If the applicant indicated enrollment in TANF, HEAP, SSI, Lifeline, PAAD, or Section 8, the customer is qualified. If the customer does not qualify through enrollment in a low-income program, then the CSR determines if the customer qualifies based on having income below 150 percent of the federal poverty guidelines.
 - If the applicant does not qualify for the program, the CSR will deactivate the enrollment and update HDMC's system with the specific reason for ineligibility. The CSR will call the household and inform the customer why he/she did not qualify. The application is filed away and no further action is taken with the customer.
 - If the applicant does qualify for the program, the CSR opens up a Comfort Partners file in HDMC's system. The system assigns a unique enrollment number to the customer.
 - The CSR obtains the household's consumption history for the last twelve months in order to prepare for the upcoming audit. For PSE&G, Elizabethtown and JCP&L customers, the data can be downloaded online within ten minutes². This information can be added to HDMC's system and a follow-up call placed to the household the same or following day, depending on scheduling needs.

² PSE&G has given HDMC access to their data system. Three customer representatives have direct, real-time access to the consumption history. All other staff use a PSE&G terminal which accesses consumption history downloaded each night. Data for JCP&L and Elizabethtown can be downloaded from their Internet web sites.

For Conectiv, NJ Natural Gas³, and South Jersey Gas, requests must be faxed. The usage data is then faxed back within one to three days. After a request has been faxed to the utility, the customer enrollment is placed on hold until the consumption information is entered. The system does not allow initial appointment scheduling until the usage data for that household has been entered⁴. Once the utility company faxes back the usage information, the CSR enters the data into the customer's file within twenty-four hours.

- If the customer has lived at the household for less than a year, the representative only downloads or requests data for the months applicable to the new tenant or owner.
- In addition to entering the electric and gas usage data, the customer service representative enters the exact date of each reading so the technician understands the billing cycle of the household. If a gas company has not entered a reading date, the representative automatically assigns the first of the month for the first bill. Each remaining bill receives a read date of thirty days after the last bill. The name of the customer's utility is also put in a name field to help tally customers by utility company in reports generated weekly or monthly.

Scheduling Audits

HDMC employs the following procedures to schedule all utility customers for service delivery:

- Once the usage data has been obtained for accepted applicants, the CSR calls the customer back and informs the customer that he/she has been accepted into the Comfort Partners Program. The CSR then schedules an initial audit visit.
- Visits are scheduled 3 to 5 days in advance. Appointments are not scheduled further in advance, unless the customer specifically asks, because when visits are scheduled much further in advance the customer may cancel or forget about the appointment.
- The date and time of the audit is entered into the scheduling module of HDMC's system and is also recorded on a separate clipboard, which can be used as a backup if the computer system crashes. All CSR's are familiar with the service areas and work specialties of the field technicians, and can choose the correct technician from this knowledge base. A technician guide documenting this information is available for reference if necessary.
- Once an appointment has been made, the customer service representative informs the caller of the following:

³ New Jersey Natural Gas sends the consumption history with the recruitment list, but HDMC will request that an updated consumption history be faxed when a customer is enrolled in the program.

⁴ This safeguard has been put in place to ensure that technicians do not go to an appointment with a work order that does not include the household's consumption history.

- The name of the technician who will visit the home.
 - The identification carried by the technician.
 - The time of the appointment.
 - The length of time it will take to complete the service call (usually two to three hours).
 - The need for the technician to access the basement and attic, if applicable.
- The CSR then thanks the customer for his/her time and ends the call.
 - Audit work orders for HDMC's three NJ offices are faxed from the Marlton office to the technicians' homes.

Scheduling Measure Visits

If a measure visit was recommended by the technician who performed the audit, then the work order will be generated during data entry.⁵ Once the audit work has been completed and reviewed, the office case manager authorizes work to begin on the next component by releasing the task in HDMC's system⁶. The following procedures are employed:

- The CSR calls the customer, introduces herself, and explains why she is calling. She consults HDMC's system or the scheduling clipboard for a technician in the customer's area and schedules the appointment.
- The CSR provides the customer with the following information:
 - The name of the technician who will visit the home.
 - The identification carried by the technician.
 - The time of the appointment
 - The length of time it will take to complete the service call. The estimate given is based on the amount of work planned for the household.
 - The need for the technician to access the basement and attic, if applicable.
- The CSR thanks the customer for his/her time and ends the call.
- A data entry specialist or customer service representative then retrieves the initial paperwork for the customers from an open account storage area, and places the measure work orders and customer paperwork in the mailbox of the assigned technician.

Scheduling Other Services

⁵ Under the new service delivery approach, follow-up visits are scheduled directly with the customer at the conclusion of the initial visit.

⁶ Occasionally the case manager places a case on hold to consult with John Augustino or Neal Gale to decide which technician or contractor should be assigned based on the type of work required.

Twice per day, a CSR or data entry specialist will print work orders by type. Insulation and refrigerator work orders for all three of HDMC's offices are faxed from Marlton to the sub-contractors.

Scheduling Management

HDMC has a scheduling coordinator who tracks the progress of field technicians from all three offices. She ensures that all technicians keep to their appointed schedules, reroutes jobs as necessary, and schedules additional technician time in HDMC's system for unexpectedly long jobs.

Throughout the day, technicians contact the scheduling coordinator to update her on their progress. If a technician only has one long job assigned for the day, he/she will only call in before leaving the site. When a technician reports that he/she has completed a work order, the scheduling coordinator notes this in HDMC's system and adjusts the technician's upcoming work schedule if necessary. If the scheduling coordinator does not hear from a technician by the end of the day, she calls the technician and requests a summary of the technician's progress.

Each afternoon, the CSR will generate a report that shows the work that is scheduled for the next day. The CSR will then pull the customer files for the next day and generate work orders from HDMC's system. A representative then faxes or e-mails the work orders to technicians assigned to initial audits and delivers the work orders and paperwork to the technicians' office mailboxes. Field supervisors are faxed a report which shows where their technicians will be throughout the day.

F. Service Delivery

1. Utility procedures

Measure Allowance and Average Cost per Job

The Working Group decided to utilize JCP&L's previous Warm program method for determining the amount of funds to be spent on heating and cooling measures at each job site. When the Comfort Partners Program was first initiated, the joint delivery calculation methodology resulted in a lower measure allowance than what JCP&L had been using in their Warm program. The contractors felt that this allowance would result in too many missed opportunities, and the Working Group agreed to change the calculation so that the measure allowance would be increased.

According to the rules set forth by the Low Income Collaborative Working Group, the contractors are required to obtain approval from the appropriate utility if they want to exceed the cost allowance by more than \$200. Below, each utilities' requirements are described.

- Conectiv: HDMC is required to call Conectiv for permission if they wish to exceed the cost allowance by more than \$200. Conectiv does not have a requirement for the average cost per job.
- Elizabethtown Gas/NUI: HDMC must contact Elizabethtown if they want to exceed the cost allowance by more than \$200. There is no cap on the average cost per job.
- NJ Natural Gas: HDMC must contact NJ Natural Gas if they want to exceed the cost allowance by \$200. There is no cap on the average cost per home.
- JCP&L: Contractors need to call JCP&L for permission if a job will go more than \$200 above the cost allowance. If the job is joint delivery, the contractor will call the gas company, and the gas companies have been authorized to spend up to an additional \$200 of JCP&L's funds. If the costs will go much above there, then JCP&L must be called for permission. JCP&L does not have a cap on the average amount to be spent per job.

If the contractor's spending on a job is below the measure allowance, JCP&L's third party quality control inspector will note if the contractor missed something and still had money in the allowance. If there is money left, the third party quality control inspector will ask why the contractor did not do a particular measure, and jobs will fail for these reasons. However, at times customers will refuse measures. If this is documented, then the job won't fail for not installing the measure.

Sometimes contractors miss a potentially cost-effective energy-saving opportunity that the allowance would not cover. If the contractor had called JCP&L, the additional measure might have been approved, based on the customer's usage. The contractor would have to justify what the measure would cost and what kind of savings were expected. Usually when the contractors call, JCP&L does approve the additional expenditure.

- PSE&G: HDMC is required to contact PSE&G if they want to exceed the cost allowance by more than \$200. PSE&G also has a \$1530 target for the average cost per job.
- South Jersey Gas: HDMC is required to contact South Jersey Gas if they wish to exceed the cost allowance by more than \$200. South Jersey Gas' target for the average cost per job is about \$600 to \$800.

2. Bill Busters

Participation

Almost all customers that have expressed interest in the program and have been screened by the utilities are served. Mike Omasta estimates that he is able to serve ninety percent of the customers that he downloads from the system. He indicates that

he is not always successful at gaining cooperation on the first try. Sometimes, he needs to call the customer back at a later time. Other times he stops at the house to help the customer get comfortable with the program. Given a little time, he feels that most people who signed up for that program will follow through on their initial interest.

Production Goals

JCP&L has set a goal of 22 completes per month for Bill Busters. This production goal will continue to be a stretch for Bill Busters until they can get additional staff.

Service Delivery Procedures

Bill Busters spends about one half day conducting the first Comfort Partners visit. During this visit, they tend to install only a few items. Bill Busters usually schedules a second visit within days of the audit. All of the work on the home is completed in one to three days, depending on the complexity of the job. Bill Busters does their own insulation work.

Bill Busters completes the jobs that they download within 30 days of the download.

Subcontractors

Occasionally, Bill Busters customers have HVAC, electrical, or plumbing work that requires the use of their licensed subcontractor. Their subcontractor sometimes gets behind in work and can delay job completion. Bill Busters is in the process of negotiating response times with the subcontractor.

3. HDMC

Participation

Almost all customers that have expressed interest in the program and have been screened by the utilities are served by HDMC. However, most of the customers recruited by HDMC for the Comfort Partners Program have not previously expressed interest in the program and have not been screened for the program. There is a higher dropout rate for HDMC recruiting efforts, as these are customers who have not taken the initiative to request program services. A majority of these customers are still served by HDMC.

Production Goals

HDMC is the primary service delivery contractor for the Comfort Partners Program. Their Comfort Partners production goal for 2002 is 6,334.⁷

Staffing

⁷ This is the Comfort Partners goal of 6,556 minus the 222 expected to be produced by Bill Busters.

There are 54 technicians on HDMC's staff. Twenty of these technicians have been trained as auditors for the Comfort Partners Program. The number of auditors that are sent out on a particular day depends on the workflow. All 54 staff members are trained to provide measures under the Comfort Partners Program, but normally 34 deliver measures.

Different staff members are more skilled at different aspects of the job. When deploying staff, HDMC attempts to use the staff at the task in which they are most skilled. Certain staff members are more skilled at working in certain types of homes. HDMC tries to take this into account when deploying staff.

There are three field supervisors, each responsible for a particular territory. Crews are shifted as needed to respond to backlog. Supervisors are responsible to oversee all crews working in their territory at the time.

Service Delivery Procedures

HDMC has recently changed their service delivery procedures. However, because much of the work that was evaluated for this report was delivered under the old model, both the old and new models are described here.

Under HDMC's old model, they viewed the mission of the audit as to sign the customer up for the program, engage the customer in the process, begin the education process, scope out opportunities in the home, and plan the measures for future visits. The quicker, less intensive work was also provided during this visit such as hot water and lighting. While the auditor did not have the time or materials to do the more intensive work, he/she provided the customer with concrete examples of what he/she can receive from the program, and savings began to accrue.

The next visit was the measures or insulation visit. Which visit is next depended on whether repairs are needed prior to insulation, what the priority of the work is, and how the work fits into the cost allowance. Sometimes HDMC cannot determine how much effort is required to provide the measures until they are in the home.

The majority of the homes received three site visits under the old model. Some of these visits included an HVAC contractor, a plumber, an electrician, or other specialized work.

HDMC has recently restructured the way that the Comfort Partners services are delivered. The goals of the new method of service delivery are to have fewer visits, a shorter process, and improved quality of work.

In HDMC's new service delivery model, there is a team leader who is skilled at educating the customer and diagnosing problems in the home. The team leader is responsible for each job, beginning to end. Each team leader will have one HDMC crew and one subcontractor crew (all subcontractor crews are not yet in place)

permanently assigned to him. The crews drive a truck containing all of the materials, tools, and equipment needed on site.

The subcontractor crew will be used in cases where insulation is involved in the job. The subcontractors are the insulation contractors who have taken on more responsibility with the new service delivery model. Under this model, the subcontractors will complete all measures on the job, for jobs where there is insulation work involved. This may include installing lights or hot water measures. While this work is conducted at the request of the team leader, HDMC is training insulation subcontractors to be open to additional energy-saving opportunities in the home.

Service delivery is currently being implemented in one of two ways. With the first method, the team leader will perform the initial audit on the home, performing much of the energy education and some of the baseload measures, depending on the time availability. He will schedule the subsequent measures visit for his HDMC crew or his subcontractor crew, depending on whether insulation is required at the time of the audit. The schedules are made at the time of the audit and are called into HDMC's case managers and into the subcontractor's office so that all schedules are coordinated. The second visit is scheduled for the next day or for later in the week. On average, the second visit takes place three days after the first visit.

Each day, the team leader checks in with the crews. Usually, the team leader will check in with the crews on site in the morning and make sure that they are prepared to complete work on the site, with the necessary materials and tools. He will get them started and make sure that they understand the work plan. Once the crew is set, the team leader will leave the home where the crew is working and conduct two audit visits. Towards the end of the day, the team leader will return to the sites being completed and inspect the work done. He is responsible for ensuring that all work has been satisfactorily completed before signing off on the job.

Another method is being used is for smaller jobs. In the coastal and northwestern regions, the team leaders and their crews often provide the audit and measures during one visit. They then schedule insulation to be done at a later date if needed, or call the subcontractor in at the same time to finish the job while they are still on site. This allows for direct supervision of the work done by the subcontractor.

The team leader is responsible for returning to the site, observing the work of the team providing the second visit, and providing quality control. By having the team leader involved in the entire process, HDMC hopes that there will be more accountability, and less that falls through the cracks because of handoffs.

HDMC is about two-thirds of the way through implementing this new service delivery system. They have been implementing the new system in one area at a time. It has been completely implemented in the southern territory and on the coast, and they have started two crews in the north and the northwest. They are also about to start two

subcontractor crews in the north and northwest, and another subcontractor crew on the coast.

Case Management

The mission of HDMC's case manager is to prioritize and expedite delivery of the most appropriate program services. The case manager also ensures that the customer received all of the services that he/she should have received.

The case manager reviews open backlog to identify customer files with no remaining work orders. She then reviews and closes these cases. Next, the case manager works with the homes with the smallest number of open work orders. She prioritizes these cases to have follow-up visits.

The case manager also reviews all notes and comments in the system. She examines the amount that has been spent in the home relative to the cost allowance. She ensures that all deviations from the cost allowance are explained, and that opportunities are not missed.

If there is very specific information that needs to be communicated or a specialist that needs to be brought on site, the case manager will ensure that the item is ordered or the specialist is scheduled.

Subcontractors

Four insulation subcontractors are used by HDMC: Optimal Energy, Premier, Divine Energy, and Gaydos. The choice of which insulation subcontractor to use depends on geography and cost-effectiveness. Because there are volume changes in the amount of work that needs to be done, HDMC needs the flexibility of having several insulation subcontractors. In order to get the best value for the utilities, HDMC needs to have different insulators in different areas and to have the contractors compete for the business. HDMC gives more work to the contractors that they perceive to be better qualified.

HDMC has worked to obtain insulation contractors that know building science. Some of the contractors were perceived as less knowledgeable, but HDMC has trained them. All of the insulation subcontractors know the procedures, but some are better at implementing them than others.

HDMC is not able to provide insulation with its internal staff at the current time.

The work order for the insulation work is printed and faxed to the insulation subcontractor. Usually there are sketches involved in the work order. HDMC's system is updated so that HDMC knows which subcontractor has which customer. The insulation subcontractor faxes back the completed work order. HDMC checks the completed work order and enters the data into their system.

Other subcontractors are used for plumbing and HVAC work. HDMC has been satisfied with their work. In these jobs, the work to be done is more straightforward. HDMC uses several of each of these types of contractors. There is a lower volume of this work, and contractors are not willing to go outside of their geographic area.

Follow-up

HDMC conducts two types of follow-up, quality control, where HDMC conducts telephone calls or site visits to check on customer satisfaction and the quality of work done, and usage-based follow-up.

Usage-based follow-up is currently only done for JCP&L. JCP&L looks at non-weather normalized usage changes five months after the customer has been served. If usage goes up significantly, then HDMC will determine if there is an obvious reason why the usage has increased, provide supplementary education, and return to the home and fix a measure if necessary. The Working Group has agreed that this process should be part of the program, but have not yet agreed on how to make this happen. Follow-up information is databased in WARM2.

G. Materials Procurement

Most materials procurement is done by the contractors. JCP&L has selected Sears as their refrigerator delivery contractor, and they take responsibility for tracking and paying Sears for refrigerator delivery. PSE&G and Conectiv use HDMC's contractor and tracking system for refrigerator delivery.

1. JCP&L

JCP&L chose to do their own refrigerator procurement because they had a system set up to provide volume discounts to the 20 contractors they work with in Pennsylvania. JCP&L combined its work in PA and NJ, went out for bid, and selected SEARS as their refrigerator vendor. SEARS has been successful in meeting JCP&L's requirement for delivery within 2 weeks. They have often provided delivery within the same week, and usually within 10 days, and have rarely gone over two weeks.

JCP&L has independently contracted with USA Mattress for waterbed mattress replacement.

2. HDMC

Refrigerator work orders are generated from the data collected during the audit visit. Refrigerator work orders are faxed out to one of two vendors: Sears and CSG. Sears is the contractor for JCP&L and CSG is the contractor for PSE&G and Conectiv. Orders are faxed directly to Sears and CSG about once per week, depending on the backlog. These data are entered into HDMC's system and JCP&L's WARM2 system.

Completed work orders (with the customer's signature) performed by Sears are sent to both HDMC and JCP&L. JCP&L pays for the work and enters the information into the WARM2 system. HDMC enters the delivery information into their system.

Work orders (with the customer's signature) performed by CSG are sent back to HDMC. The information is entered into HDMC's system. HDMC then bills PSE&G or Conectiv for the refrigerator.

USA Mattress is used for waterbed mattress replacement. HDMC has contracted with USA Mattress for the remaining utilities.

H. Data Review, Data Tracking and Reporting

1. HDMC

Data Review and Tracking

Each of HDMC's offices has its own data entry team: field supervisors who check the technicians' work, data entry specialists who key the forms into HDMC's system, and a case manager to check the accuracy of the data entry. Every Tuesday and Thursday, the field technicians come to the office with the recently completed data collection forms and deliver the information for the field supervisor. The field supervisor reviews each job, ensuring that all of the information was properly recorded and that the technician's observations warrant the recommended measures. After his review, he delivers the forms to the data entry staff. The data entry staff enter all of the information from the forms into the customer's file in HDMC's system.

At each of HDMC's offices, there is a data entry specialist who handles initial audit and measures forms. In addition, there is a second data entry specialist at HDMC's Marlton office who handles refrigerator and insulation forms for all three offices.

As the initial audits and measures data entry specialist enters the information, she verifies that the name on the form matches the name in the system, ensures that the audit is complete, and confirms that the description of the installed measures corresponds with the correct product code. The data entry module of HDMC's system provides some additional help in preventing keying errors with range limit and logic checks built into the software.

If data is missing from the form, the data entry specialist consults with the field supervisor of the technician who performed the work. The field supervisor is usually able to ascertain what the missing data should be, but occasionally needs to call the technician who performed the work to verify. After the data is entered, the data entry specialist initials the form, then stamps it with a visit number and date. The paperwork is then forwarded to the office case manager.

As the insulation and refrigerator data entry specialist enters the information, she verifies the customer name and address. For refrigerator orders, she confirms that the correct model was delivered and the delivery date, and enters this into the system. Once the paperwork is entered, the data entry specialist writes the refrigerator model in the delivery box of the work order and stamps the paperwork with a date. For insulation orders, she checks the calculations for materials used based on a contractor floor plan sketch. She also checks the labor costs and billing totals. If the data entry specialist finds an error in billing, she notes it on the paperwork and then sends a fax to the contractor stating that a bill adjustment needs to be made.

Every one to two days the data entry specialist faxes refrigerator work order forms from the tracking system to the refrigerator contractors. The tracking system will tell the specialist to send the work order to CSG or Sears. The tracking system divides the insulation work orders among the sub-contractors by region. The data entry specialist prints a weekly report that shows the number of outstanding orders. If there is a backlog, she calls the sub-contractor and reviews each case. Once the insulation paperwork is entered into the system, she stamps the paperwork with a date. If the job originated at another location, she then makes a copy and faxes it to the other office where the local case manager reviews the work. The originals for the Marlton office are then forwarded to the Marlton case manager.

Case Management

HDMC's office case manager is responsible for checking the accuracy of data entry, moving projects along by managing work flow, printing work orders, and considering allowance implications.

- *Data Entry Verification:* Every data collection form entered into the system by a data entry specialist is reviewed by the office case manager⁸. The case manager checks that each field on the form has been accurately entered. Measures hidden beneath a scrolling window are also checked. The case manager checks the installed measures carefully to ensure that the code produces the correct product description in HDMC's system. If the case manager finds a data entry error, she edits the fields as necessary and checks the new total with a calculator. If she recognizes a trend in errors, she points this out to the data entry specialist or to the technician's supervisor, depending on where the errors are found, to ensure that immediate feedback is given.
- *Usage History Examination:* While reviewing the initial audit data collection form, the case manager ensures that twelve months of usage history have been recorded in the system, unless the customer has occupied the residence for a shorter period of time.

⁸ Refrigerator and insulation data collection forms are entered and undergo quality control in HDMC's Marlton office but are reviewed by the local office case manager.

- *Measure Allowance Examination:* After the initial audit, the cost estimates are reviewed to ensure that they fall within the household's measure allowance. If a project is \$200 or more over the measure allowance, and the work is justifiable, she calls the utility for permission to spend the additional amount. These calls are placed when the case manager can substantiate a reasonable return for the expenditure. The office case manager usually encounters one case per week that requires such a call.
- *Work Review:* When all work has been completed, the case manager ensures that the measures recommended by the technician were carried out during the initial and subsequent visits by examining the paperwork. The case manager also flags any installed measures that may not have been correctly chosen based on the established protocols. If the case manager does not understand why a measure was installed, she will ask the field manager or lead technician to review the decision. If an error was made, the technician's field supervisor will review the procedure with the technician. Finally, the case manager checks to see if all of the supporting paperwork is in the customer's file. Each file should include an application, an action plan, as well as an initial audit work order and data collection form. If additional work has been performed, the file should include work orders and data collection forms for measures, service, refrigerator and insulation visits.
- *Case closing:* When all work for a customer is completed, the office case manager verifies the name, address and account number; reviews the financial and measures fields for accuracy and examines supporting paperwork to make sure all recommended measures and sub-contractor visits took place. The office case manager initials the hard copies and uses the "close" option within the case management screen of HDMC's system. This automatically generates a quality control work order for the household that can be selected by the CSR's for scheduling. The paperwork is filed away by date in a closed account section.
- *Completed Case Checking:* Once per week the office case manager runs a report to ensure that data entry has received and input data collection forms for all jobs completed during the prior week. If forms are missing, the technician or his supervisor is contacted for retrieval.

Reporting

Reports that HDMC provides are built around activities and invoices. The invoice provides a line by line list of the work done in the home, as well as a summary by house. The invoice also provides an aggregate of what has been spent in the program.

When the job has been completed, there is a summary report which shows the spending for baseload and seasonal work compared to the cost allowance, as well as spending for health and safety.

Most of the WARM2 data entry is done at the end of the job. However, there are certain milestones that get entered along the way. The WARM2 system automatically

enters the date when the case is pulled down. The other milestone dates that are entered by HDMC are the audit date and the date when the majority of services have been completed. After the majority of the measures are completed, there still may be HDMC follow-up and quality control.

After the measures are completed, HDMC will print out a report from their system and key the information into the WARM2 system for the invoice. Pure Energy will then report on the quality control visit, and then HDMC will respond to their comments.

2. JCP&L

JCP&L developed a data system called WARM2 to create and maintain records for participants in JCP&L's Warm program. This system is currently used for the Comfort Partners Program. Information on job progress, installed measures, inspections, remarks, and invoices can be found within WARM2. This system can be accessed by contractors and the third party quality control inspector.

The WARM2 data system generates reports that allow Comfort Partners staff to review job progress, including project performance, installed measures, and accounting issues. The reports currently available to assist staff in delivering services include:

- *Job Status Reports:* The progress of current jobs can be checked using these reports. Queries allow searches for jobs waiting for audits, work partially completed, and completed jobs missing an invoice. Searches can occur by region or date range.
- *Inspection Reports:* The system allows staff to generate reports based on homes approved, approved with conditions, or failed. Staff can also query approvals within a date range.
- *Invoice Status Reports:* These reports allow staff to monitor progress of invoices including creation, inspector approval and JCP&L approval. Queries can also search for invoices submitted or approved within a certain date range.
- *Measures Report:* This report provides counts on measures installed over a particular time period. This is especially useful during bid time to negotiate prices with potential vendors.
- *Solicitation Statistics:* The reports are generated manually by Comfort Partners staff. The reports tally the number of applications received back for each solicitation mailing. They also keep track of the number of applications sent out for each mailing so they can calculate a basic response rate.
- *Customized Reports:* These reports are created by downloading data into Access or Excel. The applications' data manipulation tools are then used to create customized reports. Examples of such work include a report for HDMC on completed jobs lacking submitted invoices.

Currently there are no range or consistency special error reports, although WARM2 does require that valid entries be made for much of the demographic and other data that is entered on the Weatherization Audit screen. The inspectors and JCP&L administrative staff are expected to find any other problems within the data collection and reporting process. JCP&L also has a computer program (run monthly) that compares their customer service data system to the WARM2 system to ensure that customers are being tracked in both systems.

HDMC and Bill Busters use WARM2 to download new customer contact information, submit invoices for installed measures and education sessions, and leave notes describing the current status of the job. WARM2 data is exchanged and synchronized via an FTP process.

Pure Energy, JCP&L's third party quality control inspector, uses WARM2 to report the results of a household inspection to JCP&L and the contractors. Within the system, an inspector screen allows Pure Energy to record whether a home has passed, passed with exceptions, or failed. If it passes, the inspector documents it in WARM2 and sends the associated paperwork on to JCP&L. If it doesn't pass, the inspector notes this in WARM2 along with the reasons. In addition to entering the data into WARM2, Pure Energy is currently printing the inspection reports and faxing them to the responsible HDMC supervisors. Pure Energy also summarizes each batch of inspection results in emails to HDMC and JCP&L supervisors. If the job is a joint delivery job with NJ Natural Gas, Pure Energy prints the WARM2 reports and sends them to NJ Natural Gas with their invoice.

The service delivery contractors, who also have access to WARM2, check the system to verify that each home has been passed. If they see that the inspector has failed a home, a technician is sent to complete the work. The inspector will often reexamine the home if a health or safety issue is involved, update the status of the job in WARM2, and pass along the paperwork to JCP&L once the home has passed.

I. Quality Control

Some of the utilities have hired third party quality control inspectors to perform quality control on the contractors' work. Additionally, the contractors have their own internal quality control processes. This section describes the utilities' procedures or plans for hiring quality control inspectors, the third party quality control inspectors' procedures, and the contractors' internal quality control procedures.

1. Utilities

Conectiv

Conectiv is in the process of selecting a third party quality control inspector. Under joint delivery, they have not yet had quality control. They plan that about twenty-five percent of the homes served will have quality control visits.

Elizabethtown Gas

Elizabethtown Gas/NUI plans to use CMC as their third party quality control inspector. They do not yet have a contract for inspections.

NJ Natural Gas

Pure Energy will be inspecting 10% of NJ Natural Gas' homes served under the Comfort Partners Program.

JCP&L

JCP&L has Pure Energy inspect about 100 percent of electric and oil heat homes and about 10 percent of baseload and electric water heat homes. Pure Energy also conducts quality assurance visits once per year, where they go out with crews during education, auditing, and installation. If necessary, these quality assurance visits will be conducted more than once per year. Pure Energy also does a blower door test up to six times per year in order to check the accuracy of the contractors' readings.

Inspections are documented and coded into WARM2. JCP&L and their contractors can run reports to see which jobs did not pass inspection. Pure Energy also faxes copies of the reports to the contractors. JCP&L has a policy to not pay for work until all problems are resolved.

JCP&L staff and the program manager are also in the field at least once per year with the contractors.

PSE&G

CMC conducts quality control on approximately 28 percent of PSE&G's homes served under the Comfort Partners Program. Based on the inspection results, PSE&G sends a list of all customers, outlining the problems to HDMC, for corrective action. HDMC is required to address and remedy each issue and report back on a bimonthly basis the results of the corrective actions taken

South Jersey Gas

South Jersey Gas is currently working with Conectiv to select a third party quality control inspector.

2. Bill Busters

Internal Quality Control

The owner of Bill Busters, Mike Omasta is on site performing work with his employees. He inspects all of the work completed by his crew. Since Bill Busters always works in the same areas, they can easily follow-up with customers to ensure that their questions are answered or concerns are addressed.

Response to Third Party Quality Control

Mike Omasta checks his message board on JCP&L's WARM2 system on a daily basis. If he receives a question from Pure Energy on a job, he tries to respond within 24 hours. Sometimes he can answer the question from the paperwork. Other times, he may need to visit the job site and check on the matter. He tries to resolve issues as quickly as possible. In most cases he is able to address the problem within a week.

3. HDMC

Internal Quality Control

HDMC has three types of internal quality control:

- Supervisors regularly visit technicians on site and verify the quality of work that is done and identify where remedial training is needed.
- HDMC conducts quality control on a percentage of jobs in order to spot missed opportunities or work that is not done according to protocols. The goal is to conduct quality control on 10 percent of jobs, but HDMC is now conducting quality control on 50 percent, since they are in the learning mode. As their success rate improves, they will reduce the rate of inspection.
- HDMC staff conduct evaluation on about 30 to 35 percent of completed paperwork.

HDMC conducts quality control on work performed by subcontractors in the same way they conduct quality control on work performed by their own staff.

HDMC's internal quality control system's purpose is to verify that all work meets high quality standards and that customers are satisfied with the results. This entails a visit by a crew supervisor who examines the work and asks the customer a series of questions designed to measure the overall experience. The following procedures are employed:

- Once the office case manager closes a customer's file, HDMC's system generates a quality control visit work order which can be selected and used online by CSR's.
- The CSR generates a quality control schedule report, which lists the crew supervisor's weekly schedule.

- The CSR calls the customer, introduces herself, and explains to the customer that HDMC would like to send out a quality control supervisor to examine the work done at the home. Occasionally, the customer is reluctant to schedule an additional visit, but the CSR almost always convinces the customer of its importance.
- The CSR informs the caller of the following:
 - The name of the technician who will visit the home
 - The identification carried by the technician.
 - The time of the appointment
- She then thanks the customer for his/her time and ends the call.
- The appointment is then recorded in HDMC's system and on the hard copy of the quality control scheduling report.

The crew supervisors examine between four and seven homes per day depending on how far apart the homes are. If necessary, they complete work or fix any problems they find during their inspection. The crew supervisors can also call in a team of floating technicians who are supervisors or who lost a job due to a no-show or a reschedule if they feel that an important large scale project was missed.

HDMC Internal Customer Complaint Procedures

Occasionally, customers call in with problems that they feel are related to the Comfort Partners work done in their homes. Using a Customer Complaint Form, a CSR takes down the details.

The form is then passed on to the CSR supervisor, who assesses whether the complaint is legitimately related to the work. Common complaints that require follow-up include loose fill insulation leaking into living areas, malfunctioning CO detectors or other installed measures, and anticipated measures which have not been installed.

Complaints involving damage to an area of the home that was not worked on are contacted via telephone by a field supervisor who tries to assess if HDMC bears responsibility. If the field supervisor believes that HDMC was not responsible, he tries to explain the cause of the problem to the customer. Otherwise, the field supervisor is responsible for resolving the complaint.

Emergency complaints which warrant immediate attention include health and safety concerns such as smoke or other unusual odors, or a short circuit which has rendered part or all of the home without electricity. Customers with no heat or with health and safety issues are handled in the same day.

After the CSR supervisor or the field supervisor assesses that the customer has a legitimate complaint, a service visit work order is generated in the tracking system.

Once in, the system can queue up and schedule it. The CSR then calls the customer, introduces herself, and tells the customer why she is calling. She explains that HDMC would like to send a technician to fix the complaint. An appointment is then scheduled in HDMC's system and written on the scheduling clipboard. She then thanks the person for his/her time and ends the call.

Technicians go to the customer's home during the appointed time and review the complaint. If the technician determines that the problem is related to Comfort Partners work, he makes the necessary repairs; otherwise he tries to explain the cause of the problem to the customer.

Customer service staff are available to take complaints from 7:00 a.m. until 9:00 p.m. For after-hour emergencies, a customer can reach a technician, who first attempts to address the problem over the telephone. If the technician cannot solve the problem in this manner, the technician goes to the customer's home and makes emergency repairs. A monthly calendar is generated showing which technician is on duty each night.

Response to Third Party Quality Control

When jobs are failed by Pure Energy or CMC, they are logged into an HDMC excel table and are assigned to the field supervisor. The supervisor is responsible for correcting the problem. The jobs are monitored and reported by Neal Gale. All failures provide by third party quality control are communicated to HDMC technicians who were responsible for the failures. If there is a trend, Neal Gale or John Augustino meet with the field staff. HDMC reports back to the utilities on the status of these failures.

All subcontractor failures are passed on to the subcontractors, and they are required to address the problem. HDMC also has regular conversations with the subcontractors and their quality control team visits the subcontractors in the field.

HDMC's goal is to resolve failed jobs within 14 days. Health and safety issues are prioritized.

4. Pure Energy

Utility Contracts

Pure Energy currently has a contract with JCP&L and has recently begun working with NJ Natural Gas. Pure Energy inspects almost all of JCP&L electric and oil heat homes, and ten percent of their gas heat homes. Additionally, Pure Energy conducts telephone inspections on 5 percent of electric water heat and baseload jobs for JCP&L, where they call to verify the work that was done in the home.

HDMC sends NJ Natural Gas usage printouts and invoices to Pure Energy with the other paperwork on the JCP&L joint delivery jobs. Pure Energy determines which jobs to inspect based on previous HDMC performance. They attempt to target jobs where

they believe there may be issues that require inspection, where a large amount of work was done, or where there was high usage and there may have been missed opportunities.

NJ Natural Gas planned to have Pure Energy inspect ten percent of HDMC jobs - approximately 75 jobs in 2002. However, by June of 2002 Pure Energy had already inspected 75 joint delivery jobs because of the nature of the problems being found and the desire to resolve any performance issues. Given Pure Energy's findings on the 75 inspections, they recommended that additional jobs with insulation work be inspected.

Paperwork

Pure Energy receives the audit form, the invoice, usage history, and education forms including the savings strategy and the customer action plan. The manager reviews the forms to make sure that she has received all of the paperwork, examines the invoices to see if there are any duplicates or anything that does not make sense, and tries to get an idea of what was going on in the home prior to sending the job to the inspector. Then she checks the WARM2 system to see if there are any comments from JCP&L or from the installer on that job.

Pure Energy Staff

There are four inspectors working for Pure Energy and two part-time support staff members, but Philip Schilling and Tamasin Sterner are the main inspectors for the Comfort Partners Program. In certain instances, Scott Barhight will also inspect Comfort Partners jobs. Philip does the majority of the inspections. He conducts the inspection and writes an inspection report. Tamasin Sterner enters the report into the JCP&L's WARM2 system and determines if the job passes.

Selection of Inspection Sites

When initially conducting joint delivery inspections, Pure Energy looked at the job, called NJ Natural Gas, and asked if they want an inspection because insulation was done, for example. After the initial visits, Pure Energy determined which jobs to inspect on their own, based on their previous experience with HDMC's work.

In most cases the inspections are chosen for homes with more work done. However, Pure Energy examines the usage history, and if it seems that what was done was not right, they may inspect the home. For NJ Natural Gas, Pure Energy examines if there is potential to do something that can be risky to the customer, such as insulation where there are recessed lights.

Pure Energy Repairs

Pure Energy does a lot of work fixing problems while on the site inspecting the customer's home. There are many issues that are minor enough that they don't want to bother the customer with another visit. For example, when they check the depth of the

insulation, they sometimes find garbage or some of the customer's possessions under the insulation. Pure Energy will move these things so that the insulation can settle in like it is supposed to. They are especially likely to fix problems if the customer appears to be irritated with the number of visits he/she have already received.

Other problems that are likely to be fixed by Pure Energy are dryer vents, adjusting weather stripping (to enable the customer to open or close the door), adjusting the water temperature, pulling insulation away from recessed lighting so it is safe until the dam is installed, and removing and returning tools to HDMC.

These fixes are not done based on utility requirements or requests, but are done voluntarily and without charge, due Pure Energy's commitment to the program.

Inspection Reporting

After the inspection is completed and reports are entered into WARM2, the Pure Energy manager messages the relevant HDMC staff. She has stopped sending all the messages to them because they were having problems using the WARM2 system to access their messages. It was agreed that she would fax the reports to HDMC after every batch of inspections, and email a summary of the inspections.

Failed Jobs

The main reasons that Pure Energy failed HDMC jobs were missed energy saving opportunities, such as obvious duct leaks, attic floor air sealing opportunities, and obvious bypasses, invoice entries for items not installed, quality of installation or materials, insulation related issues, and heat-producing fixtures not dammed or dammed incorrectly.

Pure Energy has failed only a few Bill Busters Comfort Partners jobs.

Inspection Procedures

Pure Energy Inspections cover the following:

- *Installed measures:* Pure Energy checks to ensure that all invoiced measures were installed, and checks to ensure that they were installed according to specifications. They check that appropriate materials were used, that the measures were installed well, and that the measures will work for their intended purpose.
- *Measure appropriateness:* Pure Energy checks for measure appropriateness. The main issue with measure appropriateness is thermostats. There is often no documentation provided as to why the thermostat was installed. The Comfort Partners specifications say that a thermostat should be installed when the old one is faulty or can't be reached and turned down. Often HDMC will install a thermostat when there are other things left undone that will save money, such as air sealing.

JCP&L has told contractors that if they run into the PSG Lin-stats, they are to be replaced even if they are not used. These thermostats have caused fires, and this replacement is a health and safety issue. Pure Energy has asked HDMC to document this reason for replacing the thermostat in their notes.

- *Health and safety:* The main health and safety issue that Pure Energy looks for is whether the contractor has properly treated heat producing fixtures when insulation is installed. If there was no insulation installed, then they do not need to see the condition of the lights. There are other borderline health and safety issues such as dryer venting.
- *Testing:* During every inspection, Pure Energy measures the temperature of the hot water. They also may use an infrared thermometer to measure the temperatures of different surfaces in order to determine if the thermostat is faulty or if the customer does not understand it. They also use this tool to pinpoint voids in the insulation. If insulation has been installed, Pure Energy will measure the depth of the new insulation in several areas.

In Pure Energy's contract with JCP&L, they conduct three blower door tests with full diagnostics for each contractor each year. This allows Pure Energy to check whether or not the contractor has sealed areas where they should have sealed. However, Pure Energy would not compare the reading on their test to the contractor's reading, because different conditions can be the cause of different readings.

- *Education:* The education procedure that Pure Energy uses is to review the work that was done, assess if the education sunk in, and fill in the gaps and review. When performing the inspection, Pure Energy first asks the customer how the work went, and if there are any questions. Customers often want to express their frustrations or joys right away. Next Pure Energy does a check of the work and reviews education issues with the customer. Pure Energy asks the customer if the contractor talked about how to save energy and money, and asks the customer what she remembers. If the customer does not remember the education, then the inspector uses prompts such as, "did the contractor talk to you about heat settings", "did the contractor talk to you about how much it costs to heat your water", etc. Heating, air conditioning, and hot water are the main subjects that Pure Energy discusses. They try to determine if the customer remembers anything about the education. Pure Energy always goes through the education again, although not in a formal way. If the customer is able to walk through the house with the inspector, then the inspector will educate as they go around the house. The inspector will explain what was done, why certain materials were used, how the measures have to be maintained, what the measures will do for them, and how much money and energy they might be expected to save. In some cases the inspector will sit down to educate if there are major things to be reviewed. If they can't tell that certain information was provided based on the forms, then they will provide that information again.

Follow-up

For the last six months, Pure Energy has been re-inspecting health and safety failures. This is due to the fact that Pure Energy had previously called the customer as a check, and the customer could say that the contractor had been in the home again, but could not provide information to allow Pure Energy to determine if the problem had been fixed. Pure Energy has re-inspected about 15 health and safety failures, mostly due to recessed light damming or other issues related to venting or insulation. In some of these cases, the jobs did not pass the second inspection. Cooperative communication between contractor and inspector lead to the identification of the source of these failures and agreement of consistent standards going forward.

5. CMC**Utility Contracts**

CMC has a contract to conduct inspections for PSE&G Comfort Partners jobs. The inspections began in January 2002.

Paperwork

CMC reviews all the completed jobs sent to them each month. CMC makes sure that each job appears to have received the normal services and that the contact information is available. When there is missing information or there is a need for clarification, CMC will contact either the utility or the contractor, depending on the discrepancy.

Selection of Inspection Sites

CMC intends to inspect all of the homes they are given in a month. Either they are not able to schedule an inspection because the participant is not reachable or refuses the inspection, or they reach the end of the month. They generally select first the homes that had the most major measures. They have two inspectors (and the equivalent of one full time person) so they divide the territory in half and schedule until they exhaust the available participants or the available time.

Failed Jobs

Jobs failed because work that should have been done was not done, or installed items were not functioning properly and had not been replaced. Ducts in difficult to access unconditioned areas were not always insulated or sealed effectively. CO detectors and CFL's were not always replaced in a timely manner.

CMC usually does the inspection thirty days or more after the work was completed. If the customer called HDMC to report a non-functioning CO detector or CFL, and it is still not replaced at the time of the inspection, this is considered not timely and CMC assumes that the customer's complaint is being ignored, so they fail the job.

Inspection Procedures

- *Installed measures:* Every measure listed on the report of every home CMC visits is inspected. Only when they are unable to gain access do they not inspect a measure. Examples where access is not attainable are where the attic is permanently sealed, the insulation was done from the roof, or the landlord does not show up and has the only key for the basement. Usually failure to find one measure will not cause a job to be failed, but if the measure was removed because it was not installed properly and is needed, then CMC would fail the job.
- *Measure appropriateness:* CMC does not receive a copy of the participants' energy bills. Thus, they cannot determine the cost effectiveness, only the effectiveness. CMC will ask the customer if the CFL's are installed in fixtures that are on for a minimum of four hours a day. Also, they inspect the clock thermostat to see if it is controlling the temperature rather than the occupant and at what temperature.
- *Health and safety:* CMC makes sure that the CO detector is operating properly. They look for disconnected ducts or flues, and if there is any odor of gas. CMC does not often fail jobs because HDMC failed to address health and safety issues.
- *Testing:* CMC does not perform any tests.
- *Education:* CMC asks the customer if he/she was present at the time of the inspection, and if the contractor explained the program and answered all of the customer's questions. Additional education will be provided in cases where the customer is confused or does not understand the program.
- *Customer satisfaction:* CMC asks the customer if he/she was satisfied with the program, if the educator, technician, and subcontractors were on time, if they were courteous and helpful, and if they adequately cleaned up. Customers are most likely to express dissatisfaction if something is not working, if something is not replaced after being reported, or if the auditor indicated that something will be done that isn't. (CMC's assumption is that the item proved not to be cost effective, but they ask the customer to contact HDMC and they make a note of the complaint.) Whether the job is failed depends on whether or not the complaint can be verified, and how egregious the complaint. All comments are reported to the utility, even if CMC does not fail the job, or do not think it is a valid complaint.
- *Follow-up:* Prior to June 2002, PSE&G conducted follow-up on failed jobs. Beginning in June, CMC started doing follow up inspections on failed jobs.

J. Arrearage Reduction

The Arrearage Reduction component is one aspect of the Comfort Partners Program that differs substantially among the different utilities, both in terms of the program parameters,

and in terms of the way the program is implemented and delivered. The Working Group did not know if the Arrearage Reduction could be the same across utilities because of differing customer information systems. The utilities also have different budgets for the Debt Reduction.

This section describes how each utility's Arrearage Reduction component is designed, and how the program is managed. This section also describes the roles that HDMC and Community Based Organizations (CBO's) play in the implementation of these programs.

1. Conectiv

Utility Experience

Conectiv did not have a predecessor arrearage reduction program. The statewide nature of the Comfort Partners Program did not have a large effect on the development of Conectiv's program, but Conectiv was able to obtain help from some of the utilities that had a component set up previously. Conectiv also had the assistance of HDMC who had a lot of experience in the arrearage field. The Conectiv arrearage reduction program is named the "Affordability Payment Plan."

Recruitment and Outreach

HDMC recruits participants for the Arrearage Reduction component from the list of customers that was originally provided by Conectiv. These customers are recruited while HDMC is in the home providing energy services if they are eligible for the Arrearage Reduction component. The collections department may refer a few customers to HDMC for the Arrearage Reduction component, but this does not happen on a regular basis.

Conectiv does not conduct separate marketing of the Arrearage Reduction component outside of Comfort Partners.

Eligibility

The eligibility requirements for the Arrearage Reduction component are the same as for Comfort Partners. Customers must have arrearages between \$300 and \$1500. If the customer has slightly over \$1500 in arrears, Conectiv will sometimes allow the customer to join the Arrearage Reduction component.

Enrollment

If the data received from Conectiv indicates that the customer is eligible (\$300 to \$1500 in arrears), HDMC targets the customer for the Arrearage Reduction program. During the initial site visit, the HDMC technician explains the payment plan benefits and requirements to the client. If the participant is interested in the plan, HDMC completes

the application with the customer and returns the documentation to their payment plan coordinator, who faxes the application to Conectiv.

Conectiv will review what HDMC has calculated. HDMC's calculations are usually accurate. Before HDMC goes into the field, they will obtain a copy of the customer's current usage and arrearages. HDMC can also get a rough idea of the customer's budget. Conectiv verifies company acceptance and sets up the payment agreement.

Customers will be denied entry into the Arrearage Reduction Program if they were not within the eligibility criteria. Very few customers are denied in the field because Conectiv wants to make sure that the customer is eligible for the program before the program is offered.

The customer will sometimes refuse to participate because he/she can't afford the payment.

Tracking and Follow-up

Conectiv reviews whether the customers on the Arrearage Reduction program are paying their bills on weekly basis. They run a report each week for all customers on the plan. This report details the customers' arrearages, their outstanding balances, and their monthly payments. They look for the customers' payments depending on their billing cycles.

Conectiv notifies HDMC of any payments that haven't been received. Then HDMC will contact the customers who have missed payments. HDMC will determine if there is a problem or a special circumstance, or if the payment has been mailed. HDMC can make a special arrangement with the customer after discussing the customer's circumstances with Conectiv.

Conectiv aims to make sure that there is close contact with the customers so that the customers don't fall off the program. The idea is to catch participants in enough time to bring them back in and counsel them and let them know the importance of staying on the program. Often the customer just needs an extra couple of days to pay the bill.

Conectiv has the philosophy that each customer is different and requires a hands-on approach. Therefore, Conectiv did not want to have rules for the number of times that HDMC could contact the customer. HDMC counsels the customers and there are not a lot of customers who fall off the program. However, it is required that HDMC call the customer at least twice before the customer is removed from the program.

Conectiv considers a payment to be late after the due date for the payment has passed. If the payment has not been received by the due date, Conectiv will notify HDMC. If the customer misses two payments, he/she will be removed from the program. If a customer is removed from the Arrearage Reduction program, the customer is placed back in regular collections.

Exceptions may be made depending on the customer's individual circumstances.

Tracking Systems

Information on the Arrearage Reduction customers is entered into Conectiv's general database system. If the customer is on the program, the customer's monthly payment and arrearage forgiveness will be entered into the system. Each month the customer's arrearage forgiveness is entered manually as a payment. The customer is put on the budget program in the general customer database.

Conectiv also has spreadsheets for the Arrearage Reduction customers. The spreadsheets include the amount of the customer's bill, the customer's balance, when the customer started on the program, the customer's budget amount, the customer's forgiven amount, the customer's usage, any payments made on the account, any contact that was made with the customer, any comments that Conectiv has notified HDMC about the customer or HDMC notified Conectiv.

Program Parameters

In order to calculate the customer's monthly payment, the customer's annual bill is estimated as last year's bill minus ten percent for energy savings. Half of the customer's arrears are added to that amount. The total of these two amounts is divided by 12 to obtain the customer's monthly payment. Conectiv will forgive fifty percent of the customer's arrearages up to a maximum of \$750.

If a LIHEAP payment is received, the payment is subtracted from the customer's arrears. If a LIHEAP payment is received after the customer signs up for the Arrearage Reduction program, the payment will show up as a monthly credit. However, if the customer was expected to receive a payment prior to signing up, the amount would be subtracted from the arrears before calculating the payment.

2. Elizabethtown Gas/NUI

Utility Experience

Elizabethtown Gas/NUI did not have a predecessor to the Comfort Partners Arrearage Reduction Program. The statewide nature of the Comfort Partners Program has not had an effect on the development of their Arrearage Reduction component of the program.

Recruitment and Outreach

Elizabethtown generated a list of arrearage customers for HDMC. Additionally, when a customer comes into an arrearage situation, the customer's account goes into the Protected Accounts file. Heather forwards customers in this file to HDMC (they usually qualify for Comfort Partners.) The credit and collections department also refers customers to the Arrearage Reduction and Comfort Partners Programs.

Elizabethtown has no separate marketing of the Arrearage Reduction component of the program outside of the general Comfort Partners Program.

HDMC schedules a Comfort Partners visit, and while they are in the home, they tell the customer about the Arrearage Reduction program. HDMC calls Elizabethtown's credit and collections department to find out what the customer's arrearages are and what their monthly payment should be. HDMC then fills out an enrollment form if the customer qualifies for the program.

Eligibility

The eligibility requirements for Elizabethtown's Arrearage Reduction program are:

- The participant must be the customer of record residing in a residential gas heated dwelling.
- The customer must be income eligible (150% of the Federal Poverty Guidelines) or winter moratorium protected from discontinuance of services
- The customer must provide proof of income
- The customer must receive funds or have applied for assistance from one or more available funding sources for energy assistance.
- The customer must designate NUI Elizabethtown Gas as the recipient of any energy assistance funds received by the customer, if NUI Elizabethtown Gas is their heating fuel provider.
- Senior Citizens who receive Lifeline assistance or PAAD are eligible to participate.
- The customer must participate in the low-income energy efficiency program
- The customer must have arrears no greater than \$1500.

Enrollment

HDMC faxes the completed enrollment to the credit/collections department at Elizabethtown Gas. Credit/collections accepts or declines the application and processes the account. Credit and collections faxes back to HDMC to inform them if the customer has been accepted into the program.

When credit and collections is reviewing the Arrearage Reduction application form, they recheck arrears to see if they have changed due to a payment from the customer or from an agency. The account is usually consistent with what Elizabethtown had told HDMC while conducting the audit. There is not much room for error on HDMC's part. Participants who have been rejected have \$0 arrears.

Tracking and Follow-up

Elizabethtown counts Arrearage Reduction customers as participants once their applications are approved. At this time, Elizabethtown faxes the approved applications to HDMC and takes up to a maximum of \$750 off the arrears, and codes the accounts. If the customers keep making their payments, then the arrears don't have to be changed again. If the customers stop making their payments, then a percentage of the arrears will be put back on the customer's account.

Elizabethtown's credit and collections department has generated a report that is run weekly and that examines all of the accounts on the Arrearage Reduction program. The report lists how much has been written off, the customer's budget amount, payments made, and the difference between the budget amount and payments made.

If the customer has not made a payment or has not made a full payment, credit and collections will call HDMC, and HDMC will contact the customer. A payment is not considered to be late until the next billing - after 30 days. After this point, the payment is also considered to be missed.

If the customer has missed 2 payments, and HDMC has not been able to work with the customer, Elizabethtown will reverse the arrearage that was not covered. For example, when the customer enrolls in the program, the full arrearage up to a maximum of \$750 is credited. If the customer has made payments for two months, and then has stopped making payments, Elizabethtown will place 10/12 of the arrearages back on the customer's account.

The program is so new that Elizabethtown has not had any customers dismissed from the program to date. Elizabethtown does not know if they will send a letter to the customer informing the customer that he/she is being dismissed from the program.

Customers will be removed from the program after two missed or partial payments. HDMC will contact the customer after he/she misses the first payment. Exceptions will be made on a case-by-case basis, but none have been experienced yet. The customer cannot rejoin the Arrearage Reduction component at a later date. The program is a one-time opportunity.

If the customer is suspended from the Arrearage Reduction program, he/she is returned to regular collections.

Tracking Systems

Elizabethtown's general customer billing database is used for managing the Arrearage Reduction program. When a customer is enrolled in the program, the credit and collections department puts a code of "M" on the account to indicate that the customer is an Arrearage Reduction participant. The customer's required monthly payment,

arrearages forgiven, and the date that the arrearages were written off are included in the database.

Program Parameters

Elizabethtown calculates their customers' Arrearage Reduction payments as last year's bill divided by 12. Their total arrears, up to a maximum of \$750, will be forgiven. The agreement is structured to last 12 months.

NJ Shares and LIHEAP payments are deducted from the arrearage amount. If a LIHEAP payment or NJ Shares is received after the arrears was removed from the customers account, Elizabethtown will take that money and apply it to the amount written off. If the customer defaults, the pro-rated arrears applied back to the account will be less the money received from LIHEAP & NJ Shares.

3. JCP&L

Utility Experience

JCP&L did not have a predecessor Arrearage Reduction program. The joint nature of the program has not affected the development of JCP&L's Arrearage Reduction program, except by imposing a \$750 limit on arrearage forgiveness.

Recruitment and Outreach

JCP&L has chosen to use Community Based Organizations (CBO's) to provide recruitment, outreach and enrollment for the Comfort Partners Arrearage Component. JCP&L has a Customer Assistance Program (CAP) that is provided jointly with the Arrearage Reduction Component. The CAP program provides the customer with a monthly electric payment that is equal to a percentage of the customer's income.

Currently there are eleven CBO intake agencies providing services in New Jersey's thirteen counties. While some have multiple locations, others are located away from the customer base.

JCP&L employs a CARES representative who is responsible for providing support for the CBO intake agencies. This representative supports CBOs through guidance and assistance in appropriate application intake of eligible customers with arrearages.

JCP&L customers may first be served by Comfort Partners weatherization services or by the Arrearage Reduction component. Right now, both programs are feeding into each other. If the customer has not yet received the Arrearage Reduction program, HDMC will refer the customer to CAP and to Arrearage Reduction, with the local CBO's number. It is the customer's responsibility to contact the CBO in the county. If the CAP program is working the way it should be, the CAP program will feed the

Comfort Partners and Arrearage Reduction programs, and separate marketing for Comfort Partners will not be needed.

JCP&L sends out letters to customers to market the CAP program. Customers who participate in CAP are required to participate in Comfort Partners weatherization and Arrearage Reduction components. There is no other marketing that is conducted for Arrearage Reduction. JCP&L hopes to work with CBO's to take a holistic approach. They are talking to all CBO's about how the different programs interact with each other, in the hope of taking a holistic approach to solving debt, affordability, and consumption problems. They want to provide a total package for the customer.

JCP&L's collections department refers customers to the Arrearage Reduction program. Managers stress these programs with the collections department and with customer service. JCP&L has a Lotus-based system that provides information on all programs, and that works like an internal web site. For all of the programs, information on benefits, guidelines, and application procedures, are provided. The collections department can use the information in this system when making program referrals.

Eligibility

JCP&L's eligibility requirements for the Arrearage Reduction program are the same as the eligibility requirements for the Comfort Partners Program, except that customers with income up to 175 percent of the poverty level are eligible for the program, in order to match JCP&L's CAP program eligibility guideline. There are no other program requirements.

Enrollment

CBO's are responsible for program intake. After filling in the application, they fax or mail the application to JCP&L.

Prior to an appointment, the agency will pre-screen the customer and access JCP&L's web site. JCP&L's Human Services web site provides account information including usage, payment, consumption, and arrearage data. The information contained in the web site allows the agencies to determine customer eligibility at pre-screening. However, some agencies haven't utilized the web site to its full potential and others have just recently purchased internet services and have indicated they will use this tool. In these cases, the CBO's must obtain account information from the customer or call JCP&L.

In most cases, intake is done in person. Agencies prefer intake in the office because it allows face-to-face interaction with the customers and allows the agencies to determine if other services can be provided. JCP&L allows for phone intake, but does not encourage it. If intake is conducted by phone, the customer must mail or fax proof of income. JCP&L encourages home visits if the client is disabled, ill, or not able to get to the office, and will pay for the agency to visit the customer in his/her home.

The CBO presents the Arrearage Reduction program along with the CAP information. The Arrearage Reduction offer is tied with CAP. To the customer, the CAP and Arrearage Reduction programs should seem like one program.

When arrears exist, the customer applying for the CAP program at the CBO is informed that he/she will automatically be enrolled into the Arrearage Reduction component and receive \$750 in forgiveness, on an installment basis, as long as on-time, in-full payments are made each month. (When the application is processed, the arrearages may have increased or decreased. The representative applies arrears at time of input.) Agencies also explain what happens if assistance dollars, such as NJ Shares, HEAP, Lifeline, etc. are received and how they are applied to the account. The agency indicates directly on the intake form that the customer is eligible for Debt Reduction and the amount of arrears at the time of intake. Signatures are placed on the intake form. Also, the customer signs a Customer Agreement Form, which reviews the participation guidelines. Additionally, a Check List for Debt Reduction Offer may also be reviewed and signed. Agencies provide copies of these documents to the customer.

The only reasons that applications are rejected are that the customer does not have arrearages, or that the customer is income ineligible. In some cases, the customer has refused to accept the program.

A report is run each month to monitor agency production. Currently one-third of the agencies are conducting aggressive intake, others are marginal. Still others have indicated they will begin to increase their intake as soon as they receive internet connections.

Tracking and Follow-up

Customer monthly payments under the CAP program are automatically calculated in JCP&L's system when the customer's income is entered.

After a customer's monthly payment is received, the arrearage credit is applied to the customer's account. Payments are considered to be late after a 5-day grace period. If a payment is overdue, the system automatically generates a letter to the customer, reminding the customer that the payment is overdue. If the customer brings the account up to date, the customer will be awarded the arrearage installments.

After the first missed payment, the customer receives a reminder letter. After the second missed payment, the customer is told to make payments or he/she will be dismissed from the program.

When the customer is dismissed from the program, the arrearage remains on the customer's account, the subsidy is taken away, and the customer needs to contact the collections department in order to work out a payment agreement.

If the customer does not contact collections, the collections department will contact the customer. No other contacts with the customer are made. The customer also can call the CBO and the CBO will refer the customer to NJ SHARES or any other assistance that is available.

There are exceptions made to removal from the program. In cases where the customer has contacted the CBO or JCP&L, they have been put back into the program. Technically, the customer is not supposed to be returned to the CAP program for 6 months. However, exceptions are made based on the circumstances. The CARES representative helps the CBO's to determine when exceptions should be made. CBO's are also allowed to provide a lower percentage of income payment based on household circumstances. They need to document the circumstances and obtain permission from JCP&L. One example of such a situation may be a catastrophic illness in the family.

When a customer is removed from the Arrearage Reduction program, he/she is placed in an accelerated track within regular collections.

Tracking Systems

All database functions are integrated into JCP&L customer service system. The system will automatically credit the customer's account with both the \$62.50 arrearage forgiveness and the difference between the customer's actual bill and the CAP payment when the monthly payment is received. The system will also automatically generate letters to notify the customer when a payment has been missed.

However, there are many functions that must be performed manually. Applications are received on paper and must be input into the system by a temporary staff member. A manual process will also have to be used to deactivate the customer once the customer has received the maximum \$750 arrearage credit. Approximately one year after program implementation, JCP&L will download tables from the database in order to determine which customers have received the maximum credit and need to be deactivated. These reports will then be created on a weekly basis to continue the deactivation process.

Program Parameters

The customer's CAP rate is based on gross income. The CBO will inform the customer of his/her monthly payment and that JCP&L will subsidize the remaining part of bill. The CBO will inform the customer that the program requires on-time and in-full payments. The customer must follow through with Comfort Partners weatherization participation if he/she has not already done so. JCP&L has had customers who were making payments every month but who refused weatherization, so they were dismissed from CAP and Arrearage Reduction.

Each month, after the payment is made in full and on time, \$62.50 of arrearages is credited to the customer's account. The plan is spread over a 12-month period if the

customer has \$750 or more in arrearages. If the customer has less than \$750 in arrearages, the plan will last long enough to forgive the customer's arrearages, given a forgiveness of \$62.50 per month. The plan may last longer than 12 months if the customer misses a payment and then makes it up at a later date.

LIHEAP grants are applied to the oldest arrearage. If the customer has over \$750 in arrears, then LIHEAP will take care of the arrears over that level. If arrearages are below \$750, LIHEAP will be applied towards that arrearage and then to the full bill, rather than the CAP bill. Once LIHEAP starts affecting current bills, the CAP subsidy is no longer in effect.

NJ SHARES is used for the current bill. The purpose of this grant is to help a customer who has extenuating circumstances and can't make the CAP payment.

JCP&L is still determining what will happen to the remainder of the customer's debt after the 12 month program is completed. JCP&L was not prepared for the \$750 ceiling to be established. A handful of customers who were enrolled before the limit was imposed will have all of their debt forgiven.

The difference between the CAP payment and the customer's actual bill is subsidized through the merger settlement, and eventually will be subsidized through the societal benefits charge.

4. NJ Natural Gas

Utility Experience

NJ Natural Gas did not have a predecessor Arrearage Reduction program. NJ Natural Gas developed their own Arrearage Reduction program after learning what the other electric companies had done with their previous programs.

Recruitment and Outreach

Applications for the Arrearage Reduction component can come in a couple of ways. NJ Natural has screened and recruited customers who receive assistance and has sent this list to HDMC. This information includes the customer's arrears. The CAP agencies can also refer the customers to the Arrearage Reduction component.

The NJ Natural Gas newsletter mentions the Arrearage Reduction component. The program is also mentioned at the Speaker's Bureau, and the CAP agencies know about the program. The collections department refers customers to the program if they have the opportunity.

Because of the many different types of home energy assistance available, many low-income customers are not severely delinquent on their bills. Customers can receive HEAP and NJ SHARES (up to \$750). Additionally, NJ Natural Gas has the Gift of

Warm Program, and the state came out with an emergency program which provides to \$200-\$400. The USF program will also give home energy customers an additional \$200 credit. NJ Natural Gas tries to make sure that customers apply for all programs.

Eligibility

Eligibility requirements for the Arrearage Reduction component are the same as for the Comfort Partners Program. Customers with arrears of \$250 or more can participate in the program.

Enrollment

HDMC fills out the Arrearage Reduction program application while in the customer's home, and then faxes the enrollment form to NJ Natural Gas. The application is forwarded to NJ Natural Gas' collections department, and their staff reviews the applications for completeness, and makes sure that the arrearage amount is correct. If the customer qualifies, NJ Natural Gas will do an analysis of the new budget amount and then fax the approval and the new budget to HDMC.

When reviewing the customer's payment agreement, NJ Natural Gas checks what the customer has told the HDMC representative about his/her arrears. The budget amount can also be different from what HDMC has estimated.

So far, all of the applications received from HDMC have been approved. NJ Natural has had some calls from HDMC about customers who were sent to HDMC early in the year, but who are just being served now. Some of these customers can no longer apply for Arrearage Reduction because they have received assistance from other programs and they no longer have arrears.

Tracking and Follow-up

Once a NJ Natural Gas customer is approved for the Arrearage Reduction program, the collections department moves the arrears off the customer's account. The customer's full balance or up to \$750 in arrears is removed from the account. The customer is placed on a monthly fixed budget.

NJ Natural Gas' collections department is responsible for managing and monitoring the status of the Arrearage Reduction program accounts. They check the arrears of each bill to make sure that the customers don't fall behind again. NJ Natural tries to instill the fact that if the customer falls behind in payments, the customer will be removed from the program and the debt will come forward.

Customers who are participating in the Arrearage Reduction program are coded in the system. When the customer's bill is generated, the bill is forwarded to collections. The collections department checks the bill to make sure that the customer is current, and then mails the bill to the customer. If the customer is not current, collections will

forward the information to HDMC and HDMC will call the customer. If the customer is still in arrears at the next bill, the system will automatically remove the customer from the Arrearage Reduction program. When the bill is reviewed again, HDMC will be notified that the customer is removed from the program if the customer has not paid his/her bill.

NJ Natural does have the capability to make exceptions to removal from the program. If HDMC notifies NJ Natural about the customer's circumstances, NJ Natural may make exceptions to removal from the program. In some cases the customer's budget payment is too high and NJ Natural Gas can lower the payment.

If the customer defaults on the program, the remainder of the arrears that have not been forgiven will be returned to the customer's account. A customer cannot be returned to the program after being removed for nonpayment.

If a customer is removed from the program, the customer is returned to where the customer left off in terms of the collections procedures. The customer could be in jeopardy of having his/her service turned off. The customer would receive the final notice and have to call collections for additional arrangements, or to have an agency assist in paying the bill.

Tracking Systems

Customers who are participating in NJ Natural Gas' Arrearage Reduction component are coded in their billing system. This code causes the participants' bills to be sent to the Arrearage program manager in the collections department prior to being sent to the customer. If the customer remains in arrears for two bills, the system will automatically remove the customer from the Arrearage Reduction component.

Program Parameters

NJ Natural Gas estimates the customer's annual bill as the past year's bill minus ten percent for energy savings. Arreages over \$750 are added to this amount. This total is divided by 12 in order to obtain the monthly payment.

Assistance payments that are received before the customer is signed up are subtracted from the arreages. Assistance payments that are received after the customer is enrolled are applied to the customer's monthly payments.

5. PSE&G

Utility Experience

PSE&G had an Arrearage Reduction component under the E-Team Partners Program. This is the same program that has been implemented under Comfort Partners.

Recruitment and Outreach

HDMC recruits PSE&G participants for the Arrearage Reduction program when they are providing the Comfort Partners Program services. Additionally, PSE&G's collections department refers customers to HDMC for determination of overall program eligibility.

PSE&G does not conduct separate marketing of the Arrearage Reduction component of the program outside of the Comfort Partners Program.

Eligibility

Eligibility for PSE&G's Arrearage Reduction component is the same as the eligibility for the general Comfort Partners Program. In addition, customers must have arrearages between \$300 and \$2000, and be on shutoff notice. Customers cannot participate in the program if they have participated before, unless they stopped partway through the old program and are now picking up where they left off at their new address.

Enrollment

HDMC faxes the completed enrollment forms to the CCC department at PSE&G. CCC reviews the fax and faxes back whether the customer has been accepted into the program, and if rejected, why.

When reviewing the payment agreement, CCC checks to make sure that all figures coincide with HDMC figures. The plans are usually accepted. The main changes that are made are due to changes to the level of arrearages or to usage estimates.

The most common reason that customers are rejected from the program is because they haven't made a payment within the last 30 days. Other reasons that applications are rejected are that the customer does not have an actual reading, the customer has an outstanding bill at an old address, or the customer has more than one account in his/her name. Sometimes the payment plan has been calculated incorrectly and needs to be adjusted upward. In this case, PSE&G would notify HDMC and HDMC would contact the customer.

Tracking and Follow-up

PSE&G monitors Arrearage Reduction customer payments through daily queries. CCC does queries for customers in Arrearage Reduction with a particular route number, prints out the data, and makes sure that the customers have made their monthly payment. Each month, each customer is checked to make sure that a payment was received.

A payment is considered to be late if it is not received by the monthly due date. A payment is considered to be missed if it is not received by 10 days after due date.

If the customer misses a payment, CCC will make a phone call and then send a follow-up letter stating how much is needed to stay current in the program. If the customer does not respond within ten days another phone call will be made and another letter will be sent.

Prior to being removed from the program, the customer will receive several phone calls and letters stating that the customer has missed a payment. If these contacts are ignored, the customer will be suspended from the program. PSE&G will send a letter stating that the program is no longer available to the customer due to missed payments. Usually by the time the letter has been sent, the customer has missed the second payment. The customer is eligible for suspension after the second missed payment.

Exceptions are made periodically depending on the customer's circumstances. The customer is allowed to rejoin the program, but not all customers do. In order to rejoin the program, the customer must make up for all his/her missed payments.

There are three different customer statuses. "Pending" indicates that the application has been issued by HDMC, and "active" indicates that the enrollment has been approved by PSE&G. The customer remains active even if there is a late payment. The customer is "not active" once the customer has been suspended from the program.

Customers who are active in the Arrearage Reduction component are handled by a utility representative associated with the Arrearage Reduction component. These customers are exempt from shutoff and normal collections activity. Only those staff members who are handling the Arrearage component can make changes to the accounts of customers participating in the program.

If customers are removed from the program for nonpayment, they are returned to general collections procedures.

After the customer has made payments for one year, PSE&G sends information on the customer's arrearage credit to their bookkeeping department. The arrearage credit is then made to the customer's account.

Tracking Systems

PSE&G uses a separate Access 2000 database to monitor Arrearage Reduction component customers. This database contains information on both old and new participants. The database indicates why the customer was removed from the program - because the customer completed the program or because the customer did not make the required payments. The database also contains the forgiveness amount, the customer's balance when the customer started on the plan, and the customer's current balance.

Program Parameters

PSE&G's Arrearage Reduction payment is calculated by first estimating the total bill as the last year's bill minus 10 percent for projected energy savings that should be realized by the installation of the energy conservation measures. Customers who go on Voluntary Restrictive Payment (VRP) receive an additional 25 percent discount. This amount is divided by 12 for the monthly usage payment.

Each month, for 24 months, the customer will pay this monthly usage payment, plus two percent of arrears if on VRP and two and a half percent of arrears if not on VRP. The PSE&G monthly service contract amount is also added to the monthly payment.

After 24 months, the VRP customer will have paid 48 percent of past arrears, and the non-VRP customer will have paid 60% of the arrears. PSE&G will forgive one half of the rest of the arrears after 12 months, and the other half of the rest of the arrears after 24 months.

The maximum amount of forgiveness is \$1040 for a VRP customer and \$800 for a non-VRP customer. (Pending a decision by the NJ Board of Public Utilities, PSE&G may have a \$1500 forgiveness limit for customers that are provided with both gas and electric service.)

Any assistance payments that are received after the customer has signed up for the program will be applied to the monthly payment.

6. South Jersey Gas

Utility Experience

South Jersey Gas did not have a predecessor Arrearage Reduction program. South Jersey Gas managers developed the Arrearage Reduction Program based on parts of Conectiv's and PSE&G's programs because they thought it would be helpful to develop a program that was similar to what customers were used to on the electric side.

The statewide nature of the program has had a large effect on the South Jersey Gas Arrearage Reduction component's development. South Jersey Gas never had an approved BPU DSM program. Though they had filed, the BPU had never approved their programs. Without having mature programs to use as a model, it would have been very difficult for South Jersey Gas to develop the Arrearage Reduction component. South Jersey Gas decided that they should make their program look similar to Conectiv's, as 95 percent of their territories line up. Conectiv provided South Jersey Gas with a copy of their program plan, and that was very helpful.

Recruitment and Outreach

South Jersey Gas provided HDMC with a list of customers who had received one of seven programs that made them eligible for Comfort Partners. A subset of these customers with arrears between \$300 and \$600 were flagged to be targeted for the Arrearage Reduction component.

South Jersey Gas has instructed the Customer Service staff that low-income programs are available, and some referrals are made.

There is no separate marketing of the Arrearage Reduction component of the program, outside of the general Comfort Partners Program. The budget for such marketing is not available, and general marketing would not allow the customers with the highest usage to be targeted, since anyone who expresses interest in the program must be served.

Eligibility

Eligibility requirements for South Jersey Gas' Arrearage Reduction component are the same as for the Comfort Partners Program. There are no requirements for minimum or maximum levels of arrears to participate in the program. However, the Customer Care department can refuse to put customers on the program. For example, there was one customer who had not made any payments for over six months. The Customer Care department said that this customer would have to pay \$200 before he/she could be put on the program.

Enrollment

HDMC enrolled South Jersey Gas customers in the Arrearage Reduction component starting at the very end of 2001. However, South Jersey Gas had not yet updated their computer system to handle processing of the program. Their system was up and running in May 2002, and the program awards began at this time.

HDMC had begun enrolling South Jersey Gas customers in the Arrearage Reduction component in December 2001. Given the time lag between when some of the customers were signed up for the program and the time when the program was put in place, all of the customer program payments had to be recalculated. Budgets and arrears had changed since the time that customers were enrolled in the program.

At the time the customers were signed up, HDMC counseled the customers to continue making payments. Five of these customers no longer had arrears at the time they were entered into the system, however they will be maintained in the program and monitored for their payment patterns. All of the customers who had been enrolled were keyed into the system.

South Jersey Gas' Customer Care Center is responsible for reviewing enrollment forms and recalculating payments and arrearage forgiveness. They have the final authority on whether the customer is accepted into the program and what the customer's payment

will be. They enter the enrollment data into the mainframe, and calculate the monthly payment.

Tracking and Follow-up

South Jersey Gas reviews Arrearage Reduction accounts each month in order to determine if payments have been made. Customer payments are tracked manually. South Jersey gas has a screen that is hooked into their Customer Care system. They can query for all customers on the Arrearage Reduction Program.

Additionally, South Jersey Gas maintains a spreadsheet for each customer where all information on all Arrearage Reduction program participants is kept. At enrollment and each month, they enter data from the mainframe into the spreadsheet.

If a customer has missed two payments, South Jersey Gas' system will automatically generate a message on the bill that the customer has been suspended from the program, and will remove the customer from the program. If the customer completes a full year on the program, the system will automatically send a letter to the customer, praising the customer, and letting him/her know that there are no more arrears.

South Jersey Gas has not yet decided what will be done after the first missed payment, but they believe that the customer should be contacted. This contact will either be made by South Jersey Gas or by HDMC.

A payment is officially considered to be late after the next bill is sent. At this point, the customer will receive a dunning notice. If customers miss two payments, then they are removed from the program.

Exceptions will sometimes be made to removal from the program. However, if the Customer Care department says that an exception should not be made for the customer because the customer will not pay his/her bill, then the customer will not be granted an exception.

If the customer is removed from the program for non-payment, theoretically the customer can return to the program in the following year. However, if the customer appears to be someone who will not pay, South Jersey Gas will not put that customer back on the program.

If the customer is removed from the program, he/she is put back into the regular collections procedures.

Tracking Systems

South Jersey Gas codes customers in their billing system as being Arrearage Reduction participants. They also maintain separate spreadsheets for each program participant.

Program Parameters

South Jersey Gas estimates the customer's annual usage as usage over the past year, minus 10 percent for energy savings. Any arrears over \$300 is added to this amount. This total is divided by 12 in order to obtain the monthly payment.

South Jersey Gas' maximum arrearage forgiveness is \$300. Customers will receive the arrearage forgiveness over 12 months, no matter what the level of their arrearages are. Therefore, each month they will receive a forgiveness of their arrears divided by 12, up to a maximum of \$25 per month. This decision was made due to the fact that it was easier to make the programming consistent.

NJ SHARES or LIHEAP payments that are received prior to enrollment are subtracted from arrears. South Jersey Gas has not yet decided how to credit payments from these programs that are received after enrollment in the program. There is a concern that if the customer has a large LIHEAP payment credited to his/her account that covers a few months of the budgeted payment, the customer will get out of the habit of making the monthly payment.

7. HDMC

Comfort Partners Enrollment

The CSR ask the customer about arrearages at the time of enrollment in the Comfort Partners Program to determine if she should explain the Arrearage Reduction component. In all cases, arrearage data from the utilities is checked before going into the field.

At enrollment in the Comfort Partners Program, if applicable, the CSR explain the procedures of the payment plan, and informs the customer that the technician will have an application to start the customer on the plan.

HDMC does receive referrals for the Comfort Partners Program and the Arrearage Reduction component from CAP agencies. The CAP agencies have applications when customers go to their office. The CAP agencies are authorized to approve eligibility for the program, or HDMC can verify eligibility. When the agency recommends a customer for weatherization and the payment plan, the agency calls HDMC and faxes an application. HDMC determines if the customer has an arrearage, and if so, HDMC will put the customer in the program.

Customers who have arrearages, and who therefore are in danger of shutoff, are always priority customers. The customers who come in from the CAP agencies fall into this category. They do not have to be on one of the utility's targeted lists. When they seek help, they are priority, and they are treated like the other customers who have priority. Customers can't be turned down for the program, however these customers may not be the targeted high use customers.

Arrearage Reduction Enrollment in the Field

Each utility has different guidelines for the program. The field staff explain the guidelines and the customer's and the utility's obligations, and if the customer is interested, they present the application. The field staff are supposed to talk about how crediting of HEAP and SHARES payments work in the context of the program. This effort has been complicated by the complexities of how these payments would affect a customer's arrearage depending on when and how the assistance payment is received by each participating utility.

Whether the payment calculation is presented to the customer depends on the utility. NUI Elizabethtown Gas calculate the payment themselves, and in these instances the field staff are instructed to call the hotline. Then the utility will calculate the payment and the field staff will fill in the information. Other utilities have a formula that they use in the field and then they present the application to the payment plan manager to process. The process varies by the utility, because in order for the program to be successful, it has to work within the utilities' billing processes.

In terms of the collections actions, the field staff explain what the customer's responsibilities are, and what the utility will do if the customer does make payments and what the utility will do if the customer does not make payments on time and in full. They try not to get too specific about rules for dismissal because the utilities are trying to work with the customer.

The field staff usually have the information they need to calculate the payment. If not, they call HDMC to obtain the information over the phone. For PSE&G, HDMC logs onto their system. For the other utilities, if the field staff call the office, HDMC will call the utility.

The majority of the field staff spend the majority of their time with two utilities. Therefore, they don't have to understand how all of the payment plans work.

Most of the time when they are going out in the field the technicians have all the necessary information they need. They have all the paperwork and they don't need to call in very much. Usually calls are made if the information that the field staff have is inconsistent with what the customer says or if the customer didn't have a full year of data.

If the customer is in arrears, the field staff focus on what the customer can do to better handle making the payments. The utility focus is on keeping the bill payment current. HDMC staff try to make the customer understand that making the payment with arrearage reduction is a better deal than missing the payment and having to pay the full arrearage. They also try to identify NJ SHARES and other programs that are available. If the customer is on TANF, they help the customer to understand the direct payment option. (Not all of the utilities have set this up yet, but this is a goal for all of the utilities.)

HDMC Processing of Enrollments

Right after technician visits, the HDMC payment plan manager calls the customer to touch base and let the customer know that she will forward the application to the utility. The manager also tells the customer that she will let the customer know what the utility decides. PSE&G sends an approval letter to the customer, but even in this case the manager will call the customer.

Before applications are sent to the utility, the HDMC payment plan manager reviews the applications. If she finds some error, she may identify an adjustment before the application is sent to the utility, and she will notify the customer.

Part of the purpose of the Arrearage Reduction component is to build a closer relationship with the customer so that the customer sees the utility and the program as an ally, rather than as an adversary. There is a direct effort to reach out to customers to keep them connected. Connected customers are more likely to pay their bills. This is the whole idea of having an arrearage department at HDMC.

Customers do not usually have questions about the plan when HDMC's representative calls, because the technician already explained the plan. The purpose of the call is to refresh and confirm what the technician informed the customer.

The only thing that customers sometimes have had difficulty with is identifying the information on the bill as opposed what is on the plan. It is very difficult for the utilities to add a line to the bill, but the customer bill does have the arrearage payment amount.

Customers have been skeptical that the utility will really forgive their debt, but HDMC staff assure the customers that the utility is serious about helping the customer to get rid of the arrearage. HDMC staff tell the customer that they communicate with utility, and that the customer will see the credit on the bill.

Skepticism about the program is the single largest barrier. Because the Arrearage Reduction component is not advertised, the customers don't see anything about it. They see Comfort Partners but not Arrearage Reduction.

The biggest reason that customers refuse to participate in the Arrearage Reduction component is that they don't believe that the program is real. When the HDMC representative explains everything, customers usually agree to sign up for the payment plan. They are not aware of any other reasons for customers refusing to participate.

The HDMC payment plan manager will call customers if they refuse to sign up for the plan with the technician in the field. Additionally, technicians call the HDMC payment plan manager from the office sometimes, and she will get on the phone with customer to explain the program. Most of the time she can turn the customer around.

Utility Enrollment

There is a utility rejection rate of about two percent of the arrearage applications. The main reason that customers are denied is that they no longer have an arrearage. This may be due to finding a payment or receiving other credits. The customer may already have applied for another assistance program before HDMC went to the home.

Very rarely, a customer will be denied because of his/her payment history. These customers have already gone through other plans with the utility and the utility knows the customer by name and does not trust the customer.

The same day that the utility calls the HDMC representative, she calls the customers and lets them know that they have been accepted, and whether the payment level is different from what was initially calculated.

Follow-up

HDMC provides follow-up for NJ Natural Gas, Conectiv, South Jersey Gas, and Elizabethtown Gas. In certain cases, they also provide follow-up for PSE&G.

The utility will contact the HDMC payment plan manager when the customer has missed a payment. The HDMC manager contacts the customer by telephone. If she can't reach the customer, she will leave a message and send a letter that same day. She will continue calling the customer until she reaches the customer.

When the HDMC payment plan manager talks to the customer, she tries to work with customer and see when the customer can make the payment. The information provided to the customer varies depending on what the customer's situation is and the utilities' policies. The HDMC manager will find out what the customer's situation is and try to convince the customer to get back on track. She lets the customer know that he/she can face shutoff if the payment is not made.

The customer will usually give a date when the payment can be made. If it is the beginning of the week, the customer will usually say that he/she can make the payment by the end of the week. After the HDMC payment plan manager obtains a commitment from the customer as to when the customer can make a payment, she calls the utility. Usually the utility will accept the late payment. HDMC negotiates between the customer and the utility.

The HDMC manager informs the customer that the utility will look for the payment. She tells the customer that if payments will be late, they need to notify her ahead of time. They contact the HDMC manager and let her know the payment will be late and she calls the utility and lets the utility know. The utilities have been flexible.

In addition to the other services, HDMC manages the arrearage funds for Conectiv as a separate trust account. HDMC handles funding and payment of the credit. Each month the customers make their payments, HDMC sends a check for Conectiv's share of the arrearage payments to Conectiv. Because HDMC has information on Conectiv

customer payments, HDMC also sends a letter each month to remind the customers that a payment is about to come due.

Data Management

There is an Arrearage Reduction program code in HDMC's main database system that is updated for all utilities' payment plan participants except JCP&L's. This database also contains information on whether customers were approved or denied and keeps track of missed payments and customer contact.

For Conectiv, there is an interactive database that is sent back and forth between HDMC and Conectiv. This database is used for HDMC to update credit payments and for Conectiv to update when customers make payments.

III. Evaluation Activities

A statewide evaluation of the Comfort Partners Program is a goal in the program that was approved by the BPU in its Decision and Order of August 15, 2001. The key objective of the evaluation is to determine how well program goals are being met and to recommend program refinements that will allow for improved attainment of program goals.

The Working Group proposed Process, Energy Impact, and Affordability Evaluations in order to meet the evaluation objectives.

The Process Evaluation assessed the program's design and delivery, and the usefulness and quality of services. It provides context for the interpretation of the Energy Impact and Affordability findings. Five tasks are included in the Process Evaluation to meet these objectives.

Task 1 – Core Program Operations and Costs: Due to the participation of seven utilities, two implementation contractors, and two quality control inspectors, the Comfort Partners Program is administratively complex. Effective and efficient procedures for program operations are crucial to program success. The purpose of this task was to develop a detailed understanding of how the program is designed to operate, to assess whether it is operating according to the prescribed guidelines, to identify organizational barriers to program effectiveness, and to capture information on program costs. There were five activities included in this task:

- Activity 1: Interviews and Document Review
- Activity 2: On-Site Observations
- Activity 3: Database Analysis
- Activity 4: Client Case Studies
- Activity 5: Measurement of Program Costs

Task 2 – Program Delivery Staff Training, Performance, and Feedback: Program delivery staff are an integral part of the Comfort Partners Program. In order for the program to achieve its goals, program delivery staff must have sufficient skills and experience, must understand program goals and design, and must be able to effectively implement program protocols. The purpose of this task was to document the service delivery staff training and certification procedures, and to understand how the performance of individual crew members is tracked and enhanced. There were two activities included in this task:

- Activity 1: Interviews and Document Review
- Activity 2: On-Site Observations

Task 3 – Education Program Effectiveness: Energy education is an important component of the program. In order for education to be effective, educators must understand where gaps in client knowledge exist and be able to impart knowledge that will have a lasting impact on the client. The purpose of this task was to develop an in-depth understanding of the client education

protocols, to assess whether the protocols are being implemented consistently, to develop an understanding of the key education concepts and behavioral objectives, to identify barriers to the effectiveness of the client education, to assess the extent to which the program has affected client knowledge and behavior, and to assess persistence of knowledge, behaviors, and measures. There were five activities included in this task:

- Activity 1: Baseline Assessment
- Activity 2: Interviews and Document Review
- Activity 3: On-Site Observations
- Activity 4: Client Quantitative Interviews
- Activity 5: Database Analysis

Task 4 – Arrearage Program Operations and Costs: The Arrearage Reduction program aims to improve energy affordability by providing clients with an opportunity to eliminate past due balances. The purpose of this task was to develop a detailed understanding of how the individual utility arrearage reduction programs are designed to operate, to assess whether they are operating according to the prescribed guidelines, to identify organizational barriers to program effectiveness, to capture information on program costs, and to assess participant understanding of responsibilities. There were four activities included in this task:

- Activity 1: Interviews and Document Review
- Activity 2: On-Site Observations
- Activity 3: Client Quantitative Interviews
- Activity 4: Measurement of Program Costs

Task 5 – Process Evaluation Reports: The Process Evaluation studies all aspects of the program. Each activity has an associated deliverable, but it is important to draw together all of the information in a single analysis. The purpose of this task was to report on all Process Evaluation findings and draw essential conclusions regarding suggested program improvements. There were two activities included in this task:

- Activity 1: Draft Process Evaluation Report
- Activity 2: Final Process Evaluation Report

A. Core Program Operations and Costs

The purpose of this task was to develop a detailed understanding of how the program is designed to operate, to assess whether it is operating according to the prescribed guidelines, to identify organizational barriers to program effectiveness, and to capture information on program costs.

The key areas of analysis were:

- Administrative – goal setting, contracting, oversight, and conflict resolution
- Program Intake – outreach, targeting, intake, and participation rates

- Program Delivery – obtaining clients’ profiles, job scheduling, contractor coordination, information sharing, problem resolution, and quality control
- Client Service – client feedback and problem resolution

There were five activities included in this task:

- Activity 1: Interviews and Document Review
- Activity 2: On-Site Observation
- Activity 3: Database Analysis
- Activity 4: Client Case Studies
- Activity 5: Measurement of Program Costs

1. Interviews and Document Review

In this task, we conducted in-depth telephone interviews with the key managers at the participating utilities, the program delivery contractors and subcontractors, and other stakeholders. The purpose of these interviews was to obtain information on program background and goals, administrative procedures, and program experiences to date. Discussions focused on each manager’s understanding of the responsibilities of their organization and on their understanding of the responsibilities of other organizations. We also obtained key program documents to be reviewed.

We conducted interviews with managers at seven utilities, managers at four program delivery contractors and subcontractors, and other program stakeholders.

Complete sets of interview questions for utility managers, service delivery contractors, and quality control contractors, as well as a list of all interviews conducted are included in the appendices.

2. On-Site Observation

On-site observation of key program activities was conducted in order to analyze program implementation. These observations provided important information on how well program operations conformed to program design. These insights assisted us in our recommendations for program refinement.

We conducted observations of a Working Group meeting, a contractor planning meeting, program recruitment and scheduling, service delivery, and third party quality control.

3. Database Analysis

We developed program performance measures using the program database. The purpose of these analyses was to understand how well the program is meeting its participation

goals, the types of households served by the programs, the incidence of delivery of various measures, and the costs of these measures.

4. Client Case Studies

We conducted client case studies in order to document actual customer experiences in the program. These case studies provided early feedback on client motivation, understanding, and satisfaction with the program. These interviews were qualitative in nature, and a small sample of 25 households was interviewed.

We began with a purposive sample of customers with different circumstances (e.g., high user/low user, single family home/other housing types, electric heater/gas heater, owner/renter) and tracked the services that the client received. We then conduct in-depth follow-up interviews with clients to document their experiences in the program.

A set of the interview questions is included in the appendices.

5. Measurement of Program Costs

In this activity, we documented program costs. These costs will be provided to Michael Blasnik and Associates for use in the cost/benefit analysis.

Materials were obtained during interviews with utilities. We will conduct follow-up interviews with financial staff at each of the seven utilities when necessary, and monitor service delivery costs through the tracking database and/or invoicing system.

B. Program Delivery Staff Training, Performance, and Feedback

The purpose of this task was to document the service delivery staff training and certification procedures, and to understand how the performance of individual crew members is tracked and enhanced.

The key areas of analysis are:

- **Comprehensiveness** – Does the training system furnish staff with the basic information required to assess the needs of the housing unit and households, complete the required energy services and/or energy education, and communicate with other service providers?
- **Mentoring** – Is there appropriate supervision and guidance during a staff member’s “apprenticeship?”
- **Support** – Do field staff have technical resources to help them address problems that are beyond their knowledge base?
- **Feedback** – Do field staff receive feedback on the quality of the jobs that they complete? Do they receive retraining when it is warranted?

There were two activities included in this task:

- Activity 1: Interviews and Document Review
- Activity 2: On-Site Observation

1. Interviews and Document Review

In-depth telephone interviews were conducted with field staff trainers and field staff managers. In person interviews were conducted with a small sample of experienced and recently trained staff at each program delivery contractor. Discussions focused on goals of classroom training, nature of follow-up training activities, and system for on-going feedback on field staff performance. We also reviewed relevant training and feedback documents.

We conducted interviews with four program delivery contractors and subcontractors,. We conducted a focus group with recently trained staff.

Protocols for the interviews and focus groups are included in the appendices.

2. On-Site Observation

We conducted on-site observation of a training session and of other quality enhancement activities. These observations provided information on how training procedures are implemented and how staff knowledge and performance are assessed.

C. Education Program Effectiveness

The purpose of this task was to develop an in-depth understanding of the client education protocol, to assess whether the protocol is being implemented consistently, to develop an understanding of the key education concepts and behavioral objectives, to identify barriers to the effectiveness of the client education, to assess the extent to which the program has affected client knowledge and behavior, and to assess persistence of knowledge, behaviors, and measures.

The key areas of analysis were:

- Assessment – Does the education protocol allow the educator to develop an understanding of the client’s education needs and tailor the education session to those needs?
- Communication – Do field staff have technical knowledge and the teaching skills to communicate the most valuable information to the client?
- Motivation – Does it appear that the educator is motivating the client to learn energy management skills and to take actions?
- Impact and Persistence – Does the household retain the information furnished during the education session and continue to take actions over the longer term?

There were five activities included in this task:

- Activity 1: Baseline Assessment
- Activity 2: Interviews and Document Review
- Activity 3: On-Site Observation
- Activity 4: Client Quantitative Interviews
- Activity 5: Database Analysis

1. Baseline Assessment

In order to measure the impact of the Comfort Partners Program on the lives of the low-income participants, it is important to develop a picture of the clients at the time of program intake. By measuring baseline knowledge, behaviors, and comfort, we can best measure the impact of the programs on these client attributes. In order to cost-effectively obtain this information, we proposed to develop a questionnaire that would be implemented at the time of delivery of education services as part of the education protocols. This survey would have an additional benefit beyond providing evaluation data on baseline knowledge and behavior. Not only would this questionnaire help to develop baseline information on customer attitudes, knowledge, behavior, comfort, and health and safety practices, it would also guide the educator in the areas in which the customer needed the most information. By requiring the educator to first ask the customer about energy knowledge and behavior, the educator may more readily focus the education session on the areas in which the customer needs the most instruction.

The baseline assessment questionnaire was developed early in the evaluation and submitted to working group members for comments. While it was hoped that this measurement would be included in the education protocols and the data included in the contractor database, the education protocols had already been developed. Additionally, the contractors already have a large burden for collecting information while on site and for data entry. The possibility of entering the data for a subset of 350 clients who were included in the education interviews was discussed.

The assessment form is currently being discussed and modified. A copy of the current version of the questionnaire is included in the appendices.

2. Interviews and Document Review

In-depth telephone interviews were conducted with education program designers and a sample of experienced field staff educators for each of the program delivery contractors. The purpose of the discussions was to document the goals of the education session, to discuss motivational and teaching strategies, and to explore how educators adapt to different teaching situations. We also reviewed relevant documents.

We interviewed designers of the education program, education training staff at the two program delivery contractors, and experienced educators at each of the program delivery contractors.

3. On-Site Observation

We conducted on-site observation of education sessions with clients and debriefed clients regarding the specific achievements of the education session. The debriefings occurred via telephone shortly after the education session in order to assess the short-term effectiveness of the protocols and the trainer.

We conducted 7 days of direct observation in the field. This allowed for observation of the contractors work for each utility.

A set of observation procedures is included in the appendices.

4. Client Quantitative Interviews

We surveyed clients to document specific knowledge obtained through the education session, assessed client follow-up with program commitments, and measured persistence of installed measures. We conducted interviews with 50 customers for this report, and will conduct interviews with an additional 300 customers.

A copy of the customer survey is included in the appendices.

5. Database Analysis

We developed performance measures on client education, including certification of key concepts and assessment of customer action plan. We measured changes in energy knowledge and behavior, unsafe energy practices, and health and safety.

We developed statistics from the program delivery database and from quantitative survey data. Analysis of the quantitative survey data allowed us to measure the change in energy knowledge and comfort level after receiving energy services and energy education. Analysis of these data also allowed us to address the persistence of installed energy measures.

D. Arrearage Program Operations and Costs

The purpose of this task was to develop a detailed understanding of how the individual utility arrearage reduction programs are designed to operate, to assess whether they are operating according to the prescribed guidelines, to identify organizational barriers to program effectiveness, to capture information on program costs, and to assess participant views on affordability.

The key areas of analysis were:

- Arrearage Reduction Program Operations – Are the program intake procedures documented, efficient, and consistent across all intake sites, and adequately supported?

- Linkage the Collections Department – Is the program effectively linked to collections operations so that customers get a consistent message regarding program responsibilities?
- Monitoring and Follow-up – Do customers get consistent feedback on their payment performance and arrearage reduction?
- Knowledge and Awareness – Do clients understand the parameters of the program and do they know their commitments?

There were four activities included in this task:

- Activity 1: Interviews and Document Review
- Activity 2: On-Site Observations
- Activity 3: Client Quantitative Interviews
- Activity 4: Measurement of Program Costs

1. Interviews and Document Review

In-depth telephone interviews were conducted with arrearage reduction program designers and a sample of program intake and tracking staff. The purpose of the discussions was to document how the arrearage reduction program differs from standard collections procedures, to gain an understanding of the specific program parameters, to discuss motivational and monitoring procedures, and to understand how the program adapts to individual client circumstances.

For each of the seven utility arrearage reduction programs, we interviewed the program manager, at least one staff member responsible for program intake (at utility or program delivery contractor), and at least one staff member responsible for program monitoring. Relevant documents were also reviewed.

Interview questions are included in the appendices.

2. On-Site Observations

We conducted on-site observation of Arrearage Reduction sessions with customers and debriefed customers regarding the specific benefits and responsibilities of the program. The purpose of this activity was to determine how program operations are actually implemented, what problems are encountered in day-to-day operation, and what systems appear to be working effectively. The client debriefing allowed us to determine how well the client understood instructions regarding the rules and benefits of the program, and the client's expectations for meeting payment agreements.

We conducted seven days of observation of arrearage reduction program agreement development. This allowed for observation of intake for each utility's program.

3. Client Quantitative Interviews

We conducted a survey with clients to document specific knowledge of the arrearage reduction program requirements, the program challenges, and the program barriers. The survey included a projection by the customer regarding probability of program success. We will survey 350 clients regarding the arrearage reduction program. For this report, we have surveyed 25 customers, due to the fact that we planned to exclude customers enrolled before January 1, 2002, and that there was a low number of customers enrolled in the program in the first half of 2002.

4. Measurement of Costs

In this activity, we documented arrearage reduction program costs. These data will be provided to Michael Blasnik and Associates for inclusion in the cost/benefit analysis as part of the Energy Impact Evaluation.

Materials were obtained during interviews with utilities. We then conduct follow-up interviews with financial staff at each of the seven utilities when necessary. Reductions in service termination and collections are estimated by analyzing the tracking database.

E. Process Evaluation Reports

The Process Evaluation studied all aspects of the program. Each activity has an associated deliverable, but is important to draw together all of the information in a single analysis. The purpose of this task was to report on all Process Evaluation findings and draw essential conclusions regarding suggested program improvements. There were two activities included in this task:

- Activity 1: Draft Process Evaluation Report
- Activity 2: Final Process Evaluation Report

1. Draft Process Evaluation Report

This document is the draft process evaluation report summarizing findings from all process evaluation tasks and activities.

2. Final Process Evaluation Report

We will write a final process evaluation report summarizing findings from all process evaluation tasks and activities. This report will incorporate comments from the Working Group on the draft report.

IV. Program Procedures and Implementation

This section of the report provides a description of the goals, design and rationale, evaluation goals, evaluation activities, findings, and recommendations for each aspect of the program. The areas analyzed include program administration; staff training; targeting, recruitment, and outreach; service delivery; quality control; and the Arrearage Reduction component.

A. Program Administration

1. Goals

The goal of administration of the Comfort Partners Program is to efficiently and effectively perform all of the functions necessary in order to successfully implement the program. The program is administered by the Working Group, the utilities, and the service delivery contractors.

2. Design/Rationale

Administrative responsibilities for the Comfort Partners Program are immense. These responsibilities include hiring contractors to provide service delivery, training contractors, providing oversight to contractors, procuring materials, recruiting customers, confirming program eligibility, providing data on targeting customers to the service providers, collecting and maintaining data on service delivery, monitoring program production, keeping track of customers who have been served, and paying contractors. The utilities also are required to report to the BPU on a periodic basis.

The utility managers who are responsible for running the Comfort Partners Program, have this responsibility as one of many. Additionally, many of the utility program managers have not previously administered such a comprehensive and complex low-income usage reduction program prior to Comfort Partners. Therefore, most of the utility managers have chosen to rely on HDMC, their service delivery contractor to provide most of these functions.

JCP&L had been providing a comprehensive usage reduction program prior to the implementation of Comfort Partners. They had their own data system, which they had invested heavily in developing, and used two different service delivery providers. Their system provided them with the information they needed to administer their program and to coordinate data with the two delivery contractors as well as the third party quality control inspector. Therefore, JCP&L is the only utility that chose to provide most of these administrative functions within the utility.

3. Goals of the Evaluation

The two main goals of the evaluation of administrative functions are to determine how utility program administration and delivery contractor administration facilitate efficient and effective service delivery.

a) *Determine the extent to which utility program administration facilitates efficient and effective program delivery*

Utility managers are ultimately responsible for ensuring that all aspects of the program are working effectively and that all necessary actions are being taken. All utilities maintain responsibility for program design and development, providing the service delivery contractors with lists of targeted customers, providing contractors with usage data for recruited customers, monitoring production, and paying service delivery contractors. Additionally, other utilities have maintained responsibilities for several other program functions. The evaluation will determine whether the utilities are effectively performing these functions in order to ensure that program delivery is as efficient and effective as possible.

b) *Determine the extent to which administration by service delivery contractors facilitates efficient and effective program delivery*

Both HDMC and Bill Busters are responsible for the program administration directly related to serving customers, including scheduling service delivery, and reporting on work done in the field. HDMC also serves many other administrative functions for many of the utilities including data tracking and reporting, material procurement and inventory, and customer outreach and intake. The evaluation will determine whether the contractors are effectively performing these functions in order to ensure that program delivery is as efficient and effective as possible.

4. Evaluation Activities

Several evaluation activities have provided information on program administration. These activities included interviews with utility managers and staff, interviews with service delivery contractor management and staff, review of data collection forms, and observation of program processes, both at JCP&L and HDMC.

a) *Interviews with utility managers and staff*

Interviews with utility managers and staff have provided information on the administrative functions that utilities have taken responsibility for, the challenges in providing these functions, and their views on the effectiveness and efficiency of services provided by the contractors.

b) Interviews with service delivery contractor management and staff

Interviews with service delivery contractor management have provided information on the administrative functions that the contractor has taken responsibility for, and the rationale for how the processes relating to these functions were designed. Interviews with staff at HDMC has provided detailed information on how the procedures have been implemented.

c) Review of data collection forms, HDMC reports, and WARM2 reports

Review of data collection forms, HDMC reports, and WARM2 reports has provided information on the data that the utilities have available to them when monitoring program performance.

d) Observation of program processes

Observations of program processes at HDMC and JCP&L have provided information on how administrative functions are actually implemented, and where and how implementation of these procedures differs from described and documented procedures.

5. Evaluation Findings

The main findings relating to the joint program were that the joint program has created positive benefits for the utilities and their customers, but that the joint program has also created challenges for program administration. There have been significant improvements in the Comfort Partners Program over the E-TEAM Partners Program. Uncertainty in the future of program administration has impeded achievement of program goals.

There are two main approaches to program administration: most of the utilities have contracted with HDMC to provide the majority of the administrative functions, and JCP&L has maintained most of these administrative functions within the utility. Other key findings relate to utility oversight of contractors, contractor invoicing, the lack of integration with other low-income programs, and the lack of qualified contractors in the state.

a) The joint program has created positive benefits for the utilities and their customers

Many of the parties involved in the Comfort Partners Program, including the utility and contractor managers who are responsible for implementing and managing the program, stated that there were many benefits to the joint utility low-income program. From a program design standpoint, the ability to share ideas and choose aspects of prior programs that work best has been extremely helpful. One utility manager noted that the sharing of information between competing utilities that has

occurred as part of the collaborative had been unheard of prior to the joint management of the Comfort Partners Program.

There are also many efficiencies that result from the joint program including:

- Utilities can share printing and graphic design costs.
- Utilities receive cost savings through bulk purchasing.
- Utilities have improved quality control, due to the coordination.
- Marketing for the joint program has been improved.

There are many benefits for the customer as well, including:

- Increased convenience for the customer due to fewer visits to the home and fewer contractors.
- Increased clarity for the customer, as to which program is providing services and which utility needs to be called. There is one program and one program name throughout the state.
- Increased equity for different utility customers, due to the uniformity of the program. One of the utilities noted that they used to receive calls from customers asking why other utilities were offering programs that they did not offer.
- Increased incentive to participate in the program, due to the fact that the program serves both gas and electric usage reduction needs. One gas utility manager stated that prior to the joint program many customers would not participate in the program during the summer months, because they were not focused on heating needs.

Many of these opinions about the benefits of the joint program are substantiated by the progress that the utilities have made in successfully implementing the joint program within 60 days of the BPU's order, and in continuing to improve and refine program design and implementation.

b) Many challenges were faced in the implementation of the Comfort Partners Program

Many challenges were faced in the implementation of the Comfort Partners Program. Some of these challenges were due to the need for the utilities to collaborate on the program and come to difficult decisions including how to divide costs for shared program services. Some of the Working Group members stated that it was a challenge to make decisions early in the program, due to the number of program partners. Another utility manager stated that some of the utilities had less experience with these types of programs and had not provided sufficient budgets for the services.

One of the more complicated challenges that results from the joint administration of the program is the challenge of targeting customers for service delivery. In order to achieve the greatest savings, it has been shown that usage reduction programs should target high use customers. However, customers who have high gas use will not necessarily have high electric use, and vice versa. Therefore, mean reductions in customer energy usage achieved for each individual utility may be lower than in the case where each utility could individually target the customers that they served.

c) Improvements over E-TEAM Partners Program

APPRISE has noted significant improvements in the Comfort Partners Program over PSE&G's previous E-TEAM Partners Program. These include improvements in:

- Program specification and documentation
- Tools that allow field staff to select and prioritize measures
- Communication between service delivery staff and customers
- Communication among auditors, measure crews, and insulation crews
- Allocation of responsibility between insulation crews and measure crews
- Average time to complete service delivery
- Data tracking systems
- Reporting and invoicing systems
- Quality control systems

d) Uncertainty of future program administration

Achievement of program goals has been impacted by the uncertainty of how the program will be administered in the future. The Collaborative has been reluctant to make long-term commitments with current contractors and to hire additional contractors to help meet program production goals. The installation contractors have been reluctant to purchase additional trucks and hire new staff. The uncertainty is also impeding the Collaborative's implementation of a statewide tracking system and their long-term planning process, including working with State Weatherization Assistance Program providers.

e) HDMC has developed comprehensive systems for managing many administrative functions for the utilities

Many of the utilities have little experience with comprehensive usage reduction programs, and have only a couple of staff members available to manage the complex program. As a result, most of the utilities have contracted with HDMC to provide administration of many program services, from customer targeting, outreach, and recruitment, through data tracking. The ability of HDMC to provide these comprehensive services has been instrumental to the utilities' ability to implement the complex program in a short time frame.

HDMC has implemented systematic procedures to obtain customer lists and data from the utilities, market the program to these customers, enroll customers in the program, provide customers with all program services, and track data associated with the program.

The potential advantages of HDMC management of these administrative processes for many of the utilities are economies of scale, consistency of procedures, and a shorter time elapsed between initial program marketing and service delivery. However, the effectiveness and efficiency of these procedures will be analyzed in a later report when we study the costs of service delivery and the impact of program services.

f) JCP&L has maintained most of the responsibilities for program administration within their utility

JCP&L is the one utility that has decided to maintain responsibility for most of the program's administrative functions, including marketing, enrollment, and customer tracking.

JCP&L's procedures systematically market the program to targeted customers, enroll customers in the program, provide data on enrolled customers to the contractors through direct access to their WARM2 system, and track data associated with the program. The use of JCP&L's independent tracking system requires duplication in data entry because HDMC must enter data both into their own system for service delivery and into the WARM2 system for JCP&L reporting.

Potential advantages of JCP&L's system include immediate access to program data and reports, since they house their own data tracking system, greater understanding of the program, utility contact with customers, and direct oversight of contractor production. However, the effectiveness and efficiency of these procedures will be analyzed in a later report when we study the costs of service delivery and the impact of program services.

g) Utility oversight

JCP&L has implemented systematic procedures for reviewing contractor performance. Each year they conduct a contractor performance review, with supplemental meetings if they are experiencing problems with the contractor. JCP&L also analyzes the customer feedback surveys that they receive. The other utilities review HDMC's detailed invoices and production reports.

h) Contractor Invoicing and Payment

Most of the utilities have been very satisfied with contractor invoices. Most managers have noted that HDMC's invoices are very complete and provide all

needed information. However there have been a few concerns regarding HDMC invoices:

- One utility requested to see the electric and gas measure allowances on the invoice, as well as detail on why added expenses such as carpentry and plumbing were needed.
- Another utility stated that additional notes are needed on the invoice to determine more specifically the work that was done.
- One utility has found that half of the HDMC jobs failed in the previous year were due to invoicing errors. The utility has recently seen improvement in this area.
- There have been significant delays in HDMC's updating JCP&L's WARM2 system with their invoicing information. For example, jobs that were completed in January were not reported until June. This is problematic, as third party inspections are then delayed and problems are not caught until they have been repeated many times.

There have been no problems noted with the invoices from Bill Busters, using JCP&L's WARM2 system.

i) There is a lack of coordination with other low-income programs

There is a lack of coordination of the Comfort Partners Program with other low-income usage reduction programs in the state, such as the Weatherization Assistance Program.

However, there has been some movement toward coordination. Some examples are as follows:

- Members of the Working Group and HDMC managers have participated in a statewide WAP conference, and have begun the process of coordinating measures with the WAP program.
- HDMC has had recent discussions with the New Jersey Community Action Association about forging a formal working agreement.
- There are referrals between the Community Action Agencies and the Comfort Partners Program, in both directions.

j) There is an apparent lack of capacity within existing contractors

Analysis of production for the first half of 2002 showed that production goals are not being met. It appears that service delivery providers who have been contracted with to deliver Comfort Partners services do not currently have the capacity to meet production goals.

k) There is a lack of qualified contractors in the state

There appears to be a lack of qualified service delivery contractors in New Jersey to effectively provide program services to the number of customers required under the Comfort Partners Program. One of the utilities went out for bid a few years ago and found that there were only three contractors qualified to provide the comprehensive program services.

6. Recommendations

The three main recommendations for administration of the Comfort Partners Program are to develop a joint review of HDMC's work, to develop a service delivery infrastructure, and to develop coordination with other low-income programs.

a) The Working Group should conduct a joint review of HDMC

JCP&L has a systematic procedure in place to assess and provide feedback on contractor performance. Given the fact that HDMC is currently providing services for all of the utilities, the Working Group should develop procedures to systematically provide feedback to HDMC on a periodic basis regarding all program performance issues.

b) The Working Group should work to develop the service delivery infrastructure

An analysis of program production, in the Service Delivery section, shows that the current program contractors are not meeting production goals. Utilities have found during their procurement processes that there are only a few qualified contractors in the state. Utilities should work to further develop the service delivery infrastructure in the state. One method would be to provide a service delivery contractor with a long-term contract, subject to acceptable performance, and encourage their investment in increased capacity. Another method is through long-term support of WAP agencies. A third potential method for increasing capacity is to hire other small independent contractors to deliver program services. Their services could be managed either by HDMC, or by the individual utilities.

c) The contractors should increase coordination of service delivery with other low-income programs

Members of the Working Group and HDMC managers have worked towards coordinating the Comfort Partners Program with other low-income programs. However, progress in this area has been limited. We recommend that contractors and the Working Group increase efforts to coordinate delivery of Comfort Partners services with the WAP program or with housing renewal programs in order to increase efficiency of delivery.

B. Staff Training

The Working Group provided two training sessions to program contractors: an initial training that covered program procedures, and a second training that covered energy education. Additionally, contractors provide ongoing training to their staff in order to increase the effectiveness of service delivery.

1. Goals

The goal of the training is to provide staff with the information necessary to efficiently and effectively implement the Comfort Partners Program according to prescribed program procedures.

2. Design/Rationale

The BPU mandated that the Comfort Partners Program begin implementation in May 2001. In order to meet this deadline, program training was provided to utility and contractor management at this time. Training was provided to contractor staff in July 2001, after the new Comfort Partners procedures had been tested and refined. All of the utilities had previous energy education programs, and the Working Group determined that the programs were fairly similar. It was decided that the contractors would continue with the utilities' previous education procedures until a new energy education notebook was developed in the first quarter of 2002. Education training was then held in the Spring of 2002, after the education materials were developed.

The contractors are also expected to provide training to their staff, in order to ensure that all staff have the necessary knowledge of program procedures and technical and communication skills to effectively delivery services. Bill Busters is small enough that the company owner is with the crews in the field every day and provides on-site training. HDMC has one technical manager who is primarily responsible for training, and three field supervisors who are in the field with the crews every day to observe their work and provide training and technical assistance.

3. Goals of the Evaluation

There were several goals for the evaluation of training. These goals included obtaining a more complete understanding of program procedures, meeting field staff who would be providing program services, understanding the level of training that providers had received, and providing feedback on the training to improve future trainings and to help understand what additional training is needed.

a) Understand program procedures

The Comfort Partners Program is complex, involving both baseload and shell energy measures, and comprehensive energy education. Review of program

training materials and attendance at the education training provided a more complete understanding of the procedures that were to be followed by the auditors.

b) Meet field staff

The field staff delivering the program services are critically important for the success of the program, in both finding the most cost-effective energy measures for the home, and in achieving behavior changes that lead to reduction in energy use. Attitudes and perceptions of the field staff impact program implementation. Attendance at the education training allowed for the opportunity to interact with the field staff, and hear their views and concerns about the program. This provided for an understanding of the knowledge, experience, and attitudes of the staff members who work directly with the customers. The reaction of these staff members to the education training, as well as the information they provided to the trainers and the questions that they asked furnished information about the varying levels of skills and experience of the different staff members.

c) Understanding of the training that providers have received

When evaluating the initial service delivery in the Comfort Partners Program, it was important to have an understanding of the knowledge the auditors had about program procedures and how they had been instructed to provide services. If program procedures are not being followed, it is important to know the extent to which deviations resulted from a deficiency in the training that was provided, or to a failure to implement program procedures as described.

d) Provide feedback on training

Ongoing training is an important aspect of such a complex and comprehensive program as Comfort Partners. The Working Group will need to make decisions regarding what additional training is cost-effective and what additional training is warranted. Feedback on the training, along with feedback on service delivery, will provide guidance on what additional training should be provided.

4. Evaluation Activities

Training evaluation activities included review of training materials, attending the education training, and interviews with utility managers, contractor managers, and contractor field supervisors.

a) Review of training materials

The Comfort Partners Program training sessions were held in May and July 2001, prior to the time that APPRISE was hired to conduct the Comfort Partners evaluation. Therefore, review of training materials for the training provided information on the content of the training. These materials included the training agenda and presentation materials.

b) Attend education training

A APPRISE staff member attended one of the education training sessions held on April 30 and May 1, 2002. A written set of observations and recommendations was developed shortly after attending the training session.

c) Manager and staff interviews

Interviews with utility managers, contractor managers, and contractor field supervisors provided information on the parties' opinions on the training sessions, including the information covered and the format for the training. These interviews also provided information on what additional training these individuals felt was necessary.

5. Evaluation Findings

The main findings relating to Comfort Partners training were that program training will be assessed through field observation and customer surveys, education training was well received, education training time was too limited, and HDMC contractor training has focused on changing the service delivery mechanism.

a) Assessment of Comfort Partners Program training through other evaluation activities

APPRISE was hired to provide an evaluation of the Comfort Partners Program after the program training sessions were held in May and July 2001. Therefore, our only review of the training was from interviewing recipients of the program training and reviewing training materials. Recommendations for continued program training are based on results of observing field work, and interviewing program recipients.

b) Program training was inadequate

Field staff were provided with two days of program training prior to implementing the Comfort Partners Program. They were provided with some additional HDMC training. Results from on-site observation show that program procedures are not consistently followed. Quality control results show that the same mistakes are made repeatedly, following extensive feedback from the inspectors. These results point to the need for additional and ongoing program training.

c) Lack of initial education training

The Working Group could not implement the new education procedures and the education training given their time frame for starting joint service delivery. They therefore delayed the education training until April 2002. The initial lack of education training has caused barriers to consistent education delivery in the first year of program implementation.

d) Education training was well received

The method of education training that was utilized, allowing and encouraging participation by all attendees, seemed to be well received by the trainees. Observation of the training and discussion with participants provided the assessment that attendees were enthusiastic about the training, about the information being presented, and about having the opportunity to participate and share ideas. Some participants expressed the fact that they felt self-conscious being video taped and that the tape did not accurately portray how they interacted with the client. However, others noted that the taping was a very helpful process, and reviewed the tape many times to obtain a better idea of the behaviors they used when interacting with the customers.

e) Education training time was too limited

The education process in the New Jersey Comfort Partners Program is difficult for many reasons. Adults are difficult to educate. They may be used to doing things in particular ways and may be resistant to being told to change their behavior. Therefore, they must be motivated to change their behavior. Providing such motivation requires effective communication and influencing skills. These skills were repeatedly stressed in the education training.

Additionally, program procedures are lengthy and complex. There are many steps to the education process to understand and remember. There are many different materials and forms that are used as part of the education process. The education training covered some of these issues.

Given the short length of time available for the training relative to the amount of information to be covered, it was challenging to adequately address all of the areas needed. The auditors expressed the fact that they wanted to learn more about how to effectively communicate with the customer, more about the technical information needed to educate the customers, and more about the program procedures. An additional area of training that may be needed is to convince auditors that energy education really can change customer behaviors.

The education training provided auditors with the communication skills needed to effectively apply education in the audit. However, time was not sufficient to provide comprehensive technical information on education areas, to provide comprehensive information on program procedures, or to address the issue of the potential effectiveness of energy education.

f) Additional HDMC contractor training has focused on the new service delivery approach

Following implementation of the Comfort Partners Program, HDMC recognized that new service delivery procedures needed to be developed to better provide program services. HDMC altered the system for delivering program services and

concentrated on training their staff in the new service delivery mechanism. APPRISE was not given the opportunity to observe HDMC training.

6. Recommendations

The recommendations for training include that an additional formal training focused on the workflow of the audit and the education process should be held, and that ongoing regular opportunities for auditors to meet and discuss technical, education, and programmatic issues should be facilitated.

a) An additional formal training focusing on the workflow of the audit and the education process should be held.

In order to consistently and systematically apply the program procedures for educating clients and have the technical knowledge to do so, the auditors need an additional formal training. This training should emphasize the workflow of the audit and the education procedures.

Such training might include detailed review of the following:

- The audit/education workflow
- The education notebook and how it should be used
- The education cards and how they should be used
- What information the auditor should provide as an introduction to the program
- How the customer's utility bills should be reviewed
- How potential savings from changes in energy use should be calculated
- How the partnership agreement should be described
- How the action form should be discussed and completed

The Comfort Partners education training provided core communication and energy information that auditors needed to provide education in the context of the New Jersey Comfort Partners Program. More specific review and exercises around the areas listed above may help auditors effectively use the program procedures that are believed to influence customer energy use.

b) Ongoing regular opportunities for auditors to meet and discuss technical, education, and programmatic issues should be continued.

Once the auditors understand the aspects of the Comfort Partners education procedures, they will be able to modify the presentation of the material to a way that best fits their own style. It is expected that this is a process that will evolve over time. Training should be an ongoing process where educators meet on a regular basis to discuss technical issues, education methods that have been working well with the customers, and how program procedures should be revised. As auditors gain experience and skill, and with this opportunity to share learnings, the auditors will increase each other's knowledge, and improve the delivery of energy

education. Ongoing opportunities for sharing experiences will help the education delivery to improve as the program matures. HDMC has noted that such a process is underway.

C. Targeting, Recruitment, and Outreach

In order to delivery the most cost-effective energy services, the program must be targeted to high use customers. Recruitment of eligible program participants who have the potential for effective energy reduction requires effective coordination between the utilities and the contractors.

1. Goals

The goal of targeting, recruitment, and outreach is to identify a set of customers who are eligible for program services and whose homes provide opportunities for energy saving measures.

2. Design/Rationale

The participating utilities have worked to target high use customers. High use customers are targeted because these customers have the greatest potential for cost-effective energy savings.

Four main types of different designs are used for targeting, recruitment, and outreach:

- *JCP&L* provides their own targeting and outreach, and provides HDMC with a list of customers who have already been enrolled in the program. Bill Busters and HDMC are only responsible for scheduling these customers for service delivery.
- *NJ Natural Gas* does marketing to their customers and screens interested customers for program eligibility. They provide a list of screened customers to HDMC, but HDMC must still enroll the customers in the program and schedule the customers for service delivery.
- *Conectiv, South Jersey Gas, and Elizabethtown Gas* provide HDMC with lists of customers who are targeted for program services. HDMC is responsible for marketing the program to customers on this list, enrolling the customers in the program, and scheduling service delivery.
- *PSE&G* provides HDMC with direct access to their customer system. HDMC accesses the system and downloads a list of LIHEAP participants above a gas usage threshold.

These systems were designed to work within each utility's infrastructure and to target high use customers who have participated in other low-income programs that make them likely to be eligible for Comfort Partners Program services.

3. Goals of the Evaluation

The goals of the evaluation of targeting, recruitment, and outreach are to determine how well the program is targeted to high use customers, to understand the barriers to targeting high use customers, and to determine the effectiveness and efficiency of recruitment and outreach procedures.

a) Determine how well the program is targeted to high use or payment troubled customers

The Working Group has goals for achieving savings for customers participating in the Comfort Partners Program. The evaluation will determine how well the program is targeted to high use customers, both through the review of the procedures used to target these customers, and through analysis of the energy usage of customers served by the program.

b) Understand the barriers to targeting high use and payment troubled customers

The Comfort Partners Program has high production goals, and many factors that complicate targeting and recruitment, including joint delivery. This evaluation will assess the barriers to targeting high use customers.

c) Determine the effectiveness and efficiency of recruitment and outreach procedures

Utilities and contractors have designed systems to bring customers into the Comfort Partners Program as efficiently as possible. The evaluation will assess the procedures that are being used for effectiveness and efficiency.

4. Evaluation Activities

Evaluation activities that provided information on targeting, recruitment, and outreach included interviews with utility managers, HDMC and Bill Busters managers, HDMC staff, and JCP&L staff. The evaluation also included HDMC office observation, JCP&L office observation, and analysis of data for served customers.

a) Interviews with utility managers

Interviews were conducted with all seven utility program managers to obtain an understanding of their role in targeting, recruitment, and outreach and to understand how they have facilitated HDMC's role in this process.

b) Interviews with HDMC

Interviews were conducted with HDMC managers to understand the services that they provide for the utilities, and how these activities are implemented.

c) Interviews with HDMC office staff

Interviews were conducted with HDMC office staff to obtain a detailed understanding of the procedures used for targeting, recruitment, and outreach, as well as how their data system facilitates these procedures.

d) Interviews with JCP&L staff

Interviews were conducted with JCP&L office staff to obtain a detailed understanding of the procedures used for targeting, recruitment, and outreach, as well as how their data system facilitates these procedures.

e) HDMC office observation

Observation of HDMC office procedures was conducted in order to obtain a better understanding of how targeting, recruitment, and outreach procedures are implemented. This included observation of program marketing and observation of scheduling calls.

f) JCP&L office observation

Observation of JCP&L office procedures was conducted in order to obtain a better understanding of how targeting, recruitment, and outreach procedures are implemented. This included observation of customer service representatives answering calls about the program and review of applications for the program.

g) Data analysis

Participants' energy usage was analyzed to determine whether high use customers are effectively being targeted by the Comfort Partners Program. This included a comparison of joint delivery and one utility jobs.

5. Evaluation Findings

The main evaluation findings in this area are that some utilities are targeting the high use customers, there are some barriers to targeting high use customers, and that development of the partnership is not initiated at the marketing or scheduling call.

a) Targeting high use customers

Customers who have high usage are often those customers with the greatest opportunities for cost-effective energy savings. Therefore, utilities are more likely to reach goals for energy saving if they target high use low-income customers for the Comfort Partners Program. Table IV-1 displays whether and how each utility targets high use customers. Four of the utilities, Conectiv, JCP&L, PSE&G, and South Jersey Gas are currently targeting higher use customers for program services.

Table IV-1
Targeting of High Use Low-Income Customers for Program Services

Utility	Target High Use Customers	Notes
Conectiv	Yes	HDMC targets the higher use customers on the list of targeted customers that Conectiv provided.
Elizabethtown	No	
JCP&L	Yes	JCP&L gives priority to their high use electric only customers.
NJ Natural Gas	No	
PSE&G	Yes	HDMC ranks PSE&G targeted customers by usage and takes those at the top of the ranking. Their threshold for gas usage is 1200 therms.
Rockland	No	
South Jersey Gas	Yes	HDMC targets the higher use customers on the list of targeted customers that South Jersey Gas provided.

Table IV-2 displays the mean electric and gas usage of customers who received Comfort Partners services. On average, served customers had a mean of 7519 kWh and 860 therms. The mean gas usage for PSE&G only jobs was below HDMC's targeted threshold of 1200 therms.

Table IV-2
Mean Electric and Gas Usage
By Utility Combination and Contractor

Electric Utility	Gas Utility	Contractor	Mean Electric Usage (kWh)	Mean Gas Usage (therms)
Conectiv		HDMC	12,584	
Conectiv	NJ Natural Gas	HDMC	9,764	809
Conectiv	South Jersey Gas	HDMC	7962	884
Conectiv	Missing Gas Utility	HDMC	4,509	645
PSE&G		HDMC	8238	
PSE&G	NUI/ETG	HDMC	5647	1118
PSE&G	PSE&G	HDMC	6698	1098
PSE&G	South Jersey Gas	HDMC	6518	699
PSE&G	Missing Gas Utility	HDMC	7286	670
JCP&L		HDMC	11,347	
JCP&L	NJ Natural Gas	HDMC	6651	927
JCP&L	NUI/ETG	HDMC	4631	822
JCP&L	PSE&G	HDMC	7065	860
JCP&L		Bill Busters	NA	
TOTAL			7519	1005

b) Barriers to targeting by usage

While utility managers recognize the benefits of targeting high use customers for the Comfort Partners Program, there are barriers to such targeting. These barriers include the following:

- According to BPU program guidelines, customers who are eligible for the program cannot be denied program services. Customers who are referred to the program by CAP agencies or neighbors or relatives may not have high enough usage to provide for cost-effective energy savings.
- As noted previously, customers who have high gas usage will not necessarily have high electric use, and vice versa. Therefore, joint delivery customers who were targeted for their high usage in one fuel may not have high usage for the other utility.
- JCP&L has been providing usage reduction services to their low income customers for many years and has served a total of 9,700 customers. PSE&G served thousands of customers under the E-TEAM Partners Program. Due to market saturation, it may be difficult to target high use customers. Additionally, many of JCP&L's low-income customers are seniors who are not high users and who are already taking many steps to conserve energy.

c) Initiating the partnership

The Comfort Partners procedures manual states that one of the purposes of the initial contact with the customer, prior to the home visit, is to initiate the partnership. However, HDMC's and JCP&L's description of the process and APPRISE's observation of the marketing and enrollment process used indicates that the partnership development process does not begin prior to the home visit.

According to JCP&L procedures, the following information is presented when customers call for information on the program:

- Joint delivery of services, if applicable
- Refrigerator metering process
- Potential energy-savings improvements
- Energy education will be provided
- Work is free
- High quality work is guaranteed
- All described items may not be installed
- A landlord agreement form is required for renters
- The landlord does not contribute to the cost of services
- The customer is responsible for implementing energy-saving practices covered during the education

During observations of calls, the JCP&L CSR explained the Comfort Partners Program thoroughly, but did not describe the customers' responsibilities. When asked about the omission, the CSR stated that this was done by BBI and HDMC at the time that audit appointments are made.

According to HDMC procedures, the following information is presented during the marketing call:

- The program is sponsored by the utility
- The program will help reduce energy consumption and energy bills
- The program includes a home visit that will provide energy education and review health and safety and comfort issues
- Energy saving measures may be installed

During observations of calls, the HDMC CSR provided a thorough description of the program including potential replacement measures, but did not describe energy education or the responsibilities of the customer.

According to HDMC procedures, the following information is presented during the scheduling call:

- The name of the technician who will visit the home
- The identification carried by the technician
- The time of the appointment
- The length of the appointment
- The need for the technician to access the basement and attic, if applicable

Scheduling calls were not observed.

6. Recommendations

The recommendations for improving targeting, recruitment, outreach, and enrollment are to increase targeting of high use customers and begin the partnership development at the time of program enrollment.

a) Utilities should increase targeting of high use customers

The greatest potential for cost-effective energy savings is found in the homes of high use customers. Currently four of the utilities are targeting high use customers. Efforts to target these customers should be increased in order to achieve goals for energy savings. However, there are several barriers toward such targeting, including coordination of joint delivery jobs, saturation of the market, and the program's mandate to serve any eligible customer. Utilities may not be able to reach customers with as high usage as they would in an individual program, but

they can, however, attempt to target their customers with the highest usage. This can be done through targeted marketing, as currently done by some of the utilities.

b) Intake representatives should begin the partnership development at the time of enrollment

The philosophy of the Comfort Partners Program, as a partnership between the customer, the utility, and the contractors, is not developed during the marketing or enrollment contacts with the customer. The partnership development should begin at this time, with a description of what the contractor will do, and a commitment from the customer to take actions to save energy.

D. Service Delivery

Service delivery consists of providing the customer with effective energy services that reduce electric and gas usage, and comprehensive energy education so that the customer understands the program and recognizes his or her self-interest in reducing energy usage.

1. Goals

The goals for service delivery are to achieve both the production and energy saving impact goals that were submitted to the BPU. In order to achieve these goals, the contractors must serve over 6,000 customers and provide them with effective energy measures and energy education.

2. Design/Rationale

The two service delivery contractors each have their own method for service delivery, based on their staff's skills and their infrastructure.

- *Bill Busters* Bill Busters spends about one half day conducting the first Comfort Partners visit. During this visit, they tend to install only a few items. Bill Busters usually schedules a second visit within days of the audit. All of the work on the home is completed in one to three days, depending on the complexity of the job. Bill Busters does their own insulation work.
- *HDMC* has recently implemented a new method of service delivery where a team leader provides the first diagnostic visit, and then schedules one of two crews while at the customer's home. The crew returns to the home later in the week. The crew providing the measures visit is an HDMC crew if no insulation is required, and is a subcontractor crew if insulation is required.

3. Goals of the Evaluation

There are three main goals for the evaluation of service delivery, to determine how program production compares to plans, to identify barriers to service delivery, and to compare service delivery implementation with program procedures.

a) Analysis of program production

The Comfort Partners Program has high production goals. The evaluation will examine program production statistics through the end of June 2002 in order to determine how well the contractors are meeting production goals for the first half of the year. This analysis will also provide information on the measures that are being installed.

b) Identification of barriers to effective delivery

Looking at program production statistics will provide information on how well the contractors are meeting production goals. However, in order to meet goals for usage reduction, providers will need to identify energy saving opportunities and provide effective education to customers. The evaluation will determine whether there are barriers to effectively serving customers, and make recommendations for how these barriers can be overcome.

c) Comparison of program implementation with program procedures

The Working Group, along with input from advisors and contractors, has identified a set of program procedures that are thought to provide cost-effective service delivery. The evaluation will determine the extent to which these procedures are being followed. In the event that procedures are not being followed, the evaluation will determine whether the procedures should be followed as prescribed, and what actions should be taken to achieve compliance with the procedures. In some cases, it may be determined that there are more beneficial procedures that can be used in addition to or instead of the initially documented procedures.

4. Evaluation Activities

Seven evaluation activities provide information for the evaluation of service delivery. These include direct observation of service delivery, interviews with service delivery contractors, interviews with utility managers, interviews with education program designers, review of documentation of program procedures, interviews with customers, and data analysis.

a) Observation of service delivery

Observation of service delivery allowed for an analysis of how the program procedures were implemented in the field.

b) Interviews with service delivery contractors

Interviews with service delivery contractors provided an understanding of how each contractor implements the program procedures for service delivery, and what they feel are the barriers to service delivery.

c) Interviews with utility managers

Interviews with utility managers provided information on expectations for service delivery.

d) Interviews with education program designers

Interviews with education program designers provided information on the energy education procedures.

e) Review of documentation of program procedures

Review of the Comfort Partners procedures manual, the materials and installation specifications, and the building performance field guide provided information on the procedures for service delivery.

f) Interviews with customers

Interviews with participating customers provided information on their understanding of measures installed, the actions they agreed to take to reduce energy usage, and their satisfaction with program services. Twenty-five case studies and fifty-one quantitative interviews were conducted with participants who received full program treatment in 2002.

g) Data analysis

Analysis of program data provided information on program production and installed measures.

5. Evaluation Findings**a) Production rates**

The Comfort Partners Program has a high production goal, to serve 6,556 customers in 2002. Current production levels, halfway through the program year, suggest that these production goals will not be met. Table IV-3 displays production of jobs beginning in 2002 and completed by June for HDMC and by May for Bill Busters. This table shows that contractors are not meeting production goals. However, many additional jobs were begun at the end of 2001 and completed in the first half of 2002. These jobs will also count toward some utilities' 2002 production goals.

Table IV-3
Production Rates By Utility Combination and Contractor

Electric Utility	Gas Utility	Contractor	Number of Homes Served
Conectiv		HDMC	40
Conectiv	NJ Natural Gas	HDMC	7

Electric Utility	Gas Utility	Contractor	Number of Homes Served
Conectiv	South Jersey Gas	HDMC	56
Conectiv	Missing Gas Utility	HDMC	1
PSE&G		HDMC	25
PSE&G	NUI/ETG	HDMC	44
PSE&G	PSE&G	HDMC	265
PSE&G	South Jersey Gas	HDMC	15
PSE&G	Missing Gas Utility	HDMC	7
JCP&L		HDMC	50
JCP&L	NJ Natural Gas	HDMC	99
JCP&L	NUI/ETG	HDMC	13
JCP&L	PSE&G	HDMC	21
JCP&L		Bill Busters	43
TOTAL			686

b) Number of visits

The number of program visits that customers receive can be as high as six. Under HDMC's old model for service delivery, most customers received three service delivery visits. Additionally customers may receive another visit for refrigerator delivery, another visit for HDMC quality control, and another visit for third party quality control. Bill Busters usually provides two service delivery visits, and HDMC, under their new service delivery model, will usually provide two service delivery visits.

c) Length of time to complete services

HDMC has taken over six months to complete service delivery for some of the homes served at the end of 2001. This was due to the fact that many jobs received the audit visit at the end of 2001 in order to meet production goals for the year. Their goal is to complete service delivery to the home in one month. Bill Busters usually completes service delivery to the home in two weeks.

d) Establishing a relationship with the customer

All of the auditors observed were successful in establishing a good relationship with the customer. By the end of the visit, most had described the Comfort Partners Program, explained to the customer what they were doing in the home, explained the to customer the work that may be completed during future visits, and provided education about ways to reduce energy usage.

Table IV-4 displays the amount of time charged by the contractor for education on audit visits alone, and in total. Contractors are encouraged to provide additional education, especially on areas that the customer was confused about, during the measures visit. On average, contractors spend 1.4 hours on education during the audit visit, and 1.9 hours on education in total.

Table IV-4
Time Spent on Energy Education
By Utility Combination and Contractor

Electric Utility	Gas Utility	Contractor	Hours Spent on Education	
			Audit Visit	Total
Conectiv		HDMC	1.6	1.9
Conectiv	NJ Natural Gas	HDMC	1.6	2.2
Conectiv	South Jersey Gas	HDMC	1.6	2.2
Conectiv	Missing Gas Utility	HDMC	2.0	3.0
PSE&G		HDMC	1.0	1.6
PSE&G	NUI/ETG	HDMC	0.9	1.5
PSE&G	PSE&G	HDMC	1.3	2.0
PSE&G	South Jersey Gas	HDMC	1.6	2.6
PSE&G	Missing Gas Utility	HDMC	1.1	1.3
JCP&L		HDMC	1.6	1.9
JCP&L	NJ Natural Gas	HDMC	1.6	1.9
JCP&L	NUI/ETG	HDMC	1.0	1.1
JCP&L	PSE&G	HDMC	1.3	1.7
JCP&L		Bill Busters	NA	NA
TOTAL			1.4	1.9

e) Following the workflow and the education procedures

The initial Comfort Partners procedures manual does not provide a detailed description of the education procedures to be followed during the initial visit. However, this manual does describe the partnership approach workflow. According to this workflow, the steps to be followed in the home are:

- Explain the purpose of the program
- Confirm the partnership
 - The benefits of each partner
 - The responsibilities of each partner
 - Sign the partnership agreement
- Information gathering
 - Family needs, wants, and behaviors
 - Bill history review, including determination if the customer is on the correct rate
- Meter the refrigerator and other appliances that may qualify for replacement
- Take a house tour
 - Identify potential measure installation opportunities
 - Determine the usage habits
 - Install qualifying measures
- Calculate the current energy costs and projected costs based on measure installation and customer actions
- Review options for measures, replacements, and actions with the customer.

- Make decisions and complete the Partnership Agreement Action Plan
- Follow up on responsibilities
- Thank customer for being a partner in the Comfort Partners Program

Additionally, the manual states that customers should be educated regarding how to read their energy bills, actions they can take on their own, and why Comfort Partners is installing some measures.

The Comfort Partners education notebook that was provided at the education training in the spring of 2002 provided a more detailed outline for the workflow of the audit. This outline is presented below.

I. Identification/Introduction

- A. Display business card – ID tag
- B. Introduce self
- C. State purpose of visit and time contract
- D. Monitor refrigerator

II. Stress Partnership Theme

- A. Complete partnership agreement if not addressed earlier
- B. Discuss customer and New Jersey Comfort Partners responsibilities

III. Explain Steps to Weatherization

- A. Intake/Eligibility
- B. Energy Survey
- C. Energy Education
- D. Installation
- E. Inspection
- F. Follow-up

IV. Information Gathering/Giving

- A. Complete lifestyle survey (examine energy use behavior)
- B. Review electric bill (major bill components)
- C. Building walk-through
 - 1. Appliance operating costs
 - 2. Note usage habits
 - 3. Accent safety and maintenance tips
 - 4. CFL installations/reinforce partnership theme
 - 5. Identify high users
 - 6. Examine Time-of-Day Rate possibilities

- V. Co-Develop Family Plan of Action
 - A. Identify three actions customers can do themselves to lower energy use
- VI. Provide Referrals
 - A. For energy assistance
 - B. Other referrals per customer
- VII. Discussion of Energy Bill Payment Performance
 - A. Budgeting
 - B. Reducing arrearage
 - C. Payment plan
- VIII. Closure
 - A. Summarize main points
 - 1. Review again major energy users
 - 2. Review Family Plan of Action
 - 3. Leave name and phone number
 - 4. Thank customer for partnering to reduce energy use
 - 5. Encourage customer's active participation
- XI. Follow-up Visit/Remedial
 - A. Query customer as to usage
 - B. Review Family Plan of Action
 - C. Review electric bill
 - D. Review Time-of-Day Rate
 - E. Zone heating

We observed seventeen HDMC jobs and three Bill Busters jobs. During the observations, we found that education protocols were not completely and consistently followed. The auditors generally did a good job of educating the customer during the walk through about the work that was being done and potential energy-saving actions. However, the auditors were less consistent in providing education at the introduction and conclusion of the visit.

The approach used was generally not successful in establishing and confirming the partnership with the customers. During the customer interviews, we found that customers did not understand the partnership or their responsibility for reducing energy usage. We found that customers could not recall many energy saving actions that they said they would take.

The following elements of the education implementation need to be improved:

- *Partnership agreement:* The partnership nature of the program should be explained at the beginning of the visit. This should include an explanation of the fact that both the utility and the customer have responsibilities in the program, and that one of the customer's responsibilities is to take actions to reduce energy usage.

In our observations, HDMC auditors did not consistently explain the partnership nature of the program at the introduction to the visit. Many of the auditors did not mention a partnership until the end of the visit. Even when the partnership nature of the program was explained at the introduction to the visit, auditors did not consistently explain that the customer had a responsibility to take part in reducing energy use in the home, or that the customer's role as a partner in the program extends beyond the day of the audit.

Some of the HDMC auditors, however, did do an excellent job with the partnership agreement. One auditor, in particular, provided a complete explanation of the partnership and the fact that there were some responsibilities that the utility had in providing services, and some responsibilities that the customer had in taking actions to save energy. He repeatedly mentioned the partnership throughout the visit, for example, stating that "We will wrap your hot water heater and you have agreed to turn down your hot water temperature" or "we will do air sealing and you will turn down your thermostat at night". He repeatedly noted that the people who are successful on the program are those who actively participate.

In our observations, the Bill Busters auditor did consistently present the partnership at the introduction to the program. However, aside from reading the form, he did not explain that the customer had responsibilities as part of the partnership including taking actions to reduce energy usage.

- *Energy education notebook:* The auditor should use the energy education notebook to explain the program and energy use in the home.

In our observations, many of the HDMC auditors did not use the energy education notebook at any time during the visit. One of the auditors did use the notebook to explain the program and the partnership.

In our observations, the Bill Busters auditor consistently used the energy education notebook to explain the program.

- *Explaining the steps of weatherization:* At the beginning of the visit, the auditor should explain the steps of weatherization, including intake/eligibility, the energy survey, energy education, installation, inspection, and follow-up.

In our observations, HDMC auditors did not provide a description of the steps of weatherization. Some of them did describe what the day's visit would entail, but this was not consistently done. At times the auditor only stated that she/he was going to learn how energy was used in the home and do some tests.

In our observations, the Bill Busters auditor did explain what he would be doing during the visit and that there would be another visit where he installed measures. However, he did not explain all of the steps of the program, as listed above.

- *Reviewing and explaining bills:* At the beginning of the visit, the auditor should request a copy of the customer's bills, explain how to read the bills, and discuss the customer's usage.

In our observations, the HDMC auditors did not consistently review the customer's bills. Some of the auditors did not request copies of the customers' bills, some of the auditors looked at the bills, but only commented on spikes in usage. Some of the auditors talked about usage on HDMC's work order, and some did not discuss usage at all.

However, some of the HDMC auditors did ask for bills, explain how electricity and gas were measured, and explain how to determine if bills were actual or estimates. One auditor explained the graph on the bill and explained baseload and heating and cooling usage.

In our observations, the Bill Busters auditor consistently reviewed the bills with the customer, explained the cost of the energy usage, and explained baseload usage.

- *Co-developing an action plan:* The auditors should work with the customer to determine the high energy users in the home, and the actions that the customer is willing to take to reduce energy use. The auditor should develop a written action plan with the customer that lists the actions that the customer has committed to take.

In our observations, the HDMC auditors did not consistently work with the customers to determine energy-saving actions that the customer was interested in taking. Some of the HDMC auditors did not recommend energy-saving actions during the walkthrough. Some of the auditors who did recommend actions did not tailor these to the customer's energy usage, but appeared to have a set of actions that was recommended at each visit. Auditors did not consistently reinforce the recommended energy-saving actions at the end of the visit. Auditors did not consistently record the actions that the customers had agreed to on a written form. Of those who did write down the actions, many

recorded them on the partnership agreement form. Most of the auditors did not use the action form at all during the audit visit. Auditors did not provide estimates of the cost savings that customers should expect from taking energy-saving actions.

HDMC has noted that their auditors use the action form during the measures visit, and JCP&L confirmed that most customer files did contain an action form. However, the action plan should be completed during the audit visit when the walk through is conducted and comprehensive discussion of energy use and energy education takes place. The measure visit can then be used to review and reinforce action plans. HDMC stated that they plan to move toward this procedure.

In our observations, the Bill Busters auditor did work with the customers to determine energy-saving actions that the customer was interested in taking. He identified actions during the walkthrough. However, he did not consistently review the identified actions at the end of the visit. He did complete an action form for the customers.

- *Summarizing and reviewing and encouraging the customer's active participation:* At the end of the visit, the auditor should review the work that was done on the home, any actions that the customer needs to take to maintain the work, the energy-saving actions the customer has committed to take, and other commitments the customer has made. The auditor should also explain other visits that the customer will receive and what the customer should expect to happen during these visits.

In our observations, HDMC did not consistently summarize the work that was done in the home, summarize the actions that the customer had agreed to take, and provide reinforcement on the importance of the customer's role in the partnership and in reducing energy usage at the conclusion of the visit.

In our observations, the Bill Busters auditor did review the work that was done during the visit, but did not consistently review the actions that had been agreed to or the importance of the customer's role in saving energy.

f) Following measure selection procedures

While the measure selection and installation process will be examined in detail in the Comprehensiveness analysis, it is important to note here that procedures for replacing incandescent lights with CFL's are not being followed consistently by HDMC auditors. Some of the auditors are carefully determining hours of use and are only replacing bulbs for those lights that are used more than two hours per day. However, auditors are not consistently following these procedures.

Additionally, the measure allowance, while intended to provide an initial guide as to the potential for savings, has been treated as a soft cap on services that can be delivered or as a floor on expenditures that must be made. This was especially true in the initial implementation of the program. While improvements have been made in the use of the allowance, additional training in this area would be useful.

g) Measure installation rates

Table IV-5 displays measure installation rates by contractor. The most common measures installed by Bill Busters are air sealing (91%), aerators (65%), and insulation (51%). The most common measures installed by HDMC are air sealing (82%), CO detectors (79%), and insulation (65%).

Table IV-5
Measure Installation Rates
By Contractor

Measure	Bill Busters		HDMC	
	Number	Percent	Number	Percent
Refrigerator	12	28%	315	49%
CO detector	8	19%	505	79%
Hot water heater wrap	19	44%	273	42%
Aerator	28	65%	276	43%
Showerhead	5	12%	151	23%
Programmable Thermostat	0	0%	66	10%
Air sealing	39	91%	529	82%
Insulation	22	51%	419	65%
Duct Sealing	14	33%	272	42%

h) Service delivery costs

Table IV-6 shows that average costs are \$1395 for service delivery. Costs vary by whether they are joint delivery and by utility combination.

Table IV-6
Costs By Utility Combination and Contractor

Electric Utility	Gas Utility	Contractor	Mean Total Cost
Conectiv		HDMC	\$1056
Conectiv	NJ Natural Gas	HDMC	\$1529
Conectiv	South Jersey Gas	HDMC	\$1395
Conectiv	Missing Gas Utility	HDMC	\$1690
PSE&G		HDMC	\$921
PSE&G	NUI/ETG	HDMC	\$1732
PSE&G	PSE&G	HDMC	\$1335
PSE&G	South Jersey Gas	HDMC	\$1751
PSE&G	Missing Gas Utility	HDMC	\$1074
JCP&L		HDMC	\$1289

Electric Utility	Gas Utility	Contractor	Mean Total Cost
JCP&L	NJ Natural Gas	HDMC	\$1537
JCP&L	NUI/ETG	HDMC	\$1665
JCP&L	PSE&G	HDMC	\$1755
JCP&L		Bill Busters	\$1446
TOTAL			\$1395

i) Health and safety expenditures/measures

Health and safety measures are included in the Comfort Partners Program. Table IV-7 displays mean health and safety costs by utility combination. Overall, mean health and safety costs are \$117. Health and safety costs ranged from \$0 to \$979.

Table IV-7
Health and Safety Costs By Utility Combination and Contractor

Electric Utility	Gas Utility	Contractor	Mean Health and Safety Cost
Conectiv		HDMC	\$92
Conectiv	NJ Natural Gas	HDMC	\$300
Conectiv	South Jersey Gas	HDMC	\$183
Conectiv	Missing Gas Utility	HDMC	\$130
PSE&G		HDMC	\$62
PSE&G	NUI/ETG	HDMC	\$118
PSE&G	PSE&G	HDMC	\$70
PSE&G	South Jersey Gas	HDMC	\$199
PSE&G	Missing Gas Utility	HDMC	\$158
JCP&L		HDMC	\$100
JCP&L	NJ Natural Gas	HDMC	\$198
JCP&L	NUI/ETG	HDMC	\$189
JCP&L	PSE&G	HDMC	\$123
JCP&L		Bill Busters	NA
TOTAL			\$117

6. Recommendations

Recommendations for improving service delivery include providing additional training on customer education and the flow of the audit, providing additional training on program procedures, and placing increased emphasis on consistent delivery that follows prescribed procedures.

a) Additional training on customer education and the flow of the audit should be provided

The auditors are not consistently following the workflow of the audit as described in the education notebook. The procedure for using the partnership agreement form and the action form is the area in which the most instruction is needed. Additional

training should be provided on the steps that are expected as part of the audit procedure.

b) Additional training on program procedures should be provided

The auditors are not consistently following procedures for working with the client to select measures that meet the clients needs in a way that is consistent with the specified procedures. Auditors need additional training on providing energy saving measures to customers as options, rather than using their current procedures of telling the customer that something will be replaced, or replacing something and then telling the customer what was done.

c) There should be increased emphasis on consistent delivery that follows prescribed program procedures

HDMC managers emphasize the fact that auditors are individuals and customers are individuals and that each home and each interaction is different. While the audit visit cannot be scripted, and each customer does require individualized education, there is a set of procedures that has been documented and that should be followed. Following the prescribed set of procedures can lead to the most consistent delivery and results. The fact that most of the auditors are omitting many of the required steps in the workflow of the audit is evidence that more emphasis needs to be placed on following procedures that have been defined by the program managers.

E. Quality Control

While the evaluators have observed jobs, conducted inspections, and provided feedback on the work seen in the field, it is the responsibility of the Working Group and the service delivery contractors to design systematic procedures to ensure that minimum standards are met and to provide training on-site where needed and appropriate. This is the function of quality control.

1. Goals

There are several goals for quality control. First, quality control should ensure that all pre-existing health and safety problems are addressed by the program or referred for correction, and that the contractors do not cause health and safety problems in the home. Second, quality control should ensure that program procedures are followed and that service delivery is effective. Third, quality control should allow for the provision of training in the field when problems are seen. Fourth, quality control should identify training needs. And last, quality control should identify program procedures that need revision or clarification.

2. Design/Rationale

Quality control is conducted both by third party quality control inspectors and by the service delivery contractors. Quality control by the third party inspectors provides a systematic and objective view of the completed work and can identify health and safety problems, measures installed incorrectly, and missed opportunities. On-site quality control by contractors during service delivery can more specifically identify problems with service delivery and training needs. Quality control by the third party inspectors and the service delivery contractors is described briefly below.

- *Third party quality control contractors* have been hired by some of the utilities to provide systematic inspection of the work done on the home. The Working Group is finalizing procedures whereby all utilities would be required to have third party quality control inspectors review ten percent of their completed jobs and report on the results.
- *Bill Busters* provides ongoing quality control as the company's owner is always on-site delivering services with the crews and providing training at the same time.
- *HDMC* provides quality control both through on-site observation by field supervisors, and through post completion inspection by quality control specialists.

3. Goals of the Evaluation

The two main goals of the evaluation are to understand the quality control procedures that are being used and to assess whether these procedures are meeting the goals for quality control.

a) Understand what quality control procedures are being used

The evaluation studied the quality control procedures that have been developed and how these procedures have been implemented.

b) Determine the extent to which quality control is meeting its goals

The evaluation will determine the extent to which the planned and implemented quality control can meet the goals of ensuring that effective service delivery is implemented, and that training needs are being identified and met, to the extent possible, in the field.

4. Evaluation Activities

Five main evaluation activities provided information on quality control plans and implementation, and on what quality control is needed. These activities included interviews with utility managers, interviews with third party quality control providers, observation of quality control by third party quality control providers, review of reports

from third party quality control providers, and interviews with service delivery contractor management.

a) Interviews with utility managers

Interviews with utility managers provided information on status of contracts with third party quality control inspectors, the percent of homes to be inspected, and expectations for the content of the inspections.

b) Interviews with third party quality control inspectors

Interviews with the third party quality control inspectors provided information on the procedures for inspections and some initial findings from inspections on Comfort Partners jobs.

c) Observation of quality control by third party quality control inspectors

Observation of quality control by third party inspectors provided information on how the quality control procedures are implemented in the field, including how the inspectors relate to the customers, and the energy education that is provided as part of the quality control visits.

d) Review of reports from third party quality control

Review of reports from the third party quality control inspectors provided information on the type of feedback that contractors and utility managers receive from the inspectors, including specific examples of information provided in the reports.

e) Interviews with service delivery contractor managers

Interviews with HDMC and Bill Busters managers provided information on the contractors' internal quality control procedures, and how contractor training responds to findings from their own and external quality control findings.

5. Evaluation Findings

Evaluation findings relating to quality control are that jobs are not randomly selected for third party quality control, education is provided during the third party quality control inspections, there are several different reasons why jobs are commonly failed, and that HDMC failure rates vary between the two third party inspectors.

a) Jobs are not randomly selected

Pure Energy inspects almost one hundred percent of JCP&L electric and oil heat homes. Pure Energy inspects ten percent of JCP&L/NJ Natural Gas joint delivery jobs.

Pure Energy determines which JCP&L/NJ Natural Gas joint delivery jobs to inspect based on previous HDMC performance. They attempt to target jobs where they believe there may be issues that require inspection, where a large amount of work was done, or where there was high usage and there may have been missed opportunities.

CMC first inspects the homes that received the most major measures as they are working their way through inspection of PSE&G jobs.

In the homes where the third party quality control inspectors visit, they do inspect for whether the contractor comprehensively addressed all cost-effective measures. However, because homes are selected for inspection based on the amount of work done, these inspections cannot determine comprehensiveness of measures overall. The inspections do assess the quality of the installation of measures and target those homes for visits where health and safety problems have the most potential to arise as a result of the work completed.

b) Education is provided during the inspection

Some level of education was provided by Pure Energy and CMC during their quality control inspections.

The Pure Energy inspections checked all measures that were installed in the home, discussed satisfaction with the measures with the customer, and educated the customer on energy saving actions. In all observations, the inspector succeeded in establishing an excellent relationship with the customer and provided effective education in key areas. The inspector's main education focus was use of hot water heater timers and switches, time of day rate, keeping the refrigerator full, using cold water for washing, and zonal heating. Other education topics included setting the hot water temperature, allowing for air flow around appliances such as dryers and air conditioners, and replacing the air conditioning filter.

The CMC inspections checked all measures installed in the home, discussed program satisfaction with the customers, reviewed the reasons for installation of certain measures with the customer, and provided some education on installed measures. In all households observed, the inspector established an excellent relationship with the customer. The inspector also asked if the technicians had explained the Comfort Partners Program, had told them why certain measures were being installed and educated them on ways to reduce their energy consumption. If the customers were confused with what they had been previously told, the inspector reviewed the details with them. Common educational areas that were covered included proper use of CO detectors and thermostats.

c) Causes of job failures

The main reasons that Pure Energy failed HDMC jobs were missed energy saving opportunities, such as obvious duct leaks, attic floor air sealing opportunities, and obvious bypasses, invoice entries for items not installed, quality of installation or materials, insulation related issues, and heat-producing fixtures not dammed or dammed incorrectly.

Pure Energy has failed only a few Bill Busters Comfort Partners jobs.

The main reasons that CMC failed HDMC jobs were that work that should have been done was not done, installed items were not functioning properly or were not been replaced, ducts in difficult to access unconditioned areas were not insulated or sealed effectively, and CO detectors or CFL's were not working properly and had not been replaced.

d) Job failure rates

Pure Energy fails about one third of HDMC's jobs and provide comments that there were problems that they fixed on about one third of HDMC's jobs. CMC fails approximately five percent of HDMC's jobs.

Part of the discrepancy between the failure rates may be due to the fact that Pure Energy checks for measures found on invoices, while CMC does not, and that they are inspecting different types of homes in different parts of the state. However, from the large difference in failure rates, it appears that there is an inconsistency between Pure Energy's and CMC's inspection guidelines.

CMC believes that they have a lower failure rate because they leave the final decision on whether a job should be failed to the utility. They only fail jobs where there is poor workmanship, there is a missing item that the participant attests was not installed, there is a health or safety issue, or there are visible bypasses.

6. Recommendations

The evaluation recommendation relating to quality control is that a uniform statewide process and guideline for quality control be developed.

a) A uniform set of third party inspection guidelines should be developed and implemented

Currently Pure Energy and CMC appear to have different standards for failing jobs. The Working Group should agree on common standards for inspecting Comfort Partners jobs. Utilities that want to place additional requirements on the contractors should have a separate grade, indicating that the job passed the Comfort Partners guidelines, but still requires additional work for acceptance by that utility. The Working Group appears to be moving toward such a framework.

b) Jobs should be randomly selected for inspected

Jobs should be randomly selected for third party quality control, rather than being inspected based on the amount or type of work done on the home. This method for selecting jobs will allow for analysis of whether all homes are receiving comprehensive services. If utilities wish to have the flexibility to inspect certain jobs that appear to have potential for problems, they should designate a minimum percentage of jobs to be randomly selected, and the remaining jobs could be chosen based on job characteristics.

c) Quarterly quality control reports should be developed

Third party quality control inspectors should prepare quarterly reports that document the contractors' performance over the quarter and analyze changes in performance. These reports should summarize the percent of jobs that have failed and the reasons for those failures. (WARM2 has the capability for generating reports that contain this information.)

F. Arrearage Reduction Procedures and Implementation

The Arrearage Reduction component of the Comfort Partners Program provides Comfort Partners participants who have utility arrearages with payment plans that allow for forgiveness of part of their debt.

1. Goals

The goal of the Arrearage Reduction component is to assist customers exiting an arrearage status by providing them with arrearage forgiveness.

2. Design/Rationale

The Arrearage Reduction component is one aspect of the Comfort Partners Program that differs substantially between the different utilities, both in terms of the program parameters, and in terms of the way the program is implemented and delivered. Utility programs have been developed based upon the budgets available for this part of the program and based upon each utility's ability to handle the administrative procedures required for signing a customer up for the program, providing the customer with a monthly budget payment, and crediting the customer for the forgiven debt.

3. Goals of the Evaluation

The goals of the evaluation of the Arrearage Reduction component are to understand the parameters of the Arrearage Reduction component, understand the procedures that utilities, HDMC, and CBO's have developed to administer the Arrearage Reduction component, determine whether the Arrearage Reduction component is being implemented according to the procedures, and to determine whether the design and

implementation of the Arrearage Reduction component can effectively meet the goals of the program.

a) Understand the parameters of the Arrearage Reduction component

The utility companies have different eligibility requirements for the program, different formulas for calculating the customer's monthly payment, and different formulas for determining the arrearage credit. The evaluation documents all of the utilities' program parameters.

b) Understand the procedures that the utilities, HDMC, and CBO's have developed to administer the Arrearage Reduction component

The utilities have different procedures for administration of the Arrearage Reduction component, including procedures for tracking customer payments, crediting customer accounts for arrearages forgiven, and following up with customers who do not make their monthly payments. The evaluation documents the procedures used by the utilities, HDMC, and the CBO's that are implementing the program.

c) Determine whether the Arrearage Reduction component is being implemented according to the procedures

The evaluation will determine whether the Arrearage Reduction component is being implemented according to the prescribed procedures.

d) Determine whether the design and implementation of the Arrearage Reduction component can effectively meet the goals of the program

The evaluation will determine whether the Arrearage Reduction component is designed and implemented in a way to assist customers in paying off their arrearages. A future report will analyze whether the program has actually resulted in improved payment patterns and reduced arrearages.

4. Evaluation Activities

Five evaluation activities provided information on the Arrearage Reduction Component. These included interviews with utility managers and staff, review of enrollment forms, interviews with HDMC managers and staff, observation of HDMC Arrearage Reduction enrollment, and observation of CBO enrollment.

a) Interviews with utility managers and staff

Interviews with utility managers and staff provided information on the utility's design and implementation of the Arrearage Reduction component, responsibilities of the utility and of the contractor or CBO in implementing the program, eligibility

requirements, marketing, payment calculation, arrearage forgiveness calculation, participant tracking systems, and participant follow-up procedures.

b) Review of enrollment forms

Review of enrollment forms provided more detailed information on calculation of monthly payments and arrearage forgiveness.

c) Interviews with HDMC managers and staff

Interviews with HDMC managers and staff provided information on how HDMC administers the Arrearage Reduction program. This includes targeting customers for the program, providing information on the program in the field, informing customers of program acceptance or denial, and following up with customers who have missed payments.

d) Observation of HDMC Arrearage Reduction enrollment

Observation of HDMC enrollment of Arrearage Reduction customers in the field provided more information on how program procedures for enrollment are implemented.

e) Observation of CBO enrollment

Observation of CBO enrollment of Arrearage Reduction customers in their offices provided more information on how program procedures for enrollment are implemented.

5. Evaluation Findings

Evaluation findings on the Arrearage Reduction component relate to the varying eligibility standards for the utility programs, the challenge that some of the utilities faced in implementing systems to handle the program, that some of the customers receive assistance from other programs that eliminated their arrears before their arrearage agreement was processed, and that information on application of other assistance payments to the customer's account is not explained.

a) Eligibility requirements

Table IV-9 provides an overview of the eligibility requirements for the utility Arrearage Reduction components, including the minimum and maximum arrearage levels that qualify customers for the program, the type of accounts customers must have to qualify, and HEAP assistance requirements.

Table IV-9
Arrearage/Debt Reduction Program Eligibility Criteria

	Arrearage Level		Account Type	HEAP Assistance
	Minimum	Maximum		
Conectiv	\$300	\$1500	Customer of record with active residential account	None
JCP&L	None	None	Customer must be ratepayer of record and in permanent residence	Participants who meet the program guidelines for HEAP must apply for benefits annually and, if possible, designate JCP&L as the recipient
NJ Natural Gas	\$250	\$750	Customer has account in his/her name and is responsible for bill payment	Customer has received funds or has applied for assistance from one or more of the available programs
NUI Elizabethtown Gas	None	\$1500	Customer of record in a residential gas-heated dwelling	Customer must receive funds or have applied for assistance from one or more available funding sources for energy assistance. Customer must designate NUI Elizabethtown Gas as the recipient of any energy assistance funds received by the customer, if NUI Elizabethtown Gas is their heating fuel provider.
PSE&G	\$300	\$2000	Customer is a PSE&G heating customer of record, or an oil heat customer with PSE&G electric.	None
South Jersey Gas	None	None	Customer is a South Jersey Gas customer of record, residing in a residential natural gas heated dwelling.	None

b) Utilities have successfully implemented the Arrearage Reduction component.

Utilities have achieved the difficult task of implementing the Arrearage Reduction component of the program and have begun to enroll customers. Many of the

utilities did not have prior experience with similar programs and received great assistance from HDMC in the design and implementation of the component.

c) Utilities have faced challenges when setting up arrearage reduction systems

Some of the utilities have faced great challenges in setting up their customer systems to allow for arrearages to be credited and for customers to be notified when they have missed program payments. At times, the way in which the program is implemented is dictated by the programming requirements. For example, the decision on whether arrearages are credited as the total amount forgiven divided by twelve each month, or as \$62.50 each month until the arrearage is gone has depended on system programming issues rather than policy issues in certain cases. Many of the utilities are using manual systems to track participant payment and program status.

d) Other programs remove customers' arrears

One of the utilities noted that one of the challenges of the program has been getting the high usage customers enrolled in Comfort Partners through HDMC and signed up for Arrearage Reduction early enough so that other available assistance doesn't cover all of the arrears. If the arrears were eliminated, the customer would no longer be eligible for the program. In many cases it benefits the customer to sign up early for the Arrearage Reduction program, have the debt taken off the account, and then receive the other assistance payments which can be applied to the monthly budget payments.

e) Participants were not provided with information on how NJ SHARES and LIHEAP will be credited toward their accounts

Neither HDMC or the CBO that was observed providing intake for JCP&L provided the customer with information on how other assistance programs would be credited to the customer's account, given the participation in this payment plan. This explanation is important to inform some customers that they still have a great incentive to apply for these programs, and to let other customers to know what to expect in terms of how these payments will affect their accounts. This effort is complicated by the complexities of how these payments could be applied against a customer's arrearage depending on when and how the assistance payment is received by each participating utility.

6. Recommendations

The main recommendation relating to the Arrearage Reduction component is that intake workers need to provide customers with more information about the program.

- a) HDMC field staff and CBO intake representatives should provide participants with information on how other assistance payments will be credited toward their accounts***

HDMC field staff and CBO intake representatives should provide participants with information on how other payment assistance programs will affect their account and their payments.

- b) Utilities should automate procedures***

As the number of arrearage participants grows, utilities' manual procedures for managing the program will become more burdensome. Utilities should work to automate these procedures.

- c) Utilities should compare and contrast their procedures***

Utilities have different procedures for managing their programs. They should work together to determine which procedures are the most effective and make changes to improve their programs.

V. Customer Participation and Response

Customer interviews are included as part of the Process Evaluation in order to understand the effect of the program on the participating customers. For this report, APPRISE conducted in-depth case studies with twenty-five program recipients, quantitative interviews focusing on education and satisfaction with another fifty-one program participants, and quantitative interviews focusing on the Arrearage Reduction component with another twenty-five program participants. In the next phase of research, APPRISE will conduct another 300 quantitative interviews focusing on education, and another 325 quantitative interviews focusing on the arrearage reduction program. This will for quantification of the impact of the program on energy use behavior and the impact of the Arrearage Reduction component on affordability.

1. Goals

The three main goals for the customer are that the customer understands the program and the measures that were installed in his/her home, that the customer takes actions as a result of the program to reduce energy usage in his/her home, and the customer makes increased and regular payments as a result of the Arrearage Reduction component.

2. Design/Rationale

Customer education is an important aspect of the program, so that the customer understands the program, the measures, and the actions that will save energy. Therefore, the Working Group has invested in education training and education materials to assist the auditors in the education process.

The Arrearage Reduction component is design to assist customers in paying off their debt and improving their payment patterns. Therefore, the utilities have invested in the design of these programs and the systems required to enroll and track participating customers.

3. Goals of the Evaluation

The goals of the evaluation are to assess how well customers understand the program and the services received, to assess the extent to which education is provided and is expected to have an impact on energy usage, to assess customer satisfaction, to assess how well customers understand the Arrearage Reduction component, and to assess the extent to which customers expect to maintain their payment agreements.

a) Assess how well customers understand the program and the services received

In order for the program to be effective, customers must understand the purpose of the program and the services that have been received. The customer interviews measure how well the customer understands these issues.

b) Assess the extent to which education is provided and is expected to have an impact on energy usage

In order for education to have an impact on energy usage, the customer must remember the actions that he/she has committed to, and must follow through with those actions. The customer interview determines the extent to which education has provided the customer with energy-saving actions that he/she remembers, and the extent to which customers were able to change their behaviors.

c) Assess customer satisfaction with the program

Customer satisfaction may have a big impact on how the customer responds to the partnership. If the customer is very satisfied with the program, the provider, and the services, the customer may be more likely to feel a responsibility to reduce his/her energy usage. The customer interviews measure the customers' satisfaction with all aspects of the program.

d) Assess how well customers understand the Arrearage Reduction component

Customer understanding of the Arrearage Reduction component and the benefits that it provides is important towards their acceptance of the program and their effort to meet their payment obligations. Customers may be more likely to make their monthly payments if they understand the way in which the program is beneficial. The customer interviews measure the customers' understanding of their Arrearage Reduction payment plan and associated arrearage forgiveness.

e) Assess the extent to which customers expect to meet their payment agreements

Customers may have a good idea of how readily they will make future program payments after a few months of experience on the plan. The customer interviews measure the customers' confidence in their ability to continue making monthly payments.

4. Evaluation Activities

The evaluation activities that provided information on customer participation and response to the program were the qualitative case studies, the quantitative education interviews, the quantitative arrearage interviews, observation of service delivery, and customer interviews following service delivery.

a) Qualitative case studies

Qualitative case studies furnished information on the customers' understanding of the program; program recruitment; knowledge of measures, education, and action plans; satisfaction with the program and the contractor; understanding of the Arrearage Reduction component; and views on the affordability of the Arrearage Reduction payment. These interviews provided assistance in developing the quantitative interview questions and in analyzing the results from the quantitative surveys.

b) Quantitative education interviews

Quantitative education interviews provided information on most of the same issues listed above, except in a survey framework, as opposed to an in-depth interview framework. These interviews allowed for a quantitative analysis of the customers' understanding of measures installed, recollection and implementation of energy-saving actions, and satisfaction with the program. Because of the methodology and the number of interviews, this survey allows for statistical analysis of results, and analysis of subgroups.

c) Quantitative arrearage interviews

Quantitative arrearage interviews provided information on the Arrearage Reduction component, in a way that allows for statistical analysis of results. These interviews allowed for a quantitative analysis of the customer's understanding of the Arrearage Reduction component, the customer's views on affordability of the component, and the customer's satisfaction with the component.

d) Observation of service delivery

While conducting on-site observation, evaluators had the opportunity to obtain a sense of the customers' interest in the program, motivation to save energy, and investment in the process. After completing on-site observation, APPRISE conducted interviews with the observed program recipients in order to assess their views on the program. These views provided useful feedback, as APPRISE has a good understanding of the services and education received, as well as the opportunities that exist for saving energy, after observing the visit.

5. Evaluation Findings

There were several findings from the analysis of the customer case studies, the quantitative education interviews, and the quantitative arrearage interviews. A later report will have much larger sample sizes for the quantitative interviews and will provide analysis by utility and other important analysis groups.

a) Understanding of the program

It is important for customers to have a good understanding of the Comfort Partners Program in order to become active participants in reducing energy usage. Most of the customers, approximately ninety percent, that were interviewed as part of the case studies, and surveyed as part of the quantitative interviews felt that they had a good understanding of the program. However, more than half of the customers interviewed in the case studies did not understand who was sponsoring the program. Many customers cited reduced bills or saving money as one of the benefits of the program.

Only six of the twenty-five customers interviewed in the case studies stated that they understood the partnership nature of the program, and two said that they partly understood the partnership nature of the program. Most of the customers stated that the service provider's responsibility was to do work in the home, reduce energy usage, or educate the customer on how to reduce energy usage.

Table V-1 displays the responses customers provided in the case studies when they were asked for a description of their responsibilities in the program. Over half of those spoken to said that their responsibility was to maintain or check work that was done on the home. Nearly one third said that they did not know what their responsibilities were. Six of those spoken to stated that their responsibility was to reduce energy usage, and one customer specifically mentioned keeping the thermostat lower.

Table V-1
Customer Description of Responsibilities
Case Studies

Customer's Description of His/Her Responsibilities	Number of Responses
Maintain/check work done on the home	13
Don't know	8
Reduce energy usage	6
Pay bills on time	2
Keep thermostat lower	1
Tell others about the program	1

b) Need for services

From an affordability standpoint, some of the customers felt a need for the program. Table V-2 shows that twenty percent of those surveyed in the quantitative interviews felt that their current energy bills are not affordable.

Table V-2
Affordability of Current Bills

Are Energy Bills Affordable?	Number	Percent
Yes	26	52%
No	10	20%
Don't Know	14	28%

When asked about the benefits of reducing energy usage in the quantitative survey, most of the customers stated that the benefit was saving money. Customers were asked in the case studies whether they had a goal for energy savings as a result of participating in the program. Eight of the customers provided a response, ranging from \$20 to \$65. Table V-3 displays the responses to this question.

Table V-3
Monthly Bill Reduction Goal for the Program
Case Studies

Monthly Bill Reduction Goal for the Program	Number of Responses
\$20	1
\$25	2
\$30	1
\$45	2
\$55	1
\$65	1
Don't know	4
No specific goal	13

c) *Program recruitment*

Most of the customers interviewed first heard about the Comfort Partners Program through a bill stuffer, a tele-marketed phone call, or a referral from a friend or a relative. The majority of customers signed up for the program by calling the number that was provided to them or by mailing in a response to a bill stuffer.⁹

Table V-4 displays responses from the case studies to the question of what information was provided at program enrollment. Ten of the customers stated that they received some information about the type of services that they might receive. Six customers stated that they did not receive any information about the program. four customers provided specific responses about the types of services they were told they would receive. These customers stated that they were told that they would receive weatherization services to make the home more efficient, they would

⁹ These are the customers' self-reported methods for enrollment. HDMC notes that most customers are recruited for the program through tele-marketing, and that the qualitative sample may not be representative of the way in which customers are enrolled.

receive heating and cooling services, and that they may receive light bulbs or a refrigerator.

Table V-4
Information Provided at Enrollment
Case Studies

Information Provided At Enrollment	Number of Responses
Information about some of the services that the customer could receive - general	10
No information	6
Received pamphlet about the program	2
Information about some of the services that the customer could receive - specific	4
They would weatherize the home and make it more energy efficient	1
They would do an audit and determine what kind of work could be done	1
They would check for home energy use and provide heating and cooling services	1
They would check the home for drafts and see if a new refrigerator or light bulbs were needed	1

Table V-5 displays the customer's recollection about the amount of time that elapsed between enrollment and service delivery. Most customers stated that they received services within one month, but there were a few customers who stated that over six months elapsed between enrollment and service delivery.

Table V-5
Time Between Enrollment and Service Delivery
Case Studies

Time Between Enrollment and Service Delivery	Number of Responses
1 week	1
2-3 weeks	7
1 month	4
2-3 months	5
More than 6 months	3
don't know	4

d) Program expectations

Most of the customers stated that they were not waiting for additional work. Three of the twenty-five customers interviewed in the case studies stated that they were waiting for work, and another three stated that they were only waiting for the final inspection. Four of the customers stated that they did not receive all of the services that they expected. One customer was expecting a waterbed replacement, one was expecting the windows to be sealed or insulated, one was waiting for the contractors to come back and do the upstairs part of the home, and one was expecting heating boards and a new thermostat.

e) Understanding of and satisfaction with measures

For most measures, the quantitative survey asked customers whether they were aware that measures had been installed, and the case study interviews asked customers if they understood the purpose of the measure. Most of the customers were aware of the measures and stated that they understood why the measures had been installed. Table V-6 displays results from the quantitative study on awareness and satisfaction with measures.

Three of the fourteen customers who received a CO detector and were interviewed as part of the case studies stated that they did not understand the detector. One of the twenty-seven customers interviewed in the quantitative survey who received a CO detector said he did not know if he understood how to use the CO detector.

Understanding of other measures was also fairly high. All of the customers who had a hot water heater wrap knew that this was done and understood why this was done. Three of the ten customers who received aerators did not understand why this was done (15 of the 17 knew it had been done), two of the six customers who received showerheads did not understand their purpose, (9 of the 11 knew it had been done.) One of the 27 customers who received insulation was not aware that this had been done.

Most of the customers were very satisfied with the measures that were received. In the quantitative interviews, ninety-eight percent of the customers stated that they were very or somewhat satisfied with the quality of the lighting. Thirteen percent said that one or more of the new bulbs had burned out.

All of the customers the quantitative interviews were satisfied with the aerators. Ninety-two percent of the customers in the quantitative interviews were very satisfied with the aerators. One of the customers reported that she had removed an aerator.

Seventy percent of the customers in the quantitative survey who received showerheads were satisfied. Ten percent were somewhat dissatisfied and twenty percent were very dissatisfied. Two of the customers had removed the showerheads.

The case study interviews asked customers if they were satisfied with the refrigerator delivery. One customer stated that she was not satisfied. In the quantitative interviews, seventy percent said that they were very satisfied with the refrigerator, ten percent said they were somewhat satisfied, fifteen percent said they were somewhat dissatisfied, and five percent said they were very dissatisfied. Most of the customers waited less than one month to have the refrigerator delivered, and only one customer waited more than two months.

One customer out of twenty in the quantitative interviews said that he was not satisfied with the hot water heater wrap.

Eighty-four percent of those in the quantitative survey were very satisfied with the insulation, twelve percent were somewhat satisfied, and four percent were somewhat dissatisfied. One customer felt that some bugs in her home were caused by the insulation

Table V-6
Awareness and Satisfaction with Measures
Quantitative Survey

Measure	Number Received	Aware of Measure	Satisfaction			
			Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied
CFL	46	Not asked	87%	11%	0%	2%
Aerator	24	88%	92%	9%	0%	0%
Showerhead	11	82%	60%	10%	10%	20%
Refrigerator	21	Not asked	70%	10%	15%	5%
Hot water heater wrap	20	100%	85%	10%	5%	0%
Insulation	27	96%	84%	12%	4%	0%
Air sealing	39	87%	94%	6%	0%	0%

f) Education and actions

The case study and quantitative program interview also discussed education and energy-saving actions with the customers.

Fifteen of the twenty-five customers interviewed as part of the case studies stated that the technician had measured the hot water temperature and told them what the temperature was. Three of these customers remembered the initial reading and eight customers stated that the technician did turn the hot water temperature down. Of these customers, two stated that they turned the hot water temperature back up because the water was taking too long to heat up or the baby's bath was not staying warm.

Twelve of the customers interviewed for the case studies stated that the contractor did review and explain their energy bills.

Sixty-three percent of those interviewed as part of the quantitative interviews said that the auditor provided a written list of actions. (Note that this form could include the partnership form or the action form.) Thirty-five percent said that the technician provided an estimate of potential cost savings associated with the actions.

Table V-7 displays actions that the customer most frequently stated he/she agreed to take in the quantitative program interview. Unprompted, customers could not remember many actions. Most of the customers either did not know what actions they agreed to take to reduce energy usage, or stated that they had not agreed to take any actions. The most common action customers stated that they agreed to take was to use their lights less. A few customers stated they would use heat and air conditioning less, keep windows and doors closed, or take advantage of the time-of-day rate.

Table V-7
Actions that the Customer Agreed to Take
Quantitative Interview

Action	Number of Responses
Don't know	20
None	8
Use lights less	9
Close doors and windows	3
Use heat and air conditioning less	3
Time use of appliances to take advantage of lower rate	3
Use energy saver on the refrigerator	1
Hang clothes to dry	1

Table V-8 displays customer responses to whether they have taken specific actions to reduce energy use. Forty-four percent of the customers said that they reduced their hot water use, twelve percent said that they kept their home at a lower temperature in the winter, twenty-seven percent said that they reduced their use of air conditioning, twenty-nine percent said that they reduced their dryer's energy use, and zero percent said that they reduced their dish washer's energy use.

Table V-8
Percent of Customers Answering that they Took this Action
Quantitative Interview

Action	Percent of Customers
Reduce use of hot water	44%
Keep home at a lower temperature in the winter	12%
Reduced the amount of air conditioning used	27%
Reduced energy used by clothes dryer	29%
Reduced energy used by dishwasher	0%

Table V-9 displays the number of customers who stated that they took different actions to reduce their hot water usage. Most of the customers who provided a method said that their hot water temperature was lower. (When asked whether the auditor reduced the temperature of the hot water heater, 38 percent of the customers said that he/she did. Of these, 11 percent said that they raised the setting back to

where it was previously.) Five customers said that they are reducing the amount of time that their hot water heater is on.

Table V-9
Actions Customers Took to Reduce Hot Water Usage
Quantitative Interview

Action	Number of Responses
Turned down water heater temperature	11
Use timer for water heater and reduced time it is on	5
Use Laundromat	1
Use after 8 pm	1
Don't use small loads of laundry	1

Table V-10 displays the actions that customers stated they have taken to reduce the energy use of their dryer. Five customers stated that they are using line drying, three customers stated that they are using only full loads, and one customer stated that she is cleaning the lint out of the dryer.

Table V-10
Actions Taken to Reduce Dryer's Energy Use
Quantitative Interview

Action	Number of Responses
Line drying	5
Using only full loads	3
Cleaning out the lint	1

g) Effect of the program on energy use and comfort

Fourteen of the customers interviewed as part of the case studies and thirty-six percent of the customers surveyed in the quantitative interviews felt that their bills had already been reduced since receiving program services.

Table V-11 displays the effect of the program on the customers' comfort. Fifty-four percent felt that their home is more comfortable, sixty-eight percent felt that the house is warmer in the winter, sixty-seven percent felt that the house is less drafty in the winter, and seventy-three percent felt that the house is more comfortable in the summer since receiving program services.

Table V-11
Effect of Program on Comfort
Quantitative Interview

Effect	Percent
House is more comfortable since receiving program services	54%

Effect	Percent
House is warmer in the winter since receiving program services	68%
House is less drafty in the winter since receiving program services	67%
House is more comfortable in the summer since receiving program services	73%

h) Satisfaction with the providers and the program

Most of the customers expressed very positive feelings toward the providers who came to their homes. Almost all of the customers stated that the providers were on time, knowledgeable about energy use, responsive to questions, and courteous and professional.

Almost all of the customers were very satisfied with the work done on the home. (One customer stated that the contractors had left holes in her walls.) The customers stated that the providers were neat and considerate of their homes. Table V-12 displays customer satisfaction results for the program as a whole from the quantitative interviews.

Table V-12
Program Satisfaction
Quantitative Interview

	Satisfaction			
	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied
Measures	86%	8%	6%	0%
Education	90%	4%	4%	2%
Overall	88%	10%	2%	0%

i) Arrearage Reduction component

A quantitative arrearage reduction survey was conducted with twenty-five program participants. Because some of the customers were signed up for both electric and gas arrearage reduction programs, 34 different payment plans were discussed.

Ninety-two percent of the customers interviewed felt that they had a good understanding of the program. However, most of the customers were not aware how much debt was being forgiven. Eighty-eight percent said that it was more likely that they would pay their bill each month, knowing that they had the opportunity to have their debt forgiven.

Customers stated that eighty-eight percent of the plans provided an affordable monthly payment. Twelve percent of the amounts were very difficult for the household to pay, fifty-nine percent were somewhat difficult, and twenty-nine percent were not at all difficult.

6. Recommendations

a) More information should be provided to customers at the time of enrollment

More information should be provided to customers at the time of enrollment. This should include information on the partnership and the customer's responsibility in reducing energy usage.

b) Auditors should follow education procedures

Customers do not understand the partnership nature of the program and do not know their responsibility in the program. Customers are not able to remember the actions they agreed to take, or stated that they did not agree to take any actions. Customers often stated that they did not receive a written action plan and were not provided with estimates of potential cost savings from taking certain energy-saving actions. These findings support our earlier findings that technicians were not following program procedures. Technicians should follow documented education procedures.

c) HDMC should pilot a more intense education procedure

There is evidence in the literature that customers will take actions to save energy if they are engaged in effective energy education. HDMC should undertake a limited pilot with some of their crews where a more intensive education effort is explored. An evaluation of such an effort should focus on whether customers participating in the pilot retained information on how to reduce energy usage through changes in behavior.

Appendix A - List of Interviews and Observations

1. Utility program procedures interview, Fred Lynk, PSE&G, December 11, 2001
2. Program and evaluation issues interview, Maria Frederick, JCP&L, December 12, 2001
3. Utility Arrearage Reduction procedures interview, John Augustino, HDMC, December 13, 2001
4. Utility program procedures interview, Maria Frederick, JCP&L, December 17, 2001
5. Utility program procedures interview, Heather-Lynn Puerschner, NUI/Elizabethtown Gas, December 17, 2001
6. Utility program procedures interview, Maria Frederick, JCP&L, January 14, 2002
7. Utility program procedures interview, Kevin Jones, Rockland, January 17, 2002
8. Utility program procedures interview, Doris Kraft, NJ Natural Gas, January 22, 2002
9. Utility program procedures interview, Fred Lynk, PSE&G, January 25, 2002
10. Utility program procedures interview, Bill Reed, PSE&G, February 4, 2002
11. Utility program procedures interview, Heather-Lynn Puerschner, NUI/Elizabethtown Gas, February 4, 2002
12. Utility program procedures interview, Van Summers, Conectiv, February 5, 2002
13. Utility program procedures interview, Bruce Grossman and Joan Sweeney, February 8, 2002
14. On-site observation of service delivery (core), HDMC, February 13, 2002
15. On-site observation of Working Group meeting, February 19, 2002
16. Contractor procedures interview, Mike Omasta, Bill Busters, February 19, 2002
17. On-site observation of service delivery (core), Bill Busters, February 19, 2002
18. Third party quality control procedures interview, Tamasin Sterner, Pure Energy, February 26, 2002
19. Contractor Procedures, John Augustino, Tom McMahon, and Neal Gale, HDMC, February 28, 2002
20. On-site observation of program procedures, JCP&L, March 5, 2002
21. On-site observation of contractor program procedures, HDMC, March 12, 2002
22. On-site observation of third party quality control, Pure Energy, March 18, 2002
23. Third party quality control procedures interview, Joe Iandolo, CMC, March 19, 2002 (written response)
24. On-site observation of contractor program procedures, HDMC, April 10, 2002
25. On-site observation of third party quality control, CMC, April 11, 2002
26. Utility Arrearage Reduction procedures interview, Gary Gamler, JCP&L, April 12, 2002
27. On-site observation of service delivery (education and arrearage), HDMC, April 22, 2002
28. Utility Arrearage Reduction procedures interview, Heather-Lynn Puerschner and Kathy Dinsmore, NUI/Elizabethtown Gas, April 26, 2002
29. Observation of Comfort Partners education training, April 29-30, 2002
30. Utility Arrearage Reduction procedures interview, Van Summers, Conectiv, May 2, 2002
31. Utility Arrearage Reduction procedures interview, Doris Kraft and Bob Ditomasso, NJ Natural Gas, May 6, 2002
32. Utility Arrearage Reduction procedures interview, Bruce Grossman and Paul Madden, May 7, 2002
33. Utility Arrearage Reduction procedures interview, Bill Reed, PSE&G, May 7, 2002

34. On-site observation of service delivery (education and arrearage), HDMC, May 30, 2002
35. On-site observation of service delivery (education and arrearage), HDMC, May 31, 2002
36. Comfort Partners education design interview, Maria Frederick, JCP&L, June 3, 2002
37. Utility Arrearage Reduction program procedures, Linda Kleppinger, JCP&L, June 4, 2002
(in writing)
38. On-site observation of service delivery (education and arrearage), HDMC, June 6, 2002
39. On-site observation of service delivery (education and arrearage), HDMC, June 7, 2002
40. On-site observation of service delivery (education), HDMC, June 10, 2002
41. On-site observation of service delivery (education), HDMC, June 11, 2002
42. Stakeholder interview, David Hill and Ken Tohinaka, June 14, 2002
43. On-site observation of service delivery (education), HDMC, June 18, 2002
44. Comfort Partners education design interview, Ken Tohinaka, June 19, 2002
45. Auditor interview, Mike Omasta, Bill Busters, June 19, 2002
46. On-site observation of service delivery (education), Bill Busters, June 19, 2002
47. On-site observation of service delivery (education), HDMC, June 19, 2002
48. On-site observation of service delivery (education), HDMC, June 20, 2002
49. On-site observation of service delivery (education), HDMC, June 21, 2002
50. Comfort Partners education design interview, John Augustino and Neal Gale, HDMC, June 27, 2002
51. On-site observation of service delivery (education and arrearage), HDMC, June 27, 2002
52. Contractor training interview, Neal Gale, HDMC, July 1, 2002
53. Contractor arrearage procedures interview, John Augustino and staff, HDMC, July 2, 2002
54. Field supervisor interview, Rich Zavodny, HDMC, July 5, 2002
55. Utility Arrearage Reduction program procedures interview, Keith Roberts, PSE&G, July 9, 2002
56. CBO Arrearage Reduction program procedures interview, Debbie Meade, NORWESCAP, July 11, 2002
57. On-site observation of CBO Arrearage Reduction intake, NORWESCAP, July 11, 2002
58. CBO Arrearage Reduction program procedures interview, Lori Sigrist, Ocean Inc., July 15, 2002
59. On-site observation of CBO Arrearage Reduction intake, Ocean Inc., July 15, 2002
60. Field supervisor interview, Bob Blozinsky, HDMC, July 18, 2002
61. On-site observation of staff feedback meeting, HDMC, August 1, 2002
62. Auditor interviews, HDMC, August 1, 2002
63. Field supervisor interview, Charles Lewis, HDMC, August 5, 2002

Appendix B - Interview and Observation Protocols

1. Utility program procedures, December 15, 2001
2. MaGrann observation procedures, January 24, 2002
3. APPRISE observation procedures, January 24, 2002
4. Core program observation procedures, February 10, 2002
5. HDMC program procedures, February 13, 2002
6. Bill Busters program procedures, February 13, 2002
7. Third party quality control inspection procedures, February 14, 2002
8. Baseline Assessment, March 14, 2002
9. Arrearage Reduction program procedures, March 29, 2002
10. JCP&L Arrearage Reduction program procedures, March 29, 2002
11. Customer case studies, May 21, 2002
12. HDMC auditor education and training, May 22, 2002
13. Education design, May 22, 2002
14. Stakeholders, May 22, 2002
15. HDMC insulation subcontractor procedures, May 26, 2002
16. HDMC arrearage procedures, May 28, 2002
17. JCP&L CARES representative arrearage procedures, May 30, 2002
18. HDMC field staff training procedures, June 27, 2002
19. Arrearage Reduction CBO procedures, June 27, 2002
20. HDMC field supervisor procedures, June 27, 2002
21. Quantitative education customer survey, June 28, 2002
22. Quantitative Arrearage Reduction customer survey, June 28, 2002

