THE ABC's

OF ARREARAGE FORGIVENESS

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When a utility relieves a customer from her obligation to pay a prior debt, that is arrearage forgiveness. Arrearage forgiveness as it is discussed below, however, represents a good deal more than straight debt restructuring; it also represents a "deal" cut between the utility and its low-income customers, in which the utility agrees to forgive some portion of the household's debt so that it will receive more money from its low-income customers toward current bills. Arrearage forgiveness is a carefully structured program of debt forgiveness, one that sets a cut-off date as to which debts will be forgiven and one that requires customers to make payments or undertake some other task in return for the forgiveness. Ideally, in other words, the utility receives more in increased revenue toward current bills than it gives in forgiven debt.

Accordingly, while the discussion below is about arrearage forgiveness, it is important to remember that such a program represents a two-way street. The utility gives up something and, in return, gets something back from the customer. It gives up the collection of past debt in return for timely and complete payment of future current bills.

Arrearage forgiveness is an essential component of any program to address the problems of payment-troubled customers and the uncollectible accounts that arise as a result. It makes little sense to rationalize a system of accounting for current bills
if low-income households would nevertheless face unpayable burdens for arrears. An arrearage forgiveness program helps provide a low-income payment-troubled customer with a clean slate.

Regulators have recognized this nexus. In approving an arrearage forgiveness program associated with the Rhode Island Percentage of Income Payment Plan (PIPP), the Rhode Island Public Utilities Commission noted the need for two essential elements to a program designed to address low-income payment problems: an element to take care of current bills^{1} and an element to take care of pre-program debts.^{2} These two program components, the Rhode Island Commission said, must be viewed "as a unified design and strategy."^{3} What results, the Commission said, "should be a synergism predicated upon the ability to erase previously incurred bills with current consumption patterns."^{4}

A number of states have experimented with arrearage forgiveness programs in seeking to confirm this insight first expressed by the Rhode Island PUC. Program specifics have often differed as between jurisdictions, but the results have been

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^{1} In Rhode Island, this was the Percentage of Income Payment Plan (PIPP).

^{2} This is what is referred to as the "arrearage forgiveness" component.

^{3} In Re, Percentage of Income Pilot Program Petition, Filed by the Coalition for Consumer Justice, Docket No 1725, Decision and Order, at 7, Rhode Island Public Utilities Commission (January 1987).

^{4} Id., at 7.
remarkably consistent. Some jurisdictions have sought to use arrearage forgiveness as an incentive for payment-troubled households to make current payments without also instituting a specific program component to make bills for current usage more affordable. Other jurisdictions have combined arrearage forgiveness with price discounts for current bills, while others have combined arrearage forgiveness with conservation and weatherization strategies. In each instance, the jurisdictions found a need for both elements: one to eliminate unaffordable arrears and the other to make current bills affordable.\footnote{One cost-based proposal for making current bills more affordable, in a cost-effective fashion, can be found at Colton, "A Cost-Based Response to Low-Income Energy Problems," \textit{Public Utilities Fortnightly} (March 1, 1991), attached as Appendix A.}

The discussion below will examine issues regarding the offer of arrearage forgiveness by public utilities. The analysis is divided into seven parts:

\textbf{PART I:} provides an overview of the concept of arrearage forgiveness and the justification for pursuing an arrearage forgiveness program;

\textbf{PART II:} reviews how arrearage forgiveness is used in other non-utility business contexts and outlines the business precedent for providing utility programs;

\textbf{PART III:} evaluates the costs of a utility arrearage forgiveness program
and the means by which such costs can be controlled and limited;

**PART IV:** explains an economic basis for offering arrearage forgiveness;

**PART V:** examines several examples of arrearage forgiveness programs from around the nation --both those that have been successful and those that have not-- to determine what lessons can be gained;

**PART VI:** reviews whether forgiven arrears are taxable income pursuant to the Internal Revenue Code;

**PART VII:** assesses how conservation can be offered as a supplemental collection device to arrearage forgiveness.
I. INTRODUCTION TO ARREARAGE FORGIVENESS.

A. OVERVIEW.

Arrearage forgiveness\(^6\) is a program designed to retire the pre-program arrears for participating households in a systematic fashion over a specified period of time. As a general rule, arrearage forgiveness involves a *quid pro quo*. In one form, for example, a household earns forgiveness for some *pro rata* portion of its debt for every current bill payment it makes. In a 36-month program of this type, for every monthly payment made by a household toward its current energy bill, the participating utility will reduce the household's pre-program arrears by 1/36th. At the end of the 36 month period, therefore, the household will be "even," having *paid* the entire current bill\(^7\) and having had the entire amount of pre-program arrears forgiven.\(^8\)

The purpose of an arrearage forgiveness program is to permit households who have become hopelessly behind on their energy bills to earn a clean slate. In exchange for this opportunity, the household agrees to make the required monthly payments and to participate in conservation and/or weatherization programs to

\(^6\) Such programs are sometimes known as earned credit provisions, arrearage management provisions, arrearage reduction provisions and the like. They all, however, involve some element of "forgiveness" of debt.

\(^7\) The current bill may be provided at a discounted rate.

\(^8\) It is important to remember that only if the household makes its payments does it earn any forgiveness. If the current bill is *not* paid, no arrearage forgiveness is provided. Accordingly, if arrearage forgiveness is completed, by definition, there can be no *new* arrears to forgive. The household and the utility will truly be even.
minimize the utility's exposure to the risk of loss in the future.\footnote{9}

Through such a program, the utility and the state (through its regulators) in a sense "cut a deal" with the customer. If the customer keeps her monthly bill for current usage paid, she will be given a fresh start on her arrears.

Arrearage forgiveness is an important part of any program to bring low-income customers current and to keep them current. In states that implemented such programs, the households who are in serious payment trouble are those households who are very poor, are likely to remain very poor, and who have few discretionary expenses to eliminate in order to generate money to pay current utility bills, let alone current bills plus arrears. Even progressive deferred payment plan arrangements, individually crafted in an effort to make arrears payments "affordable" to participants, often meet with near universal failure.\footnote{10} Arrearage forgiveness is an alternative to this recurring, hopeless, cycle of nonpayment, deferred payment plan, nonpayment.

\section*{B. CHARACTERISTICS OF HOUSEHOLDS IN ARREARS.}

Low-income households facing significant arrears to their utility service providers tend to be households who will be incapable of ever retiring their arrears.

\footnote{9}{There can be other quid pro quos for arrearage forgiveness as well. For example, one part of Colorado's proposed pilot program requires acceptance of budget counseling in addition to the timely payment of bills.}

\footnote{10}{See, notes Error! Bookmark not defined. - Error! Bookmark not defined., infra and accompanying text.}
while making full payment toward monthly bills for current usage. Households having substantial arrears are in significantly "worse" shape than households without arrears. These households tend to be very poor. They tend to have higher consumption and lower income relative to consumption. Accordingly, the average energy burden they bear as a percentage of income is greater as well. There is little chance that these households will be able to successfully complete a payment plan, if that plan presumes regular payments toward a combined bill including both current usage plus arrears.

Some of the data supporting these observations is discussed below.

1. Usage and Arrears.

Households with substantial arrears tend to be disproportionately high use customers, according to data developed in Ohio, Pennsylvania and Maine. One Cleveland State University study of households with high arrears in the Ohio Percentage of Income Plan (PIP) found this strong relationship. According to the Cleveland State study, the prime cause of growth in Ohio's PIP arrears was the excessive consumption of a small group of customers. According to Cleveland State University, while 80 - 90 percent of PIP households "are managing to keep their debt at reasonable levels," there is a group (11-12%) that "is accumulating debt at a very
rapid pace.  According to Cleveland State, "this small group accounted for 40% and 34% of total gas and electric PIP debt respectively." Cleveland State described these customers, saying:

The high debt segments are a relatively small percent of the total population. This small group has tended to accumulate debt at a high rate in the past; they begin the program with 2.6 times higher debt, they have accumulated 3 times as much total net debt, and their annual increase in debt is 3 times greater than the majority of the PIP households.

Cleveland State continued, stating: "Their annual usage (and their annual bills) are 1.6 times higher than the mid-range segments. * * *(T)heir bill/income ratios are about 1.7x higher."

Columbia Gas Company of Pennsylvania found this same phenomenon in 1991. Columbia Gas studied 1,000 of its Budget Plus customers. Some Budget Plus customers, Columbia found, were experiencing a growth in arrears despite the

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\footnotesize

\footnote{Cleveland State University, \textit{Coordinating Ohio's Percentage of Income Payment Plan and Home Energy Assistance Program: A Guidebook}, at 4 (September 1989). (hereafter \textit{1989 Cleveland State University}).}

\footnote{Id., at 2 (emphasis added).}

\footnote{Id., at 41 - 42.}

\footnote{Id., at 43.}

\footnote{Budget Plus is the typical payment plan offered by Columbia Gas to its payment-troubled customers in Pennsylvania. Pursuant to a Budget Plus agreement, the utility and the customer calculate an amount that the customer can afford to pay toward its arrears each month. There is, however, a minimum payment of $5 per month. The total arrears is then divided by that calculated payment; this provides the length of the payment plan, regardless of the outcome. Thus, if a customer has a $500 arrears and an ability to pay $25 per month, the payment plan is 20 months long; if the customer has a $500 arrears and an ability to pay $5 per month, the payment plan is 100 months long. The household must also make levelized payments toward current bills.}
company's efforts to mold arrears payments to fit within household-specific budgets.\textsuperscript{16} The customers with increasing arrears tend to be very high use customers, Columbia Gas found. These households demonstrated consumption 1.54x the residential average. The projected aggregate annual bill of $1,127,900 for these 1,000 increasing arrears customers translated into an annual bill per participant of $1,128. That compared to an average residential customer bill of $731.

Columbia found that the 1,000 customers it studied would begin a pilot program designed to address inability-to-pay problems with $1.6 million in pre-program arrears as of October 1, 1990,\textsuperscript{17} an average per household pre-program arrears of $1,610. In contrast, the average level of all "Budget Plus" arrears, including households with increasing and decreasing arrears, on that same date was only $618. As can be seen, therefore, while the 1,000 study customers represented eight percent (8\%) of total Budget Plus customers, the arrears of the 1,000 represented 21 percent of total Budget Plus arrears (in dollars).\textsuperscript{18}

\textsuperscript{16} There is considerable significance to this result. An increasing arrears means that not only does the customer pay nothing toward retiring the arrears underlying the Budget Plus agreement, but the customer is paying less than the full current bill as well. The belief is that customers with increasing arrears are those customers that do not have the ability to pay their full bill for current usage in a complete and timely fashion and thus pay nothing.


\textsuperscript{18} The total Budget Plus arrears on that date was $7,731,937. The total Budget Plus customers on that date was 12,500.
Finally, in a study of payment troubled households undertaken for the Maine Public Utilities Commission, the National Consumer Law Center (NCLC) found a direct correlation between usage and arrears. The Maine analysis found that "within the payment plan populations for both utilities studied, households having the highest usage tend to have the higher arrears." Two points of comparison were used to draw these conclusions: (1) total annual consumption; and (2) average monthly winter consumption.

A "clear correlation" between total annual usage and the level of arrears was found for Central Maine Power Company. According to the Maine research, the average total arrears for Central Maine Power Company was $48. "While households with an annual consumption greater than 16,000 KWH have an average arrears of $88, for example, households with less than 5,000 KWH of use have an average arrears of only $10."

The association held with winter consumption, the Maine study found. "Total arrears for customers with consumption over 2000 KWH were nearly twice the payment plan average ($91 vs. $48) and nearly triple the arrears of households at the

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21. Id., at 60.
lower consumption levels ($91 vs. $33). The breakpoint for particular payment problems occurs at a winter month usage of around 1300 KWH. Households falling into the band of from 1300 to 2000 KWH per winter month averaged total arrears of $82, again substantially above the total payment plan population.\(^{22}\)

Similar results were found for the Rural Electric Cooperative. The average total arrears facing the Co-op's payment plan customers, the report found, was $40. "In contrast to this average, however, is the sub-population of households with annual usage in excess of 16,000 KWH. Those customers had an average arrears of $214, more than five times the total population average.\(^{23}\)

The Maine report concluded that:

> the level of a household's consumption is highly correlated with the level of that household's arrears. * *
> Payment plan households tend to be households which have a continuing mismatch between available resources and household expenses. They tend not to be customers for whom cash flow changes would be beneficial; rather an absolute shortfall in resources is apparent and continuing payment problems can be observed.\(^{24}\)

\(^{22}\) Id., at 62.

\(^{23}\) Id., at 63. The association with winter usage and arrears was confirmed with the Co-op also. According to the Maine research, "the $272 average arrears for persons with winter usage of more than 2000 KWH was nearly seven times the $40 total payment plan population average; even at usage levels of from 1300 to 2000 KWH per month, the $118 average arrears was nearly triple the total population average." Id., at 65.
2. Energy Burdens and Arrears.

Other studies have extended this analysis beyond the findings regarding usage and arrears. This research indicates that it is not the absolute level of consumption which is associated with arrears; it is instead the interplay between consumption and income.\(^\text{25}\) This observation, for example, is supported by data from a study the National Consumer Law Center did for the Wisconsin Gas Company regarding the possible redistribution of LIHEAP benefits in Wisconsin.\(^\text{26}\)

In Wisconsin, NCLC examined a new method of distributing LIHEAP benefits that would tie the level of LIHEAP to the burden which a household's energy bill posed as a percentage of income. The NCLC study identified two different populations, one with higher energy burdens as a percentage of income and the other with lower burdens.

The average income of the higher burden population ($5,834) was somewhat, but not substantially, different from that of the lower burden households ($6,213). The average bills, however, were. While the average bills for the higher burden

\(^\text{24}\) Id., at 66.

\(^\text{25}\) The notion that this is the key determinant is supported by an examination of the federal LIHEAP statute. In LIHEAP, Congress directed not that the greatest benefits go to those households with the highest bills, but rather to those households with the lowest incomes and the highest energy costs in relation to income, taking into account family size. \textit{42 U.S.C. 8624(b)(5)} (1983 and 1990 Supp.)

households were $1,370 per year, the average bill for the lower burden households were only $873 per year. The real difference, however, came in the burden which those bills represented to the households (as a percentage of income). In general, without the redistribution of LIHEAP examined by NCLC, the high burden households spent 17.9 percent of their income on their annual natural gas bills while the lower burden households spent 8.9 percent of their income.\(^{27}\)

The difference in burdens was directly reflected in arrears. The high burden households had an average arrears of $560 while the lower burden households had an average arrears of only $229. Viewed from the converse perspective, the arrears were split as shown in Table A:

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
<th>% WITH DEBT OVER $100</th>
<th>% WITH DEBT OVER $300</th>
<th>% WITH DEBT OVER $500</th>
<th>% WITH DEBT OVER $750</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH BURDEN</td>
<td>47.8%</td>
<td>51.5%</td>
<td>58.0%</td>
<td>66.9%</td>
<td>78.1%</td>
</tr>
<tr>
<td>LOW BURDEN</td>
<td>26.3%</td>
<td>25.4%</td>
<td>22.5%</td>
<td>16.9%</td>
<td>11.9%</td>
</tr>
</tbody>
</table>

Based on this information, it is possible to conclude that while there is a relationship between arrears and usage, as well as between arrears and income, the

\(^{27}\) Id.

\(^{28}\) The figures in this table do not add to 100% since some customers will choose to be program
"truer" test of inability-to-pay is the burden which the energy bill poses as a percentage of income. That is the key indicator.

This Wisconsin data was confirmed by a similar study in Kentucky in 1991. Louisville Gas & Electric LIHEAP households with arrears have an average income of $5,530, an average annual total home energy bill of $996 and an average energy burden as a percent of income of 24 percent. The average arrears of households having arrears is $123. The Louisville data shows that arrears flow neither from the level of income alone, nor from the size of the bill alone. Rather, the size of the arrears is most associated with the energy burden as a percentage of income.

<table>
<thead>
<tr>
<th>PCT OF INC. RANGE</th>
<th>BILL AS PCT INC</th>
<th>AVERAGE INCOME</th>
<th>ANNUAL BILL</th>
<th>AVERAGE ARREARS</th>
<th>NO. OF HOUSEHOLDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 10%</td>
<td>8%</td>
<td>$8,930</td>
<td>$677</td>
<td>$109</td>
<td>378</td>
</tr>
<tr>
<td>11 - 20%</td>
<td>15%</td>
<td>$6,320</td>
<td>$917</td>
<td>$115</td>
<td>1,003</td>
</tr>
<tr>
<td>21 - 30</td>
<td>25%</td>
<td>$4,485</td>
<td>$1,091</td>
<td>$121</td>
<td>684</td>
</tr>
<tr>
<td>31 - 50%</td>
<td>37%</td>
<td>$3,382</td>
<td>$1,231</td>
<td>$138</td>
<td>408</td>
</tr>
</tbody>
</table>

(continued)

The Percentage of Income Payment Plan in Jefferson County, Kentucky: One Alternative to Distributing LIHEAP Benefits (May 1991) (hereafter Jefferson County PIPP). The arrears in this Table are arrears as of September 1990. In April, 1991, LG&E questioned the level of arrears used in this Kentucky report. LG&E posited that the arrears of LIHEAP participants were higher than reported. The Company based its challenge on its assessment of arrears as of March, 1991. March arrears in any given year will be higher than September arrears. The reason the report recommended that only September arrears be made subject to forgiveness is so the utility can forgive only those arrears taken at a time when arrears are at a minimum. To find that heating arrears are higher at the end of the heating season than at the beginning of the heating season, in other words, is not particularly surprising. March and September arrears are not comparable and March arrears have no relevance to an arrearage forgiveness program.
In sum, several factors contribute to the inability-to-pay of low-income households. Clearly, the level of income will affect a household's ability to pay, and hence its arrears. The size of bill, too, will affect the level of arrears. The primary factor, however, is a blend of bills and incomes, the energy burden.

3. Affordability of Payment Plan Payments.

Based on a variety of National Consumer Law Center studies of arrearage forgiveness programs in a number of states, the conclusion must be that many low-income households simply have insufficient funds to absorb current bills plus arrears into their budgets. The impact of "requiring" households to retire arrears in addition to paying current bills is to push total bills into unaffordable ranges. Even during the least expensive non-heating months, arrears push monthly household payments into the range of 15 - 20 percent of income. During the more expensive heating months, the average payment required to pay current bills plus arrears reaches an impossible 25 - 35 percent of income.

Moreover, as always, looking at the average masks the extremes where hardship really

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<table>
<thead>
<tr>
<th></th>
<th>51 - 100%</th>
<th>100%+</th>
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<tbody>
<tr>
<td>Income</td>
<td>65%</td>
<td>N/A</td>
</tr>
<tr>
<td>Bills</td>
<td>$2,132</td>
<td>$81</td>
</tr>
<tr>
<td>Arrears</td>
<td>$1,332</td>
<td>$922</td>
</tr>
<tr>
<td>Payment</td>
<td>$149</td>
<td>$138</td>
</tr>
<tr>
<td>Requirement</td>
<td>118</td>
<td>270</td>
</tr>
</tbody>
</table>

\(\text{\textsuperscript{30}}\) Since this range includes households with zero dollar incomes, a "percentage of income" cannot be calculated.

\(\text{\textsuperscript{31}}\) See, Jefferson County PIPP, supra note Error! Bookmark not defined.; An Evaluation of the Warwick (Rhode Island) Percentage of Income Payment Plan (January 1988); Fuel Assistance Alternatives for Utah (June 1989).
lies. NCLC recently found in its report regarding energy assistance in the City of
Louisville, for example, that the distribution of energy burden as a percentage of income
when payments for arrears are added to actual winter monthly energy bills resulted in the
following: in November, one in seven households (14%) would be required to pay in excess
of 40 percent of their income toward their home energy bills; in December, 32 percent would
be asked to pay more than 40 percent of their income (with 18 percent being asked to pay
more than 50 percent of their income). In both January and February, 12 percent of these
households would be required to pay more than 40 percent of their income. "It is because of
the futility of making such demands that an arrearage forgiveness program is proffered."

NCLC also recently examined deferred payment plans in Pennsylvania as a part of its
report on uncollectibles presented to the Pennsylvania Public Utilities Commission on behalf
of the state Office of Consumer Advocate. What NCLC found was that deferred payment
plans in Pennsylvania were not working. Consider the results from the following
Pennsylvania utilities:

a. Columbia Gas: The Budget Plus payment process has largely failed Columbia
Gas as a means to address the problems of low-income households. An

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\(^{32}\) See, Jefferson County PIPP, supra note Error! Bookmark not defined., at 64.

\(^{33}\) Id., at 66.

\(^{34}\) National Consumer Law Center, Controlling Uncollectible Accounts In Pennsylvania: A Blueprint for
examination of Budget Plus households for Columbia Gas found that energy bills that were unaffordable for households before those households entered into a Budget Plus plan remained unaffordable under Budget Plus. In short, Budget Plus payments are not being made by Columbia Gas customers. In calendar year 1989,\textsuperscript{35} Columbia Gas had an average of 13,390 heating participants in its Budget Plus payment plans each month. On average, 4,404 of those accounts (33 percent) were "delinquent." Similarly, Columbia Gas had on average $8.2 million subject to Budget Plus agreements each month. Of that money, $3.5 million (43 percent) was delinquent.

These delinquent accounts do not represent "short-term delinquencies." There are long-term failures with Budget Plus as well. On average throughout 1989, roughly 18 percent of the Budget Plus Plans (2,409 of 13,398) were "canceled" each month. During the last five months of 1989 (August - December), however, the average was 40 percent cancellation per month (4,267 of 10,683).\textsuperscript{36} On average, 22 percent of the dollars subject to Budget Plus plans ($1.8 million of $8.2 million) were subject to canceled Budget Plus plans each month in 1989. For August through December, the canceled dollars

\textsuperscript{35} The observations below are based on 1989 data provided in the payment plan reports filed by Columbia Gas with BCS. Data is taken from 1989 since that is the only complete year for which data was available for that report.

\textsuperscript{36} This is in contrast to an average of seven percent (1,082 of 15,323) for January through July.
averaged 46 percent ($2.9 million of $6.4 million).\(^{37}\)

b. **Other Budget Plus Programs:** The Columbia Gas experience is by no means unique. Indeed, it is the norm for Budget Plus payment plans to fail in Pennsylvania rather than to succeed. In response to Commission inquiry, the Pennsylvania utilities reported the success rate of their Budget Plus plans. Those results are set forth in Table C below:

**TABLE C**

PERCENTAGE OF BUDGET PLUS CUSTOMERS WHO MAINTAINED THEIR PAYMENT ARRANGEMENT

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>SUCCESS RATE (%)</th>
<th>SUCCESS RATE (%)</th>
<th>SUCCESS RATE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1987</td>
<td>1988</td>
<td>1989</td>
</tr>
<tr>
<td>UGI</td>
<td>33.3%</td>
<td>32.9%</td>
<td>36.6%</td>
</tr>
<tr>
<td>PECO(^{38})</td>
<td>11.4%</td>
<td>11.5%</td>
<td>28.3%</td>
</tr>
<tr>
<td>NATIONAL FUEL GAS</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>PENN POWER</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>MET EDISON(^{39})</td>
<td>31.5%</td>
<td>63.9%</td>
<td>61.3%</td>
</tr>
</tbody>
</table>

\(^{37}\) In contrast, the canceled dollars averaged only 10 percent ($0.93 million of $9.5 million) in January through July.

\(^{38}\) PECO reported that it "does not identify the individual customers who successfully maintain payment arrangements. However, we do track the overall success rate of special payment arrangements."

\(^{39}\) Metropolitan Edison does not separately track the success rate of Budget Plus customers from Current Plus customers. Moreover, its use of the Budget Plus process is quite limited, involving 615 accounts in 1987, 360 accounts in 1988, and 430 accounts in 1989.
<table>
<thead>
<tr>
<th>PENN P &amp; L</th>
<th>N/A</th>
<th>See n. xxx</th>
</tr>
</thead>
<tbody>
<tr>
<td>PENelec</td>
<td>29.3%</td>
<td>26.3%</td>
</tr>
</tbody>
</table>

The affordability of payment plans has a time action focus as well. Payment plans that require households to make an equal monthly payment toward their arrears, while maintaining payments on total current bills, most often pose "no win" situations for low-income households, the National Consumer Law Center found in its study of Maine payment plans. The two components which go into any deferred payment plan are: (1) the installment payment toward the arrears; and (2) the current payment toward the current monthly bill. As a result, the combination of equal monthly payments toward arrears plus current bills creates an inescapable dilemma for the low-income households, the NCLC report found.

If (the low-income households) enter into a payment plan early in the winter, they not only commit themselves to pay their installments each month, but they commit themselves, as well, to paying their entire current winter bills in full as they come due. If, on the other hand, the household waits until the end of the winter before entering into a payment plan, it will have higher arrears and a shorter payback time with which to cope. Either strategy, therefore, poses serious problems. A failure to make any given payment in full will be considered to be a default on the payment plan.

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40. PP&L reported that it "does not maintain separate statistics for the budget billing 'plus' method. The Company stated "the following statistics are representative of the total population. During 1989, 110 plans were paid in full; four were canceled or defaulted. During 1988, 103 plans were paid in full; 15 were canceled or defaulted.


42. In Maine, the arrears must be paid before the start of the next winter heating season.

43. Id., at 55.
In short, the availability of a deferred payment plan does not ensure that households in arrears will be able to extricate themselves from payment troubles. Indeed, the data from empirical studies expressly looking at the issue supports the conclusion that some households become hopelessly behind and need an arrearage forgiveness provision to make it likely at all that they will ever become current on their bills.
II. THE PRECEDENT AND CONTEXT FOR ARREARAGE FORGIVENESS.

Arrearage forgiveness is practiced on both the national and international levels, by both the public and private sectors. The factors leading to the creditors' decision to enter into an arrearage forgiveness program are remarkably similar regardless of whether the parties involved are individuals or nations, or whether the debt is worth thousands or billions of dollars. In each of the arrearage forgiveness agreements discussed below, two principles remain constant:

1. Recognition of the debtor's inability to pay under the current terms; and
2. belief that arrearage forgiveness is better business for the creditor in the long run because: (a) the creditor will receive some compensation from an otherwise uncollectible debt; and (b) the debtor will be able to continue to do business with the creditor in the future, though frequently on different terms than prior to the arrearage forgiveness.

A. HISTORICAL PRECEDENT FOR ARREARAGE FORGIVENESS.

The precedent for arrearage forgiveness is most evident in international banking, particularly banking involving debt strapped third world countries and first world lender nations and commercial banks. Historical precedent shows the wisdom of relieving countries of their unpayable debt in order to stimulatte third world
economies, which, therefore, benefits first world nations in the long run. According to Keith Griffin, a professor of economics at Oxford University, Latin American countries faced the same debt crisis from 1929-38.\footnote{Griffin, "Toward a Cooperative Settlement of the Debt Problem," Finance and Development v.25, p.12 (June 1988).}

Griffin writes:

Debt forgiveness, unilateral repudiation, debt delinquency --call it what you will-- clearly was in the interest both of Latin America and her rich country trading partners the last time the world economy was in a similar situation to today. I refer, of course, to the period of the Great Depression of the 1930's.\footnote{Griffin, supra note Error! Bookmark not defined., at 13.}

Griffin explains that during the 1930's most Latin American countries defaulted on their loans (in a sense, voluntary arrearage forgiveness). However, after being relieved of their tremendous debt burdens, the volume of imports into Latin America rose 94 percent and Latin America's GDP\footnote{Gross Domestic Product is the European equivalent of Gross National Product (GNP).} rose 39 percent.\footnote{Griffin, supra note Error! Bookmark not defined., at 13.} In other words, elimination of the debt burden freed sufficient capital to stimulate Latin American economies and improve the standard of living for many of the people in Latin American countries in addition to tremendously boosting the import/export market. The overall effect was that the global economy was stimulated as well.\footnote{Id.} While commercial lenders in the richer nations initially lost money, the industrial sector of
the affluent countries benefitted considerably from the new influx of capital, no longer devoted to loan payments and debt service.\footnote{49}

There are other historical examples where arrearage forgiveness has been used intentionally as a tool to stimulate a nation's economy. Arrearage forgiveness was a carefully structured agreement between the U.S. and Germany when in 1953 the U.S. forgave a large portion of Germany's debt.\footnote{50} Without this arrearage forgiveness, it is possible that Germany would not be the world economic power that it is today.

B. THE CONTEMPORARY CONTEXT FOR INTERNATIONAL ARREARAGE FORGIVENESS.

The United States government, under the Bush administration, has made frequent use of arrearage forgiveness and has encouraged others in the world economic community to do likewise as a way of off-setting the outstanding $1.3 trillion third world debt.\footnote{51} Such acceptance has become more rapid over recent years, as arrearage forgiveness has been accepted by many other nations and commercial lenders as the only tenable solution to what is widely considered to be uncollectible debt. The quid pro quo for the creditor usually has been receipt of some payments rather than being faced with a loan default, or support for a specified

\footnote{49} Id.


foreign policy initiative espoused by the creditor nation.

Though widely accepted and practiced by most first world creditor nations, the practice of arrearage forgiveness has come more slowly from commercial lenders, though there are commitments from officers of leading commercial banks as to the value of arrearage forgiveness in principle.\(^{52}\) Commercial lenders have acted, more often than not, as intermediaries between debtor nations and private organizations (often environmentalists) who seek to affect some sort of change within the debtor nation. Individual banks hesitate to be the first to forgive arrears to debtor nations out of concern that arrearage forgiveness by their bank may enable the debtor nation to make larger or possible even full payments on the debt owed to other banks.\(^{53}\) Consequently, each bank seeks to position itself to regain as large a portion as possible of the outstanding debt at the expense of taking any action. A possible outcome of such inaction is that all banks will lose, since debtor nations will be forced to default on all loans. Some countries --Brazil and Peru are examples-- have already essentially defaulted on their loans.\(^{54}\)

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\(^{52}\) "A.W. Clausen, former president of the World Bank, who is now chief executive of Bank America Corp., said that his bank, and he believed others, would accept lower rates to help debtor countries." *I.M.F.-World Bank Harmony Sought*, *New York Times*, p.35 (March 11, 1989).

\(^{53}\) Id.

\(^{54}\) Flint, "When nations try to swap their way out of debt: Practices are innovative, but skeptics say they are no answer for empty pockets," *Boston Globe*, p.A14 (August 19, 1990).
In order to encourage banks to forgive third world nations' arrears, the U.S. Treasury has been strategizing with commercial lenders, the World Bank and the International Monetary Fund to create a plan to guarantee that commercial lenders would share in short term loses sustained through arrearage forgiveness. This would bring to an end the current stalemate between commercial banks. To this end, on March 10, 1989, Treasury Secretary Nicholas Brady unveiled the Brady Plan, a policy initiative calling for the restructuring of third world debt. In his remarks, Brady emphasized third world debtor countries' inability to pay their debts and the necessity for easing third world debt in order to stimulate these countries' economies, as illustrated in the following excerpt from Brady's remarks:

However despite the accomplishments to date, we must acknowledge that serious problems and impediments to a successful resolution of the debt crisis remain. Clearly, in many of the major debtor nations growth has not been sufficient. Despite progress, prosperity remains, for many, out of reach.

Brady continued by outlining a five point program designed to ease the debt burden of third world countries. A key component of this program is arrearage forgiveness.

* * * we should encourage debt and debt service reduction on a voluntary basis while recognizing the importance of continued new lending. This should provide an important step back to the free markets where funds abound and transactions are enacted in days, not months. Finally, we must draw together these elements to provide debtor countries with greater hope

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55\textsuperscript{5} Sachs, "Making The Brady Plan Work,"\textit{Foreign Affairs}, 68:3, p.87 (Summer 1989).

56\textsuperscript{6} \textit{New York Times}, Brady Remarks, supra note Error! Bookmark not defined.
for the future.\textsuperscript{57}

The Brady plan reflects the Bush Administration's knowledge that many of the debtor nations will never be able to repay their loan debts even if the payments are stretched out over longer periods of time.\textsuperscript{58} The Brady Plan aims to encourage U.S. commercial banks to enter into debt reduction plans with third world nations before the default occurs and before more damage is done not only to third world economies but to the global economy as well. If the debtor country's debt is reduced, the expectation is that the debtor nation would guarantee that it would pay the reduced amount to its lender, thus avoiding an almost certain loan default.\textsuperscript{59} Additionally, an easing of third world debt burden might curtail these nations slide toward economic collapse.

The benefit for third world nations, reduction or elimination of millions of dollars of debt, is often immediate, while the benefit to the creditor is often reaped in the future. Therefore, the creditor's gains are not instantly evident. In each of these cases involving arrearage forgiveness for the third world nations, the first world benefits have been substantial. What the U.S. government has asked for in return for arrearage forgiveness has ranged from preservation of tropical rain forests to support

\textsuperscript{57} \textit{New York Times}, Brady Remarks, \textit{supra} note Error! Bookmark not defined.

\textsuperscript{58} \textit{Sachs}, \textit{supra} note Error! Bookmark not defined., at 87.

for the Persian Gulf War. In 1990, President Bush announced a new policy known as debt-for-nature swaps.\[^{60}\] In describing this program a *New York Times* editorial explains:

* * *(Bush's) 1990 "Enterprise for the Americas" initiative, (was) an effort to pare debt, liberalize trade and boost investment in Latin America. Under his plan, a slice of $12 billion in Latin America's foreign aid debt would be forgiven, interest payments on the rest would flow to local environmental projects instead of the U.S. Treasury.\[^{61}\]

Arrearage forgiveness has not been limited to Latin America. Many African nations have received forgiveness for 33 percent of their debts.\[^{62}\] Within the last two years, the United States has forgiven billions of dollars of debts in Egypt and Poland. The motivation in both of these instances was rooted in both politics and economics. Though the U.S. forgoes substantial loan payments, the U.S. has gained support for foreign policy initiatives and future economic benefits. *The New York Times* reported in April 1991,

Egypt is about to receive a package of debt forgiveness and other international economic assistance worth billions of dollars in the wake of the Persian Gulf War, American and international economic officials say* * *. The United States, which forgave about $7 billion in Egyptian debt after Cairo backed the allies in the Gulf War, has played a key role behind the scenes in

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\[^{61}\] Id.

winning the help. Western governments at a meeting tentatively scheduled to wipe out much of the $40.16 billion of Egyptian debts to these governments, according to international monetary officials here. The quid pro quo for the aid is the Egyptian government's commitment to economic reform.\(^{(63)}\)

The Times further explains that this policy is similar to the United States forgiveness of 70% of Poland's $3.8 billion debt to Washington.\(^{(64)}\) A U.S. official commenting on the U.S.'s decision to increase the amount of debt forgiveness to Poland from 50-70% of Poland's debt commented that "it is in (U.S.) interest to get the Polish economy moving again."\(^{(65)}\) The U.S. was not the only nation to forgive Poland's debts; a group of 17 nations calling themselves the Paris Club each agreed to forgive fifty percent of Poland's loans to their respective countries. The Paris Club also committed itself to putting pressure on commercial banks to follow suit. The British treasury was quoted as saying that Paris Club members expected comparable treatment from Poland's commercial creditors.\(^{(66)}\)

By entering into an arrearage forgiveness program with Egypt and Poland, the U.S. gained Poland's switch to a market economy, from a centralized communist economic system; an Arab nation's firm support for U.S. intervention in the Middle


\(^{64}\) Id.

\(^{65}\) Greenhouse, supra note Error! Bookmark not defined., at 1.

\(^{66}\) Id.
East; and a strengthening of the U.S.'s ability to exert influence in the Middle East and Eastern Europe. It would be difficult to put a dollar value on the future economic and political gains Washington made through these two arrangements, for a total of just over $9 billion dollars.

Entering into arrearage forgiveness programs with third world nations is not the territory only of first world nations and commercial lenders. Environmental organizations have bought third world debt at deeply discounted rates through commercial banks which are eager to get some return for the outstanding loans, in exchange for promises of investments by third world countries in preserving tropical rain forests or other environmentally sensitive areas.\(^67\) In these arrearage forgiveness programs between environmental organizations and third world nations, all parties involved gain something: the environmental organization is guaranteed preservation of certain lands, the debtor nation has its debt reduced and the bank receives a return on what was a potentially uncollectible debt.

Besides the environment, education has been a byproduct of arrearage forgiveness programs. Harvard University bought $5 million in Ecuadoran debt for $750,000.\(^68\) The debt was then donated to an Ecuadoran education foundation

\(^{67}\) *Flint*, supra note Error! Bookmark not defined., at A14.

\(^{68}\) Id.
which exchanged the debt notes with the Ecuadoran government for $250 million in local currency.\(^69\) That money was then invested to create an endowment for scholarships to send Ecuadoran students to Harvard.\(^70\) The Ecuadoran government was relieved of fifty percent of the $5 million debt and invested the remainder in the education of Ecuadoran youth. Harvard will eventually earn back decidedly more than its investment through the tuition money it will receive from the scholarship fund.

C. CONSUMER ARREARAGE FORGIVENESS AGREEMENTS.

The arena for arrearage forgiveness programs is not the exclusive domain of nations, global economies and billion dollar debts; it is also a practice within consumer finance. The precipitating circumstances leading to arrearage forgiveness for consumers are quite similar to those circumstances leading to arrearage forgiveness for third world nations: the debtor holds a large debt which is considered uncollectible frequently because of poor economic conditions or forces beyond the debtor's control, the cost of collecting the debt would exceed the debt's value, or the collection of such debt would create undue hardship for the consumer. The creditor, knowing that the debt may well be uncollectible, seeks to cut his/her losses and offers an arrearage forgiveness program in order either to collect on some of the outstanding

\(^{69}\) Id.
\(^{70}\) Id.
debt or to enable the debtor to remain a customer, thereby ensuring future payments for the creditor.

What is, perhaps, the largest consumer arrearage forgiveness program, in terms of actual dollars forgiven, is administered through the Farmers Home Administration, a federal agency which makes loans to farmers who do not qualify for loans from commercial lenders. Throughout the early 1980's land values were greatly inflated and farmers borrowed against these inflated prices. By the late 1980's land values fell sharply and farmers were left holding loans that were impossible to repay.\(^71\) Because of the large numbers of foreclosures which ensued, Congress enacted a law in 1987 which contained a provision for "reducing or writing off loans where collection costs would exceed the recovery value."\(^72\) As a result of this provision, in 1990, 4,608 loans were reduced to the current value of the land.\(^73\) Each of these reductions averaged $172,857 and in sum totalled $796 million.\(^74\) Another 5,029 farmers were permitted to buy out their loans at the current liquidation value which represented an average loan reduction of $205,674 and totalled $1.03 billion.\(^75\) In addition, $933 million in debt was written off as uncollectible.\(^76\) Each

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\(^{71}\) Id.


\(^{73}\) Id.

\(^{74}\) Id.

\(^{75}\) Id.

\(^{76}\) Id.
of these programs is a carefully structured arrearage forgiveness program whereby the consumer is forgiven approximately $200,000 and is able to retain their farm while the Farmers Home Administration is able to recoup some of the loan money without having to expend additional money for collections. Given the large numbers of farmers on the verge of loan default, the actual losses were cut since the nearly 10,000 farmers who were able to buy out their loans at liquidation value or had their loans reduced did not default.

Private industry, likewise recognizes that it makes good business sense to forgive arrears in order to retain a customer's future business. After the California earthquake in 1989, for example, retailers asked suppliers for arrearage forgiveness to offset some of the tremendous losses individual retailers suffered as a result of the earthquake. One major trade publication, Publishers Weekly, reported that:

* * *(some book stores) are in immediate need of some level of forgiveness in terms of accounts payable. Some publishers have already called the stores and said that their accounts payable have either been forgiven altogether or will be forgotten for several years - until the store and community are back to normal.\(^{77}\)

The *quid pro quo* for the Publishers was that these book stores were not forced to permanently shut their doors and will, therefore, continue to be a retail outlet for the Publisher's product. The publishers stand to reap greater revenues in the

\(^{76}\) Id.

\(^{77}\) "Quake Update: Damaged Stores Reopen; Debt Forgiveness Asked." *Publishers Weekly*, p.10 (Dec. 1,
long run by continuing to sell books to these book stores than they would have earned by collecting on a short term debt, thereby forcing the book store out of business and receiving no future revenues from these retailers.

**D. CONCLUSION.**

Utilities and regulators looking at arrearage forgiveness programs can learn several lessons from the above examples of arrearage forgiveness. The primary lesson is that if: (a) all parties are forward looking; (b) a win-win situation can be achieved which; (c) makes good business sense. Arrearage forgiveness need not be considered a social welfare program. Indeed, the forgiveness of arrears has been turned to in numerous instances by the most respected of business leaders for purely business reasons.

1. **Looking Forward.**

When an account is uncollectible and the business deal has gone awry, usual methods of collection are ineffectual. In such circumstances, it becomes necessary to reframe the business deal, developing new terms and viewing the business deal according to a new perspective. Rather than focusing on the deal as a loss, the creditor must view the deal in a different light to determine what future gains might be made or what losses might be averted if an arrearage forgiveness agreement is entered into. As discussed above, by enacting an arrearage forgiveness program, the (..continued) 1989).
Farmer's Home Administration prevented an additional 10,000 farmers from defaulting on their loans. Money saved by the FHA by avoiding costly foreclosures became money that could be made available to other farmers in need of loans.

Arrearage forgiveness, in other words, must be forward looking. By examining the creditor's future goals, the creditor must also take into consideration what benefits might be derived from maintaining a business relationship with the debtor. Writing off an account as uncollectible severs the business relationship and consequently the potential for future benefits for either the debtor or the creditor. By focusing on long term benefits and goals, an arrearage forgiveness agreement stands not only to cut the creditor's losses, but delivers the potential for substantial long-term benefits as well.

The forward looking nature of arrearage forgiveness underlies many of the programs discussed above. The United States, for example, will undoubtedly benefit greatly from expanded markets for U.S. products in Latin American, Poland, Africa and Egypt. The book publishers in Northern California will have more book orders in the future, keeping sales higher than they otherwise would have been had they allowed their retail outlets to go out of business. By keeping sales volume high, the publishers and U.S. industry wholesale prices can remain low enabling them to be more competitive with other book publishers or export nations. The short term losses
sustained by these creditors by forgiving outstanding debt are marginal compared to what they are likely to gain in the future through continued or even increased business.

2. A Win-Win Situation.

When viewed according to this framework, the benefit for the creditors is evident. Accordingly, the debtor benefits by continuing to be able to purchase the goods or services of the creditor. From a short-term vantage point, what appears to be an untenable situation --the creditor cannot collect on an account and the debtor will lose a needed good or service-- will indeed become a win-win situation if the creditor forgoes past debt for future gain. The debtor will be able to retain the good or service and the creditor will receive some benefit from a situation which previously appeared to be a writeoff.


Since both growth and the minimization of expenses low (by maximizing sales) are key components of a successful business, retaining customers makes good business sense. As discussed above, arrearage forgiveness of debt-strapped nations allowed import\export markets to flourish. U.S. business had outlets for their markets and third world countries' internal economies grew steadily, increasing their ability to purchase U.S. goods. The effect was cyclical. As seen from the many arrearage
forgiveness agreements examined in this paper, cutting a new deal, where the old deal has failed, has been found to be mutually advantageous to both the creditor and the debtor in situations far more encompassing than merely the relationship between a public utility and its low-income customers.
III. DETERMINING THE COSTS OF ARREARAGE FORGIVENESS.

Who bears the cost of arrearage forgiveness, how high will those costs reach, what might help offset those costs, and when will those costs be incurred are all questions that should be addressed within the context of an arrearage forgiveness program. Generally, while not a prerequisite to the adoption of an arrearage forgiveness program, the belief is that a utility who adopts a carefully structured program will come out ahead when costs and benefits are considered. According to Wisconsin Gas Company, for example, "the concept was to trade a past debt, which was unlikely to be paid,* * * in return for the customer not incurring future debt."  

A. THE TIMING OF ARREARAGE FORGIVENESS.

It is important to properly structure an arrearage forgiveness provision so as to encourage the retirement of arrears and not vice versa. Accordingly, the arrears subject to forgiveness should be the arrears that appear on a bill on a date certain. Historically, this has been the arrears appearing on the September bill. In this way, a household does not have an incentive to delay entering the arrearage forgiveness program until spring, taking advantage of the winter moratorium in the meantime, so as to make the winter bills subject to the arrearage forgiveness provision.

It seems axiomatic that a low-income household will have higher arrears as the winter progresses and the data supports such a conclusion. NCLC's study of Maine Public Service Company payment plans, for example, found that "on average, households waiting until April (to enter into a payment plan) have an additional $150 burden to spread over the non-heating months."\(^79\) Not surprisingly, these higher bills were related to partial payments made toward high winter bills. Households entering into payment plans in May again saw lower total average arrears ($261).\(^80\) Similar results were found for Central Maine Power and Eastern Maine Electric Cooperative.\(^81\)


\(^{80}\) Id., at 33 - 34.

\(^{81}\) "* * *for Central Maine Power, too, the arrears of its customers increase as the winter wears on. While arrears in November average $92, for example, by March they have increased to nearly $160." Id., at 36. For EMEC, "during the initial winter months of November and December" * total arrears averaged only $80. By the January (payment) plans, however, arrears had nearly doubled (to $156) and by the April plans, the arrears which existed at the time of the plan agreement had nearly tripled, reaching $235." Id., at 41 - 42.
B. CUSTOMER PAYMENTS TOWARD ARREARS.

Despite the importance of arrearage forgiveness as a component of any program to address the plight of low-income households, it is important for the program not to overreach its purpose. The intent of an arrearage forgiveness provision is to allow a fresh start to low-income households who have fallen hopelessly behind on their utility bills. In contrast, if a household is "only" one or two months behind, these are not the arrears sought to be addressed by an arrearage forgiveness provision.\(^\text{82}\)

Moreover, it is reasonable to have households make some contribution toward their pre-program arrears. The goal is to have households pay what they can. It is important, however, not to attempt too much in this regard. If a utility seeks to collect more than what is affordable, it risks losing not only the unaffordable portion of the household contribution, but the affordable portion as well. If a household receives no benefit from making partial payments, no partial payments will be made.\(^\text{83}\)

\(^{82}\) Assuming that these months do not represent winter heating bills.

\(^{83}\) *See, Joint Request for Approval of Customer Assistance Plan Pilot Program*, jointly submitted to the Pennsylvania Public Utilities Commission by Columbia Gas Company and Pennsylvania Office of Consumer Advocate (September 12, 1991). "Coupled with the payment program described in (the Section on) Payment Terms above, is an arrearage retirement program. There have been considerable discussions with regard to an arrearage forgiveness program. The average arrearage of our payment-troubled budget-plus customers is approximately $1,000 per account. Arrearage forgiveness is believed by some observers to be necessary if payment troubled customers are to be encouraged to alter their payment/usage habits. Apparently, knowledge of an insurmountable arrearage acts to discourage such customers from maintaining regular payments of current bills. Therefore, a structured arrearage retirement component has been included in this pilot program." Id., at 21.
A household contribution of $3 per month for 36 months will significantly reduce a utility's exposure to forgivable arrears. NCLC has found in a number of studies that such a provision will tend to reduce the forgivable arrears by anywhere from 40 to 60 percent.\footnote{84} In Vermont, for example, the household payment reduced the total forgivable arrears exposure statewide by more than fifty percent. The Vermont study found that the household contribution would result in the payment of the entire pre-program arrears for a substantial number of accounts, ranging from a low of 42 percent of all delinquent accounts for Vermont Gas to a high of 59 percent for Green Mountain Power.

Data from Columbia Gas of Pennsylvania shows a smaller, yet still significant, reduction in arrears based on an affordable household contribution. NCLC's study of Columbia Gas arrears for the Pennsylvania Office of Consumer Advocate found that in September, 1989, there was a total of 12,641 Budget Plus plans for Columbia Gas Company owing a total of $7.237 million. "Within some limits," NCLC said, "we can see that the monthly household earned credit provision payment of $3 would eliminate the entire arrears for 3,136 households (or roughly 25 percent of the total)\textsuperscript{85}. Given the $108 household contribution, NCLC found,

\footnote{84}{Direct Testimony and Exhibits of Roger D. Colton, on behalf of the Department of Public Service, In Re. Investigation and Implementation of Low-Income Energy Programs, Docket 5308 (October 1989).}

\footnote{85}{The "limit" referenced was that the arrears report from which NCLC worked set forth an arrears range of $51 to $150 and that that range would include some undesignated number of households above the $108}
Budget Plus households would pay $1.365 million (or roughly 20 percent) of the outstanding arrears.\(^{86}\) Similar results have been found elsewhere.\(^{87}\)

The substantial reduction in forgivable arrears obtained by a customer contribution indicates simply that many households have arrears that are quite small. Accordingly, consideration of average arrears is an insufficient basis upon which to ground conclusions about either the need for, or the cost of, an arrearage forgiveness program. The January 1988 evaluation of the Rhode Island PIPP, for example, examined the 1,111 households who had participated in the prior year's program.\(^{88}\) The evaluation found for Providence Gas that "443 of Providence Gas Company's eligible PIPP customers had forgivable arrears; the average forgivable arrears for those having such arrears was $208."\(^{89}\)

These average arrears, however, did not indicate the appropriate scope of the


\(^{87}\) See e.g., National Consumer Law Center, Fuel Assistance Alternatives for Utah, at 60 - 67 (June 1989). (Contribution of #4 per month for 36 months lowered Mountain Fuel Supply forgiveable arrears from $72,049 to $27,297; contribution of $3 per month for Mountain Fuel reduced number of LIHEAP households with forgiveable arrears from 661 to 222.). Increasing the contribution to $4 per month reduced forgiveable arrears further to only $20,393 (171 LIHEAP households). Id., at 62 - 63.

\(^{88}\) The prior year was October 1, 1986 through September 30,1987.

\(^{89}\) National Consumer Law Center, Evaluation of Warwick (Rhode Island) Percentage of Income Payment Plan Demonstration Project, at 27 (Feb. 1988).
arrearage problem for Providence Gas. On the one hand, some of those Providence Gas households had "substantial amounts" of arrears: 21 had forgivable arrears greater than $1000 and more than 50 had forgivable arrears of greater than $500. On the other hand, most households having arrears had arrears that were quite small: 174 had forgivable arrears of less than $50 and 224 had arrears of less than $75.\(^{90}\)

The Rhode Island evaluation considered a proposal to make that state's PIPP participants responsible for the first $50 of its forgivable arrears. According to the evaluation, making clients responsible for the first $50 of arrears reallocates the cost of the arrearage forgiveness program. This step alone for Providence Gas customers left roughly $22,000 of responsibility with the PIPP participants (of the $92,000 total forgivable arrears) and placed roughly $74,000 of responsibility on the gas company. On the electric side, PIPP participant costs would be $11,000 (of the $22,000 total forgivable arrears) with company costs being roughly $11,000.

Each dollar of additional customer contribution within an arrearage forgiveness program, however, yielded smaller returns. An increase from $3 per month to $4 per month, for example, lowered the total exposure of a utility less than a move from $2 to $3.\(^{91}\) An increase in the required household payment, in other

\(^{90}\) Id., at 28.

\(^{91}\) This result is constant over the range of arrears. Thus, a move from $4 to $5 would result in a smaller reduction in arrears than a move from $3 to $4.
words, yielded only marginally increased benefits. According to the Rhode Island report, increasing customer responsibility:


 does not yield proportionate incremental cost reallocations. To double client responsibility from $50 to $100, in other words, would not correspondingly cut the cost responsibility of the utilities in half.  

The Rhode Island analysis showed that even though an increasing household payment requirement would continue to reduce the number of households who had forgivable arrears, the utilities simply would not be reducing their overall exposure to write-offs. Thus, for example, while increasing the household contribution for Providence Gas customers from $50 to $180 would reduce the number of program participants with forgivable arrears from 206 to 92 (a reduction of 55 percent), it would only reduce the utility's financial exposure from $53,144 to $35,868 (a reduction of 33 percent). The impact of varying household contribution levels is set forth below in Table D:

**TABLE D:**
**RHODE ISLAND ARREARAGE REDUCTION GENERATED BY DIFFERING HOUSEHOLD PAYMENTS**

<table>
<thead>
<tr>
<th>HOUSHold CONTRIBUTION</th>
<th>$0</th>
<th>$50</th>
<th>$120</th>
<th>$180</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTS LEFT WITH ARREARS</td>
<td>439</td>
<td>206</td>
<td>120</td>
<td>92</td>
</tr>
<tr>
<td>DOLLARS OF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Rhode Island, supra note Error! Bookmark not defined., at 29.
This 1987 Rhode Island data is consistent with the more recent data from Kentucky. In NCLC's study of Jefferson County, Kentucky (Louisville), 2,923 households of the sample of 3,913 Louisville Gas and Electric Company (LG&E) households studied had arrears, totalling $358,493. For LG&E's LIHEAP customers, a $3 per month contribution would
### TABLE E: IMPACT OF VARIOUS HOUSEHOLD ARREARS CONTRIBUTIONS FOR TOTAL POPULATION

<table>
<thead>
<tr>
<th></th>
<th>NO PAYMENT</th>
<th>$2/MONTH</th>
<th>$3/MONTH</th>
<th>$4/MONTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL ACCOUNTS</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>TOTAL ACCTS WITH ARREARS</td>
<td>7,760</td>
<td>7,760</td>
<td>7,760</td>
<td>7,760</td>
</tr>
<tr>
<td>TOTAL FORG. ARREARS</td>
<td>$943,255</td>
<td>$943,255</td>
<td>$943,255</td>
<td>$943,255</td>
</tr>
<tr>
<td>AVG ARRS WITH ARRS</td>
<td>$123</td>
<td>$123</td>
<td>$123</td>
<td>$123</td>
</tr>
<tr>
<td>STD DEVIATION</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>111</td>
</tr>
<tr>
<td>PCT ACCTS LEFT</td>
<td>N/A</td>
<td>65%</td>
<td>47%</td>
<td>32%</td>
</tr>
<tr>
<td>PCT ARREARS LEFT</td>
<td>N/A</td>
<td>52%</td>
<td>36%</td>
<td>24%</td>
</tr>
<tr>
<td>NO. OF ACCTS LEFT</td>
<td>N/A</td>
<td>4,986</td>
<td>3,605</td>
<td>2,454</td>
</tr>
<tr>
<td>DOLLARS OF ARRS LEFT</td>
<td>N/A</td>
<td>$490,493</td>
<td>$339,572</td>
<td>$226,381</td>
</tr>
</tbody>
</table>

---

\[\text{Id., at 68.}\]
reduce the arrears subject to forgiveness by 64 percent. Moreover, only forty-seven percent (47%) of the accounts originally having forgivable arrears would still have arrears left after a $3 per month payment for 36 months.

Each dollar of additional customer contribution, however, yielded smaller returns. An increase from $3 per month to $4 per month, for example, lowered the total exposure of the local utility (LG&E) less than a move from $2 to $3. The impact of various household arrears contributions is set out in Table E.

In sum, in assessing what the size of the customer contribution should be, the magnitude of the monthly charge must be tempered by the need to keep the overall monthly payment affordable. For example, given the marginal increase in benefits to the utility from the increase to a household contribution of $4 per month, and the danger of risking the overall affordability of the program, perhaps monthly household contributions to pre-program arrears should not be pushed to that level. If the total monthly payment is made unaffordable in an effort to squeeze that "one more dollar"

---

96. Arrears subject to forgiveness were reduced from $943,255 to $339,572 (or roughly $110,000 per year over the three years of the forgiveness program). The remaining arrears represent 36 percent of the total. Id., at 68. This result is consistent with 1989 NCLC findings in Vermont. The impact of a $72 household payment was studied in Vermont. That payment would have cut the cost of a statewide arrearage forgiveness program by more than half (from $657,350 to $310,775).

97. The number of accounts still having arrears would reach 3,605 of the original 7,760 households having arrears from the original 10,000. Id., at 68.

98. Id., at 68. This result was constant over the range of arrears. Thus, a move from $4 to $5 resulted in a smaller reduction in arrears than a move from $3 to $4.
out of a program participant, the utility offering the arrearage forgiveness program loses not only the extra dollar, but loses the first three dollars as well.

C. WHO BEARS THE COST OF FORGIVEN ARREARS.

The fact that the arrears of households participating in a program designed to provide relief to payment-troubled customers are forgiven does not necessarily mean that those arrears must be written off by the utility. Philadelphia Gas Works, for example, has implemented an arrearage forgiveness program in conjunction with its Energy Assurance Program (EAP). Pursuant to that program, a program participant is required to pay $4/month toward her pre-program arrears for 36 months.

According to that company's data, as of August 1991 --the program began in March 1990-- the program's roughly 5,300 participants had total arrears coming into the program of $1,170,000. The household $4/month payments had retired roughly $120,000 toward those pre-program arrears with another $670,000 being contributed by LIHEAP Crisis grants. Accordingly, despite the "forgiveness" of these arrears, and despite the limitations on household payments to $4 a month, the actual write-off of these arrears was only $360,000, or roughly 30 percent of the total pre-program arrears.

Despite the success of PGW in marshalling other funds to help offset the costs
of its arrearage forgiveness program, the fundamental issue of who bears the cost of
forgiven arrears that remain must be addressed. The net cost of the arrearage
forgiveness provision should be included in rates to be charged to all ratepayers. As
used for other utilities participating in an arrearage forgiveness program, the "net
costs" are to be determined by the following formula:

\[ NC = FA - (OBD + ABD + CS + WCS + LTV + O) \]

where:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC</td>
<td>net costs of arrearage forgiveness</td>
</tr>
<tr>
<td>FA</td>
<td>amounts of arrears to be forgiven</td>
</tr>
<tr>
<td>OBD</td>
<td>amount of arrears forgiven that would otherwise have become bad debt in any event</td>
</tr>
<tr>
<td>ABD</td>
<td>bad debt avoided by having households participate in EAP</td>
</tr>
<tr>
<td>CS</td>
<td>savings in collection activities</td>
</tr>
<tr>
<td>WCS</td>
<td>savings in working capital costs as revenue lag days are decreased</td>
</tr>
<tr>
<td>LTV</td>
<td>savings from elimination of lost time value of money</td>
</tr>
<tr>
<td>O</td>
<td>Other factors deemed relevant by the utilities, the Commission or other interested parties.</td>
</tr>
</tbody>
</table>

In fact, universally, utilities involved with arrearage forgiveness programs
have found that there is no net cost to be included in rates, as calculated by this
formula. These utilities find, in other words, that the arrearage forgiveness program
results in net savings to ratepayers.\(^99\)

D. ARREARAGE FORGIVENESS COSTS OVER TIME.

The costs of an arrearage forgiveness program are heavily reliant upon the planning horizon used for the financial analysis. Because there will not be a continuing significant influx of new program participants from year to year, the savings associated with the program will continue long after the arrears provision becomes unimportant from an expense perspective.

This conclusion assumes that households will not be permitted to enter and leave the arrearage forgiveness program, with each new re-entry bringing a fresh accrual of unpaid bills to be forgiven. If a program is structured so that: (1) the participating households will only earn forgiveness when a current bill is paid; and (2) the participating household will retire her arrears over the course of a 36 (or 24 or 48) month period, by the end of that period, the household should both: (1) be paid-up with regard to current bills, and (2) be "even" with regard to pre-program arrears.

Accordingly, the initial period of forgiveness should see the bulk of the expense to be experienced by the utility. After that period, while the savings

\(^{99}\) The agreement as to costs reached by the parties involved with the Rhode Island Percentage of Income Payment Plan is attached as Appendix B. The stipulated settlement of costs in Rhode Island is attached as Appendix C.
continue, the expense should not. In order to determine the cost-effectiveness of an arrearage forgiveness program, therefore, it would be improper merely to consider the years in which expenses are forgiven. Instead, some reasonable period after the pre-program arrears have been retired should be factored into the equation in recognition of the fact that the benefit/cost ratio will increase over time.
IV. AN ECONOMIC BASIS FOR ARREARAGE FORGIVENESS.

Many utilities offer the carrot of arrearage forgiveness as an incentive for low-income households to pay current bills.\footnote{100} Under such circumstance, little attention is paid to whether such forgiveness is economically justified as a means of maximizing the revenue impact of the utility's collection processes. Arrearage forgiveness, however, \textit{can} be justified on an economic ground. Increasingly, today, utilities and their regulators are beginning to recognize that companies best serve their remaining ratepayers by taking what payments they can get from low-income households, rather than seeking to obtain the performance of an impossible task.\footnote{101}

\footnote{100} In its 1989 customer service proceeding, the Philadelphia Gas Works was asked to "describe in detail the reasons why PGW is willing to offer the arrearage forgiveness component of the 5 and 2 program." (Consumer Advocate Data Request #224). The "5 and 2" program was the utility's deferred payment plan program. Under 5 and 2, a household was required to make a downpayment of 5 percent of her arrears, and make payments of 2 percent of the arrears for 25 months. The other 50 percent of the arrears was forgiven. In response to Data Request 224, PGW replied: "In testimony before the Philadelphia Gas Commission on April 2, 1985, Senator Roxanne H. Jones said: 'the possibility of having fifty percent of the arrearage forgiven provides a powerful incentive to the payment agreement.' PGW subscribes to the theory that being able to earn forgiveness on a portion of the arrears should provide an incentive to customers to maintain their 5%-2% payment plans."

\footnote{101} The Philadelphia Gas Commission stated in November 1989 that:

*The recommended energy assurance program recognizes that:

(a) low-income customers do not have enough money to pay their fully-embedded cost of service; and

(b) without a program to address these issues, these customers will pay nothing or will pay only some portion of their fully-embedded bill; and

(c) in either case, PGW loses the full contribution to its fixed cost; and

(d) this occurs whether or not the household is ultimately permanently disconnected; and

(e) special pricing arrangements are good for all ratepayers, since the energy assurance program encourages more low-income customers to remain gas customers and to make some payments toward their bills, which payments are better than no payments at all."

In addition, the Vermont Department of Public Service told the Vermont Public Service Board in January 1990 that:

*The Department's Basic Energy Needs Program recognizes two harsh realities for the utility industry. First, charging a rate and collecting a rate are two separate actions. Simply because a utility charges a particular rate does not mean that the utility will ever collect that money from a low-income household. Second, even when a utility does collect the total bill from a low-income household, the utility often spends considerable sums in the very act of collection. The net stream of income is thus less than the total outstanding bill. The BENP will succeed in changing
The following analysis looks at deferred payment plans from this perspective. Through such plans, households are permitted to retire their arrears over time. Frequently, these plans can result in spreading arrears over a substantial number of years. The question thus arises whether the utility should enter into such a long-term deferred payment plan for the "full" amount of the arrears or whether the utility would be more prudent in taking some lesser amount immediately and "forgiving" the rest.\footnote{\textsuperscript{102}}

A utility may best serve the interests of all its ratepayers by accepting, as full satisfaction of a debt, an immediate \textit{partial} payment of an arrears the payment of which would otherwise be extended over some substantial period of time. In accepting such payments, the concept of "indubitable equivalence" can be imported into the law of utility payment plans from bankruptcy law\footnote{\textsuperscript{103}} to the mutual benefit of both the ratepayer and the utility. A utility should accept an immediate lesser payment as satisfaction of an arrears if that payment is the functional equivalent of payment "in full" over the long-term.

\footnote{\textsuperscript{102}} This is the case even setting aside for the moment the question of whether the long-term plan will be successfully completed.

One "expense" associated with deferred payment plans arises from the fact that a dollar collected today is worth more than a dollar collected tomorrow. As a result of payment plans, in other words, a utility loses the time value of the arrears subject to these plans.\textsuperscript{104}

The loss of time value can manifest itself in either of two ways. In the event that the utility must borrow money to fill its short-term capital needs, the loss shows up as a working capital expense. In contrast, even when the utility need not borrow money to provide the revenue (the payment of which is deferred through a payment plan), the loss shows up as an opportunity cost. If the money had been collected rather than deferred, the prudent utility manager would have invested that revenue and obtained a rate of return on it.

The proper approach to determining the extent of the "loss" to the utility can be demonstrated by a simple hypothetical. Several assumptions are necessary. First, we assume that the arrears subject to the payment plan are $480.\textsuperscript{105} Second, we assume that these arrears will be paid to the utility at the rate of $10 per month. The

\begin{footnotesize}
\textsuperscript{104} This discussion is taken largely from the NCLC publication Of Payment Plans and Indubitable Equivalents: The Cost-Effectiveness of Alternatives to Long-Term Payment Arrangements (July 1990). The NCLC publication presents an extensive discussion of how to determine the appropriate discount rate to use in calculating the net present value of a deferred payment plan.

\textsuperscript{105} This is an arbitrary figure that has no significance.
\end{footnotesize}
length of the payment plan in this hypothetical would thus be 48 months. Finally, we assume the discount rate to be 30 percent.

Under these assumptions, the value of this stream of $10 payments over 48 months would be $278. Through the payment plan process, therefore, the utility in this hypothetical loses the value of roughly $202 (42 percent) of the original debt, even if the payment plan is successfully completed. Since the net present value of the stream of payments depends on the length of the plan, the loss will be greater or lesser depending on the length of the plan.

Given this loss in time value, and assuming that the payment plans would have been successfully completed, it would be prudent for the utility to accept an immediate lump sum payment of anything more than $278 as full settlement of the $480 in arrears. Such a payment would have a present value, over a 48 month period, of more than $480. An immediate $278 payment, in other words, would represent the functional equivalent of successful completion of the payment plan over 48 months.

\[\text{\footnotesize 106} \] $480 divided by $10/month equals 48 months.

\[\text{\footnotesize 107} \] The payment plan, in essence, represents an unsecured consumer loan to a low-income household with acknowledged bill payment problems for a term of 48 months. Typical loans of similar risk and term, perhaps by small loan finance companies, might well carry an interest rate of 30 percent per annum. A report of state-by-state small loan costs can be found in the looseleaf service titled The Cost of Personal Borrowing in the United States (Financial Publishing Company). Interest rates might be even higher for these households if the only institution offering credit in such circumstances could be shown to be a rent-to-own merchant.
A further reduction in the settlement payment would be warranted if there is any likelihood that the household will default on the payment plan. Two lines of reasoning support a further reduction in the immediate payment that would be appropriate under such circumstances. The first alternative assumes that the household ultimately defaults on its payment plan and is disconnected before the end of the plan. The second alternative assumes that the household successfully completes its plan, but that the utility must devote some collection activity to obtain such "success."

Under the first alternative, a present value of $0 is assigned to the payments scheduled for the months after which the default and service disconnection is projected to occur. In this instance, the Net Present Value of the payment plan would be $10 a month, discounted at 2.5 percent per
month, for the number of months the utility can reasonably expect payments to be made. Under this analysis, the following would result:

- If default is deemed probable by the fourth year, the Net Present Value of the payment plan is $235.56.\footnote{108}
- If default is deemed probable by the third year, the NPV of the payment plan is $178.85.\footnote{109}

Under the second alternative, the utility's use of collection measures over the course of the payment plan is projected. In these circumstances, while the utility may indeed collect every payment plan payment, it must spend money in the process of collection. Accordingly, the utility would be prudent to accept an immediate payment net the costs of the collection effort. If the household is expected to complete the payment plan, but only after one round of collection efforts, and if the utility's collection process costs $50, the acceptance of an immediate payment of anything more than $228 ($278 NPV minus $50 collection cost) would be prudent.

\footnote{108} $10 per month for 36 months.
\footnote{109} $10 per month for 24 months.
Under each of these lines of reasoning, the utility must engage in a realistic assessment of what revenue it is likely to collect from its payment troubled customers. There is no room for ideology. Regardless of what the customer "should" pay, an assessment of what the customer "will" pay might well indicate that the utility (and its remaining ratepayers) is better off taking what it can get immediately rather than insisting on "full" payment over time.

In sum, arrearage forgiveness can be justified on a purely economic ground. The utility not only can, but should as a matter of prudent management, accept partial immediate payment of outstanding arrears in those instances when the immediate payment represents the functional (or "indubitable") equivalent of "full" payment over some period of time. While it may appear at first glance that the utility is merely granting some type of forgiveness, in reality, the utility is merely recognizing the reality of the lost time value and risk associated with deferred payments.
V. EXAMPLES OF PRIOR ARREARAGE FORGIVENESS PROGRAMS.

Utility arrearage forgiveness programs are no longer a rare phenomenon. Such programs have taken several forms and have been implemented for a variety of reasons. The *quid pro quo* for the forgiveness of arrears differs as between companies. Some companies require the household to pay some portion of the arrears subject to forgiveness while others do not. Some require budget counselling while others require energy conservation counselling. Some incorporate weatherization provisions. The discussion below is a sampling of programs, by no means intended to be comprehensive, that is presented to give an overview of the types of attributes that can be built into an arrearage forgiveness program.

A. PHILADELPHIA ELECTRIC COMPANY.

The Philadelphia Electric Company (PECO) offers a program of arrearage forgiveness to income eligible households. The program, which has existed in one form or another since 1985, is available to customers whose household income is at or below 150% of the Poverty Level. The program is part of the PECO Customer Assistance Program (CAP). Once a customer enrolls in CAP, all collection action directed toward that customer for past due bills is suspended.

Participants in the PECO CAP are given a discount rate for their current energy consumption. Those households who live at or below 75 percent of the
Poverty Level are required to pay eight percent (8%) of their income toward their total energy bills if they are electric heating customers; three percent (3%) if they are not electric heating customers. Households who live between 75 and 150 percent of the Federal Poverty Level must pay either the 3-percent/8-percent figures, or their discretionary income available to pay utility bills, whichever is greater.

Customers enrolled in CAP become eligible for arrearage forgiveness after 12 months on the program, if they have not missed three or more payments. At the end of the year, 50 percent of the customer's total arrears, which includes the preprogram arrears as well as the shortfall between household payments and the cost of actual current usage, are forgiven. In addition, the utility reduces arrears by that percent by which the customer reduced her usage from the prior year.

The PECO program seeks to eliminate any incentive such a program might create for households to remain below the income-eligibility level. The utility offers arrearage forgiveness to those customers who voluntarily withdraw from the program because their income increases. These persons receive $200 in arrearage forgiveness in addition to the other forgiveness provided.

**B. PHILADELPHIA GAS WORKS.**

Another utility that incorporates arrearage forgiveness into its low-income
program is Philadelphia Gas Works (PGW). PGW has offered arrearage forgiveness in two forms for several years: first through its "5 and 2" program and later through its Energy Assurance Program (EAP).

1. The 5 and 2 Program.

The extended payment plan historically offered by the Philadelphia Gas Works is called its "5 and 2" plan. Through this payment plan process, a household is required to make a downpayment of five percent of the arrears. The household is then required to make payments equal to two percent of the arrears for 25 months, thus retiring one-half (50 percent) of the arrears. The remaining half of the arrears is forgiven. At all times, the household is responsible for paying its current bill.

The PGW 5 and 2 program has had little success, despite the offer of arrearage forgiveness. From October 1985 through March 2, 1989, 73 percent of all 5 and 2 plans had been broken (i.e., had sufficient numbers of nonpayment that the plans had been abrogated). Indeed, the results of the 5 and 2 program were not at all encouraging. In 1988, alone, the last year for which complete data is available, 58 percent of the 5 and 2 plans entered into were broken; 75 percent were either broken or defaulted. Overall, from October 1985 through March, 1989, PGW's 5 and 2 customer made fewer than six out of every 25 required payments.

\[110\] A "defaulted" payment plan is one under which the customer has not made all payments, but also has not missed so many payments that the payment plan is considered abrogated.
This result is not surprising. Table F demonstrates that the PGW 5 and 2 program does not bring monthly household payments down to affordable levels.

Given current bill payments, plus a levelized payment toward arrears, PGW households were being "required" to pay in excess of 15 percent of their income, just toward their natural gas bill.¹¹¹ Electric bills were an additional household expense.

Given these energy burdens as a percentage of income, and considering the discussion above regarding the correlation between energy burdens and arrears, it is not surprising that the 50 percent arrearage forgiveness offered by PGW was not sufficient to keep its 5 and 2 customers paid on their bills for current usage.

¹¹¹ This population includes both natural gas heating, and natural gas non-heating customers.
TABLE F
AFFORDABILITY OF PGW DEFERRED PAYMENT AGREEMENTS

<table>
<thead>
<tr>
<th></th>
<th>MONTH BILL</th>
<th>MONTH ARREARS</th>
<th>MONTH TOTAL BILL</th>
<th>MONTH INCOME</th>
<th>TOTAL AS INC %</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN.</td>
<td>$114.67</td>
<td>22.21</td>
<td>$136.88</td>
<td>$698.33</td>
<td>20%</td>
</tr>
<tr>
<td>FEB.</td>
<td>$100.76</td>
<td>22.21</td>
<td>$122.97</td>
<td>$698.33</td>
<td>18%</td>
</tr>
<tr>
<td>MARCH</td>
<td>$105.20</td>
<td>22.21</td>
<td>$127.41</td>
<td>$698.33</td>
<td>18%</td>
</tr>
<tr>
<td>APRIL</td>
<td>$72.57</td>
<td>22.21</td>
<td>$94.78</td>
<td>$698.33</td>
<td>14%</td>
</tr>
<tr>
<td>MAY</td>
<td>$42.69</td>
<td>22.21</td>
<td>$64.90</td>
<td>$698.33</td>
<td>9%</td>
</tr>
<tr>
<td>JUNE</td>
<td>$27.55</td>
<td>22.21</td>
<td>$49.76</td>
<td>$698.33</td>
<td>7%</td>
</tr>
<tr>
<td>JULY</td>
<td>$22.24</td>
<td>22.21</td>
<td>$44.45</td>
<td>$698.33</td>
<td>6%</td>
</tr>
<tr>
<td>AUGUST</td>
<td>$21.56</td>
<td>22.21</td>
<td>$43.77</td>
<td>$698.33</td>
<td>6%</td>
</tr>
<tr>
<td>SEPT.</td>
<td>$20.50</td>
<td>22.21</td>
<td>$42.71</td>
<td>$698.33</td>
<td>6%</td>
</tr>
<tr>
<td>OCT.</td>
<td>$31.67</td>
<td>22.21</td>
<td>$53.88</td>
<td>$698.33</td>
<td>8%</td>
</tr>
<tr>
<td>NOV.</td>
<td>$45.57</td>
<td>22.21</td>
<td>$67.78</td>
<td>$698.33</td>
<td>10%</td>
</tr>
<tr>
<td>DEC.</td>
<td>$104.64</td>
<td>22.21</td>
<td>$126.85</td>
<td>$698.33</td>
<td>18%</td>
</tr>
</tbody>
</table>

\[\text{Re. Philadelphia Gas Works Request for Increase in Base Rates, Direct Testimony and Exhibits of Roger D. Colton on Behalf of Philadelphia Public Advocate, at Exhibit RDC-9 (December 1990).}\]
2. The Energy Assurance Program.

In a settlement of a 1989 proceeding to consider new customer service regulations for PGW, that utility agreed to offer a 5,000 household pilot program involving a rate structure tied to percentage of income. This PGW program, called the Energy Assurance Program (EAP), incorporates an arrearage forgiveness provision.

Under the EAP, pre-program arrears are forgiven over a three year period. Households with arrears are required to make a four dollar per month payment toward retiring these pre-program arrears, in addition to the percentage of income payment. Each time a household makes its monthly payment, the household earns a credit equal to a pro rata portion (1/36th) of its pre-program arrears.

The most recent data available for PGW examines the 5,300 households who entered the EAP from March 1990 through July 1991. During that time, EAP participants brought $1.170 million of arrears into the EAP. The program collected $120,000 through household payments of $4 per month. An additional $690,000 was

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113. Under the PGW program, participating households will pay a bill determined as a percentage of the household’s income. Households who are at 0-50 percent of the federal poverty level will be required to pay five percent of their income toward their natural gas bills; households at 51-100 percent of poverty will be required to pay seven percent; and households at 101-150 percent of income will be required to pay eight percent.

114. In February, 1991, the Philadelphia Gas Commission directed PGW to expand its EAP to 15,000 households.

115. Data is available as of August 6, 1991.
collected from LIHEAP Crisis grants and applied toward the pre-program arrears. The utility actually wrote-off $360,000 of the pre-program arrears as uncollectible forgiven arrears.

C. WISCONSIN GAS COMPANY.

Wisconsin Gas offered arrearage forgiveness as far back as 1983 through its Guaranteed Service Plan. The program forgives the arrears of participating households over a 3-year period so long as those participants maintain a current status with their budget payments. Budget payments are determined by subtracting the LIHEAP grant from the annual usage and dividing the total remaining bill by twelve months.

Wisconsin Gas Company and a local community action agency (CAP Services, Inc.) also developed a program that combines weatherization and arrearage forgiveness. This program is offered in eight rural counties of central Wisconsin. It began in the summer of 1985 and offers several options to low-income customers who are in arrears at least two months.

Pursuant to the Wisconsin Gas programs, households could earn the forgiveness of arrears through any one of a number of options:

- Weatherization & Credit for Payments
o Credit for Payments

o Energy Counseling & Credit for Conservation

o Energy Counseling, Credit for Payment and Conservation

Under the Credit for Payment option, a customer's arrearage would be reduced by 1/36th for each month the current bill is paid. Under the Credit for Conservation option, a customer's arrearage is reduced by the cost of each therm saved on a weather-adjusted basis.\textsuperscript{116}

The Wisconsin program established a criteria that current bills must be paid. Whether the customer chose the payment or conservation credit option, her arrearages were placed on hold only as long as bills for current month's usage were paid. Otherwise, collection efforts were to be renewed.\textsuperscript{117}

The first year's experience in Wisconsin was positive. Only seven percent (7%) of all participants failed to keep their bills current. At the same time, 46% of participants completely eliminated their back bills. In the second year, only five percent (5%) of all participants failed to keep their bills current.

\textsuperscript{116} If a customer is more than 90 days in arrears, he or she is eligible for both payment and conservation credits.

\textsuperscript{117} LIHEAP was distributed in such a way in Wisconsin, however, to limit current month bills to an affordable percentage of household income.
Part of the success of the program, according to Wisconsin Gas, was attributable to the success of the counseling provided to participants. The counseling takes place during four visits. At those times, the CAA shows the clients how to install low-cost/no-cost weatherization materials; provides free supplies; and gives the participating households tips on how to change behavior so as to reduce consumption. The agency continues to monitor client consumption for up to a year or until the arrearage subject to forgiveness has been retired.

The counseling has, in fact, resulted in substantial energy savings. The counseling portion of the program has resulted in an average of 10 percent energy savings. This 10 percent does not include energy savings attributable to weatherization received as a result of referral to the low-income weatherization program. In total, customers have saved an average of 15 percent on their monthly bills; some have saved as much as 26 percent. For most customers, the conservation credits were more effective in reducing arrears than payment credits.

The "interim report" regarding the second year of the Wisconsin program is attached as Appendix D.

D. COLUMBIA GAS COMPANY.

Columbia Gas proposed, as part of its Customer Assistance Plan (CAP) Pilot
Program, an arrearage forgiveness program tied to the percentage of income payment required by participating households.\footnote{118} Jointly developed by Columbia Gas, the state Office of Consumer Advocate and the Pennsylvania PUC's Bureau of Consumer Services, the CAP requires participating households "to exhibit regular payment practices under the CAP to continue to qualify for" arrearage forgiveness. Moreover, the CAP workplan requires that "all LIHEAP or other qualifying assistance amounts be credited to the balance of the customer's unretired pre-program arrearage."\footnote{119}

Unlike other arrearage forgiveness provisions offered within the various programs discussed in this analysis, the Columbia Gas CAP was based on the premise that "affordability of the \textit{total customer bill} is of paramount importance." (emphasis added).\footnote{120} Accordingly, after establishing an "affordable" payment amount for participating household as a percentage of income, no change is made in total household payment based on whether or not the household has pre-program arrears. Instead, Columbia devotes a pre-determined portion of the total household payment


\footnote{119} The OCA, however, specifically declined to support the LIHEAP application provision. In an order dated September 8, 1991, the Hearing Officer in \textit{Pennsylvania Public Utilities Commission v. Columbia Gas of Pennsylvania}, Docket No. R-901873, supported the OCA's opposition. \textit{Decision and Order}, at 117 (September 8, 1991). The Hearing Officer held that, in light of the Pennsylvania PUC's prior disapproval of the recovery of arrears from Budget Plus ratepayers as retroactive ratemaking, the claim of Columbia Gas "for the recovery of CAP customers' pre-program arrearages is indistinguishable from its claim to recover the increased arrears of its Budget Plus customers. The OCA and (Office of Trial Staff) correctly point out that the claim with respect to the Budget Plus arrearages was disallowed by the Commission in the Respondent's last rate case as retroactive ratemaking." Id., at 116. Applying LIHEAP to the pre-program arrears, the Hearing Officer held, "appears to be a decision made by the Respondent to maintain the viability of such arrearages as regulatory assets for accounting and auditing purposes." Id., at 117.

\footnote{120} \textit{Workplan}, supra note Error! Bookmark not defined., at 21 - 22.
toward arrears in those instances where pre-program arrears exist. In this fashion, Columbia Gas seeks to keep total household payments of CAP participants affordable. The Company first varies its total required household payment by Poverty Level. This payment is set at the same level, as follows, whether or not the household has preprogram arrears:

<table>
<thead>
<tr>
<th>POVERTY LEVELS</th>
<th>PERCENTAGE OF INCOME PAYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 50%</td>
<td>5%</td>
</tr>
<tr>
<td>51 - 100%</td>
<td>7%</td>
</tr>
<tr>
<td>101 - 150%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Additionally, within the CAP customer's total bill amount, the amounts of the payment designated for current bill and pre-program arrearage will vary depending on the customer's applicable Poverty Levels, as follows:

<table>
<thead>
<tr>
<th>POVERTY LEVELS</th>
<th>PERCENT TO CURRENT BILL</th>
<th>PERCENT TO ARREARAGES</th>
<th>TOT PERCENT OF INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 50%</td>
<td>2%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>51 - 100%</td>
<td>2%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>101 - 150%</td>
<td>4%</td>
<td>5%</td>
<td>9%</td>
</tr>
</tbody>
</table>

As can be seen, if a participant living at the 0-50 percent Poverty Level (for example) has no arrears, she pays five percent of her income toward her current Columbia Gas bill; if that same household does have arrears, she will still pay five percent of her income toward her utility bill, but two percent will go toward current bills and three percent will go toward pre-program arrears.
Pre-program arrears payments in the Columbia Gas program will be spread over a maximum of a four (4) year time period, commencing when the participant is accepted into the program. The unpaid portion of the pre-program arrears, if any, will be forgiven. According to the Columbia Gas Workplan:
In this manner, the average customer retires a part of his or her own pre-program arrearage, over a four-year period. Progress toward such arrearage retirement will be clearly demonstrated on each monthly bill in order to encourage continued progress.\footnote{\(\text{121}\)}

The Company concluded that "this method not only acts to encourage the development of regular payment practices, it achieves the additional goal of encouraging responsibility for outstanding debt within an affordable payment structure."\footnote{\(\text{122}\)}

E. CONNECTICUT'S PILOT PROGRAMS.

Starting in 1987, each of Connecticut's major gas and electric utilities developed their own pilot program to address the needs of low-income payment-troubled customers. The four companies planned a collaborative evaluation effort to facilitate comparisons and generalizations among these different programs.

The four Connecticut programs involved small pilot programs, each of which was administered manually by the respective company without change in the company's mainframe computer programs. The programs involved nonrepresentative samples of customers: volunteers were recruited among high-balance customers that were eligible for hardship protection. The programs placed different emphases on

\footnote{\(\text{121}\)} Id., at 22 - 23.

\footnote{\(\text{122}\)} Id., at 23.
conservation, thermostat control, education and social service, personal account management and arrearage forgiveness.

Among the goals of the Connecticut pilots were to gain administrative experience with "continuous service plans," to assess the costs and benefits for companies and consumers, and to help those customers who were most in need.

Each Connecticut company offered some type of arrearage forgiveness provision. Connecticut Natural Gas offered "partial arrearage forgiveness," up to $500. Southern Utilities offered complete forgiveness over a three year period. Connecticut Light and Power offered a partial forgiveness, up to a maximum of $600. Finally, United Illuminating offered a limited forgiveness, agreeing to match any customer payment in excess of the required current payment, up to a maximum of $200.

The customers participating in the Connecticut pilots were not households who had a history of paying their full home energy bills in the time period immediately before the pilots were initiated. Even after considering LIHEAP payments devoted to these customer accounts, the respective companies experienced average annual shortfalls of from $255 to $332 per participant. The pre-pilot characteristics of each company program, and its recruited customers, are set forth in
Table G.

According to the evaluation of the four Connecticut programs,\(^{123}\) because of the variations both in incentives and requirements offered to participants, as well as in the types of customers recruited, direct comparisons between programs "may be misleading." Nevertheless, the evaluation continues, "strengthened by this diversity among programs, several conclusions can be drawn from the (first winter) data" available at the time, including:

1. **Many of the recruited customers prefer to make regular affordable payments toward their energy bills.** Across all payments, 60% of recruits made all of their payments, or missed only one payment.

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\(^{123}\) Prepared by RPM Systems of New Haven, Connecticut.
TABLE G

CHARACTERISTICS OF CONNECTICUT COMPANIES, PROGRAM FEATURES AND RECRUITED CUSTOMERS
2. Many recruited customers will pay more to obtain predictable service and maintain an affordable payment arrangement. All programs asked some participants to increase personal payments. Of these challenged customers, the evaluation stated, an average of 47% paid at least 80% of their expected "fair share" amount. Others increased fall and winter payments but fell short of the success standard (of 80%).

3. A substantial minority of recruited customers did not maintain their agreement. Connecticut's strong consumer protections, including such things as a winter moratorium, ensured that there are diminishing returns to company efforts to attain a high success ratio with any one group of recruits, the evaluation said.

4. Continuous service programs may not decrease total subsidy requirements. Each company, the evaluation found, had some recruits who had previously paid more than the "fair share" amount assigned them by the program's sliding scale. Their recruitment led to a decrease in their personal payments, resulting in lost revenue.

5. Existing Energy Assistance is not sufficient for all recruits. For almost all recruits, the evaluation said, there remains a subsidy gap between the "fair share" payment and the total bill. Customers using energy for heat should use energy assistance to cover this gap.
A summary of "first year account performance" for Connecticut's four pilot programs is set forth in Appendix E.

F. COLORADO's PROPOSED PROGRAM.

In June, 1991, the Colorado Energy Assistance Foundation (CEAF), among others, released a proposal for a pilot "arrearage management program." The proposed Pilot Project was designed "to test arrearage management, weatherization and budget counseling approaches on a sample of households throughout Colorado." Those approaches which prove successful would then be recommended for implementation on a permanent basis at the conclusion of the study.

According to the Colorado Proposal, "direct financial assistance and stabilizing assistance levels are not the total solution" to low-income energy payment problems. "As with other social service programs," the Proposal said, "real and lasting success comes when program recipients are motivated to be self-sufficient and

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124. Those agencies cited as "supporting" the proposal include the Colorado Energy Assistance Foundation, the Colorado Department of Social Services, the Colorado state Office of Consumer Counsel, Consumer Credit Counseling Services, the Colorado Division of Housing Weatherization Programs, Catholic Community Services, Central Denver Community Services and Public Service Company of Colorado. (June 11, 1991).

125. According to a cover Letter by Elizabeth Horn, Chair of the Colorado Arrearage Management Program, the "Arrearage Management Project" "is a collaboration of utility companies, government agencies and non-profit agencies formed to address the long-term needs of low-income home energy consumers."

are given the tools to achieve independence." The Arrearage Management Program proposed by the group of interested agencies, including utilities, is intended "to foster self-reliance among (LIHEAP) recipients."

The Colorado Proposal would establish an "arrearage management plan supplemented with weatherization and debt counselling that would allow utility customers to systematically reduce or eliminate unmanageable account arrearages. This concept* * *permits low-income utility customers to waive a portion of their arrears if they pay their utility bills on time each month."

Under the proposed pilot program, customers would contract to pay each of their forthcoming monthly bills in exchange for a 1/24th reduction of the arrears that exist on their account when they enter the program. The reduction would take place each month for as long as the customer maintained payments or until the arrears were eliminated.

If successful, the Proposal states:

"benefits can accrue to the utility companies as well as the customers. Given the incentive to have past debts forgiven, these customers could become regular bill payers. Utility companies could save future

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\(^{127}\) Colorado Proposal, supra note Error! Bookmark not defined., at 3.

\(^{128}\) Id., at 4.
disconnection and collection costs as well as protect their revenue generating capabilities. The companies would also benefit from steady paying customers and (would) forgive debt which, in many cases, would have been written off anyway.\footnote{129}

The Colorado Proposal sets out the framework within which the feasibility and cost-effectiveness of an Arrearage Management Project would be tested. "The study will determine the cash flow or financial impact that an arrearage management program extended over a two-year period would have on the participating low-income customers as well as on the participating utilities."\footnote{130} The study would also examine the added impacts that weatherization, budget counselling and energy conservation education would have on arrearage management.

In short, the Proposal states that:

The goal of the Colorado Arrearage Management Project is to implement a two-year pilot to test whether reducing arrears in exchange for on-time bill payment creates an incentive for low-income customers to pay their energy utility bills on time and results in no adverse impact or a positive impact on the utilities' cash flow and uncollectibles.

The pilot project also will determine to what extent weatherization, energy conservation education and budget counseling (in conjunction with reducing arrears), help reduce these customers' energy usage and

\footnote{129}{Id., at 4.}
\footnote{130}{Id., at 4.}
improve their ability to pay their current utility bills.\footnote{Id., at 6.}

The CEAF proposal for an arrearage management pilot project is attached as Appendix F.
VI. TAXABILITY OF FORGIVEN ARREARS AS GROSS INCOME UNDER THE INTERNAL REVENUE CODE.

The forgiveness of arrears by public utilities raises the issue of the extent to which that foregone debt is taxable by the Federal government. Generally, the extent to which a household obtains a discharge of debt is includible in the calculation of gross income for that household. Section 61(a) of the Internal Revenue Code controls.\[^{132}\] Section 61(a)(1) states that, except as otherwise provided, gross income means all income from whatever source derived. Moreover, Section 61(a)(12) of the Code explicitly states that the amount of a discharged debt is to be included in the calculation of gross income.

In sum, when a solvent debtor has a fixed obligation reduced or canceled, the amount of the reduction or cancellation constitutes income for tax purposes.\[^{133}\] Unless the gain is excluded from income because of a statutory or judicial exception to this general rule, the amount of the debt cancellation is income in the year the debt is canceled. The issue, therefore, is whether a utility arrearage forgiveness program results in taxable income to the program participant as per Section 61(a)(12) or whether such forgiveness falls within some accepted exclusion.

A. 1991 RULING REGARDING LIHEAP AND FORGIVENESS.


Arrears that are forgiven by a public utility company in conjunction with benefits delivered through the Low-Income Home Energy Assistance Program (LIHEAP) are not gross income for federal income tax purposes, according to a 1991 ruling by the Internal Revenue Service.

The July 19, 1991 IRS ruling was directed to the arrearage forgiveness component of the Rhode Island Percentage of Income Payment Plan (PIPP). In addition to the income-based payments toward current bills, the IRS found, "to encourage participants to remain in the program, and thereby to maintain uninterrupted energy service, the program also provides that an arrearage owed by a participant to the utility company prior to the participant's enrollment in the program is forgiven on a pro rata basis over a 36-month period."

The IRS cited the LIHEAP statute in its ruling, holding that "the Act specifically states that home energy assistance payments or allowances made pursuant to the Act to or for eligible households are not taxable income to the households." The ruling continues to note that Rhode Island "has determined that the forgiveness of arrearages is vital to the program's overall success, and has enacted

\[42 \text{ U.S.C. 8624(f)(1) (1991).}\] This statute explicitly provides that: "notwithstanding any other provision of law, unless enacted in express limitation of this paragraph, the amount of any home energy assistance payments or allowances provided directly to, or indirectly for the benefit of, an eligible household under this subchapter shall not be considered income or resources of such household (or any member thereof) for any purpose under any Federal or State law, including any law relating to taxation, food stamps, public assistance, or welfare program."
legislation specifically authorizing the utility companies to forgive the arrearages."

"Accordingly," the IRS concluded, "* * *neither the payments made by (Rhode Island) to the utility company nor the forgiveness of arrearages is includible in your gross income."

The IRS ruling is attached as Appendix G.

B. GENERAL TAXATION PRINCIPLES.

In addition to the specific language of the LIHEAP statute relied upon by the IRS in 1991, two other possible grounds exist for possibly concluding that arrearages forgiven pursuant to a utility arrearage forgiveness program should not be considered gross income for taxation purposes. First, there is an exemption for the discharged debts of insolvent debtors; second, there is an exemption generally for general relief programs. Each will be examined separately.

1. INSOLVENCY.

The forgiveness of utility arrears might be exempt from consideration as gross income under Section 108 of the Internal Revenue Code. Under Section 108(a) of the Code, gross income excludes discharged debts if the discharge occurs when the
taxpayer is "insolvent." Two important limitations exist, however. First, the amount not charged as taxable income is not to "exceed the amount by which the taxpayer is insolvent." Second, the term "insolvent" is a defined term, meaning an "excess of liabilities over the fair market value of assets." Clearly, therefore, being "poor" and being "insolvent" per 108(d)(3) can be, but are not necessarily, the same.

It would be possible, however, to categorically determine that some households are "insolvent." Rather than making a case-by-case determination of insolvency, a PUC is entitled to make that determination on a classwide basis.

In sum, the general insolvency exemption to including discharged debts as gross income may potentially operate to exclude forgiven arrears under an arrearage forgiveness program. A state public utility commission can determine, on a classwide basis for particular households, that such households are "insolvent" as defined by the Internal Revenue Code. Moreover, in those instances that the Commission determines that the amount of an arrears is included in the extent of

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insolvency,\footnote{\textsuperscript{139}} to forgive those arrears would not constitute gross income.

2. GENERAL RELIEF.

Arrearage forgiveness undertaken pursuant to a program adopted pursuant to directive (or approval) of the state Public Utility Commission (PUC) might fall within the exemption generally recognized for payments in general relief for the social benefit. Payments made to households in furtherance of the general social welfare objectives of the state will no in turn be recaptured by the state in the form of income taxes. A wide range of benefits has been found to fall within this construct, including:

\begin{itemize}
  \item \textbf{CRIME VICTIM COMPENSATION:} Compensation made by the New York Crime Victims Compensation Board to victims of crime or their surviving dependents are not includible in gross income. Rev. Ruling 74-74. "Disbursements made from a general welfare fund in the interest of the general public which are not made for services rendered" are not includible in gross income.
  
  \item \textbf{STATE PAYMENTS TO ADOPTIVE PARENTS:} Monthly
\end{itemize}

\footnote{\textsuperscript{139}} For example, to the extent that a PUC determines that a household at a given level of poverty can only afford to pay a certain amount toward current bills, additional payments toward arrears would by definition be included in the extent of the insolvency.
payments to adoptive parents in Maryland for the necessary support and maintenance for their adopted child, under a program administered by the state Department of Social Services, are not includible in gross income. Such payments are "disbursements from a general welfare fund in furtherance of the social welfare objectives of the State***." Rev. Ruling 74-152.

- **INTEREST SUBSIDIES TO LOW-INCOME HOME BUYERS:** Interest subsidies paid pursuant to the National Housing Act "for the purpose of assisting lower income families in acquiring home ownership" are not includible in gross income. Such payments "are in the nature of general welfare." Rev. Ruling 75-271.

- **RELOCATION PAYMENTS:** Federal payments to help relocate low and moderate income families into "decent housing and a suitable living environment" as part of federal efforts to help develop "viable urban communities" are not includible in gross income. These payments, too, "are in the nature of general welfare payments." Rev. Ruling 76-373.

- **HOME REHABILITATION GRANTS:** Federally-funded, city
administered, home rehabilitation grants to income-eligible households residing in a defined area of the city are not includible in gross income. Such grants are "payments made under legislatively provided social benefit programs for promotion of (the) general welfare" to low-income homeowners and "are in the nature of general welfare." Rev. Ruling 76-395.

Most directly on point, however, is IRS Revenue Ruling 78-170. In this Ruling, the IRS held that payments made, either directly or indirectly,\(^\text{140}\) to income-eligible households for the purpose of reducing the cost of winter energy consumption "are in the nature of relief payments made for the promotion of the general welfare" and are thus not includible in gross income. (citing Rev. Ruling 74-153 and Rev. Ruling 74-74).\(^\text{141}\)

Arrearage forgiveness provisions adopted pursuant to PUC mandate or approval would appear to fall within this same genre of public welfare programs. Aside from Ruling 78-170, the public housing Revenue Rulings are the most directly applicable. Among the similarities are:

\(^{140}\) An "indirect payment," in this instance, would be discounts granted by energy vendors and reimbursed to those vendors through state tax credits. Thus, while the government benefit is not directly to the energy consumer, it is to benefit that consumer and is an "indirect payment" to that consumer. Any arrearage forgiveness program that is part of a social welfare program whereby the utility grants the initial forgiveness and the state reimburses the utility would thus seem to fall within this "indirect payment" exemption.

\(^{141}\) Revenue Ruling 78-170 is attached as Appendix H.
NEED-BASED: The programs are "need-based." While LIHEAP eligibility, and thus eligibility for arrearage forgiveness, is based upon a percentage of federal poverty, programs such as the three housing assistance programs are based upon designated dollar amounts of income.

ESSENTIALS OF LIFE: As LIHEAP did with energy, the National Housing Act declared that "decent housing and a suitable living environment" are essentials to life. Thus, just as the housing rehabilitation, relocation or acquisition assistance is designed to ensure such essentials to low-income households, a utility arrearage forgiveness program (and the rate program of which it is an essential part) is designed to ensure the continuing availability of home energy.

It can be concluded that an arrearage forgiveness program is one component of a "social benefit program for the promotion of general welfare." Accordingly, the discharge of debt thereunder is not to be construed as gross income.

The issue is not clear-cut, however. The relevant Revenue Rulings, for example, refer to "legislatively-provided social benefit programs." (See e.g., Rev.
Ruling 76-373, Rev. Ruling 76-395) (emphasis added). While LIHEAP benefits in general are available pursuant to a legislatively-provided welfare program, arrearage forgiveness provisions in particular are part of a more specific package of rate benefits. In turn, rate programs may, but need not, be part of a legislatively-provided program.\(^{142}\)

More disturbing yet is the potential problem that lies in the fact that an arrearage forgiveness program need not be financed with public funds. The payments made in pursuance of the general welfare discussed above were each made from a government "general welfare fund." (See, Rev. Ruling 74-74, Rev. Ruling 74-153). In contrast, the costs of arrearage forgiveness programs, if any, are often passed on to remaining ratepayers. Revenue Ruling 82-106, which deals with relocation assistance benefits required to be paid to tenants by landlords under a municipal ordinance, poses the greatest obstacle.\(^{143}\)

In Revenue Ruling 82-106, the local city council enacted an ordinance requiring landlords to provide relocation assistance to tenants who were to be evicted from their units because of a conversion of those units to condominiums or

\(^{142}\) It is not clear that "legislative" necessarily means provided by the state General Assembly. Whether a program adopted by an administrative body, whether or not pursuant to specific statute, is "legislatively" provided is not clear. Moreover, it is not clear whether "provided" necessarily contemplates a legislative mandate or whether a legislative sanction would suffice.

\(^{143}\) Revenue Ruling 82-106 is attached as Appendix I.
cooperatives. The ordinance was enacted "because of a critical shortage of rental housing in (the) city."

The payments in this local tenant relocation situation were found to be "distinguishable from the replacement housing and relocation payments." In the latter instances, an "agency of the federal government makes the payments to qualified recipients. Here the landlords make the payments to tenants who are to be evicted."

The Revenue Ruling then articulated a principle that would be ruinous to a conclusion that forgiven arrears may be excluded from gross income. "Payments," the Ruling said, "made by individuals or other non-governmental entities are not considered payments for the general welfare." The fact that the tenant payments were made pursuant to a government-imposed requirement was not determinative in this situation. The landlords, in other words, were required by ordinance to make the relocation payment. Nevertheless, the fact that the payment itself came from an "individual or other non-governmental entity" was found to be the controlling factor.

This analysis does not conflict with the Ohio energy credit program in

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144 The issue is muddied even more by the fact that arrearage forgiveness involves the discharge of a debt and not an affirmative "payment" to PIP participants. Thus, unlike the other social welfare programs discussed above, there is not really a "payment" from a public fund that is made.
Revenue Ruling 78-170 discussed above. In that situation, Ohio private energy vendors\(^{145}\) were directed to provide, during designated times of the year, a 25-percent reduction on monthly bills for home energy consumption to persons meeting certain income and programmatic guidelines.\(^{146}\)

The privately granted discount, however, was reimbursed by the state to the energy vendors. These state expenditures, the Revenue Ruling found, were simply "indirect payments to qualified individuals" and were "in the nature of relief payments made for the promotion of the general welfare."

It is arguable, however, that this principle regarding "private" payments, as articulated in Ruling 78-170, was not intended to sweep as broadly as it might first appear. That Revenue Ruling continued to state: "moreover, the payments here in question are not based on need and are not a substitute for payments traditionally made by a governmental entity." It appears, therefore, that this Revenue Ruling leaves open room for the argument that benefits, even if privately provided, are exempt from inclusion in gross income if they are need-based and, in addition, are a "substitute for payments traditionally made by a governmental entity." To conclude that arrearage forgiveness is at least an adjunct to, if not a substitute for, further

\(^{145}\) These included propane dealers as well as gas and electric utilities.

\(^{146}\) Certain circumstances could also arise where a household could receive a direct cash payment from the state instead of a discount.
LIHEAP payments is not a big jump.\footnote{147}

In sum, the factors militating against excluding forgiven arrears from gross income include:

1. An arrearage forgiveness program may be a mere program of administrative creation and need not be "legislatively-provided." (Rev. Ruling 74-205, Rev. Ruling 76-373);

2. The forgiven arrearages are not "disbursements from a general welfare fund." (Rev. Ruling 74-74, Rev. Ruling 74-153); and

3. Payments made by individuals or other non-governmental entities are not considered "payments for the general welfare." (Rev. Ruling 82-106).

In contrast, the factors militating in favor of finding that forgiven arrears are exempt from inclusion in gross income include:

1. LIHEAP, of which an arrearage forgiveness program can be made an integral part, is a legislatively-provided social benefit program. (Rev. Ruling 76-395).

\footnote{147} Moreover, if tied to LIHEAP, then the taxability of such payments is brought within the express exemption of the LIHEAP statute, and is not controlled by the Internal Revenue Code.
2. Arrearage forgiveness is need-based. Particularly under programs such as the Columbia Gas model, arrearage forgiveness payments do, in fact, vary according to the income of the participant. Moreover, under LIHEAP, the participant's income must be recertified periodically with appropriate adjustments made in the amount of the payments. (Rev. Ruling 75-271).

3. Arrearage forgiveness is integral to the success of LIHEAP and, at a minimum, is in the nature of general welfare. (Rev. Ruling 75-271, Rev. Ruling 76-373).


5. LIHEAP benefits involve "payments traditionally made by a governmental entity" and, arrearage forgiveness, even if not a "substitute" therefor, is an adjunct thereto, and has been found to be integral to the success of the program of payments made by the government. (Rev. Ruling 82-106).
Given all of the factors discussed above, on balance, it is reasonable to conclude that an arrearage forgiveness program that is adopted as part of a PUC mandated or sanctioned program, particularly if tied closely to the disbursement of LIHEAP, does not involve gross income arising as a result of the discharge of indebtedness.
VII. THE USE OF CONSERVATION AS A SUPPLEMENT TO ARREARAGE FORGIVENESS.

Investment in weatherization and conservation measures is a strong tool to use in controlling unaffordable low-income home energy bills and the payment problems which accompany them.\(^{148}\) Research has found a "clear correlation" between total annual usage and the level of arrears.

A. CONSERVATION AS A MEANS TO CONTROL ARREARS.

Wisconsin Gas Company recognized the legitimacy of special low-income conservation and weatherization programs when it implemented a pilot program explicitly designed to use conservation measures as a means to reduce the costs associated with delinquent payments and bad debt. The purpose of the study, Wisconsin Gas said, was "to examine the effects of Wisconsin Gas Company's Weatherization Program on the arrearages of low-income customers."\(^{149}\) Wisconsin Gas divided its study homes into two groups: (a) single family homes; and (b) two-family homes.\(^{150}\)

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\(^{148}\) Quaid & Pigg, *Measuring the Effects of Low-Income Energy Services on Utility Customer Payments* Washington State Energy Office (May 1991). According to Quaid and Pigg, traditionally, impact evaluations of low-income weatherization programs have focused on measuring energy savings, and have neglected quantification of other potential benefits. "One such benefit relates to the financial aspect of reducing energy use. Low-income households often get behind in paying their bills. Reducing energy consumption in these households may set off a chain of impacts: Lower, more affordable utility bills; fewer unpaid utility bills; lower past-due bills (arrearages); and ultimately, lower utility costs to process pass-due accounts, and lower utility write-offs from uncollectible debts."

\(^{149}\) *Weatherization Arrears Savings*, Wisconsin Gas Company (April 1988).

\(^{150}\) The company stated, however, that "due to the integrated nature of two-family energy use and weatherization measures, two-family accounts were treated as one dwelling unit." Id., at 1.
For single family homes, Wisconsin Gas experienced an overall therm savings of 23.4 percent.\textsuperscript{151} Moreover, therm savings based on heat load were computed. The company produced "an overall single family heat load savings rate of 30.7 percent* * *, n\textsuperscript{152} Two-family homes generated similar results.\textsuperscript{153}

Wisconsin Gas found that not only did the program reduce arrears for households, but the company recognized significant savings from the program as well. According to the company, without the program, while only nine percent of the study group would have had arrears of $100 or less without the program, 27 percent of the group would have annual arrears of $100 or less following weatherization.\textsuperscript{154}

Moreover, Wisconsin Gas found that it received a 20 percent return on its weatherization investment, strictly from the reduced nonpayment, and before considering traditional avoided costs, in the first year of the program.

In sum, Wisconsin Gas concluded from its study:

The study indicates that single family dwellings generated on average $353 less annual arrears after

\textsuperscript{151} While the savings ranged widely between units, the company noted that 64 percent of the single family homes fell in the 10 percent to 35 percent savings range. Id., at 2.

\textsuperscript{152} Id. Again, while the savings ranged widely between units, 60.2 percent of the single family homes fell in a range of 25 percent to 50 percent savings.

\textsuperscript{153} Id., at 5. Over 70 percent of the dwellings fell in the 10 percent to 35 percent savings range.

\textsuperscript{154} Id., at 2.
weatherization. (emphasis added). For the two family group, weatherization reduced arrears $502 annually. (emphasis added). Taken a step further, for 1,300 dwellings weatherized annually and split evenly between single and two-family jobs, over $550,000 in billed arrears or approximately $360,000 in gas cost would have been avoided.  

Finally, Wisconsin Gas concluded, "within the parameters of this study, 20 percent of the study group would have generated $0 or less annual arrears with weatherization as compared to 5 percent without. This reflects favorably on weatherization potential as an arrears eliminator." The Wisconsin Gas study is attached as Appendix J.

Similar results can be obtained for electric companies. One electric company in Massachusetts, for example, studied the implementation of an arrears control program using conservation as the mechanism. COM/Electric found that "from the analysis, a Bad Debt Program appears to be not only theoretically sound, but also empirically supported for electrically heated homes and for homes having electric water heaters. It also appears beneficial to offer the program to `other' homes in the Commonwealth service territory." According to the utility's consultant, "the main source of economic value to COM/Electric is the reduced carrying costs for late

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155. \textit{Id.}, at 6.

156. \textit{Id.}

payments." The consultant did not study collection costs.

COM/Electric found that the Bad Debt Conservation program had, from a system perspective (i.e., based upon system "avoided cost" savings), a benefit-cost ratio of 1.857 (for electrically heated homes), of 2.290 (for homes with electric hot water but not electric heat), and 1.944 (for all "other" --non-electric heat, non-electric hot water-- homes).

The potential of conservation as a viable means to help reduce arrears should not be surprising. As discussed above,\textsuperscript{158} one Cleveland State University study of households with high arrears in the Ohio Percentage of Income Plan (PIP) found this strong relationship. According to the Cleveland State study, the prime cause of growth in Ohio's PIP arrears was the excessive consumption of a small group of customers. According to Cleveland State, "this small group accounted for 40% and 34% of total gas and electric PIP debt respectively."\textsuperscript{159} Cleveland State described these customers, saying:

The high debt segments are a relatively small percent of the total population. This small group has tended to accumulate debt at a high rate in the past; they begin the program with 2.6 times higher debt, they have accumulated 3 times as much total net debt, and their annual increase in debt is 3 times greater than the

\textsuperscript{158}\textit{See notes Error! Bookmark not defined. - Error! Bookmark not defined., supra and accompanying text.}

\textsuperscript{159}\textit{Id., at 2 (emphasis added).}
majority of the PIP households.\textsuperscript{160}\textsuperscript{1}

Cleveland State continued, stating: "Their annual usage (and their annual bills) are 1.6 times higher than the mid-range segments. * * *(T)heir bill/income ratios are about 1.7x higher."\textsuperscript{161}\textsuperscript{1} In reviewing the Ohio Percentage of Income Plan (PIP), Cleveland State University found that: "Targeting weatherization and energy education to the high-debt group seems to hold the greatest potential for minimizing the growth in debt." Cleveland State further found as to the natural gas company it studied: "almost all the households who used more than the mean amount of energy for their group fell into the high-debt group. . .If this group were targeted for weatherization, including education regarding energy efficiency, the model suggests that for EOG (East Ohio Gas-ms), for every MCF saved at the mean, a corresponding $4 decrease would be seen in debt."

**B. TARGETING CONSERVATION INVESTMENTS.**

It is not sufficient, however, for a public utility to simply invest substantial sums of money in "a" conservation program, or set of conservation programs, without first undertaking a careful analysis of precisely what the utility hopes to accomplish through such a program. Too often, conservation program designs tend to exclude rather than include low-income households and any hope of obtaining participation is

\textsuperscript{160}\textsuperscript{1} Id., at 41 - 42.

\textsuperscript{161}\textsuperscript{1} Id., at 43.
lost.

Consider the case of Western Massachusetts Electric Company (WMECO). In WMECO's 1987 rate case, the Hampshire Community Action Commission (HCAC), a local community action agency, challenged both the overall conservation planning of Western Mass Electric Company (WMECO) and the design of specific conservation programs. Both the planning and design components, HCAC argued, were marred by assumptions which, though perhaps unwittingly, nevertheless resulted in the effect of excluding low-income households from conservation programs. This exclusion, HCAC said, denied the opportunity for the poor to reduce their bills by reducing their consumption.

WMECO's energy conservation planning resulted in a de facto exclusion of the poor because of its failure to consider market barriers that were unique to the poor. Three barriers were discussed in particular. Hurdle rates, that annual return on investment required for a household to invest in conservation measures, were set at levels that ignored low-income data. In its conservation planning, WMECO

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\[\text{\footnotesize{\textsuperscript{163}}}\] "Although WMECO asserts that its programs are designed to be income neutral, HCAC contends that the effect of WMECO's programs, intended or unintended, is to exclude low-income customers." \textit{Id.}, at 404.

\[\text{\footnotesize{\textsuperscript{164}}}\] \textit{Id.}, at 417.

\[\text{\footnotesize{\textsuperscript{165}}}\] \textit{Id.}, at 404.
assumed that any measure which met a hurdle rate of 30 percent would be implemented without financial assistance from the utility. According to evidence presented by HCAC, however, low-income hurdle rates reached up to 90 percent. Second, HCAC said, low-income households do not have access to investment capital for conservation measures, even if those measures are recognized by customers as providing economic benefits. If a household does not have $400 to invest in a new appliance, in other words, it makes no difference that the new appliance would return a savings of $500 to the household. Finally, low-income households have less education, which interferes with their ability to recognize the cost savings that conservation measures might induce.

For a utility effectively to design and offer conservation and weatherization programs to its low-income customers, it should have a clear grasp of what market barriers prevent the implementation of those measures without utility assistance. The utility program, accordingly, would most rationally be designed to effect the removal of the identified market barriers. If, for example, the market barrier is an unreasonably long payback period, the utility may offer direct subsidies to shorten that period. If, in contrast, the market barrier is a lack of affordable investment capital, the utility may offer a low-interest/no-interest loan fund.

\[166\] Id.
\[167\] Id.
\[168\] Id.
In 1987, the National Consumer Law Center (along with Northeast Utilities) put substantial effort into identifying what market barriers exist to the implementation of conservation measures by consumers. A list of the results of that effort is set forth below:

(continued)
### TABLE H
**RESIDENTIAL MARKET BARRIERS TO THE IMPLEMENTATION OF CONSERVATION MEASURES**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Information access.</strong> Consumers do not have free access to information on capital/operating tradeoffs. There is an implicit cost in time and effort to obtain this information.</td>
</tr>
<tr>
<td>2</td>
<td><strong>Uncertain technologies.</strong> Consumers have little direct, first-hand experience with new technologies, particularly concerning performance, reliability and operating costs. Information may often be supplied by manufacturers whose credibility is suspect.</td>
</tr>
<tr>
<td>3</td>
<td><strong>Consumer credit.</strong> The ability to invest in conservation measures often depends on having access to credit. However, consumer credit is often limited by financial institutions that disregard the value of conservation investments.</td>
</tr>
<tr>
<td>4</td>
<td><strong>Lack of knowledge.</strong> Energy reductions are not always identifiable in the customer's bill. Accordingly, it is sometimes not possible for a customer to make a decision as to the economic viability of conservation programs.</td>
</tr>
<tr>
<td>5</td>
<td><strong>Unfavorable payback periods.</strong> Even though some conservation measures may be justified when viewed in light of systemwide savings, they may not be when viewed in terms of customer-specific savings.</td>
</tr>
<tr>
<td>6</td>
<td><strong>High initial capital cost.</strong> Even in the event that a measure is cost-justified in the long-term, if the initial capital cost exceeds the ability of a customer to finance, the program will not be implemented.</td>
</tr>
<tr>
<td>7</td>
<td><strong>Difficult installation.</strong> Just as there are implicit costs in time and effort to obtain conservation information, there are implicit costs of installation. As these costs go up, the extent of measures installed will go down.</td>
</tr>
<tr>
<td>8</td>
<td><strong>Limited or no commercial availability.</strong> Even if cost-effective, some demand side measures have a limited (or no) commercial availability to a utility's customers. Often, availability will follow demand, but demand, in turn, is dependent upon availability.</td>
</tr>
</tbody>
</table>

In addition to market barriers common to all residential ratepayers, however, low-income households have market barriers that are different from, and more extensive than, residential households in general. The result of these market barriers is to more severely restrict the availability of conservation measures to low-income households than to residential households in general. Market barriers that make the direct benefits of conservation programs inaccessible to the poor are listed below:
TABLE I
LOW-INCOME MARKET BARRIERS
TO THE IMPLEMENTATION OF CONSERVATION MEASURES

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Low income homeowners are reluctant to borrow, even interest-free, to invest in conservation.</td>
</tr>
<tr>
<td>2.</td>
<td>Low income homeowners have extremely high required returns on investment.</td>
</tr>
<tr>
<td>3.</td>
<td>Given their lack of liquidity, low income residents cannot hire a contractor as readily as those with greater means.</td>
</tr>
<tr>
<td>4.</td>
<td>Tenants have little or no incentive to improve the landlord's property.</td>
</tr>
<tr>
<td>5.</td>
<td>Tenants often have insufficient tenure at a particular service address to cost-justify conservation improvements.</td>
</tr>
<tr>
<td>6.</td>
<td>Landlords owning housing occupied by tenants whose electricity use is individually metered have little incentive to invest in conservation improvements.</td>
</tr>
<tr>
<td>7.</td>
<td>Lower income households generally have less education than higher income households and, as a result, are perhaps less aware of the cost savings that energy investments can produce. The lack of education could also make it more difficult to perform the calculations necessary to determine whether a conservation investment is advantageous.</td>
</tr>
</tbody>
</table>

As a result of this discussion, it is possible to conclude that a response to low-income inability to pay problems must incorporate a component that offers special conservation programs to low-income households, using income and Poverty Level themselves as the factors upon which the targeting of the programs is based.

However, greater direction regarding the offer of low-income conservation is necessary. Simply dumping money into low-income conservation programs will not unto itself effectively address the problem. Conservation measures should be offered by public utilities specifically designed to respond to the low-income market barriers identified by those companies in preparation of their low-income strategies.
In sum, the implementation of low-income conservation measures is a valuable complement to arrearage forgiveness programs. The targeted use of conservation can substantially reduce low-income bills, thus making monthly bill payment more affordable. As a result, a greater number of low-income ratepayers make complete and timely payments and, even for those who don't, outstanding arrears, and thus dollars at risk to the utility, are less as well.

Conservation is not wisely promoted, however, simply by the blind expenditure of dollars. The design of conservation programs must take into consideration why low-income households do not otherwise participate in conservation programs, even where economically rational. This process involves making determinations of the market barriers that impede the penetration of conservation measures and the development of strategies that address those barriers directly.
APPENDIX A:

PUBLIC UTILITIES FORTNIGHTLY:

A COST-BASED RESPONSE TO LOW-INCOME ENERGY PROBLEMS
APPENDIX B:

REPORT OF THE COMMITTEE ON ARREARAGE FORGIVENESS
WARWICK (RHODE ISLAND) PIPP

February 1988

All parties involved with the Warwick Percentage of Income Payment Plan (PIPP) agree that the forgiveness of arrears is an essential part of a PIPP. The purpose of a PIPP is to bring home energy bills for income-eligible households within an "affordable" level. This is done through a two-step process. The first step is to address the ability to pay current bills through the copayment/LIHEAP process. The second step is to address the ability to retire burdensome arrears. This is done through the arrearage forgiveness provision.

All parties agree with the observation of the Rhode Island Public Utilities Commission that these two program elements should be viewed "as a unified design and strategy" and that "what results should be a synergism predicated upon the ability to erase previously incurred bills with current consumption payments." Having agreed to this principle, however, does not resolve the basic issue of who bears the cost of the forgiven arrears.

Fairness would dictate that all of the involved interests bear some portion of the cost, or at least of the risk, involved with such a provision. This conclusion is based upon the recognition that all of the involved groups -- the clients, the utilities, and the state -- obtain some unique benefit from the PIPP. Clients who make their copayments are assured that their entire current energy bill is paid. The utilities obtain a greater degree of payment by low-income customers and a guarantee that if the poor make some payment within their financial capability (even if only for a portion of their bill), the state will pay the rest of the bill. The state is assured that the limited funds that it has to distribute is provided to clients in a way designed to maximize benefits to the client population thus limiting costs in this and other programs in both the short and long-term. Accordingly, each of the involved parties will provide some contribution to ensure the feasibility of the arrearage forgiveness program and, through it, of the PIPP.

First, the clients will not have their entire pre-program arrears subject to forgiveness. This program element, in the first instance, was intended to relieve customers who had fallen "hopelessly behind" as a result of their poverty status. Arrears of less than $50 do not represent the type of arrears that implicate this policy
concern. Accordingly, clients will be responsible for the first $50 of their pre-PIPP arrears.

Second, despite the best efforts of the utilities and the state to determine whether there will be a net cost to the utility and its ratepayers as a result of the arrearage forgiveness program—the forgiveness of arrears will drive uncollectibles up, at least in the short-term, while the guarantee of payment by the state will correspondingly drive both collection costs and uncollectibles down—has not been possible to develop quantification of the net cost (if any) taking into consideration the entire spectrum of factors that affect such a figure. However, in consideration of the agreement by the state LIHEAP program to pay the difference between a client's copayment and the actual current bill, thus ensuring that current bills will remain paid, the utilities agree that the risk of whether there will be a net cost resulting from the arrearage forgiveness program will be borne by the company and its ratepayers.

Third and finally, it is agreed that it would be unfair for the utilities to bear the risk of shouldering the cost of past due bills and the risk of non-payment of current bills attributable to PIPP program shortfalls. Accordingly, the state agrees that it will seek to guard, through legislative or other appropriate means, against PIPP financial shortfalls developed during a program year. Such shortfalls might result, for example, from such uncontrollable factors as increased energy prices, increased program participation rates, colder than normal winters, or federal funding cutbacks occurring after the development of a program year matrix.

In sum, each party recognizes that it obtains a unique, real and substantial benefit from the PIPP. All parties further recognize that they bear some responsibility for the success of the PIPP and that they must play an integral part in assuring that the PIPP will be feasible and will succeed. Accordingly, the customer will bear the cost of the first $50 of arrears; the utilities and their ratepayers will bear any net additional cost associated with payment of forgivable arrears; and the state will bear the cost associated with guaranteeing the payment of current bills in light of uncontrollable program cost increases occurring during the program year.

To effectuate these agreements, the parties agree that they will jointly seek such legislation as is deemed desirable expressly authorizing the arrearage forgiveness component of a PIPP as an additional exemption under the state's utility rate "non-discrimination" statute.
MEMBERS OF THE
ARREARAGE FORGIVENESS COMMITTEE

Mark Toney, Direct Action for Rights and Equality*
Lawrence Reilly, The Narragansett Electric Company
John Rao, Rhode Island Legal Services Corporation
Ron Acton, The Providence Gas Company
John Forryan, The Narragansett Electric Company
Scott Doyle, Coalition for Consumer Justice*
Fran Pinto, Warwick Community Action Agency

*Representing the PIPP Coalition. The PIPP Coalition consists of the following consumer groups: (1) Coalition for Consumer Justice; (2) Communidad en Accion; (3) Direct Action for Rights and Equality; (4) George Wiley Center; and (5) Urban League of Rhode Island.

STAFF OF THE ARREARAGE FORGIVENESS COMMITTEE:

Matt Guglielmetti, Governor's Office of Energy Assistance
Roger Colton, National Consumer Law Center
APPENDIX C:

STIPULATED RATE TREATMENT OF RHODE ISLAND ARREARAGE FORGIVENESS COSTS
APPENDIX D:

INTERIM REPORT
WISCONSIN GAS AND CAP SERVICES
PILOT ARREARAGE REDUCTION PROGRAM
APPENDIX E:

FIRST YEAR ACCOUNT PERFORMANCE

CONNECTICUT CONTINUOUS SERVICE PILOTS

(Page 1 of 2)
APPENDIX E:

FIRST YEAR ACCOUNT PERFORMANCE

CONNECTICUT CONTINUOUS SERVICE PILOTS

(Page 2 of 2)
APPENDIX F:

COLORADO ENERGY ASSISTANCE FOUNDATION
PROPOSED ARREARAGE MANAGEMENT PROGRAM
APPENDIX G:

IRS RULING RE. TAXABILITY OF FORGIVEN UTILITY ARREARS
(July 1991)
APPENDIX H:

REVENUE RULING 78-170
APPENDIX I:

REVENUE RULING 82-106
WEATHERIZATION ARREARS SAVINGS

The purpose of this study is to examine the effects of Wisconsin Gas Company's Weatherization Program on the arrearages of low income customers. Our methodology was based upon the review of consumption for weatherized accounts designated as EIP (Early Identification Program) customers. The accounts were separated into single family and two-family groups, and data was gathered for the period of one year before and one year after weatherization. Due to the integrated nature of two-family energy use and weatherization measures, two-family accounts were treated as one dwelling unit.

For those accounts with acceptable histories, 134 dwellings out of 385, post weatherization base load and heat factors were derived. The factors were applied to the year preceding weatherization in order to normalize the post weatherization consumption. Normalization for our purposes represents adjusting the data to pre-weatherization period conditions. Comparison of actual pre-weatherized use to the calculated normalized use established the therm savings attributable to weatherization. Subsequently, normalized bill amounts were computed and, using customer payments from the pre-weatherized period, "normalized arrears" were derived. Comparison of the "normalized arrearages" to the actual pre-weatherization arrears produced arrears savings associated with weatherization.

The Tables on Page 2 (Single Family) and Page 4 (Two Family) summarize the results of the study. Unless otherwise indicated, all figures are annual averages classified by weatherization category. A detailed description of the data selection process, normalization methodology, and distribution graphs of usage and arrears savings are provided in the attached appendix.
### SINGLE FAMILY

<table>
<thead>
<tr>
<th></th>
<th>INSULATION ONLY</th>
<th>INSULATION FURNACE REPLACE</th>
<th>FURNACE REPLACED ONLY</th>
<th>INSULATION FURNACE TUNE-UP</th>
<th>ALL ITEMS</th>
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<td></td>
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<tr>
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<tr>
<td>NORMALIZED</td>
<td>1684</td>
<td>2192</td>
<td>1852</td>
<td>2017</td>
<td>1870</td>
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<tr>
<td>SAVINGS</td>
<td>454</td>
<td>1227</td>
<td>476</td>
<td>416</td>
<td>570</td>
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<tr>
<td>SAVINGS AS % OF TOTAL LOAD</td>
<td>21.2%</td>
<td>35.9%</td>
<td>20.4%</td>
<td>17.1%</td>
<td>23.4%</td>
</tr>
</tbody>
</table>

| **HEAT LOAD**          |                 |                            |                       |                             |           |
| PRIOR ACTUAL           | 1562            | 2496                       | 1700                  | 1777                        | 1781      |
| NORMALIZED             | 1092            | 1425                       | 1317                  | 1307                        | 1235      |
| SAVINGS                | 469             | 1071                       | 383                   | 470                         | 546       |
| SAVINGS AS % OF HEAT LOAD | 30.0%       | 42.9%                      | 22.5%                 | 26.5%                       | 30.7%     |

| **ARREARS SAVINGS**    |                 |                            |                       |                             |           |
| Actual prior bill      | $1369           | $2153                      | $1481                 | $1553                       | $1553     |
| Actual prior paid      | $689            | $1121                      | $678                  | $863                        | $792      |
| Actual prior arrears   | $680            | $1032                      | $803                  | $690                        | $761      |
| Normalized bill        | $1087           | $1396                      | $1187                 | $1294                       | $1200     |
| Actual prior paid      | $689            | $1121                      | $678                  | $863                        | $792      |
| Normalized arrears     | $398            | $275                       | $509                  | $431                        | $408      |
| Arrears benefit        | $282            | $757                       | $294                  | $259                        | $353      |
| Weatherization cost    | $1522           | $3611                      | $2032                 | $1767                       | $2001     |
| Savings return         | 18.2%           | 21.0%                      | 14.4%                 | 14.6%                       | 17.6%     |

169 Based on total load.
SINGLE FAMILY

The overall therm savings rate for single family dwellings was 23.4%. The combination of insulation and furnace replacement provided the greatest savings rate. Individual dwelling therm savings rates (See Appendix A.6) varied with a high of 52.2% and a low of -37.9% wherein the occupant actually used more gas. Because usage depends not only upon the weatherization of a home but consumer behavior as well, varying individual savings rates were understandable. This aside, approximately 64% of this group fell in the 10% to 35% savings range.

In addition, therm savings based on heat load were computed. An overall single family heat load savings rate of 30.7% was produced. Interestingly enough, the ranking of savings rates changed with "Insulation and Furnace Tune-up" replacing "Furnace Only" as the third highest. As is most likely the case, the higher baseload associated with a standing furnace pilot in "Insulation and Furnace Tune-up" accounts served to conceal some of the effects of weatherization on overall use.

The distribution of heat savings rates, although slightly broader in dispersion (See Appendix A.6) produced a range similar to that based on total usage. Individual heat savings rates exhibited a high of 60.2% and a low of -14.5% with approximately 60% falling in the 25% to 50% savings range.

As would be expected from its therm savings, "Insulation and Furnace Replacement" provided the greatest arrears savings return. However, because of the greater cost of implementing this measure, its return on investment fell more in line with that of "Insulation Only." The individual savings rates exhibited a wide range from a high of 64.3% to a low of -42.0% (See Appendix A.6) with 68% of the group in the 10% to 35% savings range.

An illustration of the weatherization arrears effect is presented on page 3A. The graph provides several key points of interest as to how weatherization relates to arrears. First and most obvious, is the general shift toward less arrears. The change in average arrears from a pre-weatherization level of $750 to $400 following weatherization is reflected by the movement of the red bar chart elements toward zero. The second point is the shift out of the high arrears range ($1,000 or more). Given the economic resources of this group, arrearages of that size are least likely to be recovered (uncollectibles).

Finally, under our assumptions, 27% of the group would have annual arrears of $100 or less following weatherization as compared to 9% before. This is significant because it indicates the potential for payment self-sufficiency.
<table>
<thead>
<tr>
<th></th>
<th>INSULATION ONLY</th>
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<th>FURNACE REPLACED ONLY</th>
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<tr>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>653</td>
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</tr>
<tr>
<td>SAVINGS AS %</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OF TOTAL LOAD</td>
<td>25.3%</td>
<td>25.9%</td>
<td>22.1%</td>
<td>19.2%</td>
<td>24.1%</td>
</tr>
<tr>
<td><strong>HEAT LOAD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRIOR ACTUAL</td>
<td>2191</td>
<td>3045</td>
<td>2154</td>
<td>2270</td>
<td>2459</td>
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<tr>
<td>NORMALIZED</td>
<td>1271</td>
<td>2078</td>
<td>1688</td>
<td>1527</td>
<td>1602</td>
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<tr>
<td>SAVINGS</td>
<td>920</td>
<td>967</td>
<td>466</td>
<td>743</td>
<td>857</td>
</tr>
<tr>
<td>SAVINGS AS %</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>OF HEAT LOAD</td>
<td>42.0%</td>
<td>31.8%</td>
<td>21.6%</td>
<td>32.7%</td>
<td>34.8%</td>
</tr>
<tr>
<td><strong>ARREARS SAVINGS</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Actual prior bill</td>
<td>$1935</td>
<td>$2656</td>
<td>$1891</td>
<td>$2013</td>
<td>$2163</td>
</tr>
<tr>
<td>Actual prior paid</td>
<td>$1298</td>
<td>$1349</td>
<td>$1198</td>
<td>$1022</td>
<td>$1246</td>
</tr>
<tr>
<td>Actual prior arrears</td>
<td>$ 637</td>
<td>$1307</td>
<td>$ 693</td>
<td>$ 992</td>
<td>$ 916</td>
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<tr>
<td>Normalized bill</td>
<td>$1464</td>
<td>$1989</td>
<td>$1488</td>
<td>$1644</td>
<td>$1661</td>
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<tr>
<td>Actual prior paid</td>
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<td>$1349</td>
<td>$1198</td>
<td>$1022</td>
<td>$1246</td>
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<tr>
<td>Normalized arrears</td>
<td>$ 166</td>
<td>$ 640</td>
<td>$ 290</td>
<td>$ 622</td>
<td>$ 415</td>
</tr>
<tr>
<td>Arrears benefit</td>
<td>$ 471</td>
<td>$ 667</td>
<td>$ 403</td>
<td>$ 370</td>
<td>$ 502</td>
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<tr>
<td>Weatherization cost</td>
<td>$2150</td>
<td>$4347</td>
<td>$3212</td>
<td>$2216</td>
<td>$2913</td>
</tr>
<tr>
<td>Savings return</td>
<td>21.9%</td>
<td>15.3%</td>
<td>12.5%</td>
<td>16.7%</td>
<td>17.2%</td>
</tr>
</tbody>
</table>

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^170 Based on total load.
TWO FAMILY

Results of the two-family group indicates a therm savings rate of 24.1%. Although the savings percentages present a narrower spread than that of the single family, "Insulation Only" and "Insulation with Furnace Replacement" are the highest. The comparative drop in the "Insulation and Furnace Replacement" savings rates, as compared to single family, stems somewhat from a furnace replacement affecting one account more than the other. Consequently, this results in a lowering of the savings rate for the dwelling as a whole. Individual therm savings rates fell in a range of 43.6% to -5.5% (See Appendix A.7). Over 70% of the dwellings fell in the 10% to 35% savings range comparing favorably to that of single family.

Heat load savings for the two-family dwellings were also computed. The distribution, although in a wider range, was similar to that of the overall therm savings rates. The individual savings rates ranged from a high of 72.2% to a low of -9.3% with approximately 70% of the dwellings falling in the 25% to 50% savings range (See Appendix A.7).

Individual arrears savings rates based on total therm use, peaked at 57.6% and bottomed out at -4.2%. As compared to single family, the spread was narrower (See Appendix A.7). Over 75% of the dwellings fell in the 10% to 35% savings range with 26% concentrated in the 15% to 20% range.

As with the single family group, a graphic depicting the movement of pre and post weatherization arrearages is provided on Page 5A. The shift toward lower arrears is evident. Under our assumptions, nearly 28% of the dwellings would generate $100 or less of annual arrears with weatherization as opposed to 9% without. Those dwellings generating $1,000 or more arrears were more than halved from pre-weatherization levels.
CONCLUSIONS

To the extent that insulation measurements should provide a five-year payback, and furnace replacements a 7-year payback, the overall effect on consumption for the study group exceeded program guidelines. To some degree this was not a surprise considering the high energy consumption levels for the subject dwellings. Still, the results were encouraging.

Of a less positive nature, twenty-one (15.7%) of the dwellings, provided savings rates of less than 10%, with approximately one-third of those using more gas following weatherization. This confirms the need for job-site follow-up and consumer education to maximize the benefit to ratepayers from the arrears savings generated by the program.

The study indicates that single family dwellings generated on average $353 less annual arrears after weatherization. For the two-family group, weatherization reduced arrears $502 annually. Taken a step further, for 1,300 dwellings weatherized annually and split evenly between single and two-family jobs, over $550,000 in billed arrears or approximately $360,000 in gas cost would have been avoided.

Finally, within the parameters of this study, 20% of the study group would have generated $0 or less annual arrears with weatherization as compared to 5% without. The reflects favorably on weatherization potential as an arrears eliminator.