

# **PAYMENT PLUS: CINERGY'S LOW-INCOME EDUCATION & ARREARAGE FORGIVENESS PROGRAM**

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## **ABSTRACT**

Cinergy Corp has designed, implemented, and evaluated a program with a new twist to serving low-income customers with substantial arrearage levels. Typically low-income programs have focused on installing weatherization measures in homes but few low-income programs have provided a comprehensive set of energy-related services that focus on multiple goals (energy savings, debt reduction, consumer education, improved payments, etc.) Many of these customers do not have the financial management skills needed to develop and follow a household budget that will help them stay out of debt and manage their reduced energy bills. The Cinergy program fills this gap. Cinergy's Payment Plus Pilot Program takes a three-step approach to helping their low-income customers. The three steps include: 1) Energy education workshops, 2) Household financing and budgeting workshops, and 3) Installation of weatherization measures. This paper discusses the design and operations of three Payment Plus pilot programs, highlighting the changes that were made to the program in 2003 and the results of three evaluations.

## **Introduction**

Like all utilities, Cinergy has low-income customers who have high energy bills and high arrearage. These customers struggle to make ends meet, often facing choices between paying utility bills or buying other necessities. The objective of this pilot program is to test whether the combination of energy efficiency education, budget management training, and weatherization can help customers reduce their bills and gain control of their financial condition so that they are better able to manage their account and pay their bills.

This pilot program is being conducted in northern Kentucky. The program was conducted in three phases from May 2002 to May 2004.

## **Program Description**

Cinergy's Payment Plus (PP) Pilot Program takes a three-step approach to helping low-income customers reduce consumption and manage household finances. The three steps include:

1. Energy education workshops focusing on ways to reduce energy consumption through behavior modifications,
2. Household financing and budgeting workshops focusing on how to live within one's household income, and
3. Installation of weatherization measures that make the home more energy efficient.

While weatherization services appeal to many low-income households, classroom style educational programs often suffer from poor attendance. To encourage program enrollment and participation, the PP offers an incentive to customers who complete one or more of the program components. The incentive

takes the form of bill credits that go directly toward paying down arrearage levels, directly reducing the total cost of the utility bill.

The program is funded by Cinergy utilizing demand-side management funds and is implemented by the Northern Kentucky Community Action Commission (NKCAC) and People Working Cooperatively (PWC), two low-income service agencies. NKCAC manages and administers the program and provides the participant training services. PWC provides the weatherization services as part of a broader weatherization program, once the participants complete the training component(s).

The program has completed three pilot program implementation phases in which the program was re-designed after each phase following an evaluation of each phase. The evaluations were conducted by TecMarket Works. The evaluation efforts consisted of:

- Two process evaluations that examined program designs and operations (after the first and second pilot programs);
- Two arrearage and payment effects evaluations (after the first and second program)
- Three rounds of energy impact evaluations consisting of both short term and longer-term impact assessments.

The primary purpose of the pilot program is to determine if the combination of the three aspects of the program can help low-income customers with significant arrearage and payment problems obtain the information and learn the skills needed to control their consumption, reduce their utility bills and manage their accounts in a way that results in lower arrearage levels.

### **Pilot I**

PP Pilot I planned to serve 50 participants and was implemented in the spring of 2002. In addition to the training and weatherization services described above, the program also offered incentives to pay the utility bill on time. If the participant paid their “current usage” energy bill on time each month, they received an incentive. These incentives were:

- Month one payment on time = \$80 credit
- Month two payment on time = \$70 credit
- Month three payment on time = \$60 credit
- Month four payment on time = \$40 credit

Participants who maintained timely bill payments for four months, attended the two education sessions (energy and budgeting), and had their homes weatherized would receive an additional \$500 arrearage credit for a total participation incentive of up to \$750. No credits above the arrearage could be applied. Participants were not disconnected if they kept up their payments and participated. If they dropped out of the program they reverted back to their regular payment agreements or were disconnected. Credits were issued in the form of vouchers used at the Cinergy office to make payment.

### **Pilot II**

PP II was redesigned based on the experience of PP I. The Pilot II effort planned to serve 100 participants who had levels of utility debt greater than \$500. The program enrolled 78 participants who participated in one or more program components. The primary program change was removal of the “on-

time” monthly payment incentive. The incentives were restructured to reward program participation and progress. The incentives were structured as follows:

- Attend the 2-hour Energy Education Session = \$200 credit
- Attend the 3-hour Budget Management Training = \$150 credit
- Free weatherization = \$150 credit

Under this structure a participant could receive up to \$500 in arrearage credits but no higher than their total arrearage level. In Pilot II the energy education session was required. The other two components (budgeting and weatherization) were encouraged through the incentives provided. The second major change to the program was arrearage credit processing. To reduce labor for Cinergy’s credit processing tasks and to make it easy for the participants, vouchers for the arrearages were eliminated and replaced with automatic internal credit processing by Cinergy. As participants took part in the program’s components, their account numbers were provided to Cinergy for direct credit processing. While this made the administrative process more direct, it did cause additional problems associated with the speed at which the credits could be applied and the ability to stop any pending disconnect orders due to internal billing system constraints.

PP II served 78 participants who took advantage of one or more of the program services. The program had an additional 25 enrollees who refused to participate in any of the program activities.

***Pilot I Process Evaluation Findings.*** The Pilot I process evaluation findings are presented below to help convey the experiences of the program and to help others who may be designing a similar program.

1. Pilot I enrolled 55 people in the program with a target of having 50 participate in all phases of the program. During the program, however, over half of the participants did not complete the required components and forfeited their utility bill credits. There were several reasons for the high dropout rate. First, most enrollees thought that program participation was required in order to obtain utility bill crisis assistance to maintain their utility connection. When customers came in to the agency to obtain “crisis” help to keep their power on, they were enrolled in PP I. In many cases customers were not aware that the PP was an option and was not required in order for them to obtain crisis dollars to keep their power on. This misconception caused people to enroll with no intention of following through. Second, the requirement of monthly on time payments is very difficult for this group. Participants were often unable to pay their bill on time even with substantial incentives to do so. Third, Weatherization measures were difficult to install in these homes because, for the renters, landlord consent was difficult to obtain. Others simply did not want program staff in their home. The requirement for monthly on time payments was also very labor intensive for both Cinergy and the program staff. Throughout the program both Cinergy and NKCAC staff needed to repeatedly contact participants encouraging them to pay their bills to keep them eligible for the program.
2. While the program was designed to test the delivery and effects of an arrearage reduction pilot program on 50 high-arrearage customers, the program, as implemented, did not target high arrearage customers. The NKCAC targeted customers on a first-come first-serve basis, as clients enrolled in the State’s Crisis Program.

3. The program administration, management and implementation took considerably more time than anticipated. The primary labor-intensive aspect of the program is the ongoing handholding and encouragement contacts required to keep payments on time and keep participants in the program.
4. There is a difference between enrolling in the Pilot Program and staying in the program until the end. Of the 55 customers enrolled in January, 28 finished the program – a 51 percent dropout rate. This is after there was an additional enrollment effort to fill the participation quota prior to the first workshop when 5 enrollees indicated they were not going to attend the first workshop.
5. As delivered, PP I program enrollments were predominantly driven by the customer's need to avoid having their power shut off or to receive incentives to help pay down arrearage debt. Of all the things considered by enrollees, the incentive played the most important role in their decision to enroll.
6. Most participants understood that attending a workshop or paying bills on time was required, but about one-third of all participants did not understand that both were required.
7. About 41 percent of the participants and 60 percent of the refusers, or about half of all enrollees thought that participation was required in order to not have their power shut off. Most participants (88%) knew their monthly bills needed to be paid on time if they were to receive monthly credits. Ninety-four percent of the participants knew that they needed to pay bills on time and attend the workshops in order to receive the final \$500 credit.
8. Participants report strong program satisfaction across all program components, with no score being less than 8.9 on a 10-point satisfaction scale.
9. About 24 percent of participants report being better able to pay their household bills as well as their utility bills. However, over 80 percent report being better able to manage their energy consumption. Participants are from low- to very low-income households and have trouble making ends meet regardless of the program's support.
10. Most participants report that the most important things they learned dealt with specific methods or tips to reduce energy use and control their utility bill.
11. Participants, on average, report taking 2.5 actions in their home to reduce energy consumption and control their utility bills. Participants are taking actions as a result of the educational workshops they attend. Over 80 percent of participants report their knowledge about how to save energy and control costs have increased.

***Pilot II Process Evaluation Findings.*** The Pilot II process evaluation findings are presented below to help convey the experiences of the program and to help others who may be designing a similar program. Cinergy did not conduct a process evaluation of PP III.

1. The program enrollment letter sent to 450 Cinergy low-income customers was successful at convincing 16% of the target market to participate in the program. Follow-up calls to targeted customers were successful at attracting additional participants. Sixty percent of enrollees learned of the program via the NKCAC outreach letter and 10% learned about the program through contacts with the NKCAC office.

2. The program's training materials supported the educational efforts and were a positive contribution to the sessions. The materials used covered the key issues and actions appropriate for the target market across both the energy and budget management sessions.
3. The Budget Management session needed to consider changing its name and marketing effort to focus on benefits to participants instead of focusing on the financial management aspects of the training session that may alienate potential participants.
4. During the Pilot II, there were significant delays in applying the credits to participants' bills in the Cinergy system. A system needed to be established for crediting participants quickly to offset any pending disconnect orders and to appear on the customer's next bill. Unapplied earned credits and their impact on the customer was the only significant complaint for this program.
5. Seventy-five percent of enrollees report that the \$500 arrearage credit incentive was the primary driver of enrollment and participation, however 20% said they enrolled to learn about ways to reduce their bills.
6. Homeowners are four times more likely to enroll in the program than renters, and single mothers are most likely to enroll to obtain the bill credits.
7. Reasons reported for non-attendance in one or more of the educational sessions indicate that the "choice" to attend may not be a matter of choice, but rather lack of ability to attend. Participants who could not attend indicate that health, work, transportation or other valid reasons kept them from attending.
8. Participants eligible for weatherization, but who refused it indicate a number of reasons for the decision, including: resistant landlords, not enough time, forgot about it, home is a mess and don't want people inside, and moving. Satisfaction with weatherization is high.
9. Unlike PP I, program PP II participants fully understood the program requirements, the credit values and the requirement that credits can only be used to pay their arrearage. However, older participants appear to have had a better understanding of the program than younger participants.
10. Participants are very satisfied with the Training Sessions. On a scale of 1-10, average scores for all aspects of the training sessions were high across most response categories for both sessions (energy & budgeting). Satisfaction was particularly high when rating the instructor's knowledge (9.4 & 9.8), comprehensiveness of subject matter (9.3 & 9.3), materials used (9.2 & 9.5), and presentation skills of instructor (9.1 & 9.2). The convenience of attending the session was the only response group that received satisfaction scores below 9 (8.6 & 8.8).
11. Participant's opinions of Cinergy are greatly improved as a result of the program, with almost half of the participants report "much more" positive opinions of Cinergy and an additional 18% report "somewhat more" positive opinions of Cinergy.
12. Ninety percent of the participants reported an increase in their knowledge of how to save energy, with most reporting several actions taken since attending the Energy Education Session.

13. Seventy-one percent of participants report that their utility bills have decreased *somewhat* or *a lot* since their participation, indicating that most participants think the program has helped reduce their consumption. This fact is substantiated through a review of participant and non-participant consumption records, indicating that participants have substantially reduced their electric and gas consumption.

## **Energy Use Analysis and Findings**

One of the goals of the Payment Plus Program is for the participants to learn ways to be more energy efficient. In this analysis, we examined and compared energy usage of Pilot Program I and II participants, and a control group of non-participants, over the years before and after the program.

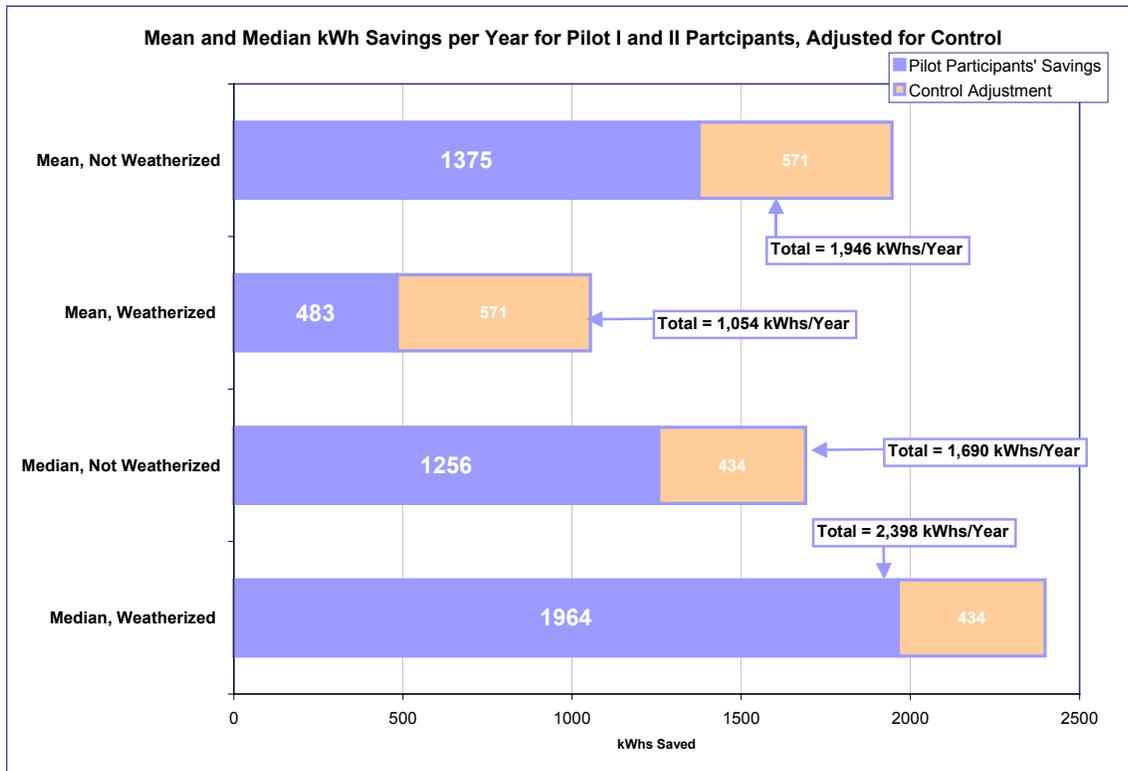
### ***Energy Use Evaluation - Pilots I and II***

**Cautionary Note on Sample Size:** Many of the customers in both the participant and the control group did not have a history of account information prior to program enrollment, or they had moved shortly after the program, making their consumption data unavailable or not relevant for the analysis. As a result, many accounts from both groups had to be eliminated from this study. The results presented in this section are based on 39 participants across both PP I and PP II who were previous customers long enough to have an account history and who stayed with Cinergy long enough to look at trends in usage after the program. The analysis is based on the use of Princeton University's energy impact analysis "scorekeeping" software called PRISM™.

All of the analytical runs were done in PRISM™ to provide an  $R^2$  and CV(NAC) value that indicates the strength of the results provided. These values indicated that the correlations were strong enough to draw conclusions from the analysis.

### ***Energy Savings of Pilot I and II Participants Combined***

With the weather-normalized results provided by PRISM™ it is possible to combine the Pilot I and II participants together as a single group and assess the energy impacts across both groups. This assessment provides the most reliable indication of program energy impacts because it treats participants as a single group.



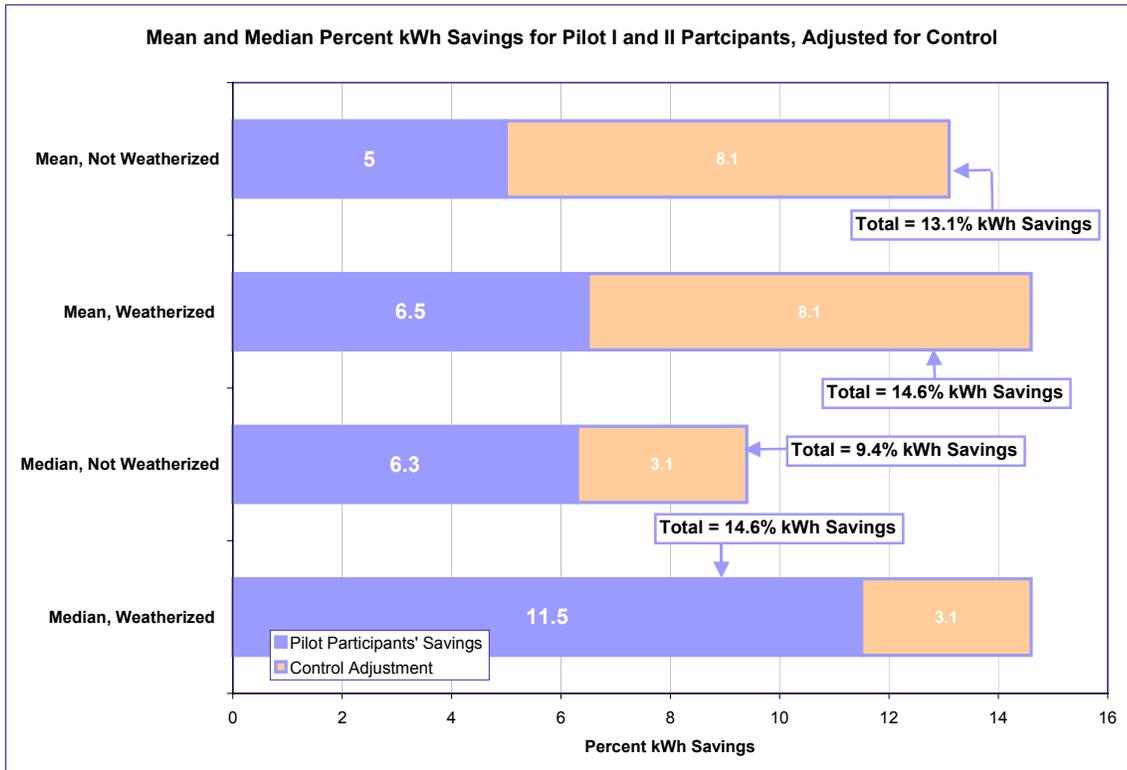
**Figure 1 Mean and Median Savings per Year of Pilot I & II Participants Combined, Adjusted for Control Group Changes**

In order to conduct this analysis we employed the use of a control group in order to assess what would have occurred in the test group if participants would not have participated in the PP pilot programs. The control group was a “filtered” group structured to match the participant group. The candidates for the control group consisted of all of Cinergy’s area-eligible (northern Kentucky) customers who were also income-eligible for participation in the PP. This population consisted of LIHEAP customers (income qualified) who also had high enough arrearage levels that they would have been eligible to participate. Following this “filtering,” the control group was then matched to have the same energy consumption characteristics as the participant group. Once the control group was selected, the pre- and post-program consumption of the test group was compared to the consumption of the control group to normalize the test group’s consumption to reflect what would have happened to the test group if they would not have participated. The comparison approach used was the PRISM™ scorekeeping approach commonly used as a standard practice within the evaluation field. The lighter area of the above graphic reflects the amount of energy that the participant group would have consumed if they had not participated in the PP program.

Figure 1 above shows that the mean kWh savings per year is higher for those participants that were not weatherized, with a mean savings of 1,946 kWh/year, compared to 1,054 kWh/year for those that were weatherized. This figure also includes the median savings for the combined Pilot I and II participants, and indicates that the weatherized participants have a much higher median savings than those that were not weatherized. This data indicates that there are a few non-weatherized participants that were able to save larger amounts of electricity than the weatherized group as a whole. These variations are normal and expected within the energy impact evaluation field.

Figure 2 below provides the percent savings with comparisons between the weatherized and not weatherized groups. This diagram also reflects the results of the comparison with the control group (discussed earlier). The mean savings between the weatherized and non-weatherized groups are very close, with weatherized participants able to cut electricity use by 14.6%, while those that were not weatherized were able to reduce their use by 13.1%.

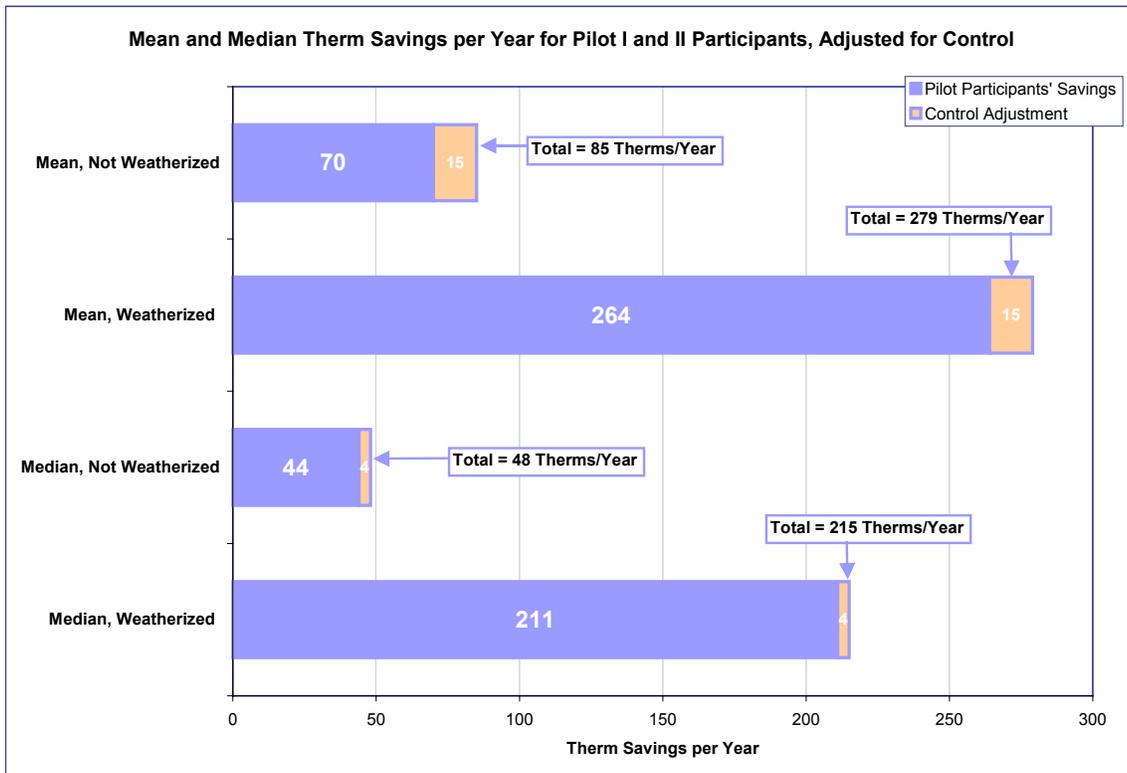
Both weatherized and non-weatherized participants were able to achieve a higher median savings. All participants were able to reduce their kWh consumption by a control-adjusted median of 14.6%.



**Figure 2 Mean and Median Percent Savings for Pilot I & II Participants Combined, Adjusted for Control Group Changes**

Figure 3 and Figure 4 below are similar to the two electric graphs presented above, but instead report therm savings. Here again, the findings are adjusted for the use of the control group to increase the validity of the results. Figure 3 indicates that weatherized participants save a significantly higher amount of therms/year. Weatherized participants were able to cut their use of natural gas by 279 therms per year. However, those that were not weatherized were able to cut their use by 85 therms. These effects can be attributed to the educational component of the Payment Plus Pilot.

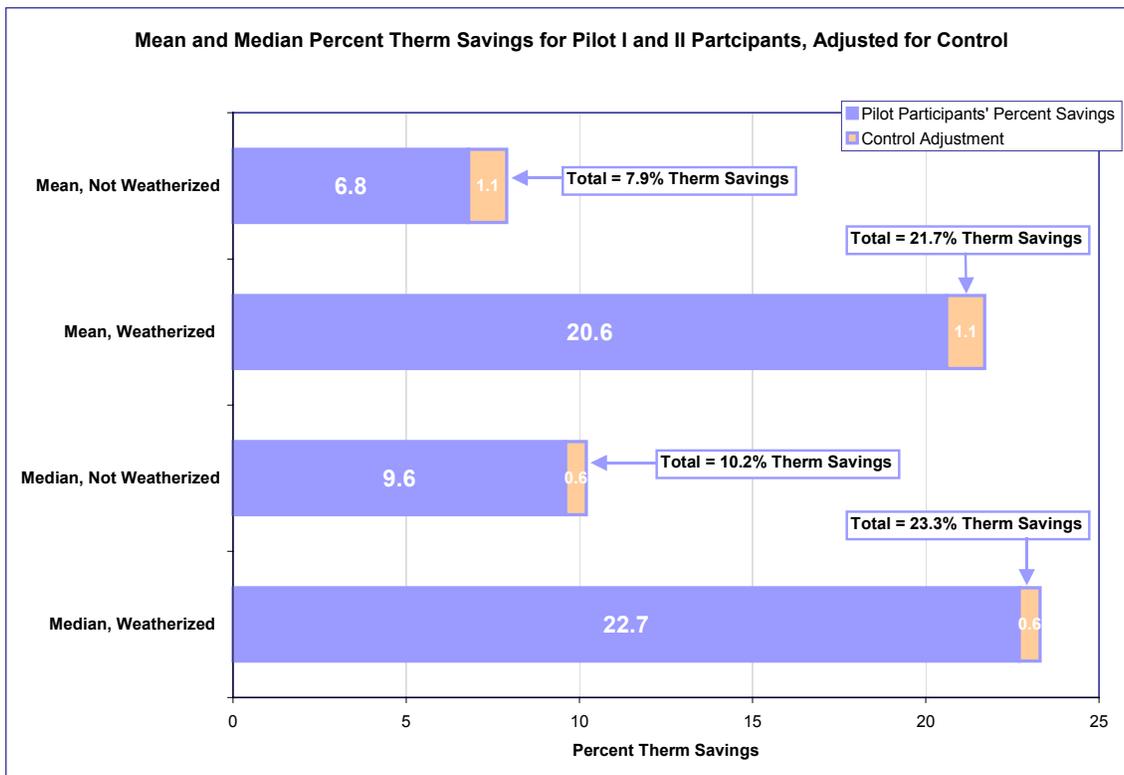
Median savings shows a similar trend. Weatherized participants experienced a median savings of 215 therms/year. Those that did not receive weatherization services were able to reduce therm consumption by a median value of 48 therms per year.



**Figure 3 Mean and Median Therm Savings per Year for Pilot I & II Participants Combined, Adjusted for Control Group Changes**

Figure 4 below provides the percent savings realized after participation in the program. Weatherized participants receiving the educational services were able to reduce their natural gas use by 21.7%. The median percent savings for this group is 23.3%. Half of the weatherized participants were able to cut their natural gas demand by almost 25% or more.

Participants who were not weatherized reduced their consumption by 7.9%, with a median reduction of 10.2%. This indicates that there were a few participants who did not experience as high a savings because the mean savings is slightly lower than the median. However, half of the participants were able to reduce their consumption by 10% or more as a result of what they learned at the energy education sessions.



**Figure 4 Mean and Median Percent Therm Savings for Pilot I & II Participants Combined, Adjusted for Control Group Changes**

### Comparison of Pilot Program Savings With Other Programs

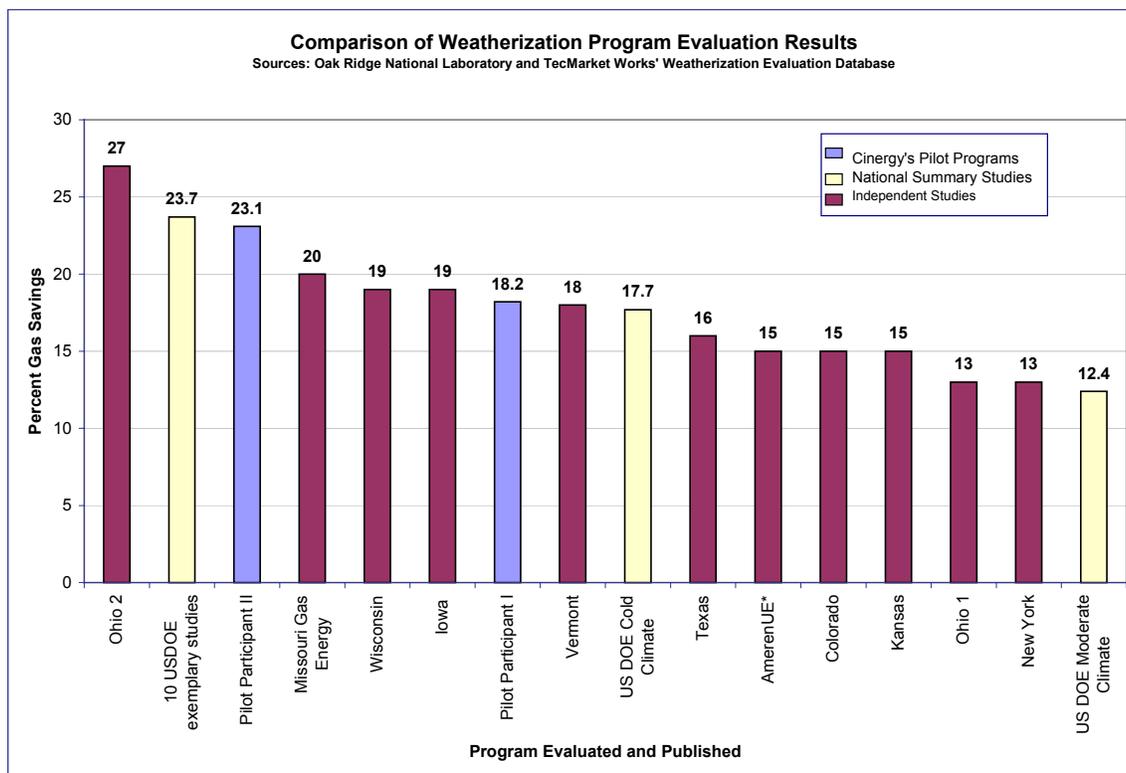
One of the most important considerations in assessing both the quality of the services provided and the ability of the program to save energy is to compare the results of the Pilot program with other weatherization programs. Cinergy’s Pilot Program compares favorably to other, better-funded weatherization programs, including the USDOE’s weatherization programs offered across the United States. The following diagram provides a comparison of the results of the Pilot Program’s energy impact evaluation to other federally and utility funded weatherization programs offered in the United States. It is interesting to note that of all the weatherization programs examined, only one (state of Ohio) provides savings slightly greater than Cinergy’s Pilot Program. The state of Ohio’s program spends an average of \$3,250 per participant, compared to the Pilot Program budget of \$2,699 per participant. Using a dollars-per-percent-saved metric, the Pilot Program is achieving savings by spending, on average, \$116.84 (PP II) per percent of savings achieved compared to the state of Ohio’s program that spends \$120.37 to achieve each percent of savings. This also compares favorably to Cinergy’s Ohio weatherization program that did not employ a tiered implementation structure or include an educational component, spending \$181.00 per percent of savings achieved.

This comparison looks only at the amount of energy saved and the cost of providing weatherization services and therefore excludes the cost for the educational services. We do not know the cost for the educational services for any of the programs included in this comparison. Additionally, we are unaware of the extent of the educational services provided by the programs used in this comparison, if any. While we know that the Ohio program includes some levels of educational services, we do not know the cost or the extent of these services. Likewise, while we know the cost to administer, manage, market, enroll and provide the educational services for the Pilot II Program (\$75,000), we do not know the

amount of these costs that are associated with the educational efforts alone. As a result we are unable to compare the effectiveness of the educational efforts associated with the Pilot program with other programs. However, we note that educational program natural gas savings of 7.9% and electric savings of 13.1% is significant, and reflects well on the education provided by NKCAC. Nationally, the effects of energy education programs included in the evaluation literature range from zero percent savings to 10% savings. However, many of these savings are estimated savings rather than the measured savings provided in this study. As a result, we expect that the savings from the educational activities associated with this program are also among the highest in the United States. It is clear from these comparisons that the Pilot Program is providing an exceptionally effective program, essentially out-performing many of the United State’s most effective weatherization programs.

Figure 5 presents a comparison of the energy savings from the Pilot Program with other weatherization programs found in the publicly available evaluation literature.

In our opinion, the primary reason for this exceptionally effective program is the two-tier approach to weatherization in which dollars are allocated to the weatherization effort consistent with the need for each home and the influence of the program’s educational efforts.



**Figure 5 Comparisons of Energy Savings With Other Programs**

# Arrearage Evaluation Results

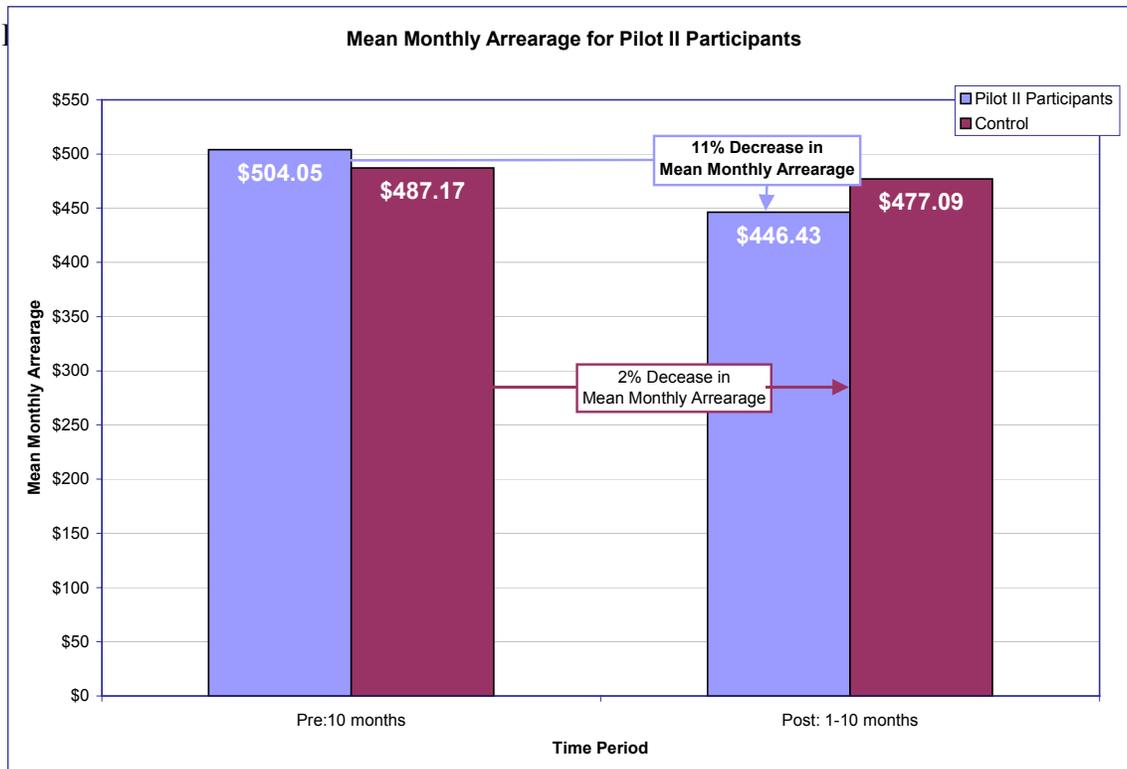
## Pilot II

This section presents the analysis of the Pilot II assessment on arrearage levels. The Pilot I analysis is not included in this paper because of the small sample size of the population (N=14) and nature of the data showing significant variance across both the test and control groups that was significantly influenced by a deteriorating economy. While this analysis showed a decrease in arrearage levels compared to the control group, it is not significant enough to report in this paper. Readers who wish to read the PP I arrearage analysis can do so by examining the full report. The analysis of the Pilot II participants is based on the billing and arrearage data of 64 customers that had data to analyze and who did not move during the study period.

Pilot II participants were able to bring their arrearage down about 11% and maintain a lower arrearage over the ten months following their participation in the Payment Plus Program. This compares with the control group lowering their arrearage by about 2% during that same period. This provides an average net decrease in post-program arrearage levels of 9% for the participant group over the post-program period.

For Pilot II, there was one year of pre-program data available (June 2002 through May 2003), but only ten months post (August 2003 through May 2004). To keep the pre- and post-periods balanced in both the number of months and the months of the year, June and July of 2002 are not included in the pre-program period. This leaves August 2002 through May 2003 as the pre-program period, and August 2003 through May 2004 as the post-program period for the time periods represented in Figure 6.

Figure 6 below shows that Pilot II participants were able to decrease their arrearage from a mean monthly arrearage of \$504 to \$446, accounting for the 11% drop. The control group (with the same 1,399 customers used in Pilot I post second year analysis) decreased their arrearage from \$487.17 to \$477.09 accounting for the 2% drop during the same time.



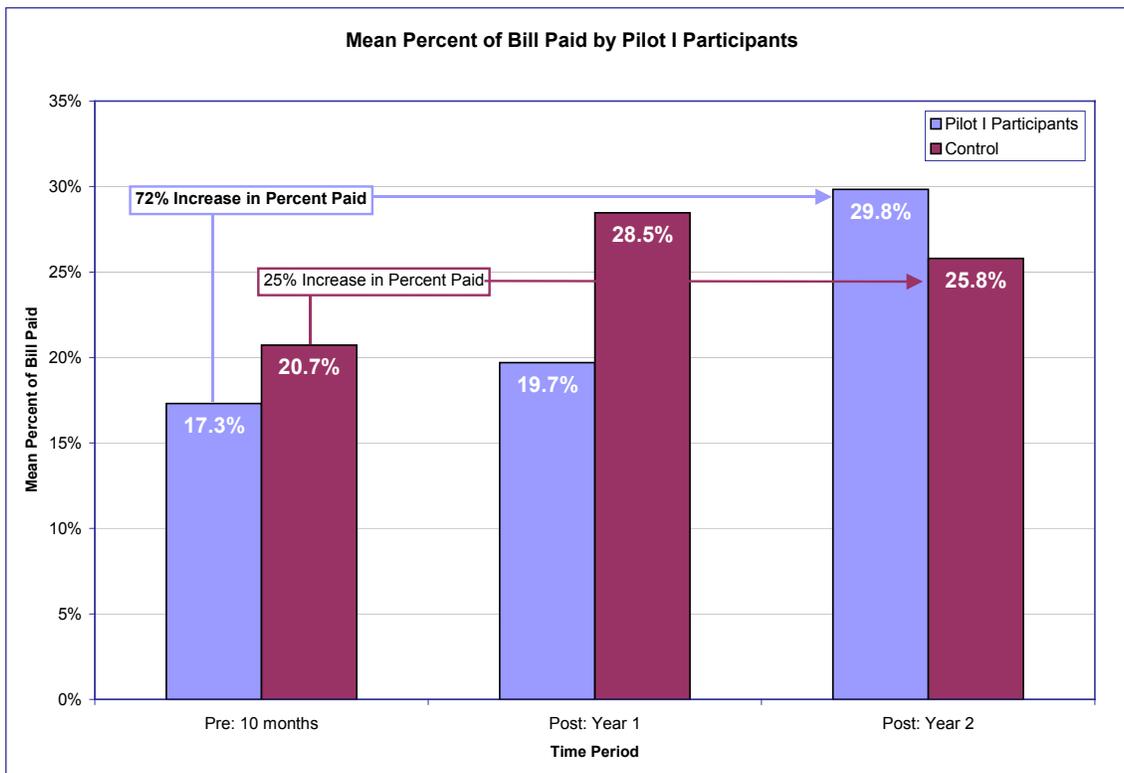
Likewise, a monthly trends analysis is included in the full report. This analysis indicates that during the month following participation the participant group was able to maintain a lower arrearage throughout the rest of the post-program period by about \$50 per month.

### ***Percent of the Bill Paid - Pilot I***

This section looks at the payments made each month by the Pilot I participants and the control group in comparison to the amount due on their bill.

During the examination of the payment data we noticed that in many cases multiple payments were made during a single month as people struggled to make weekly or bi-monthly payments. When these instances occurred we summed the payments made by the customer and then compared the sum to the amount due on the bill for that month. If there was no payment made in a month, a value of zero was included in the calculation for that month. Therefore, Figure 7 shows the percent of the bill paid, out of all the bills sent to the two groups over the three years.

The first year after participation, the percent of the bill paid stayed fairly low at 19.7% of the bills sent out, while the control group was able to pay a higher percent of their bills. However, the second year after the program, the Pilot I participants are, on average, paying close to 30% of their bill, slightly more than the control group is able to pay. This represents a 72% increase in payments toward the bill after the program than the amount paid before the program. The control group increased their payments by only 25%, from 20.7 to 25.8% of the amount due on the bill. Figure 7 presents this data in graphical form allowing the reader to see the change in the percent of the bill being paid before and after program participation by both the participants and the control group. The net percent of increase in bills paid between the participant and the control group indicates that the participant group increased the amount of their payments relative to the bills they received by a net change of 47%. This data also indicates that for Pilot I participants, the percent of the bill being paid increased each of the two post-program periods. However, it should be remembered that the number of participants is small (n=14) leading to significant reliability issues with these findings.



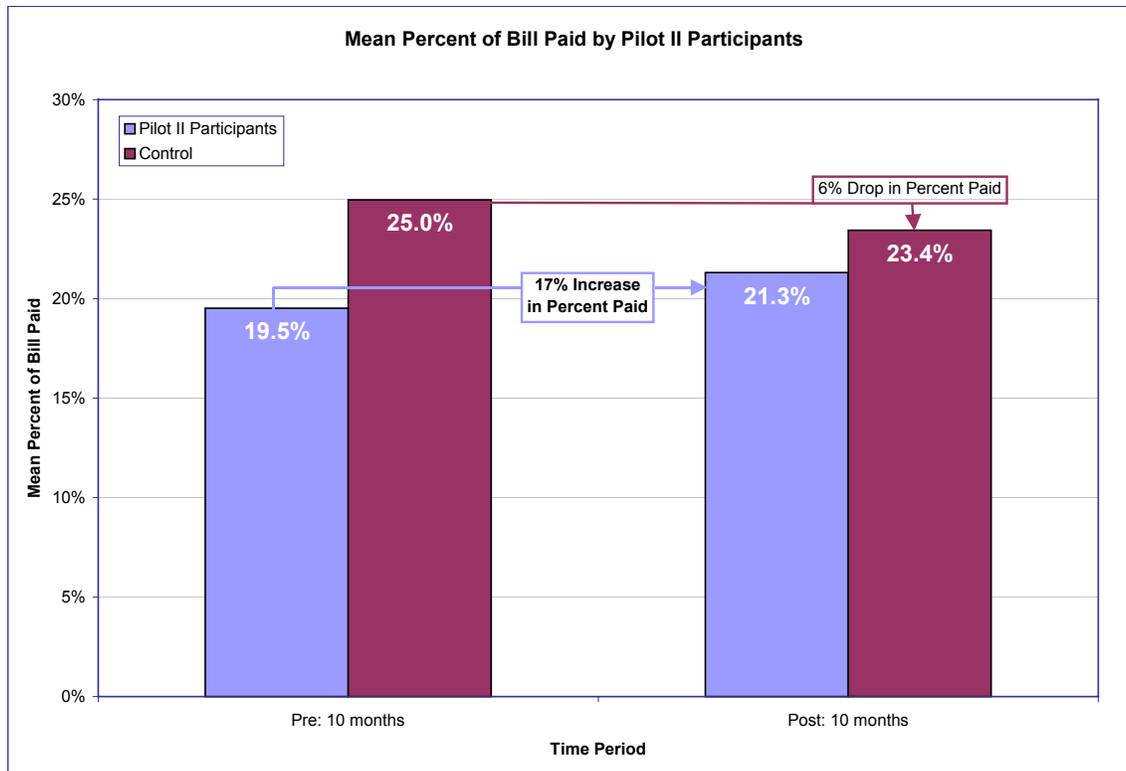
**Figure 7 Mean Percent of the Bill Paid by Pilot I Participants**

Figure 7 shows the trends in the percent of the bill being paid. In this graphic, the control is remaining steady across the pre-program period, paying an average of about 20% of their bill, while the customers chosen for participation in the Pilot I program were paying, on average, less of their bill through the same period with many of them not paying anything at all to the utility. This is a good indication that the participants chosen were in dire need of assistance when they entered the program and had significant trouble paying their bill in the November and December periods.

### ***Percent of the Bill Paid - Pilot II***

This section looks at the payments made each month by the Pilot II participants and the control group in comparison to the amount due on their bill. Pilot II participants were able to slightly increase the percent paid on their bill over the ten months following program participation by 17%, moving from 19.5% of the bill being paid to 21.3% paid after the program. The control group decreased the percent paid by 6% over the same period, dropping from 25% to 23.4%. However, even though their percent of payment went down during the post-program period, they were still able to make more of a payment than the participant group during the same post-program period. However, the data also suggest that some impact may be occurring in the long run. The monthly trends analysis in the full report indicates that prior to the program the participants had a decreasing slope to the percent of the bill that they could pay, indicating the participant was in a state of increasing arrearage levels bringing them to a condition in which they were targeted by the program (high arrearage levels). Following participation their percent of payment performance moved to an increasing slope in which participants paid a higher percent of the bill compared to the control group, especially during the months of May to September 2003. This performance should be monitored to identify any lasting long-term effects and reported in the summer of 2005.

Figure 8 presents the change in payment for Pilot II participants relative to the control group and indicates that the net change in payments between the participant and control group increased by about 23%. Yet they were still not able to reach the same post-program payment level of the control group who paid an average of 23.4% of the monthly bill during the post-program period.

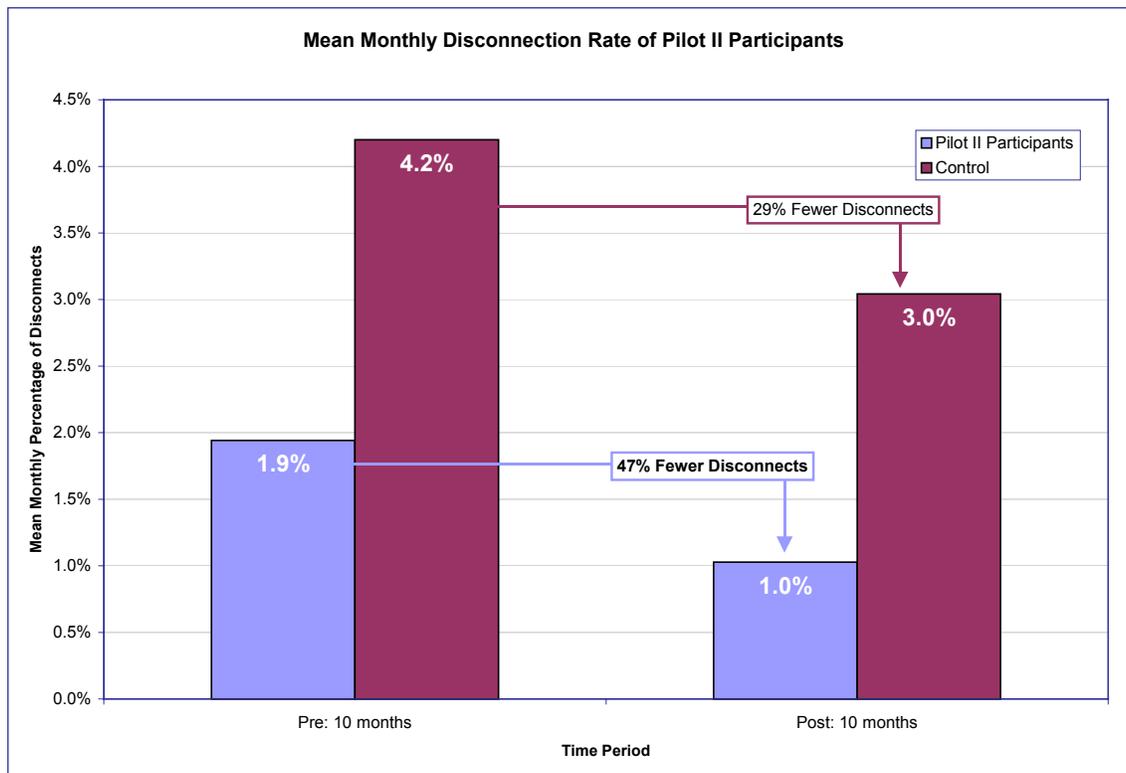


**Figure 8 Mean Percent of the Bill Paid by Pilot II Participants**

### *The Frequency of Disconnects – Pilot II*

An assessment of the frequency of disconnects was conducted only on Pilot II participants, where both the pre- and post-program data contained a disconnection code in the billing data allowing for the analysis to be conducted.

In the ten months before the program, 4.2% of the control group was disconnected at least once, while only 1.9% of the participants were disconnected. Following the program participation period the participant group disconnects were reduced by 47% to 1.0% disconnects during the post-program period. The control group decreased their disconnects by 29% moving from 4.2% to 3.0% disconnects over the 10 month post-program period. An interesting aspect of this analysis is that the participant group had less than half the disconnect rate prior to the program than did the control group, and had one-third of the disconnects after the program compared to the control group. The rate of decrease on the participant group disconnects is 18% faster than the decrease in the disconnect rate for the control group, indicating that the program impacted the disconnect rate over the pre- and post-program measurement periods. Figure 9 presents the movement in disconnect rates between the participant and control groups over the pre- and post-program periods.



**Figure 9 Mean Monthly Disconnection Rate for Pilot II Participants Before and After Participation**

## Conclusions

While there are indicators from this research that energy education, budget management training and weatherization can reduce bills of participants, it is not yet clear that there are sustainable, long-term improved payment behaviors by the participants.

For utilities considering implementing this type of program, there are lessons learned that should be considered during the program design process. First to consider is the identification of potential participants. By comparing utility arrearage data with customers who also receive energy assistance (and thus are income-qualified), a good target list can be developed for direct mail solicitations. Potential participants can also be recruited by the energy assistance agencies in the territory, but potential participants must still be checked for appropriate qualifications. Cinergy's participation criteria required an arrearage of \$500 or more and 12 months or more of historic billing (a minimum of 6 winter months) at the current address so that the bill history and payment evaluation could be completed. Renters or homeowners could also participate, however weatherization was completed in rental properties only with the permission of the owner. Second, the trainer must be someone who can relate well and teach the low-income participants through understanding and relating well to their situation. It is also important that the administrative & training agency have recognition and credibility within the low-income community. Third, the payment processing system can be a challenge and should be thoroughly thought through and functioning prior to starting the program. And last, communication and coordination between the agency teaching the classes, the weatherization agent (if different) and the program manager is important.

If the program results continue over the longer-term, this program may be a win/win/win situation for utilities, ratepayers, and participants. This preliminary data suggests that the utility may obtain a short-term reduction in the amount of arrearage owed and provide a customer with somewhat improved payment behaviors, but this may be a temporary effect. Ratepayers and the utility also benefit from energy savings and demand side reductions due to installed weatherization measures and customer behavior changes learned during the training sessions. Participants also benefit by obtaining reduced bills and by getting somewhat out of the “cycle” of arrearage problems. They also learn how to better manage their energy and bill payments.

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