AN OUTCOME EVALUATION OF INDIANA'S LOW-INCOME RATE AFFORDABILITY PROGRAMS

Programs Studied:

Citizens Gas & Coke Utility's Universal Service Program
Vectren Energy's Universal Service Program
Northern Indiana Public Service Company's Winter Warmth Program

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EXECUTIVE SUMMARY

This report provides an impact evaluation of low-income rate affordability programs offered by three Indiana utilities. The report evaluates the following programs:

- The Universal Service Program operated by Citizens Gas & Coke Utility (CGCU);
- The Universal Service Program operated by Vectren Energy (Vectren); and
- The Winter Warmth program operated by Northern Indiana Public Service Company (NIPSCO).

Three Indiana utilities offer home energy affordability assistance to their low-income customers. Two of the Indiana utilities offer similar programs. The utilities offer this assistance based on the proposition that improving the affordability of home energy to low-income customers can result in improved collections outcomes as well. In offering each program, the Indiana utilities expressed the intent that these programs would result in higher collections, lower collection activity, reduced arrears, and reduced bad debt write-off.

Despite this similarity in purpose, the three programs have distinct differences in their operational details. Each program is directed toward improving the affordability of the total home energy bill rendered by each company. The total home energy bill, in this respect, includes the bill rendered for current service along with any payments that may need to be made toward existing arrears. While the Universal Service Programs offered by CGCU and Vectren address home energy affordability by reducing the bill for current usage (leaving pre-existing arrears to be paid by the customer), NIPSCO addresses home energy affordability by targeting its assistance toward the pre-existing arrears (leaving the bill for current usage to be paid by the customer). The distinctions between the programs will be noted throughout as relevant.

OVERVIEW: ESTABLISHING PROGRAM OBJECTIVES:

This evaluation is charged with assessing whether the three Indiana low-income programs generate the outcomes that they were designed to achieve. Responding to whether programs of any nature achieve their purposes must involve an identification of the objectives of the programs in the first instance. The following objectives have been established for the Indiana low-income rate programs:

- Objective #1: To generate positive financial benefits to all ratepayers by addressing the payment troubles of low-income customers based on the lack of affordability;
- Objective #2: To improve the ability of the companies to interrupt the arrears-to-disconnect cycle of low-income customers;

- Objective #3: To improve the ability of low-income customers to sustain their seasonal bill payments through the high cost winter heating months (i.e., sustain bill payment on a seasonal basis);

- Objective #4: To improve the targeting of collection efforts to "can-pay-but-won't" customers rather than directing collection efforts to "can't pay" customers;

- Objective #5: To improve the ability of low-income customers to sustain their annual bill payments;

- Objective #6: To minimize the impact of income on all aspects of bill payment, including whether bill payments are timely, complete and regular;

- Objective #7: To improve the ability of low-income customers to rehabilitate their bill payment practices when/if they fall into arrears;

- Objective #8: To maximize the synergies between company-provided and publicly-provided bill payment assistance;

- Objective #9: To improve the capacity of existing bill payment processes to be effective with all customers at all income levels.

OUTCOME EVALUATION: EVALUATING ACHIEVEMENT OF OBJECTIVES

Any evaluation of the extent to which, if at all, a utility rate affordability program accomplishes its program objectives can only be measured through an analysis of program outcomes. While output measures and activity measures may be relevant to a discussion of how a program operates, neither of those measurements contributes to a determination of whether the program's objectives are being met. Accordingly, the discussion below identifies the low-income program objectives, and discusses outcome measurements to determine whether those objectives are being achieved.

Objective #1: Positive Financial Benefits.

Providing rate affordability assistance to low-income utility customers in Indiana accomplishes the objective of generating positive financial benefits to the companies and their nonparticipating ratepayers. The revenue neutrality of low-income programs is the most common mechanism for assessing whether such programs generate positive financial benefits. Revenue neutrality examines the extent to which, if at all, a low-income rate affordability program generates the same dollars of revenues to the utility as generated without the offer of discounted rates or bills. Revenue neutrality occurs when the low-income programs improve payment patterns sufficiently to offset any loss of revenue through the offer of the program. Each of the three Indiana utility low-income programs operated in a revenue neutral fashion for the respective utilities. Through their respective programs, each utility succeeded in leveraging additional customer payments that would not have been achieved in the absence of the program. While the USP programs implemented by Citizens Gas, and by Vectren, offered tiered utility rate discounts, in other words, the extent to which current bill payments from program participants increased more than

offset the extent to which current bills were provided on a discounted basis. Similarly, while the NIPSCO Winter Warmth program offered bill payment assistance to help retire arrears underlying pending service disconnections for nonpayment, the increase in customer payments toward NIPSCO bills was greater than the decrease in bills attributed to the Winter Warmth arrearage payments. As a result of this revenue neutrality, each company ended up collecting more revenue with their programs than they would have collected in the absence of their respective programs.

The ability of a low-income rate affordability program to generate the desired program outcomes in a less-costly way than available alternatives is a second way to assess whether programs generate positive economic outcomes from the perspective of the utility. The attached analysis assesses the extent to which available alternatives could produce the same outcomes generated by the rate affordability programs and, if so, at what cost. In sum, the increase in revenue generated through the low-income programs was accomplished in a manner that was less costly than existing available collection alternatives.

Objective #2: Interrupting the Arrears-to-Disconnect Cycle/Objective #7: Rehabilitating Payment Practices

Objective #2 and Objective #7 set forth similar objectives, stated somewhat differently for the different programs to which they apply. I will address both objectives together at this point. Collecting unpaid low-income bills can occur through a variety of utility collection activities. One of the most expensive collection processes involves the disconnection of service for nonpayment. One objective of the three low-income programs in Indiana is to interrupt that arrears-to-disconnect cycle. This can occur by allowing customers to avoid incurring arrears in the first place. Interruption of the disconnect cycle can also occur, however, by providing an alternative mechanism for low-income customers to rehabilitate their payment practices and thus retire their arrears. The Universal Service Programs (CGCU/Vectren) use the first strategy (captured by Objective #2). The NIPSCO Winter Warmth program relies on the second strategic approach (captured by Objective #7).

Because of these similarities and differences, Objective #7 involving the rehabilitation of accounts in payment trouble is treated together with Objective #2. Objective #2 references the CGCU/Vectren programs, while Objective #7 references the NIPSCO Winter Warmth program.

The Universal Service Programs operated by Citizens Gas & Coke Utility (CGCU) and Vectren Energy achieved the objective of reducing both the incidence and level of arrears experienced by program participants. The incidence of arrears measures how many customers have arrears of any size. The level of arrears measures the dollars of arrears carried on a per account basis. Customers who participated in the two universal service programs in 2006 entered the 2007 heating season "better off" than customers who did not participate in that program. This is true for both the "upper" and "lower" regimes of arrears. In addition, fewer program participants had high arrears. When viewed from the number of accounts with payment troubles, as well as the number of accounts with significant payment troubles, prior participation in the two universal service programs yielded positive results.

The Winter Warmth program has a particularly beneficial impact on helping high arrears low-income customers gain control over their accounts and to reduce their arrears in order to avoid the disconnection of service. As with the discussion above, this result is most evident in a review of the month-to-month changes in payment patterns by the EAP and Winter Warmth populations. The positive impact of the Winter Warmth program is particularly experienced by accounts with larger January arrears. While Winter Warmth was not successful in helping program participants retire arrears completely, at least in the few months for which data is available for this evaluation, the program results in a marked improvement, both over the payment patterns experienced without the program and over the payment patterns experienced by the EAP customers not in the Winter Warmth program. The positive impacts appear most dramatically in the accounts with arrears over $250. Winter Warmth not only helped a larger proportion of accounts improve their positions, but correspondingly, the Winter Warmth program helped a larger proportion of customers stop their deterioration.

Objective #3: Addressing Seasonal/Winter Arrears

One primary objective of all three Indiana low-income programs is to help low-income customers address the seasonal unaffordability of their home energy bills. As with other program objectives, the CGCU/Vectren USP differs in its approach relative to NIPSCO. While CGCU/Vectren provide broad-based assistance in an effort to prevent seasonal nonpayment, NIPSCO targets its assistance to low-income customers who fall into arrears to allow those customers to respond to their arrears and rehabilitate their payment patterns. All three utilities achieve their respective program objectives.

The USP programs of CGCU and Vectren helped program participants avoid incurring arrears during the winter months although it did not succeed in avoiding arrears entirely. Program performance shows a minimal growth in the number of accounts with arrears between January and March for customers who have participated in the universal service program in both 2006 and 2007. The number of USP participant accounts with arrears grew minimally over the course of the winter but grew substantially for USP nonparticipants. Moreover, the arrears grew less for customers participating in the USP.

The USP has an impact not only on controlling the level of arrears, but also on controlling the pattern of arrears. Program nonparticipants exhibited the traditional surge in arrears during the winter months, with the number of accounts with March arrears substantially exceeding the number of accounts with January arrears. Similarly, the number of nonparticipant accounts with March arrears exceeded the number of accounts with February arrears. In contrast, while the USP did not allow all program participants to avoid any increase in arrears during the winter months, the increased number of participant accounts in arrears was modest at most.

NIPSCO's Winter Warmth program helps program participants resolve their winter arrears in a manner that outperforms low-income customers not participating in the program. The ability of Winter Warmth to help low-income customers improve their resolution of arrears is particularly evident in that population of customers with the highest arrears. NIPSCO's Winter Warmth participants outperform NIPSCO low-income customers receiving energy assistance. The introduction of the Winter Warmth benefits in March 2007 resulted in a reversal both in the

proportion of accounts with deteriorated arrears and the adverse trend in whether arrears were improving or deteriorating relative to January. The positive impact of Winter Warmth is emphasized when one realizes that the EAP population includes all those customers who were *never* payment troubled. In contrast, Winter Warmth, as a matter of program eligibility, is limited to addressing the problems posed by payment-troubled low-income customers. The Winter Warmth program succeeded in taking those payment-troubled customers and making them virtually indistinguishable from the EAP population as a whole.

Objective #4: Improved Collections Targeting.

A utility is well-served when it targets its collection activity to those customers who have an ability to pay their bills but, for whatever reason, fail to do so. When a utility has customers who cannot afford to pay their bills, seeking such payment not only imposes a direct cost on the company, but it imposes an opportunity cost on the company by foregoing collections efforts that might generate increased results. One objective of the three Indiana low-income programs is to allow the respective utilities to decrease their collections activity directed toward low-income customers so as to allow that collection effort to be directed toward customers in arrears that have a greater ability to respond to the collection activity. Each utility achieves this objective.

The collection activity directed toward customers having participated in the Universal Service Programs of CGCU and Vectren for two years was substantively less than the collection activity directed toward customers who did not enroll in the USP until April or May of the 2007 program year. Just as important as the *number* of collection activities directed against the program participants and nonparticipants is the *shape* of the collection patterns for the two customer groups. The group of nonparticipant low-income customers demonstrated a traditional pattern of collection activities. The March collection activity represents a sharp peak relative to those activities in the immediately preceding two winter months. In contrast, the population that had participated in USP for two consecutive years had a reasonably constant, and lower, level of collection activity throughout the winter and spring.

The Winter Warmth program generates more positive collections outcomes for low-income customers than does the energy assistance program standing alone. To assess the impact of collection activity, the level of arrears for energy assistance and Winter Warmth accounts in months after a collection activity were compared to the level of arrears in the month of the collection activity. Arrears were divided into two categories. On the one hand, the level of arrears could stay the same or increase; on the other hand, the level of arrears could decrease. The Winter Warmth account activity had a demonstrably greater effectiveness in controlling arrears. The Winter Warmth impact is made more impressive by the fact that the Winter Warmth payments supplemented and did not supplant customer payments. In fact, the Winter Warmth program leveraged additional customer payments that would not have been made in the absence of the program.

Objective #5: Sustaining Complete Bill Payment

In addition to achieving improvement in the ability of low-income customers to address their winter payments, one objective of the three Indiana utility low-income programs is to improve

the extent to which bill payments are complete over time. As with other specified objectives, this objective appertains to the Universal Service Programs, which are directed to bills for current usage. In contrast, the NIPSCO program is targeted toward providing customers who have fallen into payment-trouble an opportunity to rehabilitate their payment practices without the company needing to resort to expensive collection mechanisms. The success of the NIPSCO program in this regard, particularly with its highest arrears customers, has been discussed above. The outcome evaluation found that both CGCU and Vectren succeed in improving the extent to which program participants make complete bill payments.

The evaluation found that, for both Vectren and CGCU, USP participants have a better payment performance than do their nonparticipant counterparts. Substantially fewer program participants made winter payments of less than 50% of their bill than did program nonparticipants. Substantially more program participants made payments exceeding their winter bill than did program nonparticipants.

Objective #6: Improve Customer Bill Payment Management

One objective of the Indiana utility low-income programs is to improve *customer* management of their own bills as bills become more affordable. Rather than having partial, late or periodic payments, in other words, the objective is for low-income customers to address their bills for current usage in a complete, regular and timely fashion on a monthly basis. As with other program objectives directed toward the management of current bill payment, this objective relates primarily to the Universal Service Programs operated by CGCU and Vectren. In contrast, the NIPSCO Winter Warmth program is targeted toward helping payment-troubled customers resolve their arrearage situations.

For both Vectren and CGCU, the Universal Service Program generated more complete bill payment over the winter months than did traditional collection activities. Program participants outperformed their nonparticipant counterparts in making payments that exceeded their cumulative current bills for January through March as compared to the nonparticipants. Just as there were more USP participants with lower current bill balances at the end of the winter, there were *fewer* USP participants with higher current bill balances at the end of the winter.

Objective #7: Rehabilitating Payment Practices

The discussion of this objective was presented in connection with Objective #2 (interrupting the arrears-to-disconnect cycle) above.

Objective #8: Maximizing Public/Private Synergies

To determine program integration, it is necessary to identify those points where program linkages can occur with the existing energy assistance program. The following possible program linkages can occur:

- Funding: Funding examines the direct dollars of benefit applied to customer accounts. A LIHEAP cash or crisis benefit is a direct dollar of benefit. A dollar of rate discount is a direct dollar of benefit.

- Oversight: "Oversight" has four different components: (1) oversight of day-to-day program operation; (2) periodic program monitoring on such things as participation levels, expenditures, and turn-over; (3) program impact and process evaluation; and (4) fiscal auditing.

- Administration: Program administration involves program design and implementation.

- Outreach: Program outreach involves the provision of program information to potential participants and the solicitation of program participation.

- Delivery: Program delivery involves the actual interface between the low-income customer and the program. Program delivery can involve program intake, energy efficiency audits, conservation education, budget counseling, and the like.

The three Indiana utilities were examined to determine the extent of overlaps within each of these areas.

This evaluation finds the following:

- The three Indiana utilities have substantial funding linkage with the federal energy assistance program;

- The three Indiana utilities have not sought, and do not experience, substantial oversight linkages with the federal fuel assistance program, though some linkages occur due to the nature of the programs;

- There is considerable integration of the three Indiana utility programs with LIHEAP in the area of administration as defined by the LIHEAP Advisory Committee on Managing for Results. While LIHEAP does not explicitly change its program in response to the structure and operation of the three utility programs, the converse is not true.

- The Indiana utilities have considerable integration with the LIHEAP program in terms of outreach. Due to the combined delivery of all three programs with LIHEAP, the three utilities engage in an active promotion of LIHEAP in order to promote participation in their own programs;

- The three Indiana utilities have a complete integration of their respective low-income programs with LIHEAP when viewed from the perspective of program delivery. For the Universal Service Programs operated by CGCU

and Vectren, the delivery of the programs are directly tied to the delivery of LIHEAP. Entry into the Universal Service Programs is gained by enrollment in energy assistance program. The integration of Winter Warmth with the delivery of LIHEAP benefits flows the opposite direction, but is nonetheless just as complete.

There is not a complete "integration" of the three Indiana utility low-income affordability programs with the federal energy assistance program. Integration, however, need not be complete to be considerable. Integration represents a continuum of linkages between the utility programs and LIHEAP. Indiana's utility programs have such linkages in program planning, funding, outreach and delivery.

Objective #9: Enhancing Existing Bill Payment Processes

One intended outcome of the three Indiana utility low-income programs is to enhance the effectiveness of existing collection and customer service processes. Enhancing the effectiveness might, for example, including experiencing a lower default rate on deferred payment arrangements, a higher and quicker reconnection rate for customers disconnected for nonpayment, or a lessened need to engage in more intensive (and more expensive) collection actions. The Indiana utility programs have resulted in considerable, though not universal, collection enhancement.

One of the primary impacts of the low-income programs offered by Indiana's three utilities is the leveraging of additional customer payments that would not have occurred in the absence of the programs. An additional impact, related to this leveraging, is the enhancement of existing collection efforts on the part of the utilities. Vectren data was examined in the evaluation report as being illustrative. As shown, low-income program participants experience a variety of improvements in their need for, and response to collection activity. A greater proportion of low-income customers in arrears enter into deferred payment arrangements rather than allowing their arrears to grow untreated. More resources are put into working with low-income customers to resolve their arrears through arrangements rather than moving those customers to the disconnection of service. Low-income customers in arrears can be made subject to less intensive (and less expensive) collection activities. Fewer low-income customers make $0 payments.

The collections enhancements identified above are significant standing alone. They are even more significant in that they are consistent with the overall revenue neutrality experienced by the utility in its offer of the low-income Universal Service Program.

INTRODUCTION

This report provides an impact evaluation of low-income rate affordability programs offered by three Indiana utilities. The report evaluates the following programs:

- The Universal Service Program operated by Citizens Gas & Coke Utility (CGCU);
- The Universal Service Program operated by Vectren Energy (Vectren); and
- The Winter Warmth program operated by Northern Indiana Public Service Company (NIPSCO).

PROGRAM SUMMARY DESCRIPTIONS

Three Indiana utilities offer home energy affordability assistance to their low-income customers. Two of the Indiana utilities offer similar programs. The utilities offer this assistance based on the proposition that improving the affordability of home energy to low-income customers can result in improved collections outcomes as well. In offering each program, the Indiana utilities expressed the intent that these programs would result in higher collections, lower collection activity, reduced arrears, and reduced bad debt write-off.

Despite this similarity in purpose, the three programs have distinct differences in their operational details. Each program is directed toward improving the affordability of the total home energy bill rendered by each company. The total home energy bill, in this respect, includes the bill rendered for current service along with any payments that may need to be made toward existing arrears. While the Universal Service Programs offered by CGCU and Vectren address home energy affordability by reducing the bill for current usage (leaving pre-existing arrears to be paid by the customer), NIPSCO addresses home energy affordability by targeting its assistance toward the pre-existing arrears (leaving the bill for current usage to be paid by the customer). A brief overview of each of the three utility programs is provided below.

The CGCU Universal Service Program

Citizens Gas & Coke Utility (Citizens or CGCU) operates a universal service program (USP) for its low-income customers. The Citizens' USP provides a tiered rate discount for customers who also receive assistance through the federal Low-Income Home Energy Assistance Program (LIHEAP). The discounts vary based on a variety of factors prescribed by the state LIHEAP office. The factors take into account the income and Poverty Level of the households, along with other factors that measure the extent to which a household is vulnerable to the unaffordability of home energy bills.

The Citizens' USP is designed to make home energy bills for current usage more affordable to program participants. The USP does not address preprogram arrears. The outcome measurements considered below thus focus primarily on whether current bill payments are successfully made and whether, by improving the affordability of those current bills, arrears from current usage are more effectively controlled.

The Vectren Universal Service Program

The Vectren Energy Universal Service Program mirrors the CGCU Universal Service Program in all important respects. The Vectren USP provides tiered discounts to low-income customers that also receive assistance through the federal Low-Income Home Energy Assistance Program (LIHEAP). The Vectren tiered discounts vary based upon factors prescribed by the state LIHEAP office. These factors take into account the income and Poverty Level of the customers, along with factors indicating the extent to which customers are vulnerable to the unaffordability of home energy.

As with the CGCU program, Vectren's program provides rate affordability assistance in an effort to proactively prevent current bill nonpayment (and the factors associated with nonpayment) by addressing affordability on the front-end. As with the CGCU program, the Vectren program does not address preprogram arrears. The primary objective of the program is to assist low-income customers in making current bill payments.

The NIPSCO Winter Warmth Program

The NIPSCO Winter Warmth program is a somewhat different program than the Universal Service Program offered by CGCU and by Vectren. On the one hand, while the USP initiatives provide bill affordability discounts in a proactive effort to make current bills affordable, and thus help low-income customers stay current on their accounts, the Winter Warmth program responds to nonpayment by providing grants to help avoid the loss of service due to disconnection for nonpayment.[1] On the other hand, while the USP offered by CGCU and Vectren do not address pre-existing arrears, the NIPSCO program is explicitly designed to help low-income customers address their pre-existing arrears so that future arrearage payments do not make the *total* monthly payments (arrears plus current bills) required of such customers unaffordable.

The NIPSCO Winter Warmth program is, in other words, the mirror image of the CGCU/Vectren USP programs. For all three companies, a low-income customer's total bill consists of two parts: (1) the current bill component; and (2) the pre-existing arrears component. While CGCU/Vectren address the first bill component (payment toward current bill), NIPSCO addresses the second (payment toward arrearages).

THE PURPOSE OF THIS EVALUATION

This evaluation is charged with assessing whether the three Indiana low-income programs generate the outcomes that they were designed to achieve. The focus of this evaluation on program outcomes represents a substantial policy decision. From an evaluation perspective, it is possible to measure three identified program components:

- Did the program *do* what it said it would do (activity measures)?

[1] The Winter Warmth program also provides grants to help low-income customers meet any cash security deposit requirements imposed as a result of a disconnection or other nonpayment.

- Did the program *produce* what it said it would produce (output measures)?

- Did the program *yield* what it said it would yield (outcome measures)?

Responding to whether programs of any nature achieve their purposes must involve an identification of the objectives of the programs in the first instance. The following objectives have been established for the Indiana low-income rate programs:

- Objective #1: To generate positive financial benefits to all ratepayers by addressing the payment troubles of low-income customers based on the lack of affordability;

- Objective #2: To improve the ability of the companies to interrupt the arrears-to-disconnect cycle of low-income customers;

- Objective #3: To improve the ability of low-income customers to sustain their seasonal bill payments through the high cost winter heating months (i.e., sustain bill payment on a seasonal basis);

- Objective #4: To improve the targeting of collection efforts to "can-pay-but-won't" customers rather than directing collection efforts to "can't pay" customers;

- Objective #5: To improve the ability of low-income customers to sustain their annual bill payments;

- Objective #6: To minimize the impact of income on all aspects of bill payment, including whether bill payments are timely, complete and regular;

- Objective #7: To improve the ability of low-income customers to rehabilitate their bill payment practices when/if they fall into arrears;

- Objective #8: To maximize the synergies between company-provided and publicly-provided bill payment assistance; and

- Objective #9: To improve the capacity of existing bill payment processes to be effective with all customers at all income levels.

A Cautionary Note

In assessing Indiana's three programs in light of these stated objectives, one caution is in order. Given that all three utility programs are evaluated in the same report, it is particularly important to remember the critical differences between the Universal Service Program (USP) implemented by Citizens and Vectren and the Winter Warmth program implemented by NIPSCO. The most critical distinction involves the low-income populations involved with the respective programs. The USP is directed toward <u>*all*</u> customers who receive fuel assistance through the federal Low-Income Home Energy Assistance Program (LIHEAP-known as EAP in Indiana). In order to participate in the EAP, a customer need simply meet designated income eligibility guidelines.

An EAP participant receives energy assistance, and thus is enrolled in the USP, whether or not he or she is payment-troubled. In contrast, NIPSCO's Winter Warmth program is directed toward payment-troubled customers. If a customer is *not* payment-troubled, that customer will not become a participant in Winter Warmth.

For these reasons, direct comparisons between the low-income programs of CGCU/Vectren and NIPSCO cannot readily be made, since they operate in different ways in order to further different objectives. The NIPSCO Winter Warmth program, for example, cannot be compared to CGCU/Vectren on the basis of the level of arrears of program participants. On the one hand, CGCU/Vectren is designed to *prevent* arrears. On the other hand, payment troubles (and an accompanying notice of disconnection for nonpayment) is the point-of-entry for NIPSCO low-income customers.

Because of the different program focus, the discussion of outcomes below focuses on the ability of NIPSCO's Winter Warmth program to resolve arrears rather than on the ability of the program to generate current monthly payments.[2]

As the differences between the NIPSCO Winter Warmth program and the Universal Service Programs operated by CGCU and Vectren respectively become important in construing the outcomes of the programs, they will be noted in the narrative as appropriate.

SUMMARY AND A ROADMAP FOR WHAT LIES AHEAD

In sum, the purpose of this evaluation is to assess the extent to which, if at all, the three Indiana low-income rate affordability programs achieve the objectives that were established for the programs. The nine objectives have been outlined above. The first section of this report provides that outcome evaluation. After presenting the outcome analysis for each program objective below, a brief set of recommendations is presented in the final section of this report.

[2] Indeed, it should be expected that any analysis of current monthly payments would find that Winter Warmth participants perform less well than their corresponding CGCU/Vectren program participants, not because NIPSCO's low-income population overall has a worse performance, but rather because better-paying NIPSCO customers would never reach the Winter Warmth program.

OUTCOMES RELATIVE TO PROGRAM OBJECTIVES

Any evaluation of the extent to which, if at all, a utility rate affordability program accomplishes its program objectives can only be measured through an analysis of program outcomes. While output measures and activity measures may be relevant to a discussion of how a program operates, neither of those measurements contributes to a determination of whether the program's objectives are being met. Accordingly, the discussion below identifies the low-income program objectives, and discusses outcome measurements to determine whether those objectives are being achieved.

The three utility programs examined below include:

- The Universal Service Program (USP) of Citizens Gas & Coke Utility;
- The Universal Service Program of Vectren Energy Delivery; and
- The Winter Warmth Program of Northern Indiana Public Service Company (NIPSCO).

OBJECTIVE #1: POSITIVE FINANCIAL BENEFITS.

Providing rate affordability assistance to low-income utility customers in Indiana accomplishes the objective of generating positive financial benefits to the companies and their nonparticipating ratepayers. The analysis below for the Universal Service Programs (operated by Citizens Gas and by Vectren), as well as for the NIPSCO Winter Warmth program, considered whether the programs of the respective companies generated positive financial benefits from two different perspectives:

- Did each of the programs leave the utility in a revenue neutral position (or better);
- Did each of the programs generate outcomes in a less costly fashion than achieving those same outcomes through some alternative *not* involving the program.

Each of these inquiries is examined separately below.

Results in Brief: Objective #1: Positive Financial Benefit[3]

Finding: All three Indiana utility programs were revenue neutral from the company perspective.

	Percent Billings Collected without Program	Percent Billings Collected with Program
Citizens Gas & Coke Utility	64%	79%
Vectren	50%	82%
NIPSO	48%	69%

SOURCE: Text and 5 – 6 and Table 1.

Revenue Neutrality of the Low-Income Programs

The revenue neutrality of low-income programs is the most common mechanism for assessing whether such programs generate positive financial benefits. Revenue neutrality examines the extent to which, if at all, a low-income rate affordability program generates the same dollars of revenues to the utility despite the offer of discounted rates or bills. Revenue neutrality occurs when the discounted rates or bills improve payment patterns sufficiently to offset any loss of revenue through the offer of the rate discount.

The Vectren and Citizens Gas Universal Service Programs

Indiana's Universal Service Programs offered by Citizens Gas and by Vectren result in revenue neutral programs to the two respective utilities. Two different low-income populations were examined in reaching this conclusion:

- The population of customers who participated in the USP for both 2006 and 2007; and
- The population of low-income customers who entered the USP in April or May of 2007.

The first group of customers provides a population of customers that participate in the program. The second group of customers provides a population of customers, known to be low-income (because they are subsequently found eligible for USP), who did not participate in the USP in the months being studied. For the 2007 program year (January through May 2007), the impact of the program during the months of January through March are examined.[4]

[3] The "Results in Brief" tables *summarize* the results for each objective. By their nature, such summaries leave out much of the detail of the full findings. A complete understanding of the evaluation results can be obtained only by reading the narrative.

[4] Beginning in April, the evaluation would lose the participant/non-participant distinction, since the "late applicants" begin to participate in the USP in April.

Customers that participated in the Citizens Gas USP made substantively greater payments than did that company's nonparticipant population. Over the months of January through March 2007, USP participants paid 79% of their current utility bill. While billed $273,627 during those winter months, the USP participants paid $215,897. In contrast, the Citizen Gas nonparticipants paid only 64% of their January through March billings. While billed $304,072, these customers paid $194,577. As can be seen, the USP was better than revenue neutral to Citizens Gas. While USP participants were billed 90% of what nonparticipants were billed, they paid 111% what nonparticipants paid.

The revenue neutrality can be seen from a different perspective as well. Had USP nonparticipants paid at the same rate as USP participants did, they would have paid $240,216, nearly $46,000 more than they actually paid.[5]

The same revenue neutrality can be seen for the Vectren USP participant population. Customers that participated in the Vectren program paid 82% of their Vectren bill, compared to a payment of 50% for Vectren program nonparticipants. Had Vectren USP participants paid their bills at the rate at which nonparticipants did, they would have paid $126,645 in revenue for the company rather than the $208,041 these program participants actually paid to Vectren. As can be seen, the USP was more than "revenue neutral" to Vectren.

The NIPSCO Winter Warmth Program

NIPSCO's Winter Warmth program results in a revenue neutral program to the Indiana utility. Two different populations are examined to determine revenue neutrality:

- The population of customers participating in the Winter Warmth program; and
- The population of customers participating in the Energy Assistance Program.

The revenue neutrality can be seen in two different ways. First, the proportion of the total payments being made on Winter Warmth accounts that come out of the program participants' own pockets is higher than the proportion of total payments toward EAP accounts coming from the customer's own pockets. Table 1 shows that while 69% of the Winter Warmth participants' total payment represents customer-contributed funds, only 48% of EAP payments represent customer-contributed funding. It is evident, therefore, that Winter Warmth funding is not displacing customer payments. Instead, Winter Warmth funding is leveraging additional customer payments toward customer bills. NIPSCO is not losing customer payments that it otherwise would have received in the absence of the program.

[5] All dollar figures presented in this analysis, unless other explicitly noted to the contrary, are associated with the sample population and not the total population.

Table 1. Revenue Neutrality of NIPSCO Winter Warmth Program
(January – April 2007)

	Non-Winter Warmth	Winter Warmth	Improvement
Pct customer payment of total payment	48%	69%	21%
Dollars customer payment	$255	$410	$155
Dollar total payment	$510	$591	$81

Second, Table 1 shows that the total dollars of customer payment sharply increase relative to the customer payment made by EAP customers not receiving Winter Warmth. While Winter Warmth customers paid $410 in their own out-of-pocket dollars, EAP customers paid only $255.

The revenue neutrality is reflected in the percentage of the current bill paid out of customer funds. Winter Warmth customers had a total four-month bill of $616, of which 67% was paid using customer funds. EAP customers had a total four-month bill of $598, of which 43% was paid using customer funds. (Overall, 96% of the Winter Warmth bills were paid from all sources of payments, while only 85% of EAP bills were paid using all sources of payments.) Clearly, Winter Warmth is revenue neutral from the perspective of NIPSCO. Winter Warmth payments are not only supplementing rather than supplanting customer payments, but Winter Warmth payments are leveraging additional customer payments that would not have been made in the absence of the program.

In sum, each of the three Indiana utility low-income programs operated in a revenue neutral fashion for the respective utilities. Through their respective programs, each utility succeeded in leveraging additional customer payments that would not have been achieved in the absence of the program. While the USP programs implemented by Citizens Gas and Vectren offered tiered utility rate discounts, in other words, the extent to which current bill payments from program participants increased more than offset the extent to which current rates or bills were provided on a discounted basis. Similarly, while the NIPSCO Winter Warmth program offered bill payment assistance to help retire arrears underlying pending service disconnections for nonpayment, the increase in customer payments toward NIPSCO bills was greater than the decrease in bills attributed to the Winter Warmth arrearage payments. As a result of this revenue neutrality, each company ended up collecting more revenue with their programs than they would have collected in the absence of their respective programs.

The Availability of Less Costly Alternatives

The ability of a low-income rate affordability program to generate the desired program outcomes in a less-costly way than available alternatives is a second way to assess whether programs generate positive economic outcomes from the perspective of the utility. This analysis assesses the extent to which available alternatives can produce the same outcomes generated by the rate affordability programs and, if so, at what cost.

One primary positive outcome of the Indiana utility low-income rate affordability programs is a reduction in the arrears of program participants. The analysis below considers the extent to

which, if at all, existing collection mechanisms could generate those same arrears reductions. This analysis considers the rate at which existing collection mechanisms generate arrears reductions. It further considers the level of arrears reductions that are obtained through existing collection mechanisms.

The basic question, in other words, is this: given the outcome generated by the low-income affordability program, can the three utilities generate the same arrearage reduction outcome in a more cost-effective fashion through an available alternative? The available alternative considered in this analysis involves increasing the use of existing collection mechanisms.

In assessing the ability, and cost, of available collection activities to generate the same outcomes as the low-income rate affordability program, this analysis considers the net arrearage reduction impact of existing collection mechanisms. The analysis must consider the ***net*** reduction on a weighted basis. Not all collection activity directed toward an account in arrears results in a reduction in arrears. Upon being subject to collection activity, some accounts experience no change in their arrears (e.g., they pay their current bill and thus neither increase nor decrease their arrears). Some accounts increase their arrears. To the extent that some accounts do increase their arrears after being subjected to collections, those accounts with decreases must have even ***greater*** decreases to result in a net arrearage reduction attributable to all collection activities. The analysis below considers the level and cost of the increased collection activity that would be required in order to generate the same net reduction in arrears generated by the low-income affordability programs.

The Vectren and Citizens Gas Universal Service Programs

The Universal Service Programs operated by Vectren and Citizens Gas generates low-income arrears reduction in a less costly way than would be available through the increased use of existing collection mechanisms. Little question exists but that the Universal Service Programs generate decreased arrears for the two utilities. This program outcome is documented in detail throughout this evaluation. It was documented further in the discussion of the comparative bill coverage rates presented within the context of the consideration of the revenue neutrality of the utility programs.

Arrears experienced by USP participants, calculated on a dollar-day basis,[6] are substantively lower than arrears experienced by program nonparticipants. For Citizens Gas, customers participating in the USP program for both 2006 and 2007 generated only 61% of the dollar-days of arrears in January through March that late-applicant customers did (4,358,843 dollar-days for USP participants vs. 7,256,613 for nonparticipants). The Vectren USP generated nearly identical results. The Vectren USP participants generated only 62% of the dollar-days of arrears that nonparticipants generated (2,299,224 dollar-days for USP participants vs. 3,686,778 for nonparticipants).

[6] A dollar-day examines the level of arrears weighted by the number of days in a month. A $1 arrears in January, for example, would generate 31 dollar-days, while a $1 arrears in February would generate only 28 dollar-days. It is necessary to calculate dollar-days both to consider the differences by month and to consider the different levels of arrears. Each month is calculated independently of other months.

The evaluation question facing the two companies is whether an increased level of collection activity (i.e., the "status quo" on a ramped-up basis) could generate the same reductions in arrears at a lesser cost all other things equal.[7]

In order to achieve the same arrears reduction as the USP does for Citizens, an increase in collection activity would need to generate a reduction of 2,880,770 dollar-days of arrears. An increase in collection activity by Vectren would need to generate a reduction of 1,387,554 dollar-days of arrears in order to produce the same outcome as does the Vectren USP. Given the 90-day winter period being studied (January=31; February=28; March=31), the increased collection activity would need to reduce Citizens arrears by $32,009 on average. It would need to reduce Vectren arrears by $19,291 on average.

To be cost-effective in achieving this arrears reduction, existing collection mechanisms would need to cost less than the dollars being spent through the USP for the equivalent result. An increase in existing collection processes can not pass this test.

Collection activity for Citizens generates a net arrears reduction of $9 per month of activity. As described above, this ***net*** impact takes into account not only the arrears reduction of those accounts having an arrears reduction. It also takes into account the proportion of accounts subject to collection that result in no change in arrears. It further considers the arrears reduction necessary to offset those accounts that experience increased arrears despite the collection activity directed toward them. Under these same circumstances, collection activity for Vectren generates a net arrears reduction of $13 per month of activity.

Applying these net arrears reduction amounts per collection activity, Citizens would need to produce an additional 3,600 collection activity-months to generate the same arrears reduction as the USP generates. Vectren would need to produce an additional 1,500 collection activity-months in order to generate the same arrears reduction as the USP generates.[8]

Neither company can cost-effectively produce those additional collection activities. Citizens would need to produce a month of collection activity at less than $17/month to spend less on the process of collection than the USP discount being provided. Vectren would need to spend less than $34 per collection activity month to spend less than its USP discount being provided. Neither company can meet these collection cost constraints.

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[7] The "all other things equal" condition assumes that each company "loses" the dollar value of the discount which they provide. If Citizens provides a 22% discount, the "all other things equal" assumes that that 22% discount is a cost to the company. As discussed immediately above in the revenue neutrality section, however, this is a somewhat artificial analysis since all other things are ***not*** equal. The reduced bills provided through the USP programs are revenue positive for both Citizens Gas and Vectren. Providing a discount generates an ***increase*** in revenue for both Citizens and Vectren. Nonetheless, this section will assume that there is a revenue loss equal to the discount.

[8] Each utility account provided as part of the data for this evaluation was assessed for whether collection activity was directed toward the account in any particular month. A month with collection activity is referred to as an "activity-month." A net collection result was calculated for each activity month. The net collection result considers the net arrearage change associated with accounts having increased arrears (despite collection activity), those having decreased arrears, and those having no change in arrears. The calculation underlying this statement thus determined the number of activity-months needed to generate the arrearage reduction needed in order to generate the same reduction in dollar lag days as the respective low-income programs generated.

The NIPSCO Winter Warmth Program

The Winter Warmth program operated by NIPSCO generates low-income arrears reduction in a less costly way than would be available through the increased use of existing collection mechanisms. Little question exists but that the Winter Warmth program generates decreased arrears for NIPSCO. This program outcome is documented in detail throughout the discussion of program outcomes in this evaluation. It was documented further in the discussion of the comparative bill coverage rates presented within the context of the consideration of the revenue neutrality of the utility programs.

The NIPSCO Winter Warmth program generated dollars of customer payment beyond those payments that were generated by the company's status quo. While Winter Warmth customers paid $450 in customer payments in the months of January through April 2007, non-Winter Warmth participants paid only $255 in customer payments, a difference of $155. This section assesses whether it would have been less expensive for NIPSCO to have sought to generate the additional $155 in customer payments through increased collection activities rather than to deliver Winter Warmth benefits.

In order to achieve the same collections impact as the Winter Warmth program does for NIPSCO, an increase in collection activity would need to generate a reduction of 7,365,500 dollar-days of arrears. Given the 120 day period being studied (January=31; February=28; March=31; April=30), the increased collection activity would need to reduce NIPSCO arrears by $61,380 on average. To be cost-effective, existing collection mechanisms would need to cost less than the dollars being spent through the Winter Warmth program for the equivalent result. An increase in existing collection processes can not pass this test.

Collection activity for NIPSCO directed toward Winter Warmth customers generates a net arrears reduction of $48 per activity-month. Applying this net arrears reduction amount per collection activity, NIPSCO would need to produce an additional 1,279 collection activity months to generate the same arrears reduction as the Winter Warmth generates.[9]

NIPSCO cannot cost-effectively produce these additional collection months. NIPSCO would need to produce a month of collection activity at a cost of $21 per activity month to spend less on the process of collection than what the company spends to generate the same revenue enhancement through Winter Warmth. This test of cost-effectiveness cannot be met. The package of collection activities that comprise a collection activity month costs more than $21 to produce.

In sum, the increase in revenue generated through the low-income programs was accomplished in a manner that was less costly than existing available collection alternatives. Existing collection processes can be assessed to determine the net increase in revenue associated with each "activity month" of collections. That net revenue collection can be aggregated to determine what level of collection effort would be required to generate the same level of additional revenue generated by each company's low-income programs. Even assuming that an increased use of existing

[9] A description of the calculation underlying this conclusion is presented above with respect to the CGCU and Vectren programs.

available collection processes could be effective in generating the same additional revenue levels, the cost of pursuing those additional collection efforts would have been more than the cost of the low-income rate affordability programs.

OBJECTIVE #2: INTERRUPTING THE ARREARS-TO-DISCONNECT CYCLE/OBJECTIVE #7: REHABILITATING PAYMENT PRACTICES

Collecting unpaid low-income bills can occur through a variety of utility collection activities. One of the most expensive collection processes involves the disconnection of service for nonpayment. One objective of the three low-income programs in Indiana is to interrupt that arrears-to-disconnect cycle. This can occur by allowing customers to avoid incurring arrears in the first place. Interruption of the disconnect cycle can also occur, however, by providing an alternative mechanism for low-income customers to rehabilitate their payment practices and thus retire their arrears. The Universal Service Programs (CGCU/Vectren) use the first strategy. The NIPSCO Winter Warmth program relies on the second strategic approach.

Results in Brief: Objective #2: Interrupting Disconnect Cycle
Objective #7: Rehabilitating Payment Practices.

Finding: The Indiana utility programs reduced both the incidence and level of arrears leading to service disconnections and allowed customers to rehabilitate bill payment practices after falling into arrears.

	Without Program	With Program
Citizens Gas & Coke Utility		
No. of accounts with January arrears $0	201	374
No. of accounts with January arrears $251 or more	53	21
Average January arrears ($s)	$100	$42
Vectren	Without Program	With Program
No. of accounts with January arrears $0	58%	82%
No. of accounts with January arrears $251 or more	5%	2%
Average January arrears ($s)	$54	$17
NIPSCO	Without Program	With Program
Pct accounts with reduced arrears for accounts with arrears > $250 (Feb. vs. April)	3%	23%
Pct accounts with increased arrears for accounts with arrears > $250 (Feb. vs. April)	(2%)	(22%)

SOURCE: Tables 2, 3, 4, 5 and 6.

CGCU's Universal Service Program

The Universal Service Program operated by Citizens Gas & Coke Utility (CGCU) clearly achieved the objective of reducing both the incidence and level of arrears experienced by program participants. The incidence of arrears measures how many customers have arrears of any size. The level of arrears measures the dollars of arrears carried on a per account basis. The impact of the universal service program on the incidence and level of arrears is determined by comparing the beginning arrears for the population of customers who participated in the universal service programs last year (2006) to the beginning arrears of customers who have *not* previously participated in the program. The second population is obtained by looking at customers who first entered the universal service program late in the 2007 program year.[10] The January arrears are used so that participation in the 2007 program would have no impact on what the level of arrears would be. The comparison is set forth in Table 2 below.

Table 2: Number of Accounts by Level of January Arrears for Program Participants and Non-participants (CGCU)

Level of Arrears	USP Participant	USP Non-Participant
$0	374	201
$1 - $100	35	71
$101 - $250	70	172
$251 or more	21	53
Total	500	497

Table 2 documents that customers who participated in the Citizens Gas universal service program in 2006 entered the 2007 heating season "better off" than customers who did not participate in that program. This is true for both the "upper" and "lower" regimes of arrears. Nearly twice as many USP participants entered the 2007 winter heating season without arrears as did USP non-participants (374 vs. 201). While three-quarters of the prior year program participants were free of arrears in January 2007 (the first month of USP program operation), only 40% of program non-participants were.

In addition, fewer program participants had high arrears. Less that half of program participants had arrears of more than $250 as did program non-participants (21 compared to 53). More than twice the number of program non-participants had arrears between $100 and $250 as did program participants (172 compared to 70).

When viewed from the number of accounts with payment troubles, as well as the number of accounts with significant payment troubles, prior participation in the CGCU universal service program yielded positive results.

[10] "Late" entry is defined as customers who entered the universal service program in either April or May. Data was available for January through May of the 2007 program year.

Positive results can be seen, also, from a dollar perspective. Table 3 presents the average January 2007 arrears per account, spreading the arrears over the entire population. Spreading arrears over all customers allows the analysis to implicitly take into account the number of customers with $0 arrears. The data documents that CGCU customers are "better off" having participated in the company's Universal Service Program. The level of January 2007 arrears for customers who were non-participants is more than twice as high as the average level of arrears for customers who participated in the USP in 2006 ($100 vs. $42).

Table 3: Level of January 2007 Arrears for Program Participants and Non-participants (CGCU)

	Prior Year Participant	Prior Year Non-Participant
Average January arrears	$42	$100

Base case data: January arrears.

Vectren's Universal Service Program

As with the CGCU universal service program, the universal service program operated by Vectren clearly achieved the objective of reducing both the incidence and level of arrears experienced by program participants. The incidence of arrears measures how many customers have arrears of any size. The level of arrears measures the dollars of arrears carried on a per account basis. The impact of the universal service program on the incidence and level of arrears is determined by comparing the beginning arrears for the population of customers who participated in the universal service programs last year (2006) to the beginning arrears of customers who have *not* previously participated in the program. The second population is obtained by looking at customers who first entered the universal service program late in the 2007 program year. The January arrears are used so that the participation in the 2007 program would have no impact on what the level of arrears would be. The comparison is set forth in Table 4 below.

Table 4: Number of Accounts by Level of January Arrears for Program Participants and Non-participants (Vectren)

Level of Arrears	USP Participant	USP Non-Participant
$0	414 (82%)	231 (58%)
$1 - $100	27 (5%)	60 (15%)
$101 - $250	50 (10%)	89 (22%)
$251 or more	11 (2%)	18 (5%)
Total	502	398

Table 4 documents that customers who participated in the Vectren universal service program in 2006 entered the 2007 heating season "better off" than customers who did not participate in that program. This is true for both the "upper" and "lower" regimes of arrears. Far more USP participants entered the 2007 winter heating season without arrears as did USP non-participants.

While more than 80% of the prior year program participants were free of arrears in January 2007 (the first month of USP program operation), fewer than 60% of program non-participants were.

In addition, fewer program participants had high arrears. More than two times more program non-participants had arrears of more than $100 as did prior year program participants (27% compared to 12%). More than twice as many program non-participants had arrears between $100 and $250 than program non-participants (22% compared to 10%).

When viewed from the number of accounts with payment troubles, as well as the number of accounts with significant payment troubles, prior participation in the Vectren universal service program yielded positive results.

Positive results can be seen, also, from a dollar perspective. Table 5 presents the average January 2007 arrears per account, spreading the arrears over the entire population. The data documents that Vectren customers are "better off" having participated in the company's Universal Service Program. The level of January 2007 arrears for customers who were non-participants is three times as high as the level of arrears for customers who participated in the USP in 2006 ($54 vs. $17).

Table 5: Level of January 2007 Arrears for Program Participants and Non-participants (Vectren)

	Prior Year Participant	Prior Year Non-Participant
Average January arrears	$17	$54

NIPSCO's Winter Warmth Program

The Winter Warmth program has a particularly beneficial impact on helping high arrears low-income customers gain control over their accounts and to reduce their arrears in order to avoid the disconnection of service. As with the discussion above, this result is most evident in a review of the month-to-month changes in payment patterns by the EAP and Winter Warmth populations. Table 6 presents this month-to-month data.

Table 6 disaggregates the change in arrears, relative to the January arrears, by the level of the original January arrears. January arrears were broken down into three brackets: (1) greater than $0 but less than $100; (2) greater than $100 but less than $250; and (3) greater than $250. The arrears in each subsequent month were compared to those January arrears to determine whether the arrears had "improved" (i.e., decreased), "deteriorated" (i.e., increased), or stayed the same.

The positive impact of the Winter Warmth program is particularly experienced by accounts with larger January arrears. While Winter Warmth was not successful in helping program participants retire arrears completely, at least in the few months for which data is available for this evaluation, the program results in a marked improvement, both over the payment patterns experienced without the program and over the payment patterns experienced by the EAP customers not in the Winter Warmth program.

The positive impacts appear most dramatically in the accounts with arrears over $250. Of Winter Warmth accounts with January arrears of more than $250, 95% had experienced a deterioration in their situation (an increase in arrears) in February and 90% had experienced a deterioration in March. (Remember, this deterioration is relative to January, not relative to the preceding month.) In contrast, of those Winter Warmth accounts with an arrears of more than $250 in January, only 4% had experienced an improvement in their arrearages in February and only 9% had experienced an improvement by March.

Table 6. Ratio of Arrears in Current Month to Arrears in January By Size of January Arrears

January Arrears	February		March		April	
Arrears >$0 but <$100	EAP	Winter Warmth	EAP	Winter Warmth	EAP	Winter Warmth
Improved	68%	50%	65%	55%	79%	68%
No change	5%	8%	0%	3%	0%	0%
Deteriorated	27%	42%	35%	42%	21%	32%
Total	100%	100%	100%	100%	100%	100%
Arrears >$100 but <$250	EAP	Winter Warmth	EAP	Winter Warmth	EAP	Winter Warmth
Improved	41%	34%	59%	21%	57%	48%
No change	7%	3%	0%	2%	1%	0%
Deteriorated	52%	63%	41%	77%	41%	52%
Total	100%	100%	100%	100%	100%	100%
Arrears >$250	EAP	Winter Warmth	EAP	Winter Warmth	EAP	Winter Warmth
Improved	22%	4%	23%	9%	25%	27%
No change	1%	1%	0%	1%	0%	0%
Deteriorated	77%	95%	77%	90%	75%	73%
Total	100%	100%	100%	100%	100%	100%

After Winter Warmth benefits began to flow, however, these results changed dramatically. The proportion of Winter Warmth accounts (with arrears greater than $250) that experienced an improvement in their arrears increased three-fold, from 9% in March to 27% in April. This stands in contrast to the EAP population, which demonstrates a constant relationship between the January arrears and subsequent arrears. The EAP population did not demonstrate any notable increase in the proportion of accounts that had improved their arrears position in April (relative

to January) (25%) as compared to the proportion of accounts that had improved their position in either March (23%) or February (22%).

Winter Warmth not only helped a larger proportion of accounts improve their positions, but correspondingly, the Winter Warmth program helped a larger proportion of customers stop their deterioration. The proportion of EAP accounts whose arrears status relative to January arrears remained relatively constant over the three study months (77% deterioration in February; 77% deterioration in March; 75% deterioration in April). In contrast, while 90% of Winter Warmth customers had experienced a deterioration of arrears in March (relative to January), after Winter Warmth benefits began to flow, that proportion demonstrated notable improvement, with a decrease from the 90% in March to only 73% in April. Remember, again, the "deterioration" is relative to January arrears and not to the prior month.[11]

Table 6 finally documents the relative ability of Winter Warmth to address substantial arrears in the improvement patterns it documents by level of arrears. In reviewing the proportion of accounts that improved their arrearage position, not all accounts should be considered "the same." Under the EAP program, the greatest improvement came in the accounts with the lowest January arrears. Consider that for EAP:

- While 65% of the March EAP accounts with arrears between $1 and $100 had improved their status relative to January, 79% of the April EAP accounts with January arrears between $1 and $100 had improved their status relative to January.

- While 59% of the March EAP accounts with arrears between $100 and $250 had improved their arrears status relative to January, only 57% of the April EAP accounts with January arrears between $100 and $250 had improved their arrears (a decrease in performance).

- While 23% of the March EAP accounts with January arrears over $250 had improved their arrears status relative to January, 25% of the April EAP accounts with arrears over $250 had improved their status (a steady performance).

In contrast, the Winter Warmth program generated its most significant improvements within that group of accounts with the highest arrears. Consider that within the Winter Warmth accounts:

- While 55% of the March Winter Warmth accounts with arrears between $1 and $100 had improved their status relative to January, 68% of the April Winter Warmth accounts with January arrears between $1 and $100 had improved their status relative to January, a 13% improvement comparable to EAP (14% improvement).

[11] These figures, in other words, show that while 90% of Winter Warmth participants had a March arrears higher than their January arrears, only 73% had an April arrears higher than their January arrears. They show that while 77% of EAP customers had a March arrears higher than their January arrears, 75% still had an April arrears higher than their January arrears. The figures do ***not*** show further deterioration. The figures, in other words, do ***not*** show that 90% of Winter Warmth customers had a March arrears higher than their February arrears, and that 73% had an April arrears higher than their March arrears. The comparison is to the January arrears, not to the prior month arrears.

- While 21% of the March Winter Warmth accounts with arrears between $100 and $250 had improved their arrears status relative to January, 48% of the April Winter Warmth accounts with January arrears between $100 and $250 had improved their arrears (more than doubling the proportion of accounts with improved arrears).

- While 9% of the March Winter Warmth accounts with January arrears over $250 had improved their arrears status relative to January, 27% of the April Winter Warmth accounts with arrears over $250 had improved their status (tripling the proportion of accounts with improved arrears).

Table 7 presents this data. As Table 7 shows, while 66% of the EAP accounts whose arrears deteriorated between January and April had January arrears over $250, only 36% of the Winter Warmth accounts whose arrears deteriorated had January arrears in excess of $250. In contrast, four times as many EAP accounts with arrears of $1 to $100 had arrears that improved from January to April, compared to EAP accounts with arrears of $1 to $100 with arrears that deteriorated. Similarly, 50% more EAP accounts with arrears of between $100 and $250 had arrears that improved from January to April (38% improved vs. 25% deteriorated).

Table 7. Proportion of Accounts that Experienced Improved or Deteriorated Arrears by Size of January 2007 Arrears (NIPSCO)

	EAP		Winter Warmth	
	Between January and April, Arrears		Between January and April, Arrears:	
	Improved	Deteriorated	Improved	Deteriorated
$1 - $100	37%	9%	27%	26%
$101 - $250	38%	25%	40%	39%
$250 or more	25%	66%	34%	36%
Total	100%	100%	100%	100%

In contrast, Table 7 shows that the proportion of Winter Warmth accounts that improved or deteriorated was constant irrespective of the size of the January arrears (27% vs. 26% for January arrears of $1 - $100; 40% vs. 39% for arrears of $101 - $250; 34% vs. 36% for arrears exceeding $250). Clearly, one impact of Winter Warmth, as intended, is to help accounts that are substantially in arrears, and facing the potential disconnection of service for nonpayment, reduce those arrears and interrupt the disconnect cycle. The Winter Warmth program outperforms the EAP program, standing alone, in achieving both of those outcomes.

OBJECTIVE #3: ADDRESSING SEASONAL/WINTER ARREARS

One primary objective of all three Indiana low-income programs is to help low-income customers address the seasonal unaffordability of their home energy bills. As with other program objectives, the CGCU/Vectren USP differs in its approach relative to NIPSCO. While CGCU/Vectren provide broad-based assistance in an effort to prevent seasonal nonpayment,

NIPSCO targets its assistance to low-income customers who fall into arrears to allow those customers to respond to their arrears and rehabilitate their payments. All three utilities achieve their respective program objectives.

Results in Brief: Objective #3: Addressing Seasonal/Winter Arrears.

Finding: The Indiana utility programs helped program participants avoid incurring arrears during the winter months, although it did not prevent arrears entirely.

	Without Program	With Program
Citizens Gas & Coke Utility		
Increase in accounts with arrears > $0 from January to March	21%	7%
Pct accounts with March arrears less than January arrears	43%	58%
Increased dollar level of arrears January to March	$179	$94
Vectren	Without Program	With Program
Increase in accounts with arrears > $0 from January to March	14%	0%
Pct accounts with March arrears less than January arrears	50%	62%
Increased dollar level of arrears January to March	$75	$38
NIPSCO	Without Program	With Program
Change in percentage of customers with reduced arrears March to April (relative to January)	8%	18%
Change in percentage of customers with increased arrears March to April (relative to January)	(9%)	(17%)

SOURCE: Tables 8, 10, 11, 13 and 14.

CGCU's Universal Service Program

The USP program helped program participants avoid incurring arrears during the winter months although it did not prevent arrears entirely. Table 8 below presents the change in arrears between January and March. The performance shows a minimal growth in the number of accounts with arrears between January and March for customers who have participated in the universal service program in both 2006 and 2007. While 49% of the USP participants had arrears on their account in January, 60% of nonparticipants had arrears. The number of USP participant accounts with arrears grew minimally over the course of the winter (32 accounts, from 246 to 278) but grew substantially for USP nonparticipants (from 296 to 402 accounts). By March 2007, the proportion of non-participating low-income customers that had arrears on their accounts reached more than 80%.

Moreover, the arrears grew less for customers participating in the USP. While the arrears grew less than $100 (from $74 in January to $168 in March) for CGCU customers who had participated in the USP for both years (2006 and 2007), the arrears grew nearly $200 for those customers *not* participating in the USP (from $100 in January to $279 in March).

Table 8: Change in Winter 2007 Arrears (January to March)
for Program Participants and Non-participants (CGCU)

	January				March			
Participated in USP	Accts w/ $0 Arrears	Accts w/ > $0 Arrears	% with Arrears	Arrears Level	Accts w/ $0 Arrears	>$0 Arrears	% with Arrears	Arrears Level
Participated both years	254	246	49%	$74	222	278	56%	$168
Applied April/May 2007	201	296	60%	$100	95	402	81%	$279

The USP has an impact not only on controlling the level of arrears, but also on controlling the pattern of arrears. Table 9 presents the number of accounts in arrears by month for those customers who participated in the USP for both 2006 and 2007 as well as for those who were "late applicants" in the 2007 program year. The late applicants exhibited the traditional surge in arrears during the winter months, with the number of accounts with March arrears exceeding the number of accounts with January arrears by 36%. Similarly, the number of accounts with March arrears exceeded the number of accounts with February arrears by more than 30%. In contrast, while the USP did not allow all program participants to avoid any increase in arrears during the winter months, the increased number of participant accounts in arrears was modest at most. Only 32 more USP participants (13%) had arrears in March than in April. More than three times that many more non-participants (106) had March arrears than had January arrears. Overall, 45% more USP nonparticipants had arrears in March than did customers who had participated in USP for both the 2006 and 2007 program years.

Table 9. Accounts in Arrears (CGCU)

Group	Jan-07	Feb-07	Mar-07	Apr-07	May-07	March vs. Jan	March vs. Feb
Participated both years	246	237	278	287	270	13%	17%
Applied April/May 2007	296	308	402	351	298	36%	31%
Difference	20%	30%	45%	22%	10%		

It is possible, also, to measure the extent to which arrears grow directly. The most immediate question is the extent to which USP participation helps prevent the growth in arrears over the course of the winter months. Table 10 documents that 311 customers who had participated in the Citizens USP the previous year either saw no growth in arrears (or an actual decrease in

arrears)[12] from January to February. The number of prior year participants who saw no growth (or a decrease in arrears relative to their January arrears) fell slightly to 292 customers in March.

Table 10 shows the benefits of the USP in two ways. First, in each of the comparison months (February and March), the number of program participants experiencing no growth in arrears was noticeably higher than the number of non-participants doing so. While 62% of USP program participants experienced no growth in their February arrears (relative to where they were in January) (311 of 500), only 51% of nonparticipants (254 of 497) experienced no growth in arrears in that one month period. Similarly, while 58% of program participants experienced no growth in arrears from January to March (292 of 500), only 43% of nonparticipants (215 of 497) experienced no growth. In both months, the participant population performed better than did the nonparticipant population.

Table 10: Number of Accounts with Arrears Equal to or Less than January Arrears for Program Participants and Non-participants (CGCU)

	February vs. January		March vs. January	
	Prior Year Participant	Prior Year Non-Participant	Prior Year Participant	Prior Year Non-Participant
0% or Negative Growth in Arrears	311	254	292	215

In addition, the change in performance between February and March documents the impact of the company's USP. Twice as many nonparticipating customers (254 – 215 = 39) moved *out* of the no growth category in March as compared to participating customers (311 – 292 = 19).[13]

Vectren's Universal Service Program

The USP program contributed to a reduction in both the incidence and level of winter arrears for Vectren program participants. Table 11 below presents the change in arrears between January and March. The performance shows the incidence and level of arrears for customers who participated in the Vectren USP in both 2006 and 2007 as well as for customers who did not enter the USP until late in the 2007 program year. While 43% of the USP participants had arrears on their account in January, 42% of nonparticipants had arrears. The number of USP participant accounts with arrears did not change over the course of the winter, staying constant at 43%. There was, however, a growth in the incidence of arrears for USP nonparticipants (from 42% to 56%).

In addition, there is a difference in the level of arrears. While USP nonparticipants had a January arrears of $59, customers who participated in USP both years had an average arrears of only $57. The difference between the two groups diverged between the months of January and March. By March, the nonparticipant arrears had grown to $134 while the participant arrears had grown to only $95.

[12] No growth could mean that the customer began with $0 in arrears and remained at $0.

[13] It is not possible to conclude that the March no growth population is a subset of the February no growth population. The change is a *net* change in the number of customers with either no change, or a decrease, in their arrears relative to the first program month of the year (January).

Table 11: Change in Winter 2007 Arrears (January to March) for Program Participants and Non-participants (Vectren)

	January		March	
	% with Arrears	Arrears Level /a/	% with Arrears	Arrears Level /a/
Participated both years	43%	$57	43%	$95
Applied April/May 2007	42%	$59	56%	$134

NOTE:

/a/ Of non-credit arrears ($0 or greater).

The USP has an impact not only on controlling the level of arrears, but also on controlling the pattern of arrears. Table 12 presents the number of accounts in arrears by month for those customers who participated in the USP for both 2006 and 2007 as well as for those who were "late applicants" in the 2007 program year. The late applicants exhibited the traditional surge in arrears during the winter months, with the number of accounts with March arrears exceeding the number of accounts with January arrears by 37%. In contrast, while the USP did not allow all program participants to avoid any increase in arrears during the winter months, the increased number of participant accounts in arrears was virtually non-existent. There was a slight up-tick in the percentage of accounts in arrears in February (increase to 45%) and April (increase to 44%), but the variation in the proportion of accounts in arrears occurred within a very narrow band of 43% to 45%.

Table 12. Number of Accounts in Arrears (Vectren)

Group	Jan-07	Feb-07	Mar-07	Apr-07	May-07
Participated both years	43%	45%	43%	44%	43%
Applied April/May 2007	42%	57%	56%	53%	57%

It is possible, also, to measure the extent to which arrears grow directly. The most immediate question is the extent to which USP participation helps prevent the growth in arrears over the course of the winter months. Table 13 documents that 63% of customers who had participated in the Vectren USP the previous year either saw no growth in arrears (or an actual decrease in arrears) from January to February. The number of prior year participants who saw no growth (or a decrease in arrears relative to their January arrears) fell slightly, to 62% customers, in March.

Table 13 shows the benefits of the USP in two ways. First, in each of the comparison months (February and March), the number of program participants experiencing no growth in arrears was noticeably higher than the number of non-participants experiencing no-growth in arrears. While 63% of USP program participants experienced no growth in their February arrears (relative to where they were in January) (316 of 498), only 48% of nonparticipants (192 of 398) experienced no growth in arrears in that one month period. Similarly, while 62% of program participants experienced no growth in arrears from January to March (307 of 498), only 50% of nonparticipants (200 of 398) experienced no growth. In both months, the participant population performed better than did the nonparticipant population.

Table 13: Number of Accounts with Arrears Equal to or Less than January Arrears for Program Participants and Non-participants (Vectren)

	February vs. January		March vs. January	
	Prior Year Participant	Prior Year Non-Participant	Prior Year Participant	Prior Year Non-Participant
0% or Negative Growth in Arrears	63%	48%	62%	50%

NIPSCO's Winter Warmth Program

NIPSCO's Winter Warmth program helps program participants resolve their winter arrears in a manner that outperforms low-income customers not participating in the program. The ability of Winter Warmth to help low-income customers improve their resolution of arrears is particularly evident in that population of customers with the highest arrears.

NIPSCO's Winter Warmth participants outperform NIPSCO low-income customers receiving energy assistance. In reaching this conclusion, Winter Warmth participants were compared to NIPSCO customers who received benefits through the Energy Assistance Program (EAP) in the 2007 EAP program year.[14] Table 14 documents the ratio of arrears in various months of the Winter Warmth program year to the arrears appearing on January bills. January was the first month of the Winter Warmth program. Significant numbers of low-income NIPSCO customers began to enter the Winter Warmth program in March.[15]

[14] Some, but not all, of these customers also received EAP assistance in 2006.
[15] Some accounts received Winter Warmth benefits in January and February, but the significant entry into the program began in March and April 2007.

Table 14. Change in Arrears by Month Compared to January 2007 Arrears (NIPSCO 2007)

	Feb. vs. Jan.		Mar. vs. Jan.		April vs. Jan.	
	EAP	WW	EAP	WW	EAP	WW
Reduced to less than 50%	57%	55%	54%	49%	65%	64%
Reduced	70%	64%	69%	56%	77%	74%
Stayed the same or increased	30%	36%	31%	44%	23%	26%
Increased	28%	35%	31%	43%	22%	26%

The payment troubled nature of the Winter Warmth population, as compared to the EAP population, is evident from Table 14. While 28% of EAP participants experienced a growth in arrears in February as compared to the arrears they had in January, 35% of Winter Warmth customers did. While the proportion of EAP customers who experienced a growth in arrears from February to March stayed relatively constant (28% in February compared to 31% in March), there was a growing number of Winter Warmth customers who experienced a growth in arrears (remember, the number of customers entering the Winter Warmth program does not significantly begin until March). While 35% of Winter Warmth customers had experienced a growth in arrears from January to February, 43% of Winter Warmth customers had experienced a growth in arrears from January to March.

A corresponding pattern can be found within the accounts experiencing a reduction in arrears. The proportion of EAP accounts that had experienced a reduction in their arrears from January to February (70%) was virtually the same as the proportion of EAP accounts that had experienced reduction in arrears from January to March (69%). The same could not be said for Winter Warmth accounts. The proportion of Winter Warmth accounts that experienced any reduction in arrears fell as the winter progressed. The proportion of Winter Warmth accounts that had reduced their arrears in February (compared to January) stood at 65%. The proportion of Winter Warmth accounts with lower arrears in March (compared to January) had fallen even further (to 56%). As can be seen, in other words, more Winter Warmth accounts experienced a deterioration in their arrears status relative to January (31% deterioration for EAP vs. 43% deterioration for Winter Warmth; 69% improvement for EAP vs. 56% improvement for EAP). Moreover, the performance for Winter Warmth customers exhibited a downward trend rather than an improving trend.

The downward trend for Winter Warmth customers prior to the entry into Winter Warmth is to be expected. The trend reflects the fact that Winter Warmth targets payment-troubled customers for assistance in the first instance. If customers were not in a payment-troubled situation, they would not enter the Winter Warmth program. The downward trend for Winter Warmth participants (prior to their program entry) evidences the program's targeting mechanism at work.

The introduction of the Winter Warmth benefits in March 2007 resulted in a reversal both in the proportion of accounts with deteriorated arrears and the adverse trend in whether arrears were improving or deteriorating relative to January. While there was an improvement in the EAP

population's April arrears relative to January, there was a much greater improvement in the Winter Warmth arrears. The EAP population moved from having 69% of its population with a March arrears less than its January arrears, to having 77% of its April arrears less than its January arrears, an improvement of 8%. The Winter Warmth population moved from having 56% of its March arrears less than the January arrears to having 74% of its April arrears less than January, an improvement of 18%. More impressively, however, is that the EAP improvement occurred within a population that had been able to maintain its arrears over the winter, while the Winter Warmth improvement occurred after a deterioration over the winter.

The same positive impacts can be seen within the smaller population having experienced an increase in arrears. While the proportion of EAP accounts experiencing an increase in arrears since January fell from 31% in March to 22% in April (a reduction of 9%), the proportion of Winter Warmth accounts experiencing an increase in arrears since January fell from 43% in March to 26% in April (a reduction of 17%). The Winter Warmth performance is made more impressive by the fact that it reversed the trend in increasing arrears. While the proportion of EAP accounts with increasing arrears stayed relatively constant from February to March (28% vs. 31%), the Winter Warmth customers with increasing arrears had increased (from 35% to 43%).

The change is even more evident within the populations whose arrears stayed the same or increased. While 6% more Winter Warmth customers than EAP had a constant or increased February arrears relative to January (35% Winter Warmth vs. 28% EAP), that difference had increased to 13% in March (31% EAP customers had constant or increased arrears vs. 44% of Winter Warmth customers had constant or increased arrears). After Winter Warmth began to flow in March, however, the difference between the two population had fallen to only 3% (23% EAP customers had a constant or increased arrears vs. 26% Winter Warmth customers had a constant or increased arrears).

The positive impact of Winter Warmth is emphasized when one realizes that the EAP population includes all those customers who were *never* payment troubled. In contrast, Winter Warmth, as a matter of program eligibility, is limited to addressing the problems posed by payment-troubled low-income customers. As Table 14 documents, the Winter Warmth program succeeded in taking those payment troubled customers and making them virtually indistinguishable from the EAP population as a whole.

OBJECTIVE #4: IMPROVED COLLECTIONS TARGETING.

A utility is well-served when it targets its collection activity to those customers who have an ability to pay their bills but, for whatever reason, fail to do so. When a utility has customers who cannot afford to pay their bills, seeking such payment not only imposes a direct cost on the company, but it imposes an opportunity cost on the company by foregoing collections efforts that might generate increased results. One objective of the three Indiana low-income programs is to allow the respective utilities to decrease their collections activity directed toward low-income customers so as to allow that collection effort to be directed toward customers in arrears that have a greater ability to respond to the collection activity. Each utility achieves this objective.

Results in Brief: Objective #4: Improved Collections Targeting.

Finding: The Indiana utility programs allowed each utility to decrease their collection activities directed toward low-income customers so as to allow increased collections toward customers with a greater ability to pay.

Citizens Gas & Coke Utility	Program Nonparticipants	Program Participants
Pct of customers with collection activity (April)	63%	46%
Pct of customers with collection activity (May)	54%	39%
Vectren Energy	**Program Nonparticipants**	**Program Participants**
Pct of customers with collection activity (April)	43%	37%
Pct of customers with collection activity (May)	42%	30%
NIPSCO	**Program Nonparticipants**	**Program Participants**
Arrears same or higher in month after collection activity	43%	35%
Arrears lower in month after collection activity	57%	65%

SOURCE: Tables 15, 16 and 17.

CGCU's Universal Service Program

The collection activity directed toward customers having participated in the Universal Service Program for two years was substantively less than the collection activity directed toward customers who did not enroll in the USP until April or May of the 2007 program year. Table 15 documents that customers who had not participated in the USP had 54% more collection activities directed against them as compared to customers who participated in USP for both 2006 and 2007. Even after the "late applicants" began to enter the USP in April, these customers experienced 40% more collection activities. The number of nonparticipant accounts that had collection activity directed toward them increased from 50% in January (249 of 497) to 54% in February (270 of 497) to 72% in March (362 of 497). Prior year participants had fewer collection activities in January (202 of 500) as well as in March (235 of 500).

Table 15. Collection Activities (USP Participants and Nonparticipants) (CGCU)

Group	Jan-07	Feb-07	Mar-07	Apr-07	May-07	March vs. Jan	March vs. Feb
Prior year participant	202	206	235	228	193	16%	14%
Late applicant /a/	249	270	362	313	272	45%	34%
Percent difference	23%	31%	54%	37%	41%		

NOTES:

/a/ Customer who entered the USP program in either April or May of 2007.

It is expected that as their participation in USP continues, the number of collection activities directed toward Winter Warmth customers would continue to drop.

Just as important as the ***number*** of collection activities directed against the program participants and nonparticipants is the ***shape*** of the collection patterns for the two customer groups. The group of nonparticipant low-income customers demonstrated a traditional pattern of collection activities. The March collection activity represents a sharp peak relative to those activities in the immediately preceding two winter months. The nonparticipating population experienced a 45% increase in March collections activity compared to January collections. The nonparticipating population experienced a 34% increase in March collection activity compared to February collections. In contrast, the population that had participated in USP for two consecutive years had a nearly level collection activity throughout the winter and spring. While collections were up slightly in March and April (relative to the two winter months), the May collection activity directed toward the USP participant population was actually less than the collection activity directed toward the USP participation population in the winter months of January and February.

Finally, the impact of USP participation began to manifest itself in the "late applicant" population as well. Normally, collection activity accelerates throughout the spring and early summer months as a utility seeks to collect the arrears which low-income customers incurred throughout the winter.[16] In contrast to that accelerating collection activity, as customers begin to come into the company's Universal Service Program, rather than accelerating, the collection processes begin to moderate. While still substantially in excess of those collection activities directed toward customers who had participated in USP for two years, the May collection activity had dropped to the same level as the February activity for the late applicant population.

Vectren's Universal Service Program

The collection activity directed toward customers having participated in the Universal Service Program for two years was substantively less than the collection activity directed toward customers who did not enroll in the USP until April or May of the 2007 program year. Table 16 documents that customers who had not participated in the Vectren USP had substantively more collection activities directed against them when compared to customers who participated in USP

[16] Such an impact can certainly be found in the annual credit and collection data reports generated by the Coalition to Keep Indiana Warm for both 2005 and 2006.

for both 2006 and 2007. Even after the "late applicants" began to enter the USP in April, these customers experienced more collection activities. The proportion of nonparticipant accounts that had collection activity directed toward them increased from 34% in January to 50% in February and 45% in March. Prior year participants had the same proportion of collection activities in January (35%), but did not see the same increase in collection activity later in the winter and spring.

Table 16. Collection activities (USP Participants and Nonparticipants) (Vectren)

Group	Jan-07	Feb-07	Mar-07	Apr-07	May-07
Prior year participant	35%	36%	38%	37%	30%
Late applicant /a/	34%	50%	45%	43%	42%

NOTES:

/a/ Customer who entered the USP program in either April or May of 2007.

It is expected that as the USP participation of the late applicants continues, the number of collection activities directed toward them will continue to drop.

Just as important as the ***number*** of collection activities directed toward the program participants and nonparticipants, however, is the ***shape*** of the collection patterns for the two customer groups. The group of nonparticipant low-income customers demonstrated a traditional pattern of collection activities. The February and March collection activity represents a peak relative to those activities in the preceding winter months. The nonparticipating population experienced a substantial increase in February collections activity compared to January collections (50% vs. 34%, an increase of 16%). The nonparticipating population experienced a similar increase in March collection activity compared to January collections. In contrast, the population that had participated in USP for two consecutive years had a nearly level collection activity throughout the winter and spring. While collections were up slightly in March and April (relative to the two winter months), the May collection activity directed toward the USP participant population was actually less than the collection activity directed toward the USP participation population in the winter months of January and February.

In contrast to an accelerating collection activity, as customers begin to come into the company's Universal Service Program, rather than accelerating, the collection processes begin to moderate. While still substantially in excess of those collection activities directed toward customers who had participated in USP for two years, the May collection activity had begun to decrease as these customers entered the USP.

NIPSCO's Winter Warmth Program

The Winter Warmth program generates more positive collections outcomes for low-income customers than does the energy assistance program standing alone. To assess the impact of collection activity, the level of arrears for energy assistance and Winter Warmth accounts in months after a collection activity were compared to the level of arrears in the month of the

collection activity. Arrears were divided into two categories. On the one hand, the level of arrears could stay the same or increase; on the other hand, the level of arrears could decrease. Table 17 presents the results.

Table 17. Arrears In Month after Collection activities (Winter Warmth Participants and Nonparticipants) (NIPSCO 2007)

	January		February		March	
Group	EAP	Winter Warmth	EAP	Winter Warmth	EAP	Winter Warmth
Arrears the same or higher	50%	61%	55%	75%	43%	35%
Arrears lower	50%	39%	45%	25%	57%	65%

Table 17 documents the impact of Winter Warmth in reducing arrears when program funds begin to flow. The collection activity directed toward non-Winter Warmth energy assistance accounts generates a reduction in arrears in roughly half the instances in which collection activity is pursued. Not surprisingly, the impact of collection activity is somewhat higher in the post-winter month of March than in the winter months of January or February. The impact of collection activity directed toward non-Winter Warmth customers, however, varies in a relatively narrow band around 50%. In February (the month with least effectiveness), 55% of non-Winter Warmth accounts toward whom collection activity is directed experience increased arrears, while in March (the month with greatest effectiveness), only 43% of non-Winter Warmth accounts toward whom collection activity is directed experience increased arrears.

Winter Warmth accounts demonstrate a different experience. Given that Winter Warmth is directed toward payment-troubled customers, it is to be expected that collection activity would have a limited impact in the months before program funds begin to flow. Table 17 shows that result. In January, 61% of accounts that would become Winter Warmth accounts experienced increased arrears despite the collection activity directed toward them. In February, 75% of the account that would become Winter Warmth accounts experienced increased arrears despite the existence of collection activity. In March, however, after Winter Warmth funds began to flow, the reduction in arrears becomes apparent. While 57% of non-Winter Warmth customers experienced a decrease in arrears after collection activity, 65% of Winter Warmth accounts did.

This result is made more impressive by two observations. First, not all Winter Warmth accounts received their Winter Warmth payments in March. While $14,755 Winter Warmth payments were distributed in March, an additional $9,023 Winter Warmth payments were distributed in April. Second, and even more importantly, the reduction in arrears did not occur simply because Winter Warmth payments were applied against the accounts. As discussed in detail in the discussion of "revenue neutrality" below, the Winter Warmth payments supplemented and did not supplant customer payments. In fact, the Winter Warmth program leveraged additional customer payments that would not have been made in the absence of the program.

It is expected that the number of collection activities directed toward Winter Warmth participants will continue to decrease, and the impact of Winter Warmth collection activities, to the extent

necessary, will continue to increase for NIPSCO. Insufficient months exist to consider these impacts in the current outcome evaluation.

OBJECTIVE #5: SUSTAINING COMPLETE BILL PAYMENT

In addition to achieving improvement in the ability of low-income customers to address their winter payments, one objective of the three Indiana utility low-income programs is to improve the extent to which bill payments are complete over time. As with other specified objectives, this objective appertains to the Universal Service Programs, which are directed to bills for current usage. In contrast, the NIPSCO program is targeted toward providing customers who have fallen into payment-trouble an opportunity to rehabilitate their payment practices without the company needing to resort to expensive collection mechanisms. The success of the NIPSCO program in this regard, particularly with its highest arrears customers, has been discussed above. The discussion below finds that both CGCU and Vectren succeed in improving the extent to which program participants make complete bill payments.

Results in Brief: Objective #5: Sustaining Complete Bill Payment.

Finding: The Indiana utility programs helped program participants sustain more complete bill payment.

Citizens Gas & Coke Utility	Program Nonparticipants	Program Participants
Ratio of this month' payment to last month's bill is less than 50% (March)	49%	29%
Ratio of this month' payment to last month's bill is greater than 100% (March)	23%	45%
Vectren Energy	**Program Nonparticipants**	**Program Participants**
Ratio of this month' payment to last month's bill is less than 50% (March)	75%	61%
Ratio of this month' payment to last month's bill is greater than 100% (March)	7%	32%

SOURCE: Tables 18, 19.

CGCU's Universal Service Program

One impact of the CGCU Universal Service Program is to assist program participants in making more complete payments toward their current monthly bills. While the customers may still carry arrears existing from before they entered the program, if the customer is making payments that at least cover the current monthly bill, he or she is not falling further behind. The extent to which customer payments in any particular month cover the bill rendered in the immediately preceding month –February payments are assumed to be directed toward January bills, March payments toward February bills, and the like—can be directly measured.

Table 18 documents that USP participants have a better payment performance than do their nonparticipant counterparts. Table 18 compares February payments to January bills. It compares

March payments to February bills. The Table shows a slight improvement in payment performance in February, but a significant payment improvement in March.[17] Significantly fewer program participants made March payments of less than 50% of their February bill than did program nonparticipants (145 vs. 245). Significantly more program participants made March payments exceeding their February bill than did program nonparticipants (225 vs. 114).

Table 18. Ratio of this Month's Payment to Last Month's Bill (February/March 2007)

	February 2007		March 2007	
	Prior Year Participant	Late Applicant	Prior Year Participant	Late Applicant
Ratio is less than 50%	141	158	145	245
Ratio is 100% or more	222	209	225	114

Vectren's Universal Service Program

One impact of the Vectren Universal Service Program is to assist program participants in making more complete payments toward their current monthly bills. While the customers may still carry arrears existing from before they entered the program, if the customer is making payments that at least cover the current monthly bill, he or she is not falling further behind. The extent to which customer payments in any particular month cover the bill rendered in the immediately preceding month –February payments are assumed to be directed toward January bills, March payments toward February bills, and the like—can be directly measured.

Table 19 documents that Vectren's USP participants have a better payment performance than do their nonparticipant counterparts. Table 19 compares February payments to January bills. It compares March payments to February bills. The Table shows a substantial improvement in payment performance in February. While two-thirds (66%) of program participants made February payments of less than 50% of their January bills, only one-third (34%) of program participants did. Conversely, while nearly half of all program participants made February payments equal to 100% or more of their January bills, only one-fifth (22%) of the nonparticipants did.

Similarly, significantly fewer program participants made March payments of less than 50% of their February bill than did program nonparticipants (61% vs. 75%). Significantly more program participants made March payments exceeding their February bill than did program nonparticipants (32% vs. 7%).

[17] The difference in February, though it cannot be tested for given the available data, is likely to be attributed to the receipt of LIHEAP payments which prepay a portion of the January bill. Since this table presents information on the payment compared to the bill for current usage (and not compared to the outstanding balance), a LIHEAP payment received in a prior month which results in a credit to be applied against the bill for current usage will result in a lower payment-to-bill ratio. The significant up-tick (132 vs. 108, or 30%) in the number of customers with payment-to-bill ratios in the 50% to 99% range for program participants in February lends credence to this observation.

Table 19. Ratio of this Month's Payment to Last Month' Bill (February/March 2007)

	February 2007		March 2007	
	Prior Year Participant	Late Applicant	Prior Year Participant	Late Applicant
Ratio is less than 50%	34%	66%	61%	75%
Ratio is 100% or more	49%	22%	32%	7%

OBJECTIVE #6: IMPROVE CUSTOMER BILL PAYMENT MANAGEMENT

One objective of the Indiana utility low-income programs is to improve *customer* management of their own bills as bills become more affordable. Rather than having partial, late or periodic payments, in other words, the objective is for low-income customers to address their bills for current usage in a complete, regular and timely fashion on a monthly basis. As with other program objectives directed toward the management of current bill payment, this objective relates primarily to the Universal Service Programs operated by CGCU and Vectren. In contrast, the NIPSCO Winter Warmth program is targeted toward helping payment-troubled customers resolve their arrearage situations.

Results in Brief: Objective #6: Improved Bill Payment Management.

Finding: The Universal Service Programs generated more complete bill payments over the winter months than did traditional collection activities.

Citizens Gas & Coke Utility	Program Nonparticipants	Program Participants
Cumulative January to March payments exceeded January to March bills.	9%	25%
Cumulative bill exceeded payment by $100 or less	16%	30%
Cumulative bill exceeded payment by $201 or more	48%	27%
Vectren Energy	Program Nonparticipants	Program Participants
Cumulative January to March payments exceeded January to March bills.	26%	35%
Cumulative January to March bill exceeded payment by $100 or less	17%	22%
Cumulative January to March bill exceeded payment by $201 or more	41%	26%

SOURCE: Tables 20 and 21.

CGCU's Universal Service Program

The CGCU Universal Service Program generated more complete bill payment over the winter months than did traditional collection activities. Table 20 presents the dollar difference between

payments made on customer accounts and the bills rendered for those accounts. Table 20 documents that nearly three times as many USP participants (127 vs. 44) made payments that exceeded their cumulative current bills for January through March as compared to the nonparticipants. A roughly equal number of participants and nonparticipants made payments exactly equal to their current bill in the months of January through March (17 vs. 20). More than twice as many USP participants made payments resulting in a current bill balance of $50 or less for January through March than did nonparticipants (233 vs. 109). While nearly one-half of USP nonparticipants (47%) made payments yielding a current bill balance of $50 or less (of which the substantial majority had a balance of $0 or less: 144 of 233), less than one-quarter of USP participants (22%) had a current bill balance of $50 or less (of which only a slight majority had a balance of $0 or less: 64 of 109).

Table 20. Cumulative Payments vs. Cumulative Bills (January through March 2007) (CGCU)

	Participated Both Years	USP Late Applicant
Payments exceeded bills	127	44
Payments exactly equal to bills	17	20
Bills exceeded payments by:		
$1 - $50	89	45
$51 - $100	59	35
$101 - $200	72	116
$201 - $300	58	80
$301 - $500	51	115
$501 or more	27	42
Total	500	497

Just as there were more USP participants with lower current bill balances at the end of the winter, there were *fewer* USP participants with higher current bill balances at the end of the winter. Table 20 documents that more than twice as many USP nonparticipants had a current bill balance of $301 to $500 (115) than did customers who participated in the USP for both 2006 and 2007 (51). More than 1.5x as many USP nonparticipants had a current bill balance of more than $500 (42) than did customers who participated in USP (27). Overall, while half of nonparticipants (237 of 497) had a current bill balance of $200 or more, only one-quarter (136 of 500) of USP participants had current bill balances that high. While 70% of the nonparticipants (353 of 497) had current bill balances of $100 or more, only 40% of USP participants (208 of 500) had balances that size.

Vectren's Universal Service Program

The Universal Service Program generated more complete bill payment over the winter months than did traditional collection activities. Table 21 presents the dollar difference between payments made on customer accounts and the bills rendered for those accounts. Table 21 documents that nearly 30% more USP customers (35% vs. 26%) made payments that exceeded

their cumulative current bills for January through March as compared to the nonparticipants. A roughly equal number of participants and nonparticipants made payments exactly equal to their current bill in the months of January through March (4% vs. 2%). Nearly 50% more USP customers made payments resulting in a current bill balance of $50 or less for January through March than did nonparticipants (13% vs. 9%). While more than one-half of USP participants (52%) made payments yielding a current bill balance of $50 or less (of which the substantial majority had a balance of $0 or less: 35% of the 52%), fewer than four-in-ten USP nonparticipants (37%) had a current bill balance of $50.

Table 21. Cumulative Payments vs. Cumulative Bills (January through March 2007) (Vectren)

	Participated Both Years	USP Late Applicant
Payments exceeded bills	35%	26%
Payments exactly equal to bills	4%	2%
Bills exceeded payments by:		
$1 - $50	13%	9%
$51 - $100	9%	8%
$101 - $200	13%	14%
$201 - $300	10%	15%
$301 - $500	10%	13%
$501 or more	6%	13%
Total	100%	100%

Just as there were more USP participants with lower current bill balances at the end of the winter, there were *fewer* USP participants with higher current bill balances at the end of the winter. Table 21 documents that more USP nonparticipants had a current bill balance of $301 to $500 (26%) than did customers who participated in the USP for both 2006 and 2007 (16%). More than twice as many USP nonparticipants had a current bill balance of more than $500 (13%) than did customers who participated in USP (6%). Overall, while four-of-ten nonparticipants (41%) had a current bill balance of $200 or more, only one-quarter (26%) of USP participants had current bill balances that high. While 55% of the nonparticipants had current bill balances of $100 or more, only 39% of USP participants had balances that size.

OBJECTIVE #8: MAXIMIZING PUBLIC/PRIVATE INTEGRATION

"Program "integration" is a conclusion, not a statement of fact." So concluded participants in a one-day symposium hosted by the federal LIHEAP office's Advisory Committee on Managing for Results.[18] According to this LIHEAP Advisory Group:

[18] Roger Colton (2000). *Integration of LIHEAP Programs with Energy Assistance Programs Created through Electric and/or Natural Gas Restructuring*, at 4, U.S. Department of Health and Human Services, Administration for Children and Families, Division of Community Service, Office of Home Energy Assistance: Washington D.C.

> A policymaker can measure the number and extent of program linkages and, based upon those measurements, conclude whether programs are "integrated" or not. The greater the number of linkages, the greater the extent of program integration. "Integration" involves a continuum of linkages. At one end of the continuum is a complete lack of any program linkage in any facet of the program (i.e., no program integration). At the other end of the continuum, the programs have complete linkage in every aspect (i.e., complete program integration). All types of permutations and shades of grey can exist in the middle.

To determine program integration, it is necessary to identify those points where program linkages can occur with the existing energy assistance program. The LIHEAP Advisory Committee on Managing for Results identified the following possible program linkages that can occur:

- Funding: Funding examines the direct dollars of benefit applied to customer accounts. A LIHEAP cash or crisis benefit is a direct dollar of benefit. A dollar of rate discount is a direct dollar of benefit.

- Oversight: "Oversight" has four different components: (1) oversight of day-to-day program operation; (2) periodic program monitoring on such things as participation levels, expenditures, and turn-over; (3) program impact and process evaluation; and (4) fiscal auditing.

- Administration: Program administration involves program design and implementation.

- Outreach: Program outreach involves the provision of program information to potential participants and the solicitation of program participation.

- Delivery: Program delivery involves the actual interface between the low-income customer and the program. Program delivery can involve program intake, energy efficiency audits, conservation education, budget counseling, and the like.

The three Indiana utilities were examined to determine the extent of overlaps within each of these areas.

Results in Brief: Objective #8: Public/Private Program Integration

Finding: The three Indiana utility programs have partial, but not complete, integration with corresponding public energy assistance programs.

	CGCU	Vectren	NIPSCO
Funding	Yes	Yes	Yes
Oversight			
Day to day oversight	Yes	Yes	No
Program monitoring	Yes	Yes	Yes
Program impact	No	No	No
Fiscal auditing	No	No	No
Administration	Yes	Yes	Yes
Outreach	Yes	Yes	n/a
Program delivery	Yes	Yes	Yes

Funding

The three Indiana utilities have substantial funding linkage with the federal energy assistance program. The CGCU and Vectren Universal Service Programs have a substantial funding integration with LIHEAP. While program benefits are delivered by different agencies, the combined impact of the benefits is consciously considered in program design. The two utilities seek to deliver a percentage discount designed to achieve pre-determined levels of affordability. The percentage discount is achieved by the *combined* benefits of LIHEAP and the utilities. The programs do not operate independent of each other in this respect.

So, too, does NIPSCO integrate its program funding with available public and private resources. Through the combined resources, NIPSCO addresses pre-existing arrears that serve as the basis for a pending disconnection of service. The combined arrearage payment resources must be sufficient to resolve the pending disconnection of service. NIPSCO provides benefits up to a maximum of $450. Should the full maximum not be necessary to resolve the pending disconnection given other available resources, the maximum NIPSCO benefit is not paid. Moreover, NIPSCO Winter Warmth benefits are used, in part, to help pay customer security deposits that are unaffordable to the customer. The use of NIPSCO resources in this respect is explicitly designed to integrate with LIHEAP. NIPSCO provides such resources because LIHEAP cannot be used to pay for security deposits. Rather than diverting scarce (and oftentimes unavailable) household resources to paying the deposit, the NIPSCO resources are used to pay the deposit leaving household resources available to pay outstanding arrears. In this fashion, the sum of available resources is maximized.

Oversight

The three Indiana utilities have not sought, and do not experience, substantial oversight linkages with the federal fuel assistance program, though some linkages occur due to the nature of the programs. Oversight can occur in any one of four areas.

Integration in the day-to-day oversight of program operations occurs, particularly for the Universal Service Programs operated by CGCU and Vectren. These two utility programs do not offer independent day-to-day oversight of program operations. Citizens and Vectren provide a level of benefit that is designed to supplement the LIHEAP program. While the combined benefits are structured to reach pre-determined levels of customer affordability, this program structure is done at the initiative of the utilities, not at the initiative of the LIHEAP office. The LIHEAP office does not monitor whether Indiana energy assistance program (EAP) participants actually receive the utility benefits. Nor does the LIHEAP office monitor whether the pre-determined levels of affordability are achieved. In contrast, the delivery of LIHEAP benefits in combination with Winter Warmth benefits is monitored by LIHEAP on a case-by-case basis. The delivery of LIHEAP crisis assistance monies is limited to situation where the funding will resolve the crisis. The agencies delivering the LIHEAP/Winter Warmth benefits must satisfy both entities (NIPSCO and LIHEAP) that the intended effect of the combined resources (to resolve the crisis situation) has, in fact, been achieved.

Integration in the performance of periodic monitoring does not generally occur between the three Indiana utility programs and the federal LIHEAP program. While the three utilities monitor LIHEAP funding levels, LIHEAP program structure, and LIHEAP participation levels for purposes of their own program planning, no joint program planning occurs.

The lack of integration, in this regard, is not complete. Indiana's LIHEAP office receives periodic reports of participation in the three Indiana utility programs, along with reports on the extent of utility expenditures. These reports are used by the Indiana LIHEAP office to prepare the state's "leveraging report" to the federal LIHEAP office. The leveraging report documents the dollars of private energy assistance that are distributed in collaboration with the LIHEAP program. Additional dollars of federal LIHEAP monies are provided to the state based on the amount of leveraged resources. This documentation of the low-income rate affordability assistance provided to the state of Indiana through the three low-income programs results in an increase in federal LIHEAP funds provided to Indiana.

Integration in program impact and process evaluation does not occur between the three Indiana utility programs and the federal LIHEAP program. Evaluation of the three utility programs has been undertaken independently by the three utilities, in consultation with the OUCC and IURC. The LIHEAP office has played no role in the program evaluation of the three utility programs, or of the impact of those programs on enhancing the outcome performance of Indiana's LIHEAP benefits.

Integration does not occur in any fiscal auditing functions between the LIHEAP program and the three Indiana utility programs. The utilities have no role in any of LIHEAP's fiscal activity. Conversely, LIHEAP plays no role in any fiscal auditing function of the three utility programs.

Administration

There is considerable integration of the three Indiana utility programs with LIHEAP in the area of administration as defined by the LIHEAP Advisory Committee on Managing for Results. While LIHEAP does not explicitly change its program in response to the structure and operation of the three utility programs, the converse is not true. As described in more detail above, each utility program is designed to deliver both a form and level of benefit that complements the availability, form and level of LIHEAP benefits.

The delivery of NIPSCO's Winter Warmth benefits presents one example. Extensive consideration was given to the manner in which Winter Warmth benefits should be delivered. One issue, for example, was whether the company might leverage even greater customer resources if Winter Warmth benefits were not delivered in a lump sum, but rather delivered in a series of payments over a short time-period (e.g., three months), and made contingent upon customer payments during that time period. Making that program design decision, however, was found to jeopardize the receipt of LIHEAP arrearage benefits. LIHEAP arrearage benefits could only be delivered in the event that those benefits would resolve the underlying "crisis" (e.g., the underlying disconnection of service). LIHEAP arrearage benefits could *not* be delivered in the event that the customer's remaining financial obligations might still result in the loss of utility service. As a result, the NIPSCO program design incorporated its existing lump sum payment process in order to maximize the combined payments generated by the customer, the LIHEAP program, the Winter Warmth program, and other available private (e.g., fuel fund) resources.

Outreach

The Indiana utilities have considerable integration with the LIHEAP program in terms of outreach. Due to the combined delivery of all three programs with LIHEAP, the three utilities engage in an active promotion of LIHEAP in order to promote participation in their own programs. The door through which low-income customers enter the two Universal Service Programs involves an application for LIHEAP. Accordingly, outreach for the utility programs necessarily involves an integration with outreach for LIHEAP. The USPs and LIHEAP are inextricably related in this respect.

The question of integrating "outreach" for NIPSCO's Winter Warmth program with integration for LIHEAP does not have applicability. NIPSCO's Winter Warmth program is not a broad-based energy assistance program into which the company seeks to enroll large numbers of low-income customers. Instead, the Winter Warmth program is a tool through which the company targets particular assistance to customers who are in payment-trouble as determined by a pending disconnection of service for nonpayment. In helping to resolve the arrears underlying the pending disconnection, the Winter Warmth program seeks to access federal LIHEAP dollars as one resource. These actions to access LIHEAP, however, do not represent "outreach" efforts. They are, as explained in more detail below, an integrated program delivery mechanism.

Delivery

The three Indiana utilities have a complete integration of their respective low-income programs with LIHEAP when viewed from the perspective of program delivery. For the Universal Service Programs operated by CGCU and Vectren, the delivery of the programs are directly tied to the delivery of LIHEAP. Entry into the Universal Service Programs is gained by enrollment in energy assistance program. Enrollment in LIHEAP is both necessary and sufficient to enroll in the USPs. A low-income customer, beyond LIHEAP enrollment, need take no further action to also enroll in the USP.

The integration of Winter Warmth with the delivery of LIHEAP benefits flows the opposite direction, but is nonetheless just as complete. Enrollment in LIHEAP does not automatically qualify a low-income customer for the NIPSCO Winter Warmth program. The Winter Warmth program, as described in detail throughout this evaluation, provides targeted assistance to payment troubled customers as evidenced by a pending disconnection of service for nonpayment. Enrollment in LIHEAP thus does not automatically qualify a NIPSCO low-income customer for Winter Warmth. However, by enrolling in Winter Warmth, NIPSCO qualifies a low-income customer for available LIHEAP crisis assistance. Indeed, the Winter Warmth enrollment is undertaken by designated community-based organizations that operate to qualify customers for LIHEAP crisis assistance in the absence of the Winter Warmth program. These delivery agencies jointly consider the availability of LIHEAP crisis assistance, Winter Warmth assistance, and other private fuel assistance in their work to resolve the arrears underlying the pending disconnection of service.

Summary

There is not a complete "integration" of the three Indiana utility low-income affordability programs with the federal energy assistance program. Integration, however, need not be complete to be considerable. Integration represents a continuum of linkages between the utility programs and LIHEAP. Indiana's utility programs have such linkages in program planning, funding, outreach and delivery.

OBJECTIVE #9: ENHANCING EXISTING BILL PAYMENT PROCESSES

One intended outcome of the three Indiana utility low-income programs is to enhance the effectiveness of existing collection and customer service processes. Enhancing the effectiveness might, for example, including experiencing a lower default rate on deferred payment arrangements, a higher and quicker reconnection rate for customers disconnected for nonpayment, or a lessened need to engage in more intensive (and more expensive) collection actions. The Indiana utility programs have resulted in considerable, though not universal, collection enhancement. A variety of existing procedures are examined below.[19]

[19] This discussion is based primarily on the aggregated collection data provided by Vectren Energy.

Results in Brief: Objective #9: Enhance Existing Bill Payment Processes.

Finding: The Universal Service Programs generated more complete bill payments over the winter months than did traditional collection activities.

Vectren Energy	All Customers	USF1	USF2	USF3
Arrears subject to deferred payment arrangements				
March	56%	75%	75%	81%
May	43%	57%	57%	56%
Ratio accounts in arrears on deferred payment arrangements to accounts in arrears 60+ days				
March	4.1	11.5	16.4	15.9
May	2.0	3.6	3.8	3.3
Ratio of deferred payment arrangements to disconnections for nonpayment				
April	2.7	9.1	12.1	11.1
May	1.6	6.9	8.2	6.0
Number of Field Collections to every 100 Mail Collections				
April	6.7	3.1	2.4	2.7
May	10.0	3.8	2.9	4.2
Percentage of active customers with positive bill balance but $0 payment to total bills rendered				
February	11.4%	0.1%	0.2%	0.4%
March	9.9%	0.0%	0.0%	0.0%
April	11.3%	0.1%	0.2%	0.1%
May	10.1%	0.3%	0.3%	0.4%

SOURCE: Tables 22, 23, 25, 26 and 28.

Deferred Payment Arrangements

Customers participating in Vectren's Universal Service Program also participate in deferred payment arrangements to retire arrears. Table 22 presents the ratio of accounts on payment arrangements to the accounts in arrears for five groups of customers: all residential customers; energy assistance (EAP) customers; and customers at all three levels (USF1, USF2, and USF3) of the Universal Service Program.[20] As can be seen, the percentage of low-income accounts in arrears that have responded to those arrears through deferred payment plans is higher than that for the residential customer base as a whole.

Table 22. Percent Accounts in Arrears Subject to Deferred Payment Arrangements (DPAs) (Vectren 2006-2007 Winter Heating Season)

	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
All Customers	34%	---	44%	30%	56%	28%	43%
EAP customers	52%	---	62%	51%	74%	51%	61%
USF 1	51%	---	63%	51%	75%	47%	57%
USF 2	51%	---	62%	50%	75%	47%	57%
USF 3	58%	---	66%	52%	81%	50%	56%

The same results appear in Table 23, when limiting the accounts in arrears to those in with arrears of 60-days old or older. In each month, the ratio of accounts subject to deferred payment plans to accounts in arrears is higher for low-income program participants than for the residential class as a whole. These ratios are particularly important. They indicate that the reason for the lower residential participation in payment plans does not involve less severe level of arrears for residential customers generally. Even when limiting the comparison to those accounts with older (and thus presumably higher) arrears, a greater proportion of low-income accounts respond by entering into payment arrangements.

[20] There is a virtual overlap between the EAP and USF populations, though not a complete overlap. Participation in EAP is the door through which low-income customers enter the Universal Service Program for both Vectren and CGCU. Accordingly, given the overlap, it is to be expected that the data for these two programs track each other closely.

Table 23. Ratio Accounts on Deferred Payment Arrangements (DPAs) to Accounts in Arrears 60+ Days (Vectren 2006-2007 Winter Heating Season)

	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
All Customers	2.7	---	3.0	2.9	4.1	2.5	2.0
EAP customers	2.4	---	6.2	5.2	10.2	4.8	4.0
USF 1	2.3	---	7.8	4.7	11.5	3.9	3.6
USF 2	2.5	---	7.5	6.6	16.4	4.7	3.8
USF 3	4.1	---	6.8	6.3	15.9	4.3	3.3

As with other aspects of payment-troubled status, it is not merely the *level* of payment plan participation that is encouraging, it is the *shape* of that participation as well. Table 24 presents the actual number of accounts that are subject to deferred payment plans by month for the 2006/2007 winter heating season. With residential customers as a whole, the number of payment plans peaks in December, before the heating season begins. In January and February, the number of accounts on payment plans dips, before beginning to return to more normal levels of around 100,000 accounts in the warm weather spring months.

In contrast, there is an increasing number of program participants who also participate in deferred payment arrangements. Unlike their general residential counterpart, the winter months do not prevent the low-income customers from entering into deferred payment plans to address their arrears. While there is an uptick in the number of accounts in arrears during the winter months, these accounts in arrears are recognized, brought into contact with the company, and made subject to payment agreements between the company and the customer. This use of payment plans is consistent with the ability of the company's program to leverage additional payments that would not have been made in the absence of the program.

Table 24. Number of Accounts on Deferred Payment Arrangements (DPAs) (Vectren 2006-2007 Winter Heating Season)

	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
All Customers	98,628	129,341	95,080	95,914	121,882	113,525	104,151
EAP customers	1,378	3,596	5,902	8,472	11,797	11,871	10,833
USF 1	256	716	1,497	2,096	2,935	2,983	2,713
USF 2	535	1,184	2,676	4,066	5,947	6,172	5,743
USF 3	209	317	745	1,109	1,668	1,685	1,520

Deferred Payment Arrangements vs. Disconnection for Nonpayment

Vectren has succeeded in moving to the use of payment plans as a collection device for its low-income program participants rather than relying on the disconnection of service for nonpayment when low-income customers fall into arrears. Table 25 presents the ratio of the number of accounts on deferred payment plans to the number of accounts disconnected for nonpayment by month for Vectren. A ratio of 1.0 means that for every disconnection of service for nonpayment

there is an account on a deferred payment arrangement. If there were 100 disconnections for nonpayment in other words, there are also 100 accounts on payment arrangements. A ratio of 3.0 means that for every one account subject to disconnection of service, there were three accounts on a deferred payment arrangement.

Table 25 shows that Vectren has succeeded in addressing the arrears of its low-income customers through collection mechanisms that are less intensive than the disconnection of service. While the payment plan-to-disconnect ratios are similar for all customers and for low-income customers in the early study months, the company consistently relies more on payment arrangements rather than on service disconnections to respond to low-income arrears. In April, while USF3 customers have 11.1 payment plans for each disconnection for nonpayment, "all customers" have only 2.7 payment plans for each disconnection. In May, while USF1 customers have 6.9 payment plans for each disconnection, "all customers" have only 1.6 payment plans for each disconnection.

Table 25. Ratio of Deferred Payment Arrangements (DPAs) to Disconnections for Nonpayment (Vectren 2006-2007 Winter Heating Season)

	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
All Customers	3.1	21.2	3.2	4.5	2.9	2.7	1.6
EAP customers	3.8	9.5	3.2	13.7	21.7	11.8	7.7
USF 1	4.4	12.5	3.5	19.4	52.6	9.1	6.9
USF 2	3.7	13.3	3.3	23.3	65.6	12.1	8.2
USF 3	2.8	11.3	2.0	23.7	74.9	11.1	6.0

Intensity of Collection Activities

The ability to treat the arrears of low-income customers in a less intensive fashion is also evident from an examination of the ratio of field collections to the number of other collection activities. Table 26 presents data on the number of field collection activities which Vectren engages in for every 100 mail collection activities. If the ratio is 1.0, there is one field collection activity for every 100 mail collection activities. If the ratio is 3.0, there are three field collection activities for every 100 mail collection activities. A higher ratio evidences a greater reliance on the more intensive (and more expensive) field collection activities.

Vectren has succeeded in moving to a less intensive collection activity directed toward its low-income customers when compared to its residential customer base as a whole. While the company engages in a pre-winter collection directed toward its low-income customers, that reliance does not flow into the post-winter months. For residential customers generally, Vectren pursued 2.9 field collections for every 100 mail collections directed toward those customers in February, while it engaged in fewer than one field collection activity for every 100 mail collection activities directed toward USF participants that same month. This disproportionate use of field collection efforts directed toward residential customers generally carried through May. In each month (February through May), the company succeeded in using the less intensive mail collection activities directed its low-income program participants when compared to its residential customers generally.

Table 26. Number of Field Collections to 100 Mail Collections (Vectren 2006-2007 Winter Heating Season)

	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
All Customers	4.7	0.7	4.8	2.9	6.4	6.7	10.0
EAP customers	7.1	1.5	4.8	0.9	1.5	2.5	3.3
USF 1	5.3	1.1	3.8	0.6	0.7	3.1	3.8
USF 2	7.8	1.1	4.5	0.5	0.6	2.4	2.9
USF 3	8.9	1.0	6.6	0.4	0.5	2.7	4.2

Disconnection of Service

Vectren has succeeded in lessening the duration of service disconnections for nonpayment for its low-income population when compared to the total residential customer base as a whole. Table 27 presents the number of "short-term" reconnections for every 100 service disconnections for nonpayment by Vectren Energy. A short-term reconnection includes all disconnected accounts that had service restored in two days or less after the disconnection of service. Low-income customers consistently outperformed the total residential customer basis in having their service quickly reconnected. In no month, did the reported proportion of short-term reconnections for low-income program participants fall below the proportion of residential customers generally that experienced a short-term reconnection.

Table 27. Number of Short-term Reconnections to 100 Service Disconnections for Nonpayment (Vectren 2006-2007 Winter Heating Season)

	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
All Customers	4	4	4	4	3	2	2
EAP customers	5	7	6	8	6	5	6
USF 1	7	5	7	8	13	5	7
USF 2	5	5	7	9	6	6	5
USF 3	6	10	4	10	6	5	5

Zero Dollar Payments

Vectren has succeeded in minimizing the rate at which low-income customers make zero dollars in payments in those months in which accounts have a positive bill balance. As discussed elsewhere, low-income customers receiving federal fuel assistance may well have months in which the prior receipt of fuel assistance yields a bill credit for the month. Those resulting bill credits present their own challenges for low-income programs. Of those accounts with a positive bill balance, however, low-income program participants virtually always make *some* payment. The low-income program participants actually out-perform the residential customer base as a whole in this regard.

Table 28 presents the percentage of accounts making A $0 payment despite having a positive bill balance to the total number of bills rendered each month. Table 28 documents that low-income program participants substantially outperform the residential customer as a whole. Indeed, the Table indicates that customers participating in the Universal Service Program outperform energy assistance customer base as a whole.[21] In all months reported, fewer than one USP participant out of every 100 made a $0 payment despite having a positive bill balance. The proportion of EAP customers making a $0 payment ranged from 1.5 out of every 100 to 4.0, while the proportion of residential customers overall ranged from roughly 10 to more than 12 out of every 100 making a $0 payment (with the exception of December).

Table 28. Percentage of Active Customers with Positive Bill Balance but $0 Payment to Total Bills (Vectren 2006-2007 Winter Heating Season)

	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
All Customers	12.6%	3.2%	10.2%	11.4%	9.9%	11.3%	10.1%
EAP customers	3.0%	1.5%	3.8%	4.0%	1.9%	1.4%	1.6%
USF 1	0.8%	0.0%	0.2%	0.1%	0.0%	0.1%	0.3%
USF 2	0.4%	0.0%	0.1%	0.2%	0.0%	0.2%	0.3%
USF 3	0.5%	0.0%	0.2%	0.4%	0.0%	0.1%	0.4%

Summary

One of the primary impacts of the low-income programs offered by Indiana's three utilities is the leveraging of additional customer payments that would not have occurred in the absence of the programs. An additional impact, related to this leveraging, is the enhancement of existing collection efforts on the part of the utilities. Vectren data was examined above as illustrative. As shown, low-income program participants experience a variety of improvements in their need for, and response to collection activity. A greater proportion of low-income customers in arrears enter into deferred payment arrangements rather than allowing their arrears to grow untreated. More resources are put into working with low-income customers to resolve their arrears through arrangements rather than moving those customers to the disconnection of service. Low-income customers in arrears can be made subject to less intensive (and less expensive) collection activities. Fewer low-income customers make $0 payments.

The collections enhancements identified above are significant standing alone. They are even more significant in that they are consistent with, and help to explain, the overall revenue neutrality experienced by the utility in its offer of the low-income Universal Service Program.

[21] Again, it should be remembered that the EAP and Universal Service Program populations have a heavy overlap. This evaluation offers no explanation of why fewer USP/USF customers would make $0 payments than would EAP customers.

SUMMARY AND CONCLUSIONS

An outcome assessment of the three Indiana low-income programs documents that they generate precisely the outcomes that they are intended to generate. The two Universal Service Programs (CGCU and Vectren) are designed to reduce current bills to an affordable level. While these programs do not completely prevent the incursion of additional arrears by program participants, they generate substantial and consistent improvement over the payment performance by low-income customers not participating in the USPs.

In contrast, the NIPSCO Winter Warmth program is designed to respond to the payment troubles of its low-income customers. The outcomes achieved by NIPSCO's Winter Warmth program include documented reductions in arrears. The NIPSCO program is particularly beneficial for those low-income customers presenting the most difficult situation. The most substantial improvements occur within the population of low-income customers with the highest initial arrears.

In both cases –the Universal Service Programs on the one hand and the Winter Warmth program on the other hand—the low-income assistance programs outperform the EAP program. Customers participating in the low-income assistance programs consistently generate more positive outcomes, when measured both from the perspective of the incidence of such outcomes and the level of such outcomes.

One of the strongest outcomes of the Indiana low-income programs is the extent to which they generate economic benefits for the three utilities. Each program results in the utility leveraging additional customer payments that would not have been achieved in the absence of the program. While the USP programs offered tiered utility rate discounts, in other words, the extent to which current bill payments from program participants increased more than offset the extent to which current rates or bills were provided on a discounted basis. Similarly, under the NIPSCO Winter Warmth program, the increase in customer payments toward NIPSCO bills was greater than the decrease in bills attributed to the Winter Warmth arrearage payments. As a result of this revenue neutrality, each company ended up collecting more revenue with their programs than they would have collected in the absence of their respective programs.

Moreover, the increase in revenue generated through the low-income programs was accomplished in a manner that was less costly than existing available collection alternatives. Even assuming that an increased use of existing available collection processes could be effective in generating the same additional revenue levels, the cost of pursuing those additional collection efforts would have been more than the cost of the low-income rate affordability programs.

RECOMMENDATIONS

While the low-income rate affordability programs implemented by Indiana's three utilities achieve the objectives established for the programs, this empirical review of the program provides a basis for several recommended program modifications. These recommendations do not call for the wholesale redesign of any of the three programs.

Even without a redesign of any of the three programs, it is recommended that the programs adopt common program components that will make each of them more similar both in appearance and operation. This movement toward a more common design, however, can occur within the existing fundamental policy and operational framework now existing for each program.

In recommending this movement toward a more common program design, not all recommendations apply to all companies. The applicability of each recommendation will be noted within the discussion of each recommendation below.

OVERVIEW: TYPICAL PROGRAM DESIGN COMPONENTS.

A recent review of low-income utility affordability programs around the nation engaged in a review of best practices in program implementation. While that review of best practices found that all programs need not be uniform within a state in order to optimize program benefits, the review did find that there were certain minimum program design components that were common to nearly all programs. While each design component could be (and was) *implemented* in different fashions by different states (and even by different utilities within a state), each utility should have program element that addresses each of the minimum program design components. The minimum design components include the following elements:

a. A levelized budget billing component.

b. A current bill payment component.

c. An arrearage management component.

d. A crisis intervention component.

e. An energy efficiency component.

f. A customer referral and outreach component.

Each of the specifics of these recommendations is discussed in more detail below. Each utility program, however, should have some program component tied to the above "minimum design" promulgated by the Indiana Utility Regulatory Utility Commission (IURC).

A recent multi-state study of universal service programs supports the promulgation of minimum program design components for universal service programs within the context of providing flexibility to each utility on how that company chooses to implement the design component

within its individual service territory. The state of Pennsylvania, perhaps, best exemplifies this approach. The Pennsylvania Public Utility Commission (PUC) adopted minimum program designs for that state's Customer Assistance Program (CAP), while allowing each utility to design a program unique to its service territory. The result is a network of individualized programs, all of which have common elements but each of which implements those elements in a manner specific to the utility.

While not part of the set of minimum design components, the continuity of program design has been held to be a critical component of program operations. The New Hampshire Public Utilities, for example, convened a multi-party "working group" to consider the redesign of its Electric Assistance Program in 2006.[22] One fundamental recommendation of the Working Group was to retain the basic program design to maintain a continuity of service (and a continuity of message) to the program participants. Similar results were reached in both New Jersey and Pennsylvania in proceedings by each state's regulatory body to review the design and operation of their respective low-income programs.

Within this general framework, the following recommendations are advanced:

RECOMMENDATION #1: PROGRAM CONTINUATION.

The three Indiana low-income utility programs should be continued in substantially their existing form. The programs evidence a fundamental compliance with the set of minimum design components, even while the specifics of their implementation may differ. Each of the three Indiana programs achieve the objectives that have been established for the programs. Each of the programs not only generate positive bill payment outcomes for the low-income customers receiving benefits, but also generate positive economic benefits for the sponsoring utility. Each program is more than revenue neutral, collecting more money in additional revenue than is provided in discounted bill and services. Each program generates the additional revenue more cost-effectively than seeking to accomplish the same objective through the status quo collection processes.

While some modest adjustments in program design and implementation are described below, the first conclusion is that the programs merit continuation.

RECOMMENDATION #2: LEVELIZED BUDGET BILLING.

Indiana's utilities should devote effort and resources toward improving their performance with respect to low-income participation in budget billing as one aspect of their low-income programs. While each utility need not necessarily emulate NIPSCO, which requires participation in Budget Billing as part of its Winter Warmth program, additional effort should be directed toward improving performance in two respects:

[22] The working group had representatives of each electric utility, the PUC, the Office of Consumer Advocate, the state LIHEAP office, the state association of Community Action Agencies, and various low-income advocacy groups.

- An increased number of customers that participate in levelized Budget Billing. Increasing the number of Budget Billing participants may involve simple outreach mechanisms. To generate an increase, however, may also involve the need to identify and overcome those barriers that prevent enrollment in Budget Billing.

- An increased focus on enrolling low-income customers in particular. Specialized outreach to low-income customers may be able to identify the unique advantages that Budget Billing offers to limited income customers

A seasonal Budget Billing plan may also be an option should Indiana's utilities wish to maintain the ability to ensure their program participants a lower non-heating month natural gas bill. As the annual credit and collections report prepared for the Coalition to Keep Indiana Warm (October 2006) observed:

> Indiana utilities might be well-served to offer something other than an *annual* Budget Billing plan. A "summer free" plan would help guard against the high winter bills while also preserving the low-cost summer months for the customer. The data clearly shows that many customers in arrears are simply engaging in short-term time-shifting of high winter bills without the structure of a Budget Billing plan. Increases in monthly arrears for the residential class as a whole truly begin with the January bill. Moreover, by May, those arrears are being significantly paid down. The same is true for low-income customers, with both the number of accounts in arrears and the average monthly dollars in arrears showing a sharp increase in January, with dramatic and prompt "pay down" in the months immediately following the winter. To allow customers to move some of that time-shifting *forward* rather than having it merely be *backward* would be consistent with the desire to keep bills paid, and the demonstrated inability to make that happen in the high cost winter months. To move some of those January through March dollars forward to the lower cost months immediately preceding winter should help lower arrears without running afoul of the customers' desires to retain their low-cost summer bills.

While the Coalition report was based on an assessment of data from *all* Indiana utilities, the recommendation is supported by the data from this outcome evaluation as well.

RECOMMENDATION #3: AN ARREARAGE MANAGEMENT PROGRAM COMPONENT.

Citizens Gas and Vectren Energy should consider implementation of a component for their Universal Service Programs designed to address pre-existing arrears. While the USPs offered by CGCU and Vectren help customers maintain payments toward current bills, they are less successful in helping program participants completely retire their pre-existing arrears. Program participants do not fall further behind, and often make modest progress in reducing arrears, but do not sufficiently succeed in completely retiring preprogram arrears.

An arrearage management program for preprogram arrears can, but need not, consist of an arrearage "forgiveness" program. An arrearage forgiveness program might consist of a matching credits program. Under such an approach, the two utilities would offer to match customer monthly payments toward preprogram arrears on a fixed-dollar basis (either dollar-for-dollar, or $2 of match for every $1 of payment, or whatever matching increment the utilities might choose within the budget constraints established for the program). Customers would not be "required"

to make payments toward preprogram arrears, but their payments would be matched (up to some ceiling amount) should they be made paid.

In lieu of a matching credit program, CGCU/Vectren should, at a minimum, consider an arrearage management program based on the program developed for the Detroit Water and Sewer Department (DWSD). At the time of enrollment in its rate affordability program, DWSD automatically places its program participants on an affordable deferred payment plan. While the DWSD deferred payment plan is based on a percentage of income payment toward arrears, that aspect of the DWSD program would not easily transfer to the Indiana utilities.[23] DWSD agreed, up-front, to accept whatever payment plan term that affordable payment generates. If pre-existing arrears could be retired in three months given the affordable payment, the term of the plan was for three months. If the affordable payment resulted in a 30-month payment plan, however, the plan provided for 30 months of payment. The belief on the part of DWSD was, however, that its 30-month payment plans would be revenue neutral, generating more payments toward the pre-existing arrears than would have been received by the company in the absence of the plan.

In sum, CGCU and Vectren should consider how they might address pre-existing arrears within the confines of the existing structure of their USPs.

RECOMMENDATION #4: AN ENERGY EFFICIENCY PROGRAM COMPONENT.

Each of the three Indiana utilities funnels, as part of their package of low-income programs, considerable program dollars into the delivery of energy efficiency measures to low-income customers. The three utilities, however, would be well-served to emulate the best practices of each other in drawing an explicit connection between high use program participants and their energy efficiency investments.

Each utility should develop an explicit process for referring high use, high benefit, customers, into their respective energy efficiency programs. Delivering energy efficiency investments to program participants who otherwise are receiving high program benefits results in not only the traditional avoided costs generated by ***any*** energy efficiency investment, but results in the additional advantages experienced by reducing the benefits paid to those customers. Those reduced benefits can, as a result, either be redirected toward other low-income customers or can be used to reduce the overall cost of the program. Vectren Energy draws an explicit connection between its USP customers and its referrals to available low-income usage reduction programs. The Company refers program participants having usage at or above 130% of the average residential usage to low-income efficiency programs.

Citizens has also implemented a referral process. In addition to checking total consumption against the residential average, however, Citizens seeks to cluster its high usage low-income customers into specific geographic areas. Treating high usage customers in a common geographic area helps Citizens to control administrative costs. Citizens further adjusts its analysis of customer consumption by housing unit size. This adjustment reflects a concern by the

[23] DWSD calculates a percentage of income payment toward current bills also, while neither CGCU nor Vectren do.

utility that the 130% of average usage test it used as an indicator of the need for efficiency adjustment focused disproportionate attention on large housing units.

Each of the three Indiana utilities operating low-income programs recognizes the key role which energy efficiency plays in offering a comprehensive set of affordability services. An "explicit" process of referral will allow the companies to track the movement of high usage, high benefit, program participants into the energy efficiency program. It would allow the companies to document the affordability program impacts resulting from the installation of energy efficiency investments.

RECOMMENDATION #5: A CRISIS MANAGEMENT PROGRAM COMPONENT.

Citizens Gas and Vectren should consider supplementing their basic monthly affordability benefits with a modest crisis assistance program. While the USP programs assist the companies' low-income customers with making home energy service more affordable, as evidenced by the improved payment patterns identified in the narrative discussion above, the success is not universal. Tiered discount programs, which do not individually target the determination of affordability, cannot be structured to ensure affordable bills for all program participants.

Moreover, even where a tiered discount program works as intended under normal circumstances, one attribute of low-income customers is their volatility of income. The jobs of low-income, low-wage workers are marked as much by the uncertain level of income as they are marked by the low level of income. A modest crisis assistance program designed to provide time-limited assistance responding to exigent circumstances is an important program enhancement.

RECOMMENDATION #6: A CUSTOMER REFERRAL AND OUTREACH PROGRAM COMPONENT.

Each of the three Indiana utilities should consider the implementation of additional customer referral and outreach efforts as part of their respective low-income programs. The outcome evaluation above concludes that each of the three utility programs fundamentally "work." The programs achieve the objectives established for the programs. The participants in the respective utility programs outperform program nonparticipants. The programs achieve their pre-established program objectives in a revenue neutral fashion. They achieve those program objectives in a manner that is less costly than any currently available alternative could achieve them.

Despite these findings, while the programs improve the performance of low-income customers, they do not "solve" the problem of low-income home energy unaffordability. Nor should they be expected to "solve" the problem of unaffordability. While program participants perform better than program nonparticipants do, participant performance could likely be improved even further by directing additional financial resources to these low-income customers.

Rather than directing such resources to these low-income customers from utility resources, the three utilities should consider the implementation of additional referral and outreach efforts to program participants. Periodic seasonal outreach to program participants can have the impact of supplementing household income and improving utility bill payment patterns even further.

Seasonal outreach promoting the Earned Income Tax Credit (EITC) is one initiative that would benefit the three utilities. EITC benefits would flow to low-income customers at the time of their greatest need (i.e., at the end of the winter heating season). Research by the Internal Revenue Service (IRS) documents that EITC recipients frequently use these tax dollars to make bill payments on normal household expenses. A substantial minority of EITC recipients use their tax credits to make payments on overdue utility bills. Seasonal EITC outreach could be an important supplement to the financial assistance provided by the utilities themselves.

Seasonal outreach for summer nutrition programs has also been found to be an important income supplement for low-income customers. Recent work in Georgia identified "kid-related food expenses" as the second-leading financial problem for customers in financial trouble with their utility ("inadequate income" was, not surprisingly, the leading problem).[24] One response to that cause for utility bill payment problems was the promotion of family enrollment in the federal free and reduced-price School Lunch/School Breakfast program.

The need for summer outreach became quickly evident. These households with children were found to *lose* their school lunch/school breakfast programs during the summer months. While federal summer nutrition programs for families with school-age children exist, only a *fraction* of the families who participate in the school lunch/school breakfast programs then *also* enroll in the summer nutrition programs. Families were found to pay more than $240 each month out-of-pocket for additional food expenses during the warm weather months due to the loss of the school lunch/school breakfast benefits. These additional costs come just at the time that natural gas companies were counting on reduced summer bills to provide an opportunity for customers to retire continuing winter arrears. Promoting enrollment in the Summer Food Service Program, the summer equivalent to the school breakfast/school lunch programs, could help offset these out-of-pocket expenses and improve summer bill payments.

One important supplement to the financial assistance provided through the Indiana low-income programs is the corresponding outreach and referrals to help bring outside financial resources into these low-income households. Seasonal outreach for the EITC and for the Summer Food Service Program are two examples of referral and outreach efforts that could provide particularly well-targeted assistance.

RECOMMENDATION #7: AN OUTBOUND CALLING PROGRAM COMPONENT.

Each of the three Indiana utilities should consider a greater reliance on outbound calling for program participants with small arrears. One impact identified by the outcome discussion above involves the disproportionately positive impact of the three low-income programs on low-income customers with high arrears. Ironically, those low-income customers with smaller preprogram arrears (e.g., less than $100) experienced lesser bill payment improvement under the programs than did those customers with larger arrears.

[24] Roger Colton (2006). *Georgia REACH Project Energize: Final Program Evaluation*, Georgia Department of Human Resources: Atlanta (GA).

The three Indiana utilities should consider the benefits of implementing an outbound "reminder" telephone calling program for their small arrearage program participants based on the model of Jersey Central Power and Light Company (JCP&L). JCP&L recently completed a pilot program through which that utility made telephone contact with participants in the New Jersey universal service program. The JCP&L program was limited to making reminder contacts with universal service participants who brought pre-program arrears into the program. Those pre-program arrears were subject to forgiveness; the New Jersey arrearage forgiveness program is called the Fresh Start program.

Targeting not only rate affordability assistance and usage reduction, but also direct telephone contact, to these customers was found to be an effective response to the unique needs of these households, according to the November 2005 evaluation of the JCP&L program.[25] According to that JCP&L evaluation, "the average amount of forgiveness received and the proportion of original balances forgiven were larger for JCP&L Fresh Start customers who received a substantive contact from a [customer service representative] during October 2004 through July 2005."

The provision of these telephone services was a cost-effective intervention for USF participants with pre-program arrears. According to the JCP&L Evaluation, "the overall benefit-cost ratio for the program is estimated to be about 1.8; the program yields about $1.80 in arrearage forgiveness for each $1 spent on making contacts. The ratio assumes that the increase in forgiveness is a direct result of the program." Indeed, the JCP&L Evaluation found that "the cost-benefit ratio for the *first* substantive call exceeds 2.0. The ratio gradually falls until it is about 1.0 for the fifth substantive contact." The recommendation of the JCP&L Evaluation stated that "we also can make a tentative recommendation to the BPU that the payment counseling services be expanded to the broader population of USF customers."

Rather than implementing such an intervention for all low-income program participants in the three Indiana utility programs, the respective utilities should consider the implementation of such a program component for those program participants with low preprogram arrears. These are the program participants who appear most likely to respond to, and generate benefits from, the implementation of such a program component.

[25] Apprise, Inc. (November 2005). *Evaluation of New Jersey Universal Service Fund Fresh Start Program: Jersey Central Power and Light Payment Counseling Services*, Apprise, Inc.: Princeton (NJ).

APPENDIX A:
Nonpayment Disconnections and Indiana's Low-Income Utility Affordability Programs

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This memo examines the impacts that Indiana's low-income utility rate affordability programs have generated on the disconnection of service for nonpayment. The observations below are based on the "aggregated" data provided by Vectren Energy (Vectren) and by Northern Indiana Public Service Company (NIPSCO) throughout the implementation of the low-income programs.[26] The aggregated data involves those data elements agreed to be collected and reported by the three utilities after extensive consultation with all other parties before, during and after the 2006 Indiana Utility Regulatory Commission (IURC) proceeding involving the three Indiana low-income programs.

Vectren Energy Delivery

1. The post-winter shutoff rate for low-income and non-low-income customers is virtually the same over the various customer populations. In April, the rate of shutoffs for all customers differs by only one four tenths of one percent using the highest rate for a low-income program participant for comparison purposes (0.009 vs. 0.013). A similar lack of difference exists in May, where 0.13 accounts are disconnected per each residential customer compared to 0.13 for USF1, 0.009 for USF2, and 0.018 for USF3 customers. USF3 customers are the lowest income customers.

2. The shutoff situation is even better when one looks at the ratio of shutoffs to accounts in arrears rather than the ratio of shutoffs to all accounts. In both April and May, the ratio for program participants is *lower* than the ratio for all customers. Indeed, in May, the ratio of program participant shutoffs to accounts in arrears is nearly half that of all customers. While nearly 0.3 accounts are disconnected for each residential account in arrears, the ratio for USF1 is only 0.15; the ratio for USF3 is only 0.15. The ratio for USF2 is even lower.

[26] Citizens Gas is not included in this analysis. Citizens provided the aggregated in exactly the form requested. With the agreement of the consultant, rather than aggregating the data at the Company level, the other two utilities provided data in a more detailed format with the agreement that the evaluator would combine the detailed information.

3. A similar picture emerges if one looks not at all accounts in arrears, but rather at accounts that may be "old enough" to be more likely subject to the disconnection process. The data reveals that all three groups of program participants have a lower rate at which their accounts 60 or more days in arrears are disconnected, when compared to the total residential population. The April total population rate is 0.130 while the ***highest*** program rate (USF1) is only 0.103. The May total population is 0.151 while the highest program ratio (USF3) is 0.109. Remember, however, that these are ratios, not percentages. These figures do not show that 10.9% of all USF3 accounts 60+ days in arrears are disconnected. They show that the ratio of ***all*** disconnections for nonpayments (DNPs) to total accounts 60+ days in arrears is 0.109.

4. Note that these differences occur because of two dynamics going on at the same time. There has never been an assertion that the total number of disconnects will decrease in some absolute sense. Instead, the impact of the program is to allow the utilities to redirect their collection activities away from low-income accounts where DNPs have little useful impact and toward non-low-income accounts that are more likely to have an ability to pay. It is possible to see both of these dynamics at work by comparing the pre-winter performance with the post-winter performance.[27]

   In November 2006, it is evident that the households who would eventually become program participants were performing less well than the total population. This is true for all three metrics (DNPs to total accounts; DNPs to accounts in arrears; DNPs to accounts 60+ days in arrears). It is not until after the Vectren program delivers its bill payment assistance during the winter months that the DNP performance begins to substantially improve. The trend of program participant DNPs going down is evident; the corresponding trend of non-program participant DNPs going up is also evidence.

5. The evaluation of the Indiana programs noted in a variety of places that the low-income programs were of particular help to accounts with the largest arrears. This outcome is evident in the aggregated data as well. The percentage of total accounts in arrears that, in fact, are in arrears 90+ days is reasonably comparable in November between the total population and the program participant population, with a ratio of 0.07 for all customers and ratios ranging from 0.08 to 0.09 for the USF customers. While the ratio stays relatively constant for all customers throughout the winter months (dipping to 0.05 in April and increasing to 0.09 in March and May), the same pattern does not exist for the program participants. Rather than seeing the proportion of accounts with older, and thus larger, arrears increase over the winter, the proportion of program participant accounts that are 90+ days in arrears are a fraction of what they were in the pre-winter months (0.01 in April and 0.02 in May compared to 0.08 in November).

[27] Comparing winter shutoff performance provides no useful information since shutoffs are constrained by the winter shutoff moratorium during those months.

Northern Indiana Public Service Company (NIPSCO)

1. Participants in NIPSCO's Winter Warmth program must be evaluated somewhat differently than the participants in the Universal Service Program (USP) of either Vectren or Citizens Gas and Coke Utility (CGCU or Citizens). As is noted throughout the impact evaluation, NIPSCO's Winter Warmth program is not directed toward low-income customers generally. Rather, Winter Warmth is directed toward the most payment-troubled population in an effort to improve the performance of those causing the greatest problems.

   The aggregated data documents the favorable performance of Winter Warmth in this effort. The data documents that Winter Warmth customers are among the most payment troubled of NIPSCO's low-income customers. The ratio of December shutoffs for nonpayment (SONP) to total accounts for Winter Warmth participants (0.164) is much higher than for the residential natural gas population as a whole (0.002). The same is true for January (Winter Warmth = 0.125 vs. total residential population=0.005).[28]

   Despite this population of payment-troubled customers, Winter Warmth's rate of service terminations for nonpayment *decreases* substantially once the Company begins to distribute program benefits. The rate of service disconnections decreases from the January rate of 0.125 to a rate of only 0.067 in May.

2. The same result can be seen within the population of accounts having arrears. In December, the ratio of accounts in arrears that were losing service was much greater for the Winter Warmth population (0.188) than for the total residential natural gas population (0.006). The same was true in January, with the Winter Warmth population (0.167) substantially exceeding the total residential natural gas population (0.023). However, while the ratio of nonpayment shutoffs to total accounts in arrears had more than doubled for the total residential natural gas population by April and May (0.052 and 0.050 respectively), the ratio of Winter Warmth nonpayment shutoffs to total accounts in arrears had been reduced to less than one-half the rate before program benefits were distributed.

3. The constant ratios within the 60+ day arrears populations, and the increasing ratio in the 90+ day arrears population do not contradict the conclusion that payment performance substantially improves for Winter Warmth participants. Again, it is important to remember that Winter Warmth is intentionally *targeted* to NIPSCO's most payment-troubled low-income population. Indeed, the data shows that 100% of NIPSCO's Winter Warmth participants were 60 or more days in arrears in October 2006, while 88% of NIPSCO's Winter Warmth participants were 90 or more days behind. This payment-troubled population is the intended target of Winter Warmth benefits.

   As Winter Warmth benefits flow, that proportion of Winter Warmth accounts 60-days or more in arrears was reduced from 100% in October to 24% in March, 21% in April and only 28% in May. The proportion of Winter Warmth accounts that were 90 or more days behind was reduced from 88% in October to only 11% in both April and May.

[28] It is important to remember, that Winter Warmth benefits do not flow in December and January. Winter Warmth dollars begin to flow in February.

The Winter Warmth population outperformed the residential population as a whole in this regard. While the proportion of total residential gas customers 60+ days in arrears decreased from October to May (from 0.26 to 0.17), and the proportion of total residential gas customers 90+ days in arrears decreased in that same time period (from 0.16 to 0.07), the extent of the decrease for the total residential population in no way mirrored the extent of the decrease for Winter Warmth.

Moreover, the improved performance of Winter Warmth participants is even more evident when compared to the total low-income population receiving energy assistance. While the ratio Winter Warmth participants in arrears who were either 60 or more days in arrears, or who were 90 or more days in arrears, decreased from October through May, the ratio of energy assistance customers who were 90 or more days in arrears doubled (from 0.07 to 0.15), while the ratio of energy assistance customers who were 60 or more days in arrears increased by 70% (from 0.20 to 0.34) during that same time frame.

From the perspective of nonpayment shutoffs, the substantial reduction in the numbers of accounts 90 or more days in arrears helps to explain the increase in the ratio of SONPs to accounts 90+ days in arrears. As the number of accounts 90+ days in arrears becomes smaller, the *ratio* of SONPs to accounts in that aging bucket will necessarily increase.

COMPARISON TO STATEWIDE DATA

1. The performances of Vectren and NIPSCO as outlined above should be compared to the statewide performance of Indiana utilities. The program participants for both utilities demonstrated a substantially different pattern than did the state as a whole. The October 2006 Indiana "billing and collections" report makes the following observations about the disconnection of low-income accounts by Indiana utilities generally:

   - "The number of service disconnections for nonpayment *peaked* in April and May. . ." (2006 Billing and Collections Report, at 20). (emphasis added).

   - "During the months of April through June 2006, Indiana utilities issued only 10 shutoff notices for each disconnected low-income account. In the months coming out of the winter heating season, the "notice ratio" is noticeably lower for low-income accounts in Indiana than it is for total residential accounts. *A low-income account in Indiana that receives a shutoff notice in the post-winter heating season months, in other words, was more likely to move on to the actual disconnection of service for nonpayment than was a residential account in general*." (Id.) (emphasis added).

     If we were to look at Vectren and NIPSCO and postulate what to expect based on the low-income performance statewide, we would not expect to find substantially different results from what, in fact, did occur. Both Vectren and NIPSCO performed far better than what would have been expected based on the annual billing and collections report reporting statewide data.

VECTREN UNIVERSAL SERVICE PROGRAM:
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	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
DNPS to total bills							
All Customers	0.003	0.001	0.005	0.003	0.008	0.009	0.012
USF 1	0.010	0.002	0.008	0.001	0.002	0.013	0.013
USF 2	0.010	0.001	0.006	0.001	0.001	0.008	0.009
USF 3	0.023	0.002	0.015	0.001	0.002	0.013	0.018
DNPS to total accounts in arrears							
All Customers	0.006	0.009	0.016	0.007	0.024	0.014	0.029
USF 1	0.030	0.014	0.016	0.002	0.003	0.011	0.015
USF 2	0.047	0.014	0.017	0.001	0.003	0.008	0.011
USF 3	0.070	0.012	0.032	0.001	0.002	0.010	0.016
DNPS to total accounts in arrears 60+ days							
All Customers	0.051	0.058	0.113	0.069	0.182	0.130	0.151
USF 1	0.155	0.231	0.209	0.020	0.056	0.103	0.107
USF 2	0.261	0.164	0.220	0.021	0.057	0.091	0.083
USF 3	0.529	0.158	0.349	0.017	0.046	0.100	0.109
DNPS to total accounts in arrears 90+ days							
All Customers	0.084	0.098	0.185	0.116	0.276	0.263	0.316
USF 1	0.347	0.750	0.714	0.114	0.232	0.808	0.837
USF 2	0.556	0.435	0.608	0.084	0.171	0.735	0.625
USF 3	0.931	0.429	1.056	0.063	0.127	0.813	1.064

VECTREN UNIVERSAL SERVICE PROGRAM:
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	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
30 day arrears of total -- dollars in arrears							
All	0.75	0.70	0.71	0.84	0.77	0.64	0.50
USF1	0.65	0.77	0.68	0.74	0.77	0.53	0.55
USF2	0.60	0.74	0.71	0.78	0.80	0.55	0.55
USF3	0.72	0.77	0.67	0.77	0.79	0.51	0.50
60+ days arrears of total -- dollars in arrears							
All	0.17	0.21	0.15	0.08	0.12	0.15	0.33
USF1	0.19	0.07	0.07	0.07	0.05	0.10	0.17
USF2	0.23	0.11	0.07	0.05	0.03	0.09	0.18
USF3	0.16	0.08	0.08	0.06	0.04	0.09	0.19
90+ day arrears of total -- dollars							
All	0.14	0.17	0.12	0.06	0.09	0.09	0.18
USF1	0.11	0.03	0.03	0.02	0.01	0.01	0.02
USF2	0.17	0.05	0.04	0.02	0.01	0.01	0.03
USF3	0.12	0.04	0.04	0.02	0.01	0.02	0.03

VECTREN UNIVERSAL SERVICE PROGRAM:
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	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
30 day arrears of total -- accounts in arrears							
All	0.75	0.70	0.68	0.79	0.74	0.74	0.63
USF1	0.59	0.72	0.64	0.66	0.72	0.59	0.59
USF2	0.63	0.71	0.68	0.72	0.77	0.62	0.60
USF3	0.68	0.71	0.66	0.71	0.76	0.57	0.56
60+ days arrears of total -- accounts in arrears							
All	0.12	0.16	0.14	0.10	0.13	0.11	0.19
USF1	0.19	0.06	0.08	0.10	0.06	0.11	0.14
USF2	0.18	0.08	0.08	0.07	0.04	0.09	0.13
USF3	0.13	0.08	0.09	0.08	0.05	0.10	0.15
90+ day arrears of total - accounts in arrears							
All	0.07	0.09	0.08	0.06	0.09	0.05	0.09
USF1	0.09	0.02	0.02	0.02	0.02	0.01	0.02
USF2	0.08	0.03	0.03	0.02	0.01	0.01	0.02
USF3	0.08	0.03	0.03	0.02	0.02	0.01	0.02

NIPSCO WINTER WARMTH:
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Shutoff—Nonpayments (SONPs) to Total Bills and Accounts in Arrears						
	Year	Month	Residential		Customers with Financial Assistance	
			Gas Only	Both	Energy Assistance	Winter Warmth
Ratio: SONPs to total bills	2006	12	0.002	0.003	0.000	0.164
Ratio: SONPs to total bills	2007	1	0.005	0.006	0.000	0.125
Ratio: SONPs to total bills	2007	2	0.004	0.004	0.000	0.060
Ratio: SONPs to total bills	2007	3	0.008	0.007	0.021	0.059
Ratio: SONPs to total bills	2007	4	0.011	0.009	0.057	0.082
Ratio: SONPs to total bills	2007	5	0.011	0.009	0.043	0.067
Ratio: SONPs to total accounts in arrears	2006	12	0.006	0.002	0.000	0.188
Ratio: SONPs to total accounts in arrears	2007	1	0.023	0.004	0.000	0.167
Ratio: SONPs to total accounts in arrears	2007	2	0.017	0.002	0.000	0.062
Ratio: SONPs to total accounts in arrears	2007	3	0.039	0.005	0.037	0.081
Ratio: SONPs to total accounts in arrears	2007	4	0.052	0.006	0.088	0.104
Ratio: SONPs to total accounts in arrears	2007	5	0.050	0.006	0.071	0.092
Ratio: SONPs to arrears 60+ days	2006	12	0.038	0.002	0.000	0.397
Ratio: SONPs to arrears 60+ days	2007	1	0.145	0.005	0.002	0.423
Ratio: SONPs to arrears 60+ days	2007	2	0.112	0.003	0.001	0.152
Ratio: SONPs to arrears 60+ days	2007	3	0.328	0.006	0.140	0.344
Ratio: SONPs to arrears 60+ days	2007	4	0.415	0.007	0.368	0.501
Ratio: SONPs to arrears 60+ days	2007	5	0.290	0.007	0.212	0.328
Ratio: SONPs to arrears 90+ days	2006	12	0.064	0.002	0.000	0.509
Ratio: SONPs to arrears 90+ days	2007	1	0.274	0.005	0.004	0.632
Ratio: SONPs to arrears 90+ days	2007	2	0.224	0.003	0.001	0.260
Ratio: SONPs to arrears 90+ days	2007	3	0.645	0.007	0.277	0.573
Ratio: SONPs to arrears 90+ days	2007	4	0.846	0.007	0.688	0.951
Ratio: SONPs to arrears 90+ days	2007	5	0.754	0.007	0.478	0.843

NIPSCO WINTER WARMTH:
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Aged Accounts in Arrears as Pct of Total Accounts in Arrears						
Age of Accounts in Arrears	Year	Month	Residential		Customers with Financial Assistance	
			Gas Only	Both	Energy Assistance	Winter Warmth
30-day accounts in arrears	2006	10	0.58	0.13	0.67	0.00
30-day accounts in arrears	2006	11	0.62	0.13	0.00	0.26
30-day accounts in arrears	2006	12	0.62	0.13	0.79	0.37
30-day accounts in arrears	2007	1	0.66	0.12	0.65	0.38
30-day accounts in arrears	2007	2	0.67	0.11	0.38	0.37
30-day accounts in arrears	2007	3	0.69	0.11	0.52	0.51
30-day accounts in arrears	2007	4	0.61	0.09	0.43	0.46
30-day accounts in arrears	2007	5	0.61	0.10	0.41	0.43
60+ day accounts in arrears	2006	10	0.26	0.83	0.20	1.00
60+ day accounts in arrears	2006	11	0.20	0.83	1.00	0.65
60+ day accounts in arrears	2006	12	0.17	0.83	0.07	0.47
60+ day accounts in arrears	2007	1	0.16	0.84	0.19	0.40
60+ day accounts in arrears	2007	2	0.15	0.85	0.31	0.41
60+ day accounts in arrears	2007	3	0.12	0.85	0.26	0.24
60+ day accounts in arrears	2007	4	0.13	0.86	0.24	0.21
60+ day accounts in arrears	2007	5	0.17	0.87	0.34	0.28
90+ day accounts in arrears	2006	10	0.16	0.81	0.07	0.88
90+ day accounts in arrears	2006	11	0.13	0.81	0.00	0.56
90+ day accounts in arrears	2006	12	0.10	0.81	0.04	0.37
90+ day accounts in arrears	2007	1	0.08	0.83	0.10	0.27
90+ day accounts in arrears	2007	2	0.08	0.84	0.16	0.24
90+ day accounts in arrears	2007	3	0.06	0.84	0.13	0.14
90+ day accounts in arrears	2007	4	0.06	0.85	0.13	0.11
90+ day accounts in arrears	2007	5	0.07	0.85	0.15	0.11

NIPSCO WINTER WARMTH:
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Aged Dollars in Arrears as Pct of Total Dollars in Arrears						
Age of Dollars in Arrears	Year	Month	Residential		Customers with Financial Assistance	
			Gas Only	Both	Energy Assistance	Winter Warmth
30-day dollars in arrears	2006	10	0.72	0.07	0.48	0.03
30-day dollars in arrears	2006	11	0.73	0.08	0.34	0.24
30-day dollars in arrears	2006	12	0.75	0.10	1.14	0.37
30-day dollars in arrears	2007	1	0.74	0.09	0.40	0.45
30-day dollars in arrears	2007	2	0.75	0.10	0.58	0.52
30-day dollars in arrears	2007	3	0.80	0.11	0.64	0.69
30-day dollars in arrears	2007	4	0.61	0.07	0.50	0.55
30-day dollars in arrears	2007	5	0.48	0.06	0.39	0.49
60+ day dollars in arrears	2006	10	0.12	0.02	0.11	0.14
60+ day dollars in arrears	2006	11	0.08	0.02	0.33	0.19
60+ day dollars in arrears	2006	12	0.06	0.02	-0.03	0.11
60+ day dollars in arrears	2007	1	0.07	0.02	0.22	0.17
60+ day dollars in arrears	2007	2	0.08	0.02	0.20	0.17
60+ day dollars in arrears	2007	3	0.05	0.02	0.15	0.09
60+ day dollars in arrears	2007	4	0.08	0.02	0.17	0.11
60+ day dollars in arrears	2007	5	0.23	0.03	0.34	0.22
90+ day dollars in arrears	2006	10	0.00	0.90	-0.01	0.87
90+ day dollars in arrears	2006	11	0.04	0.89	0.00	0.53
90+ day dollars in arrears	2006	12	0.02	0.87	0.05	0.39
90+ day dollars in arrears	2007	1	0.02	0.87	0.08	0.23
90+ day dollars in arrears	2007	2	0.02	0.87	0.06	0.16
90+ day dollars in arrears	2007	3	0.02	0.85	0.05	0.06
90+ day dollars in arrears	2007	4	0.02	0.88	0.06	0.05
90+ day dollars in arrears	2007	5	0.05	0.90	0.11	0.06