HOME ENERGY AFFORDABILITY IN IDAHO:

Low-Income Energy Affordability Needs and Resources

Prepared for:

Community Action Partnership Association of Idaho (CAPAI)
Boise, Idaho

Prepared by:

Roger D. Colton
Fisher, Sheehan & Colton
Public Finance and General Economics
Belmont, Massachusetts

November 2011

"We, in conjunction with utilities, and social service agencies, have all worked hard to devise ways to [e]nsure that low-income Pennsylvanians have utility services which really are necessities of life as the tragic fire deaths associated with the loss of utility service underlined. . .

"However, for the poorest households with income considerably below the poverty line, existing initiatives do not enable these customers to pay their bills in full and to keep their service. . .Consequently, to address realistically these customers' problems and to stop repeating a wasteful cycle of consecutive, unrealistic payment agreements that cannot be kept, despite the best of intentions, followed by service termination, then restoration, and then more unrealistic agreements, we believe that new approaches like PECO's CAP program and the OCA's proposed EAP program should be tried."

Pennsylvania Public Utility Commission

Table of Contents

Table of Tables

NOTES

INTRODUCTION

This report presents a comprehensive energy needs assessment for the State of Idaho. Several themes underlie the discussion that follows. First, there is a lack of sufficient household resources to allow low-income households to consistently pay their home energy bills on a full and timely basis. This inability-to-pay is not a "budgeting" problem. No amount of household "budgeting" will allow a household with an annual income of $30,000 meet basic family needs of $45,000. It may be possible to *improve* the situation with budget facilitators (such as levelized budget billing). At some point, however, additional financial resources must be made available. One element of this report, therefore, is to try to inventory the existing resources and to identify how and to what degree those existing resources might be supplemented.

Second, the search for additional resources seeks to set ideology aside. On the one hand, the report seeks to engage in problem-solving. In this regard, it specifically addresses and rejects the notion often advanced by utility industry stakeholders, that inability-to-pay is a "social" problem and no a "utility" problem (i.e., "whatever the problem is, it is not *our* problem"). In a variety of contexts, the observation that "that's not my responsibility" would be the easy, but inappropriate, response.

On the other hand, the report also rejects the notion that society "owes" low-income households continuing home energy service without reciprocal obligations on the part of the customer. Low-income customers do not earn credits toward pre-existing arrears without making corresponding "copayments" toward the first $180 of past-due bills. Moreover, once an affordable discount is provided, if payments are still not made, the low-income program participant goes into the collection cycle, including the disconnect cycle, the same as anyone else.

Third, the report seeks to emphasize the cross-cutting nature of the issues presented by home energy unaffordability. The Home Energy Affordability Gap is not just an energy problem; it is also a housing problem. A proposal to increase the self-interested participation of Section 8

landlords is thus included. The Affordability Gap is not just a utility problem; it is also a public safety problem. A proposed to increase the self-interested participation of the insurance industry is thus included. The Affordability Gap is not just an energy problem; it is also a food and nutrition problem. A proposal to build on the Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps) "excess shelter deduction" process is included.

Finally, the report seeks to emphasize the need for a "toolbox approach' to addressing home energy affordability problems. It builds on the age-old maxim that "when your only tool is a hammer, you tend to see every problem as a nail." There is a need for long-term efficiency improvements in low-income housing, and the report makes recommendations for such. But weatherization can never be an adequate response (standing alone) to low-income energy unaffordability. There is a need for ongoing rate assistance, but there will also be, for quite legitimate reasons, an ongoing need for short-term crisis assistance. There is a need for financial assistance; but there is also a need for customer service assistance. There is a need for aid to regulated natural gas and electric utilities; but there is also a need to aid propane customers.

The pages that follow will seek to explore the what, the why, and the how of maximizing existing sources of energy assistance and developing new sources. This assessment is presented with the following structure:

- Part 1 presents an assessment of low-income home energy affordability needs in Idaho;
- Part 2 documents the various factors that contribute to the incidence and depth of home energy unaffordability in Idaho;
- Part 3 reviews the consequences of those affordability needs from the perspective both of society and of the public utilities serving the low-income community;
- Part 4 documents the various sources of currently-existing energy assistance for low-income Idaho residents;
- Part 5 proposes a low-income rate affordability program for Idaho utilities;
- Part 6 considers a "business case" for pursuing a rate affordability program in Idaho; and
- Part 7 reviews a series of specific actions that Idaho could take to expand existing and potential sources of energy assistance to address the unaffordability of home energy.

The last section of this report compiles and summarizes the complete set of recommendations that are discussed throughout the text of the document. In their essence, these parts will present a tapestry considering the extent and geographic distribution of home energy affordability needs in Idaho. The assessment then identifies the existing and potential resources available to meet those affordability needs and makes recommendations.

PART 1:
HOME ENERGY AFFORDABILITY IN IDAHO

The State of Idaho has a large Home Energy Affordability Gap facing its low-income households, with available resources grossly insufficient to address the problem. As a result of this mismatch between energy bills and the resources needed to pay them, many low-income households incur unpaid bills and experience the termination of service associated with those arrears. In addition, the paid-but-unaffordable bill is a real phenomenon in Idaho. Even when low-income households pay their bills in a full and timely manner, they often suffer significant adverse hunger, education, employment, health and housing consequences in order to make such payments.

THE HOME ENERGY AFFORDABILITY GAP IN IDAHO

Energy prices have placed a substantial burden on the public and private energy assistance agencies in Idaho. Current home heating, cooling and electric bills in Idaho have driven the average *per-household* Home Energy Affordability Gap for households living with incomes at or below 185% of the Federal Poverty Level (FPL) to crushing levels. The average annual shortfall between actual and affordable home energy bills for households at or below 185% of FPL now reaches more than $800 per household. The aggregate Home Energy Affordability Gap in Idaho now reaches more than $114 million statewide.

This $114 million is *not* the total low-income home energy bill in Idaho. Rather, the $114 million is the Affordability Gap, the dollar amount by which actual home energy bills exceed affordable home energy bills.

The Affordability Gap differs by geographic region within the state. The aggregate Home Energy Affordability Gap will differ by factors that include the heating degree days (HDDs) and

cooling degree days (CDDs); the number of low-income households and the poverty level at which those households live; the type and size of housing unit; the mix of heating fuels (e.g., natural gas, electricity, fuel oil); and other similar factors.

The Affordability Gap in Idaho is rapidly increasing. Spiraling home energy prices have increased the per-household Affordability Gap by nearly $300 since 2006. Compared to the average Affordability Gap of $523 given 2006 fuel prices in Idaho, the average Affordability Gap for 2010 reached $802.

Table 1: Home Energy Affordability Gap: 2006 – 2010 (Idaho)

	2006	2007	2008	2009	2010
Statewide aggregate Affordability Gap	$74,790,645	$122,730,326	$79,127,486	$75,266,341	$114,530,581
Per Household Affordability Gap	$523	$859	$554	$526	$802

NOTES:

SOURCE: Annual Home Energy Affordability Gap. The Home Energy Affordability Gap is published each year releasing data for the prior year. The 2010 Affordability Gap, for example, was released in April 2011.

The *total* Home Energy Affordability Gap (for all households) is not the only concern presented in Idaho. One additional cause for particular concern is the fact that the Affordability Gap is reaching increasingly into what historically has been seen to be more moderate income households. Home energy burdens (bills as a percentage of income)[1] now exceed the affordable level for households with income between 150% and 185% of Federal Poverty Level.

These burdens for households with income between 150% and 185% of Federal Poverty Level, the highest income level studied, are significant because the home energy burden increases as household incomes decrease. Home energy burdens for households at lower Poverty levels will be substantially greater than twice the affordable level.

The generally accepted measure of "being poor" in the United States today indexes a household's income to the “Federal Poverty Level" published each year by the U.S. Department of Health and Human Services (HHS). The Poverty Level looks at income in relation to household size. This measure recognizes that a three-person household with an annual income of $6,000 is, in fact, "poorer" than a two-person household with an annual income of $6,000. The federal government establishes a uniform "Poverty Level" for the 48 contiguous states. A household's "level of Poverty" refers to the ratio of that household's income to the Federal Poverty Level. For example, the year 2011 Poverty Level for a two-person household was $14,710. A two-person household with an income of $7,355 would thus be living at 50% of Poverty. A three-person household with an income of $7,355 would be living at 40% of Poverty Level. Table 2 presents the Federal Poverty guidelines by household size for the years 2007 through 2011.

[1] A “home energy burden” is simply the ratio of the home energy bill to gross household income. A household with an annual income of $8,000 and a total home energy bill of $2,000, for example, has a home energy burden of 25% ($2,000 / $8,000 = 0.25).

Table 2. Federal Poverty Guidelines by Household Size (2007 – 2011)

HH Size	2007	2008	2009	2010	2011
1	$10,210	$10,400	$10,830	$10,830	$10,890
2	$13,690	$14,000	$14,570	$14,570	$14,710
3	$17,170	$17,600	$18,310	$18,310	$18,530
4	$20,650	$21,200	$22,050	$22,050	$22,350
5	$24,130	$24,800	$25,790	$25,790	$26,170
6	$27,610	$28,400	$29,530	$29,530	$29,990

For each additional person, add:
2007: $3,480
2008: $3,600
2009: $3,740
2010: $1,740
2011: $3,820

Table 3 below documents the growth in Idaho's Home Energy Affordability Gap in recent years by Poverty Level. Note that while the dollar growth in the total Home Energy Affordability Gap is not substantially higher in the top two income tiers (125-149% and 150-185% of Federal Poverty Level), the *percentage* growth in the top two tiers is much higher. The reason is that increasing energy prices have pushed households at these income levels into the "unaffordable" range. While in the past, home energy bills to these households would have been affordable, and thus not contributed to the Home Energy Affordability Gap, at current prices, they *are* unaffordable and thus contribute to the Gap in a substantial way.

Table 3: Increase in Home Energy Affordability Gap by Federal Poverty Level (2004 – 2010) (Idaho)

	Ratio of Income to Federal Poverty Level					
	Below 50%	50 - 74%	75 - 99%	100 - 124%	125 - 149%	150 - 185%
2004	$22,506,458	$10,197,693	$9,452,902	$6,328,928	$1,674,045	$310,533
2010	$36,108,819	$18,477,457	$19,942,026	$18,152,025	$13,840,271	$8,009,982
Growth in Gap (dollars)	$13,602,361	$8,279,764	$10,489,124	$11,823,097	$12,166,226	$7,699,449
Growth in Gap (percent)	60%	81%	111%	187%	727%	2,479%

The growth in Idaho's Affordability Gap in the more moderate income ranges has significant policy ramifications for fuel assistance funding. As the Home Energy Affordability Gap expands "upwards" (to more moderate income households), the need to provide assistance expands "upwards" as well. The significance of this is two-fold:

First, if funding remains constant, when the number of households that must be served increases, fewer dollars are available on a per-household basis. This is true even though the per-household Affordability Gap in Idaho has increased significantly since the base year

Second, the number of households in each range of Federal Poverty Level is not equal. Indeed, the number of households in each Poverty Level range increases as incomes increase. Table 4 below presents the number of Idaho households in each range of Poverty Level as of the 2010 Census. There are:

- more households in the 50 – 99% range of Federal Poverty Level than in the below 50% range;
- more in the 100 – 149% range than in the 50 – 99% range;
- more in the 150 – 200% range than in the 100 – 149% range.

Table 4. Poverty Households in Idaho (2010)

Poverty Level	No. of Households
Below 50%	29,000
50 – 99%	49,000
100 – 149%	62,000
150% - 200%	68,000

SOURCE: CPS Table Creator, Current Population Survey, Annual Social and Economic Supplement (Idaho), U.S. Census Bureau.

As the need for energy assistance expands into higher income households, in other words, there is a need to provide proportionately more energy assistance simply to remain even.

The increasing home energy affordability gap in Idaho results from the fact that home energy bills are increasing faster than incomes, thus increasing the "home energy burden" imposed on low-income households. Increasing energy prices have placed a clear and substantial burden on low-income households. In 2010, all Poverty ranges at or below 185% of the Federal Poverty Level have average home energy burdens above an affordable level of six percent (6%).

Home energy burdens should be of concern to a public utility when they exceed 6% of household income. An affordable home energy burden is 6% of income.[2] This affordable home energy burden is to be distinguished from a "severe" energy burden of 15%.

It is generally accepted that a household's "shelter burden" (rent/mortgage plus taxes plus utilities) should not exceed 30% of income.[3] In addition, a household's home utility bill should not exceed 20% of the household's shelter costs. Combining those two yields an affordable home energy

[2] See generally, Carroll, Colton and Berger (2007). *Ratepayer Funded Low-Income Energy Programs: Performance and Possibilities*, at 16, Apprise Inc.: Princeton (NJ). The 6% threshold is for heating, cooling and baseload electric. To the extent that particular components of home energy are viewed apart, the affordable burden would be lower. An affordable baseload electric burden, for example, is considered to be 3% if the household heats with natural gas.

[3] It is universally accepted that total shelter costs are "unaffordable" if they exceed 30% of income. Total shelter costs include not only rent/mortgage, but all utilities. See generally, Schwartz and Wilson (2008). *Who Can Afford to Live in a Home: A Look at Data from the 2006 American Community Survey*" U.S. Census Bureau: Washington D.C. They state in relevant part:

> The conventional public policy indicator of housing affordability in the United States is the percent of income spent on housing. Housing expenditures that exceed 30 percent of household income have historically been viewed as an indicator of a housing affordability problem. The conventional 30 percent of household income that a household can devote to housing costs before the household is said to be "burdened" evolved from the United States National Housing Act of 1937.
>
> * * *
>
> Because the 30 percent rule was deemed a rule of thumb for the amount of income that a family could spend and still have enough left over for other nondiscretionary spending, it made its way to owner-occupied housing too. Prior to the mid-1990s the federal housing enterprises (Fannie Mae and Freddie Mac) would not purchase mortgages unless the principal, interest, tax, and insurance payment (PITI) did not exceed 28 percent of the borrower's income for a conventional loan and 29 percent for an FHA insured loan. Because lenders were unwilling to hold mortgages in their portfolios, this simple lender ratio of PITI to income was one of many "hurdles" a prospective borrower needed to overcome to qualify for a mortgage. There are other qualifying ratios as well; most of which hover around 30 percent of income. The amount of debt outstanding and the size and frequency of payments on consumer installment loans and credit cards influence the lender's subjective estimation of prospective homebuyers' ability to meet the ongoing expenses of homeownership. Through the mid-1990s, under Fannie Mae guidelines for a conventional loan, total allowable consumer debt could not exceed eight percent of borrower's income for conventional mortgage loans and 12 percent for FHA-insured mortgages. So through the mid-1990s, underwriting standards reflected the lender's perception of loan risk. That is, a household could afford to spend nearly 30 percent of income for servicing housing debt and another 12 percent to service consumer debt. Above these thresholds, a household could not afford the home and the lender could not afford the risk. While there are many underwriting standards, none of them made their ways into the public policy lexicon like the 30 percent of income indicator of housing affordability.
>
> The mid to late 1990s ushered in many less stringent guidelines. Many households whose housing costs exceed 30 percent of their incomes are choosing then to devote larger shares of their incomes to larger, more amenity-laden homes. These households often still have enough income left over to meet their non-housing expenses. For them, the 30 percent ratio is not an indicator of a true housing affordability problem but rather a lifestyle choice. But for those households at the bottom rungs of the income ladder, the use of housing costs in excess of 30 percent of their limited incomes as an indicator of a housing affordability problem is as relevant today as it was four decades ago.

burden of six percent (6%).[4] Table 5 shows the home energy burdens by range of Federal Poverty Level, along with the average per-household and aggregate Affordability Gap on a statewide basis. The Gap is now considerable throughout all ranges of Poverty.

Table 5. Affordability Gap by Range of Federal Poverty Level (2010) (Idaho)

Poverty Level	Number of Households	Average per HH Burden (%)	Average Per HH Gap ($)	Aggregate Gap
0 – 49%	21,426	45.0%	$1,685	$36,108,819
50 – 74%	14,317	18.0%	$1,291	$18,477,457
75 – 99%	19,086	12.9%	$1,045	$19,942,026
100 – 124%	23,265	10.0%	$780	$18,152,025
125 – 149%	26,443	8.2%	$523	$13,840,271
150 – 184%	38,338	6.7%	$209	$8,009,982

Two observations become evident about the home energy burdens facing Idaho's low-income households. Table 5 shows that:

- First, the most dramatic burden of unaffordable home energy bills falls on Idaho's lowest income households. In 2010, Idaho households with income at or below 50% of the Federal Poverty Level were billed 45% of their income simply for their home energy bills.[5]

- Second, "moderately" low-income households (those with income between 100% and 150% of the Federal Poverty Level) are experiencing home energy burdens that will result in almost assured payment problems at some point in the year. While a 6% energy burden is considered to be the trigger of "affordability," home energy burdens of 10% to 12% are considered to be the trigger for probable bill payment problems.[6] These households, which had been above "affordability" but below the payment-trouble trigger, have moved into a dangerous range of unaffordability.

Clearly, the largest per-household Home Energy Affordability Gap falls in the lowest income ranges. The lowest range examined involves households with income between 0% and 50% of the Federal Poverty Level. In reviewing these results, however, it is important to remember that Poverty Level involves income taking into account household size. A 2-person household with income at 30% of Poverty Level has a lower dollar income than a 3-person household with income at 30% of Poverty Level. Since mean household size differs by county, the dollar level of income will differ as well, even given identical levels of Poverty. A county with a mean household size of 2.62 persons per household, in other words, will exhibit different income

[4] This report sets aside for the moment the inclusion of water and sewer utility bills in this six percent.
[5] One should note that being "billed" 55% of income for home energy, and actually *paying* 55% of income for home energy are two separate issues.
[6] While these bill payment problems may, but will not necessarily, be chronic throughout the year, such problems will arise at some point during the year.

characteristics, and thus home energy burdens with a corresponding Affordability Gap, than a county with a mean household size of 2.12 persons per household all other things equal.

Finally, as Table 6 documents, the "higher income" low-income households (those with income between 150% and 185% of the Federal Poverty Level) now see unaffordable home energy bills on average. While households with income at 150% to 185% of Federal Poverty Level had home energy burdens *below* the 6% affordability threshold in 2008, they had bills that are noticeably higher than that which would be considered "affordable" by 2010.

Table 6. Affordability Gap by Range of Federal Poverty Level (2008 - 2010) (Idaho)

Poverty Level	2008		2009		2010	
	Average per HH Burden (%)	Average Per HH Gap ($)	Average per HH Burden (%)	Average Per HH Gap ($)	Average per HH Burden (%)	Average Per HH Gap ($)
0 – 49%	39.0%	$1,371	37.8%	$1,377	45.0%	$1,685
50 – 74%	15.6%	$990	15.1%	$981	18.0%	$1,291
75 – 99%	11.2%	$756	10.8%	$729	12.9%	$1,045
100 – 124%	8.7%	$500	8.4%	$468	10.0%	$780
125 – 149%	7.1%	$254	6.9%	$209	8.2%	$523
150 – 184%	5.8%	$74	5.6%	$34	6.7%	$209

Table 6 shows also that home energy affordability has increased in Idaho from 2008 to 2010. The average home energy burden for households with income at or below 50% of Federal Poverty Level increased from nearly 40% in 2008 to 45% in 2010. The home energy burden for households with income between 125% and 150% of Federal Poverty Level increased from 7% in 2008 to just over 8% in 2010.

Care should be taken whenever considering "average" figures, however, as experience in individual counties can vary widely from the average. For households with income less than 50% of Poverty Level, for example, the per household Affordability Gap in Idaho in 2010 ranges widely, with the $1,409 in Nez Perce County (lowest) being just more than half of the $2,648 Affordability Gap in Oneida County (highest) for households with income below 50% of Poverty Level. For households with income at or below 50% of Poverty level, the average Affordability Gap was between $1,400 and $1,700 in fifteen (15) counties and above $2,000 in twelve (12) counties. Roughly two-thirds of Idaho's counties (29 of 44) had an average Affordability Gap of more than $1,700 for their lowest income households. Table 7 presents the data.

Table 7. 2010 Affordability Gap by County (Income at or below 50% of Federal Poverty Level) (Idaho)

Average Affordability Gap	Number of Counties	Average Unweighted Gap in Dollars /a/
At or below $1,400	0	---
$1,401- $1,700	15	$1,556
$1,701 - $2,000	17	$1,836
$2,001 - $2,500	11	$2,214
$2,501 or more	1	$2,648

NOTES:

/a/ Average Gap reported here is not weighted by population. Each county is given equal weight.

While the number of counties with the higher per-household Affordability Gaps is large, these counties do not necessarily represent the bulk of Idaho's population. The 15 counties with an Affordability Gap of less than $1,700 for households with income below 50% of Federal Poverty Level represent more than 68% of the State's population. The 12 counties with an Affordability Gap of greater than $2,000 represent only eight percent (8%) of the State's population.

ACTUAL VERSUS AFFORDABLE UTILITY BILLS

One way to look at the problem of high energy burdens leads to the same results, but focuses on why these low incomes present a business problem to Idaho utilities as the providers of local home energy service. Actual average 2010 home energy bills in Idaho reached $162 per month.[7] In contrast, in order for monthly home energy bills to be affordable for the following specific populations, home energy bills would need to reach the following levels (defining an affordable bill to be 6% of household income):

- Single mother: $133.04
- Single father: $199.92
- Food Stamp recipient (gross income) (2010): $48.48

[7] The average annual residential bill was $1,943 in 2010. Fisher, Sheehan & Colton (April 2011). *2010 Home Energy Affordability Gap: Idaho*.

- SSI recipient (December 2010): $30.36

The average Idaho residential home energy bill, in other words, ranges from 20% ($162 / $133.04 = 1.22) to more than five times ($162 / $30.36 = 5.34) higher than that which is affordable to the state's low-income customers. Only a single father with the average income identified above would be able to afford a home energy bill.

As can be seen, delivering energy at an affordable burden cannot happen without additional assistance from Idaho energy vendors. For Idaho's public utilities, as the vendor of the unaffordable services, to argue that "the problem" is exclusively a social problem of inadequate income refuses to acknowledge the impacts which this unaffordability generates for the utility as a utility.

A GEOGRAPHIC ANALYSIS OF THE HOME ENERGY AFFORDABILITY GAP IN IDAHO

Home energy affordability in Idaho can be examined geographically as well as by income. The Affordability Gap is substantial and it is statewide. It reaches into every region of the state, including both urban and rural areas. Idaho counties with the lowest aggregate Affordability Gap nonetheless still have a Gap in the millions of dollars each year.

By Region

Idaho's Home Energy Affordability Gap is a statewide phenomenon. The state's counties have been categorized into the following regions:[8]

1. Northern: Boundary, Bonner, Kootenai, Benewah, Shoshone
2. North Central: Clearwater, Idaho, Latah, Lewis, Nez Perce
3. Southwestern: Ada, Adams, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley, Washington
4. Central: Blaine, Butte, Camas, Custer, Lemhi,
5. South Central: Cassia, Gooding, Jerome, Lincoln, Minidoka, Twin Falls
6. Eastern: Bonneville, Clark, Fremont, Jefferson, Madison, Teton
7. Southeastern: Bannock, Bear Lake, Bingham, Caribou, Franklin, Oneida, Power

Aggregate and Per-Household Gap by Region

Not surprisingly, due to the sheer size of the population, the biggest aggregate Affordability Gap arises in the Ada County region. Indeed, of the state's total $114.5 million Affordability Gap in 2010, $34.4 million was in Region 3. This large aggregate Affordability Gap arises notwithstanding the fact that Region 3 has the second lowest (out of seven regions) per-household Affordability Gap ($803) in the state. Only Region 5 ($800/household) has a lower

[8] The seven regions identified here are those regions recognized by the Idaho Department of Commerce.

per-household Affordability Gap. Indeed, the Region 3 average per-household Affordability Gap is 20% lower than the statewide average ($980).[9]

Table 8. Aggregate and Average Home Energy Affordability Gap by Region and Selected Poverty Level Ranges (Idaho) (2010)

	Total		< 50% FPL		76% - 100%		125% - 150% FPL		150% - 185% FPL	
Region /a/	Total ($000)	Average	Total ($000)	Average	Total ($000)	Average	Total ($000)	Average	Total ($000)	Average
1	$16,318	$817	$2,741	$1,637	$2,934	$1,020	$1,834	$527	$980	$231
2	$10,431	$881	$1,801	$1,675	$1,582	$1,072	$1,144	$589	$608	$299
3	$34,356	$803	$5,657	$1,696	$6,298	$1,059	$4,106	$550	$1,290	$244
4	$4,066	$1,151	$635	$1,963	$700	$1,351	$504	$862	$403	$569
5	$14,267	$800	$2,347	$1,729	$2,657	$1,068	$1,814	$539	$970	$221
6	$18,528	$1,360	$2,713	$2,287	$2,996	$1,587	$2,293	$1,027	$1,971	$691
7	$16,562	$1,128	$2,584	$2,112	$2,779	$1,436	$2,143	$896	$1,787	$572
Avg / Sum	$114,528	$980	$18,478	$1,868	$19,946	$1,223	$13,838	$706	$8,009	$396
Avg.+10%		$1,078		$2,055		$1,345		$777		$436
Avg –10%		$882		$1,681		$1,101		$635		$356

/a/ The statewide average presented in this Table is not population-weighted. It is the sum of the individual county figures divided by the number of counties. It is not comparable to the average Home Energy Affordability Gap discussed earlier in this paper.

The significant geographic spread of the Affordability Gap is evident in the aggregate Gaps. Even outside Ada County (and Region 3), four regions (Regions 1, 5, 6 and 7) had an aggregate Affordability Gap of more than $14 million. In addition, Region 2 had an Affordability Gap in excess of $10 million, while the lowest Gap in the state ($4.1 million) occurred in Region 4.

Table 8 shows the aggregate and average affordability Gap by region for the total population below 185% of Federal Poverty Level along with selected ranges of Poverty Level.

Idaho is clustered reasonably closely around the unweighted regional average. In only three regions (4, 6 and 7) are the average per household Gaps greater than the unweighted regional average gap plus 10% ($980 average vs. $1,078 average + 10%). Similarly, in three regions (1, 3 and 5) is the average per household Gap less than the unweighted regional average gap minus

[9] References to a "statewide average" in this section alone are to an unweighted average of the county figures. The "statewide average" figure in this section alone does not take into account population size. The figure cannot be compared to the earlier "statewide average" Affordability Gap.

10% ($1,078 average vs. $882 average minus 10%). In Region 2, the average per-household Gap is almost identical to the statewide average minus 10% ($881 Gap for Region 2 v. $882 for statewide average minus 10%).

The variance from the unweighted regional average does not vary much as incomes vary. For the income range of between 125% and 150% of Poverty, four regions (4, 6 and 7) have per household Gaps above the unweighted regional Gap plus 10%). At that Poverty Level, three regions (1, 2 and 3) have per household Gaps less than the statewide Gap minus 10%. By the time incomes reach 200% to 300% of Poverty Level, while three regions (3, 6 and 7) have per household Gaps greater than the unweighted regional average Gap plus 10%, the remaining four had per household Gaps $100 or more smaller than that average minus 10%..

As is evident, care must be taken in considering a statewide average as being illustrative of the affordability of home energy in any particular region. The per-household Affordability Gap in each region is likely to differ from the statewide number; in addition, the extent to which regional data varies from the statewide average depends on the specific region being considered. While some regions (e.g., 4, 6 and 7) consistently exhibit higher per household Affordability Gaps than the state as a whole, others just as consistently exhibit lower Affordability Gaps than the state as a whole.

Regional Contributions to State Totals

As incomes increase, the disparities in the aggregate Affordability Gap (per Poverty Range) smooth out as well. Table 9 shows the aggregate Affordability Gap by region and selected Poverty Level along with the percentage contribution each region makes to the state total.

One can see, for example, that Region 3 contributes 30% of the aggregate statewide Gap ($34.4 million of $114.5 million) and 30.6% of the Gap for households with income at or below 50% of Poverty Level ($5.7 million of $18.5 million). In contrast, Region 3 contributes only 16.1% of the aggregate Affordability Gap between 150% and 185% of Poverty level. For households with income between 150% and 185% of Poverty Level, two of Idaho's seven regions make contributions of more than 22% to the state total, while these two regions contributed only 16% and 14% to the total statewide Gap respectively. The two regions with the highest contribution to the Affordability Gap for households with income between 150% and 185% of Poverty (Region 6: 24.6%; Region 7: 22.3%) contributed less than 15% to the statewide Gap for households at or below 50% of the Poverty Level.

Overall, with the exception of Region 3 on the high end and Region 4 on the low end, the aggregate Affordability Gap is spread reasonably consistently throughout the state at each Poverty Level.

Table 9. Aggregate Home Energy Affordability Gap by Region and Percentage Regional Contribution to Statewide Total (Idaho) (2010)

	Total		< 50% FPL		76% - 100%		125% - 150% FPL		150% - 185% FPL	
	Total ($000)	State %	Total ($000)	State%	Total ($000)	State %	Total ($000)	State %	Total ($000)	State %
1	$16,318	14.2%	$2,741	14.8%	$2,934	14.7%	$1,833	13.2%	$980	12.2%
2	$10,432	9.1%	$1,802	9.8%	$1,582	7.9%	$1,144	8.3%	$60	7.6%
3	$34,355	30.0%	$5,657	30.6%	$6,297	31.6%	$4,107	29.7%	$1,290	16.1%
4	$4,066	3.5%	$634	3.4%	$698	3.5%	$504	3.6%	$403	5.0%
5	$14,268	12.5%	$2,347	12.7%	$2,656	13.3%	$1,814	13.1%	$970	12.1%
6	$18,5289	16.2%	$2,713	14.7%	$2,997	15.0%	$2,293	16.6%	$1,971	24.6%
7	$16,563	14.5%	$2,584	14.0%	$2,779	13.9%	$2,143	15.5%	$1,788	22.3%
Total	$114,531	100.0%	$18,477	100.0%	$19,943	100.0%	$13,840	100.0%	$8,010	100.0%

Table 10 presents the corresponding contribution percentages at the regional level for selected Poverty Level ranges. Table 10 shows, within each region, how much each of the selected Poverty Level ranges contributes to the aggregate Affordability Gap within that region. Households are grouped together into four ranges below 185% of Poverty (0 – 50%, 76 – 100%, 125 – 150%, and 150 – 185%).[10]

As can be seem in Table 10, the group of households living with income of less than 50% of Poverty Level make a consistent contribution to each regional total, irrespective of the aggregate Affordability Gap for the region. The lowest contribution from the "below 50% FPL" range (14.6% in Region 6) is associated with an aggregate Gap of $18.5 million, while the highest (17.3% in Region 2) was associated with an aggregate Gap of $10.4 million. Each level of Poverty contributed roughly the same proportion of the total aggregate Gap by region, except for the highest range of Poverty. At that point, not surprisingly, the contribution became somewhat lower (7.0% on a statewide basis for the 150% to 185% of Poverty Level range vs. 16.1% for the below-50% of Poverty Level range). Households in the 125 to 150% Poverty Level range began to evidence a step-down in their contribution to the statewide (and to each regional) Gap (12.1% vs. 17.4% for 76 – 100% of Poverty).

What can be concluded from Table 10 is that common statewide strategies can be utilized to address the impact of energy unaffordability in different regions of the state of Idaho. In no region, for example, should the emphasis of assistance be directed toward the lowest income

[10] The other two ranges (50 – 75% and 100 – 125% are not presented due to space limitations.

households in order to reach the greatest need; in other regions of the state, directing assistance only to the lowest income levels would miss a considerable portion of the total aggregate Affordability Gap. In no region of the state would expanding income eligibility to the higher ranges of income be effective in meeting an increasing proportion of the aggregate Affordability Gap to the exclusion of directly addressing the need for a different set of income targeting in other regions of the state.

Table 10. Aggregate Home Energy Affordability Gap by Region and Percentage Contribution to Region Totals by Selected Poverty Levels (Idaho) (2010)

	Total		< 50% FPL		76% - 100%		125% - 150% FPL		150% - 185% FPL	
	Total ($000)	State %	Total ($000)	State%	Total ($000)	State %	Total ($000)	State %	Total ($000)	State %
1	$16,318	100%	$2,741	16.8%	$2,934	18.0%	$1,833	11.2%	$980	6.0%
2	$10,432	100%	$1,802	17.3%	$1,582	15.2%	$1,144	11.0%	$60	5.8%
3	$34,355	100%	$5,657	16.5%	$6,297	18.3%	$4,107	12.0%	$1,290	3.8%
4	$4,066	100%	$634	15.6%	$698	17.2%	$504	12.4%	$403	9.9%
5	$14,268	100%	$2,347	16.4%	$2,656	18.6%	$1,814	12.7%	$970	6.8%
6	$18,528	100%	$2,713	14.6%	$2,997	16.2%	$2,293	12.4%	$1,971	10.6%
7	$16,563	100%	$2,584	15.6%	$2,779	16.8%	$2,143	12.9%	$1,788	10.8%
Total	$114,531	100%	$18,477	16.1%	$19,943	17.4%	$13,840	12.1%	$8,010	7.0%

Interaction between Average and Aggregate Affordability Gap

Finally, it should be noted that as income increases, while the per-household Affordability Gap will decrease, the *aggregate* Gap will not decrease proportionately. Table 11 shows the data. In Regions 1 through 3, for example, while the average Affordability Gap decreased by roughly 45% to 50% between the 76 – 100% of Poverty range and the 125 to 150% of Poverty range, the aggregate Gap decreased by a much smaller degree (28% to 38%). While the average per-household Gaps in Regions 6 and 7 decreased by 35% and 38% respectively between those two Poverty ranges, the aggregate Gap decreased by only 23%. The same occurs at the higher Poverty ranges as well. For Regions 6 and 7, while the average per-household Gap decreased by 33% and 36% respectively between the 125% to 150% range and the 150% to 185% of Poverty range, the aggregate Gap decreased by only 23% in each of those regions.

What occurs is that the increased numbers of households in the higher Poverty Level range is sufficient to offset some substantial portion of the decreases in the per-household Gap in these regions. It is, in other words, important to remember in Idaho that merely because home energy

is more affordable at higher income ranges does not necessarily mean that the total Affordability Gap in those ranges will be proportionately smaller.

Table 11. Change in Per Household and Aggregate Affordability Gap at Higher Poverty Level Ranges (Idaho Regions) (2010)

Region	76% - 100% Poverty Level		125% - 150% Poverty Level		150% - 185% Poverty Level	
	Per-Household in Income Range	Aggregate In Income Range (000)	Per Household in Income Range	Aggregate in Income Range (000)	Per Household in Income Range	Aggregate in Income Range (000)
1	$1,020	$2,934	$527	$1,833	$231	$980
2	$1,072	$1,582	$589	$1,144	$299	$60
3	$1,059	$6,297	$550	$4,107	$244	$1,290
4	$1,351	$698	$862	$504	$569	$403
5	$1,068	$2,656	$539	$1,814	$221	$970
6	$1,587	$2,997	$1,027	$2,293	$691	$1,971
7	$1,436	$2,779	$896	$2,143	$572	$1,788

By County

In addition to examining the regional implications of the Home Energy Affordability Gap, it is important to examine the Affordability Gap on an individualized county basis. When looking at counties, it is possible to gain insights into how the Affordability Gap might be influenced by the number of households in any particular Poverty range as well as the impact (or lack thereof) of the penetration of primary heating fuels.

The same counties throughout Idaho consistently evidence the “highest” and “lowest” Home Energy Affordability Gaps on a per-household basis. While not in the precise same order in all ranges of Federal Poverty Level, the same counties nonetheless appear. Nez Perce, for example, has the lowest per-household Affordability Gap at each Poverty Level examined. Elmore is consistently the third to fifth lowest, while Ada is consistently among the three lowest. While Kootenai and Canyon have somewhat higher Affordability Gaps, they nonetheless are

consistently in the ten lowest statewide. Blaine has one of the ten lowest Affordability Gaps for households with income less than 50%, and 75 – 100%, of Poverty Level, but not for any of the higher Poverty Level ranges examined.

Table 12. Idaho Counties with 10 Lowest Per Household Affordability Gap by Selected Poverty Level Ranges (2010)

Counties with Lowest Per HH Affordability Gap

< 50% FPL		75 – 100% FPL		125 – 150% FPL		150 – 185% FPL		Total	
County	HH Gap	County	HH Gap	County	HH Gap	County	HH Gap	County	HH Gap
Nez Perce	$1,409	Nez Perce	$806	Nez Perce	$324	Nez Perce	$35	Elmore	$544
Shoshone	$1,432	Shoshone	$844	Ada	$344	Ada	$42	Ada	$607
Latah	$1,470	Ada	$847	Elmore	$364	Elmore	$50	Nez Perce	$637
Ada	$1,476	Latah	$872	Shoshone	$373	Canyon	$84	Kootenai	$638
Kootenai	$1,527	Elmore	$886	Kootenai	$393	Shoshone	$90	Washington	$655
Elmore	$1,539	Kootenai	$897	Latah	$394	Kootenai	$90	Canyon	$656
Blaine	$1,546	Canyon	$936	Canyon	$403	Latah	$106	Payette	$675
Washington	$1,590	Blaine	$944	Payette	$427	Payette	$113	Shoshone	$681
Canyon	$1,601	Payette	$952	Gem	$445	Gem	$136	Gem	$696
Twin Falls	$1,603	Washington	$958	Washington	$452	Washington	$149	Twin Falls	$717

The same results appertain to the counties with the ten highest Affordability Gaps in the state. As Table 13 shows, Bear Lake and Valley counties both consistently have amongst the highest Affordability Gaps amongst Idaho's counties, but Valley is not in the ten highest for households with income less than 50% of Poverty. Similarly, while Camas, Butte and Jefferson counties all have somewhat lower per-household Gaps, they nonetheless all appear in the ten highest gaps for the Poverty Levels studied. In contrast, while Madison county has the second highest Affordability Gap for the below 50% of Poverty Level range, it does not appear amongst the counties with the ten highest Gaps in any of the other ranges.

The per-household Affordability Gap can vary for a variety of reasons. The penetration of heating fuels may vary by county, with some counties having a higher proportion of high-priced heating. The penetration of homeowners and renters, with a corresponding difference in housing unit sizes and types, may differ sharply between counties. Average household sizes may different between counties. The differences between counties, however, are not sufficient to

result in a substantial re-ordering of counties when the Affordability Gap is considered on a per-household basis.

Table 13. Idaho Counties with 10 Highest Per Household Affordability Gap by Selected Poverty Level Ranges (2010)

Counties with Highest Per HH Affordability Gap

< 50% FPL		75 - 100 FPL		125 – 150% FPL		150 – 185% FPL		Total	
County	HH Gap	County	HH Gap	County	HH Gap	County	HH Gap	County	HH Gap
Bear Lake	$2,163	Valley	$1,454	Bear Lake	$975	Bear Lake	$658	Valley	$1,199
Madison	$2,202	Bear Lake	$1,503	Valley	$977	Valley	$690	Franklin	$1,245
Camas	$2,207	Camas	$1,592	Butte	$1,086	Jefferson	$756	Camas	$1,309
Butte	$2,231	Butte	$1,595	Camas	$1,100	Butte	$781	Jefferson	$1,317
Fremont	$2,387	Jefferson	$1,676	Jefferson	$1,101	Franklin	$793	Fremont	$1,417
Jefferson	$2,395	Fremont	$1,706	Franklin	$1,138	Camas	$805	Madison	$1,431
Teton	$2,403	Franklin	$1,715	Fremont	$1,161	Fremont	$834	Butte	$1,480
Franklin	$2,435	Teton	$1,735	Teton	$1,200	Teton	$879	Teton	$1,512
Clark	$2,482	Clark	$1,794	Clark	$1,243	Clark	$913	Clark	$1,541
Oneida	$2,648	Oneida	$1,982	Oneida	$1,450	Oneida	$1,130	Oneida	$1,610

Similar findings appear when one examines the aggregate (as opposed to the per-household average) Affordability Gap by county.

HOME ENERGY BURDENS IN IDAHO

The affordability of energy bills is measured by what is called a household's "home energy burden." Energy burdens are simply the household energy bill as a percent of household income. If a household has a $10,000 annual income and a $1,000 home energy bill, for example, that household has an "energy burden" of 10%. The energy burdens of low-income Idaho households show the problem that the public and private energy assistance programs are designed to address.

Energy burdens can be used to compute the Home Energy Affordability Gap for various geographic areas. The Affordability Gap is the dollar amount by which ***actual*** low-income home energy bills exceed ***affordable*** home energy bills, as measured by an affordable home energy burden.

Home energy is a crippling financial burden for low-income Idaho households. Idaho households with incomes of below 50% of the Federal Poverty Level pay 45% (or more) of their annual income for their home energy bill. Households living between 50% and 100% of the Federal Poverty Level pay, on average, between one-fifth and one-eighth of their annual income for their home energy bills. On average, households at every income range less than 185% of Poverty Level in Idaho receive unaffordable bills for home energy service.

Table 14 presents Idaho home energy burdens disaggregated by Federal Poverty Level for the years 2007 through 2010 (compared to a base year of 2004). Home energy burdens in Idaho have not reached the levels experienced in 2007, when the state experienced dual spikes in prices for both natural gas and fuel oil. Indeed, the 2008 and 2009 burdens moderated from 2007, due to dips in fuel prices and somewhat higher incomes. Idaho's home energy burdens, however, have resumed their upward trend in 2010, and continue to substantially exceed those burdens experienced in the base year of 2004.

The trend in energy affordability in Idaho is clear. While there was a dip in home energy burdens in 2008 and 2009 relative to 2007, home energy burdens are higher in 2010 than they were in 2004, even after taking into account increases in income.

Table 14: Increase in Home Energy Burdens by Federal Poverty Level (2007 – 2010) (Idaho)

	Ratio of Income to Federal Poverty Level					
	Below 50%	50 - 74%	75 - 99%	100 - 124%	125 - 149%	150 - 185%
Base (2004)	34.4%	13.7%	9.8%	7.6%	6.2%	5.1%
2007	47.8%	19.1%	13.6%	10.6%	8.7%	7.1%
2008	39.0%	15.6%	11.2%	8.7%	7.1%	5.8%
2009	37.8%	15.1%	10.8%	8.4%	6.9%	5.6%
2010	45.0%	18.0%	12.9%	10.0%	8.2%	6.7%

Table 15 presents summary data on the home energy burdens experienced by Idaho residents at differing ranges of the Federal Poverty Level in the various counties. For Idaho households in "deep poverty," which is the term commonly attached to households with income of 50% of Poverty Level or below, home energy bills alone exceed the 30% burden considered to be "affordable" for *total* shelter costs. In two (2) counties, home energy burdens for households with income at or below 50% of Poverty exceed 60% of income. An additional 16 counties face home energy burdens of more than 50% up to and including 60% of income.

At the "most affordable" level, 26 counties have average burdens for households in deep poverty of more than 40% but less than 50%. Overall, out of Idaho's 44 counties, 18 had average home energy burdens for households with income at or below 50% of Poverty Level of more than 50% of income.

By the time incomes reach between 125% and 150% of Poverty Level, home energy burdens have significantly decreased, but nonetheless remain at unaffordable levels. Burdens may appear to be "low" at this range of Poverty Level only because of the magnitude of the burdens at the lowest Poverty ranges discussed above. At 125% to 150% of Poverty Level, no county has a burden below the affordability threshold of 6% of income. Indeed, only 13 counties have average burdens in the 100% to 125% range of between 6% and 8% of income. In contrast, 10 counties have average burdens of 10% or more.

When household income reaches into the range of 150% to 185% of Federal Poverty Level, Table 15 shows that no counties report average home energy burdens which are equal to or less than the 6% affordability threshold. While 20 counties have an average home energy burden of between 6% and 7% of income for households with income between 150% and 185% of Poverty Level, 11 more have an average burden of more than 8%.

Table 15. Number of Idaho Counties by Home Energy Burdens of Households at Differing Poverty Ranges (2010)

< 50% FPL		75 - 100 FPL		125 – 150% FPL		150 – 185% FPL	
Burden Range	Number of Counties	Burden Range	Number of Counties	Burden Range	Number of Counties	Burden Range	Number of Counties
40% or less	0	6% or less	0	6% or less	0	6% or less	0
>40% - 50%	26	>6% – 13%	17	>6% - 8%	13	>6% - 7%	20
>50% - 60%	16	>13% - 15%	14	>8% - 10%	25	>7% - 8%	13
>60%	2	> 15%	13	>10%	10	>8%	11

Table 15 is significant in showing both that home energy unaffordability in Idaho is statewide, with no counties in the state experiencing an affordable burden for households with income at or below 185% of Poverty Level. Moreover, it documents once again that home energy unaffordability is no longer the province of households at the lowest income ranges. Households with income well in excess of 150% of Poverty Level are experiencing unaffordable bills today.

EIGHT IMPORTANT FINDINGS

1. The State of Idaho has a large Home Energy Affordability Gap facing its low-income households, with available resources grossly insufficient to address the problem. The

average annual shortfall between actual and affordable home energy bills for households at or below 185% of FPL now reaches more than $800 per household.

2. The Home Energy Affordability Gap in Idaho now reaches more than $114 million statewide. This $114 million is *not* the total low-income home energy bill in Idaho. Rather, the $114 million is the dollar amount by which actual home energy bills exceed affordable home energy bills.

3. The Affordability Gap in Idaho is rapidly increasing. Spiraling home energy prices have increased the per-household Affordability Gap by nearly $300 since 2006.

4. The Affordability Gap is increasingly reaching into more moderate income households. Home energy burdens (bills as a percentage of income) now exceed the affordable level for households with income between 150% and 185%.

5. Idaho households with incomes below 50% of the Federal Poverty Level pay 45% (or more) of their annual income for their home energy bill. Households living between 50% and 100% of the Federal Poverty Level pay, on average, between one-fifth and one-eighth of their annual income for their home energy bills. On average, households at every income range less than 185% of Poverty Level in Idaho receive unaffordable bills for home energy service.

6. The Affordability Gap is statewide. It reaches into every region of the state, including both urban and rural areas. Idaho counties with the lowest aggregate Affordability Gap nonetheless still have a Gap in the millions of dollars each year.

7. In Idaho, merely because home energy is more affordable at higher income ranges does not necessarily mean that the total Affordability Gap in those ranges will be proportionately smaller. As income increases, while the per-household Affordability Gap will decrease, the *aggregate* Gap will not decrease proportionately. The increased numbers of households in the higher Poverty Level ranges are sufficient to offset some substantial portion of the decreases in the per-household Gap.

8. The trend in energy affordability in Idaho is clear. While there was a dip in home energy burdens in 2008 and 2009 relative to 2007, home energy burdens are higher in 2010 than they were in 2004, even after taking increases in income into account.

NOTES

PART 2:
CONTRIBUTING FACTORS TO HOME ENERGY UNAFFORDABILITY IN IDAHO

The unaffordability of home energy bills can be attributed to many factors. The size of the home energy bill is one factor, on both a seasonal and annual basis. On the one hand, some home energy bills are too high for households to afford on an annual basis. For these households, even if their energy were to be billed on an equal monthly basis, with no seasonal variation, they would not be payable. On the other hand, some home energy bills, even if affordable on an annual basis, present unaffordable burdens in particular seasons of the year. Households receiving such bills may experience payment problems and other consequences from home energy unaffordability when facing high heating and/or cooling bills.

Not all home energy unaffordability, however, is attributable to the level of the home energy bill. Many low-income households have incomes that are sufficiently low that nearly any home energy bill would be unaffordable. A household with an annual income of $4,000, for example, receiving an annual home energy bill (heating, water heating, electricity, cooling) of $600 ($50 per month), would face a home energy burden of 15%, well above that burden considered to be affordable. In this case, it is the household income rather than the level of the bill that should be viewed as the primary "cause" of the unaffordability. Even reducing the annual bill by one-third (to $400) would leave a home energy burden of 10%, still above an affordable level.

The discussion below considers various factors that contribute to home energy unaffordability in Idaho.

THE ROLE OF INADEQUATE FINANCIAL RESOURCES

While the unaffordability of home energy in Idaho is driven by the interaction of home energy bills and household income, the overall inadequacy of household income to cover the household's basic family budget should be taken into account standing alone as well. A basic family budget takes into account the entire range of household expenses, including housing, food, childcare, transportation, health care, necessities and taxes. To the extent that household income is insufficient to cover these basic expenditures, trade-offs must occur in what gets paid and what does not. A basic family budget varies based on both the household size and the household composition. Not only will a three-person family have a different budget than a two-person family, but a one-parent/two-child three-person family will have a different basic family budget than a two-parent/one-child three-person family.

Basic Family Needs Budgets

Table 16 shows the inadequacy of incomes in Idaho for households with income even moderately in excess of 200% of Federal Poverty Level. Basic Family Budgets[11] for four different family configurations were calculated, using different family composition and family size. Within Idaho's seven metropolitan areas (and the rural areas separately stated), the Basic Family Budget for a one-parent/one-child family ranges from a low of 252% of the Federal Poverty Level (Pocatello) to a high of 281% of the Poverty Level (Coeur d'Alene). Idaho's rural areas had a somewhat lower Basic Family Budget (241% of Poverty Level). Three-person families, whether configured as one-parent/two-child or two-parent/one-child families, were grouped more closely within the state (between 260% and 270% of Federal Poverty Level) (again, with the rural areas being somewhat less expensive). A one-parent/two-child family has a somewhat higher Basic Family Budget in Idaho than a two-parent/one-child family.

Finally, while the absolute dollar amounts of the Basic Family Budget for a two-parent/two-child family are higher than the corresponding budgets for smaller families, the ratio of those incomes to the Federal Poverty Level are lower. Families with income at between 240% and 250% of Poverty Level meet the Basic Family Budget in Gem County, Idaho Falls, Lewiston, Logan and Pocatello. Moreover, families at between 250% and 260% of the Poverty Level in Boise/Nampa and Coeur d'Alene are living with an income that would cover the Basic Family Budget. In contrast, it would require an income of "only" 233% of Poverty Level in the rural area of the state to cover the Basic Family Budget for a 2-parent/2-child family.

[11] Unless the context otherwise clearly shows, a "family" and a "household" are considered to be synonymous for purposes of this discussion.

Table 16: Basic Family Budget in Dollars and Percentage of Federal Poverty Level by Geographic Area (Idaho)

	1 parent/1 child		1 parent/2 children		2 parents/1 child		2 parents/2 children	
	Dollars /a/	FPL /b/	Dollars /a/	FPL	Dollars /a/	FPL	Dollars /a/	FPL
Boise City-Nampa, ID HUD Metro FMR Area	$28,473	274%	$39,429	282%	$35,095	251%	$44,685	254%
Coeur d'Alene, ID MSA	$29,177	281%	$39,982	286%	$35,371	253%	$44,926	255%
Gem County, ID HUD Metro FMR Area	$26,690	257%	$37,885	271%	$33,083	236%	$42,894	244%
Idaho Falls, ID MSA	$26,901	259%	$38,118	272%	$33,279	238%	$43,129	245%
Lewiston, ID-WA MSA	$26,874	258%	$38,091	272%	$33,253	238%	$43,086	245%
Logan, UT-ID MSA	$27,304	263%	$38,396	274%	$33,593	240%	$43,441	247%
Pocatello, ID MSA	$26,218	252%	$37,339	267%	$32,646	233%	$42,514	242%
Rural	$25,086	241%	$34,513	247%	$32,037	229%	$41,081	233%

NOTES:

/a/ Basic Family Budget presented in 2008 dollars.
/b/ FPL is the ratio of the Basic Family Budget to 100% of the Federal Poverty Level for the particular household size. 100% of Federal Poverty Level in 2008 for a two-person household was $10,400; for a three-person household was $14,000; and for a four-person household was $17,600.

SOURCE: Economic Policy Institute, Basic Family Budget Calculator.

Income by Poverty Range

Income eligibility for various public assistance programs is often misconstrued in the assessment of home energy unaffordability. Income-eligibility might be set "at or below 200% of Federal Poverty Level" for the Department of Energy's (DOE) Weatherization Assistance Program (WAP) or "at or below 60% of median income" for the federal Low-Income Home Energy Assistance Program (LIHEAP). In considering those income eligibility parameters, however, people frequently look at the incomes "at" the maximum while forgetting to consider those households within the "or below" ranges.

Table 17 below presents data on the mean income of Idaho households by the ratio of income to Federal Poverty Level.[12] The data reported is for the years 2006 through 2010. For example, in 2007, the average income of households with income below 50% of the Federal Poverty Level was $3,689. In 2008, the average income had increased to $4,189 for this Poverty range. In

[12] The mean income is based on the average of each range.

2010, the average income of households with income between 150% and 175% of Poverty level was $39,690.

The observation that stands out from the data on mean income disaggregated by Federal Poverty Level is that the income of households below 200% of Federal Poverty Level is inadequate to meet Idaho's Basic Family Budgets. These households consistently experience an absolute mismatch between household basic needs and the income available to meet those needs.

Table 17 documents that it cannot be assumed that incomes are constantly increasing from year-to-year. In 2010, income for households at between 50% and 75% of Poverty Level, as well as at between 75% and 100% of Poverty Level were lower than in the preceding year. Households living between 125% and 150% of Poverty Level experienced a decline in their average incomes after 2007 and, by 2010, had still not climbed back to that 2007 level. Households living below 50% of Poverty Level had a lower average income in 2009 than they had in 2008. In sum, Idaho households with income at or below 200% of Poverty Level do not consistently experience growing income over time.

Table 17. Mean Household Income by Ratio of Income to Federal Poverty Level (2006 – 2010) (Idaho)

	Below 50%	50 – < 75%	75 – < 100%	100 – < 125%	125 – < 150%	150 – < 175%	175 - < 200%	200% and above	Total
2006	$3,825	$13,730	$14,042	$21,790	$27,621	$31,481	$36,048	$83,794	$64,375
2007	$3,689	$10,037	$14,781	$22,541	$31,461	$31,856	$37,418	$90,659	$70,652
2008	$4,189	$10,420	$16,345	$24,182	$26,692	$35,059	$41,290	$84,617	$63,303
2009	$4,086	$12,601	$18,968	$26,160	$27,467	$30,452	$38,262	$88,151	$65,462
2010	$5,389	$11,740	$17,986	$30,454	$29,426	$36,611	$39,690	$90,119	$65,320

CPS Table Creator, Current Population Survey, Annual Social and Economic Supplement (Idaho), U.S. Census Bureau.

The number of households living in these Poverty Ranges is not insubstantial in Idaho. And the proportion of Idaho residents that are "poor" by virtually any definition is growing. Table 18 presents the proportion of Idaho residents living at different level of Poverty. The percentage of Idaho residents in "deep Poverty" (at or below 50% of the Poverty Level) has more than doubled since 2007 (from 2.7% to 6.0%). The proportion of households with income at or below 150% of Poverty has increased by one-quarter (from 21.3% to 25.8%). The proportion of persons living below 100% of the Poverty Level has increased by nearly half (from 9.5% to 14.0%).

Table 18: Idaho Population Living with Income at or Below Multipliers of the Federal Poverty Level (FPL) (2006 -2011)

	Percent of Persons Statewide				
	2007	2008	2009	2010	2011
Persons with income below 50% FPL	2.7%	4.0%	5.6%	4.7%	6.0%
Persons with income below 100% FPL	9.5%	9.9%	12.2%	13.7%	14.0%
Persons with income below 150% FPL	21.3%	20.1%	23.8%	24.2%	25.8%
Persons with income below 185% FPL	27.4%	24.2%	29.5%	29.1%	32.0%
Persons with income below 200% FPL	32.5%	30.0%	35.1%	35.1%	38.7%

CPS Table Creator, Current Population Survey, Annual Social and Economic Supplement (Idaho): 2006 – 2010, U.S. Census Bureau.

When discussions occur of the home energy affordability problems facing the poor of Idaho, those discussions relate to a large and growing population.

Stagnating Median Incomes

Income problems are not limited to low-income households. Idaho median income has stagnated, if not declined in real terms, in recent years. According to the U.S. Census Bureau, the state median income in 2010 was $43,490, a modest increase (in inflation-adjusted terms) over the 2006 median income of $42,865. For the past two years (2009 and 2010), however, inflation-adjusted median income in Idaho has declined. The state median income reached its highest point in 2008, at $47,576. It declined by nearly $2,700 in 2009 (down to $44,926). Median income declined an additional $1,450 from 2009 to 2010. Table 19 presents the data.

Table 19. Household Median Income by Year (Idaho) (2005 – 2010)

	Total Households	Median Income					
		2005	2006	2007	2008	2009	2010
Median Income	576,609	$41,443	$42,865	$46,283	$47,576	$44,926	$43,490

U.S. Factfinder, American Community Survey (annual) (Table B25119)

Income by Demographics

The unaffordability of home energy has specific demographic implications to it. Pursuant to the statute governing the federal Low-Income Home Energy Assistance Program (LIHEAP), for example, LIHEAP benefits are to be targeted to three particularly "vulnerable" populations,

including the very young, the aged and the disabled. The discussion of health, safety and nutrition impacts of unaffordable home energy presented elsewhere in this report further demonstrates that the considering the demographics of home energy unaffordability is an important element of the equation.

Income and Aging Persons

Income in Idaho has age implications to it. Median income in Idaho is stagnating, at best, at all age levels in Idaho. For the young working population, the 2010 median income is less than it was in 2005, while the median income for householders aged 25 through 44 is virtually identical. Median income for householders aged 45 to 64 slightly increased in Idaho from 2005 through 2010, while for the aging population it increased moderately.

Overall, however, in all years 2005 through 2010, median income increases through a householder's working years; the level of median income is higher at each working age level than for the age level immediately below. For householders aged 65 and above, however, there is a dramatic drop in income.

Table 20. Median Income by Age of Householder (Idaho) (2005 – 2010)

	Median Income					
	2005	2006	2007	2008	2009	2010
15 – 24	$24,274	$27,183	$27,215	$28,577	$25,703	$23,046
25 – 44	$45,522	$47,485	$51,457	$50,500	$48,486	$46,437
45 – 64	$50,698	$52,079	$55,829	$57,931	$54,646	$53,080
65 and older	$28,789	$29,846	$30,813	$33,570	$32,084	$33,725
U.S. Factfinder, American Community Survey (annual) (Table 19049)						

This drop in income for the aging population occurs over all poverty brackets. People in the post-retirement aging bracket (age 65 or older) have a noticeable decline in their income, holding Poverty Level constant. This decline occurs for the population as a whole and for both men and women. The data for 2011 is presented in Table 21. Data for persons aged 17 and younger is not separately presented in this Table.

The increased earning capacity during adult working years is evident for the population as a whole and for both men and women in Table 21. In every Poverty Level range for both men and women (and thus for the total population as well), households whose householder is age 65 or older have less income than the income both for the total population and for the population aged 18 through 64.

Table 21. Mean Income by Poverty Level, Age and Gender (Idaho 2011)

	All			Men			Women		
Poverty Level	Total	18 - 64	65 or older	Total	18 - 64	65 or older	Total	18 - 64	65 or older
0 - 50%	$3,969	$4,137	$856	$4,097	$4,338	$0	$3,870	$3,984	$1,619
50 - 75%	$10,667	$10,667	---	$9,520	$9,520	---	$11,467	$11,467	---
75 - 100%	$15,937	$17,278	$10,304	$16,888	$17,238	$12,041	$15,206	$17,318	$9,992
100 - 125%	$26,356	$28,666	$13,124	$27,131	$30,089	$13,295	$25,746	$27,609	$12,937
125 - 150%	$26,437	$29,342	$18,569	$28,425	$29,062	$22,987	$25,240	$29,581	$17,813
150 - 175%	$32,444	$34,095	$23,905	$33,852	$35,208	$25,730	$31,258	$33,117	$22,672
175 - 200%	$34,859	$37,926	$23,555	$35,510	$37,028	$25,707	$34,262	$38,924	$22,631

SOURCE: CPS Table Creator, Current Population Survey, Annual Social and Economic Supplement (Idaho) 2011, U.S. Census Bureau.

In contrast, the mean income for men at various ranges of Poverty Level is lower than the mean income level for women. In the working years (18 – 64), women have higher average income at the 50 – 75% of Poverty Level, 125 – 150% of Poverty Level and 175 to 200% of Poverty Level ranges. In contrast, women over age 65 have lower incomes than men in all Poverty Level ranges except below 50% of Poverty.

The dollar disparity between older and younger households tends to grow larger as incomes get bigger when measured against the Federal Poverty Level. Aging households living at 75% to 150% of Poverty Level have income of roughly $5,000 less than households in the same Poverty range but aged 18 to 64. When incomes increase to between 150% and 200% of Poverty Level, the disparity between the aged and non-aged increases to roughly $12,000. The same growth pattern is evident in the dollar disparity for women as well.

The data presented in Table 21, it should be noted, holds Poverty Level constant, but not household size. The Federal Poverty Level is a measure of income taking into account both dollars of income and household size. A 3-person household with an income of $15,000, for example, is considered "poorer" than a 2-person household with an income of $15,000. While not having examined the data, it is likely that the lower incomes of aging households, holding Poverty Level constant, is an indicator of smaller household sizes. Nonetheless, when considering ability-to-pay home energy bills, it is important to remember that aging households have substantially fewer resources than do non-aging households.

The difference between aging and non-aging household incomes cannot be exclusively attributed to a difference in household size. Table 22 presents data by Poverty Level, age and employment status. Employment status is divided into three categories: (1) full-time worker; (2) part-time worker; and (3) non-worker.

Aging households with workers tend *not* to have incomes in the lowest ranges of the Federal Poverty Level. No full-time aging workers fall within the Federal Poverty Level ranges of less than 75% of Poverty Level. Aging households that *do* have full-time workers have higher incomes when falling into the income ranges of 175% to 200% of Poverty. No aging households with either part-time workers or non-workers have higher income than their younger counterparts.

Table 22. Mean Income by Poverty Level, Age and Employment Status (Idaho 2010)

	Full-Time Worker			Part-time Worker			Non-Worker		
Poverty Level	Total	18 - 64	65 or older	Total	18 - 64	65 or older	Total	18 - 64	65 or older
0 - 50%	$6,416	$6,416	---	$4,300	$4,300	---	$3,213	$3,410	$856
50 - 75%	$10,953	$10,953	---	$9,724	$9,724	---	$10,799	$10,799	---
75 - 100%	$19,161	$20,291	$9,917	$16,377	$16,377	---	$13,922	$15,756	$10,372
100 - 125%	$27,346	$28,002	$13,900	$24,866	$26,047	$15,053	$26,004	$31,058	$12,639
125 - 150%	$26,405	$26,418	$26,158	$29,985	$29,985	---	$25,555	$33,226	$18,020
150 - 175%	$34,170	$34,170	---	$33,091	$33,759	$26,758	$30,091	$34,180	$23,574
175 - 200%	$37,140	$37,040	$43,668	$38,917	$41,261	$18,698	$30,184	$37,771	$23,182

SOURCE: CPS Table Creator, Current Population Survey, Annual Social and Economic Supplement (Idaho), U.S. Census Bureau.

It would appear that household size is not the exclusive factor influencing income by age, holding Poverty Level constant.

Child Poverty

Children living in families with single parents are more likely to face home energy unaffordability. Table 23 documents that fully one-fifth of families with children in Idaho live with single parents (5.9% with single mothers; 14.0% with single fathers). Both types of single-parent families have median income less than married couple families, Even more importantly, both types of single-parent families in Idaho have median incomes considerably less than the Basic Family Budget presented above.

Single-mother families have income less than single-father families. Single-mother families in 2010 had a median income more than $13,000 less than single-father families. Indeed, single-mother median family incomes declined in 2010 relative to 2009. Their 2010 income was virtually identical (in non-inflation-adjusted terms) to their median income in 2008. In contrast, single-father incomes, while higher than single-mother families, had declined in 2009 relative to 2008 and, by 2010, had not yet climbed back to the 2010 level.

Table 23. Median Income of Families with Children by Family Type (Idaho) (2005 – 2010)							
	Distribute	Median Income					
		2005	2006	2007	2008	2009	2010
Total with Children	401,806						
Married Couple	80.2%	$54,714	$56,797	$60,829	$61,369	$58,634	$59,169
Single Mother	5.9%	$21,730	$25,670	$25,646	$26,548	$27,053	$26,608
Single Father	14.0%	$35,390	$35,969	$35,882	$40,243	$37,101	$39,984
U.S. Factfinder, American Community Survey (annual) (Table B19126)							

Educational Attainment

Educational attainment is a critical influencing factor in the determination of household income (and thus home energy affordability). Table 24 documents that as educational attainment increases for Idaho residents, so, too, does the corresponding annual income. Idaho residents with a Bachelor's degree (from a college or university) have income 70% higher than a resident with a high school diploma. A person holding a Bachelor's degree has a 50% higher income than does a person with some college experience (but not a degree).

Table 24. Income by Educational Attainment (Idaho) (2005 – 2009)						
Population 25+	Distribute (2009)	Median Income				
		2005	2006	2007	2008	2009
Total	987,829					
Less than High School	11.7%	$16,286	$19,001	$20,415	$20,182	$18,124
High School grad	28.6%	$22,948	$24,749	$27,362	$25,292	$22,850
Some college	35.3%	$26,026	$26,620	$32,096	$29,044	$26,077
Bachelor's degree	16.7%	$36,915	$37,606	$42,645	$40,534	$38,645
Graduate or professional degree	7.7%	$49,682	$52,207	$54,369	$54,459	$55,678
SOURCE: California Postsecondary Education Commission, citing, U.S. Factfinder, American Community Survey (annual)						

Table 24 further shows the prevalence of residents with differing levels of educational attainment. The lack of educational attainment is not a minor issue. More than 40% of all Idaho workers have a high school education or less.

Inadequacy of Wages

The inability to meet basic needs in Idaho is no longer the province of households traditionally considered to be low-income. The increasing movement of home energy unaffordability into the middle class is reflective of the growing mismatch between working incomes and the income a household requires to meet its basic family needs. The most recent Basic Family Needs Budget for various geographic regions in Idaho was presented above.

Table 25 presents the average wage and salary per job as reported by the U.S. Department of Commerce for various regions throughout Idaho. As can be seen, the average wage per job is inadequate to cover a Basic Family Budget in Idaho.[13] Across-the-board, a working household with a single income would not be able to provide adequately for basic household needs such as housing, food, energy and clothing.

Moreover, as Table 25 shows, despite the inadequacy of wages and salaries to provide sufficient income to meet basic family needs, wages and salaries did not keep pace with inflation statewide. In Boise and Coeur d'Alene, wage and salary growth in percentage terms fell below what wage and salary growth would have been had they tracked inflation, while in Lewiston, wage growth almost exactly matched inflation. In Idaho Falls and Pocatello, wage growth slightly bettered what wages would have been had they tracked inflation.

Table 25. Average Wage and Salary per Job by Metropolitan Area (2007 - 2009) (Idaho)

	2006	2007	2008	2009	Growth 06 to 09	Growth 07 - 09	Growth 08 - 09	If at Inflation (06 – 09)
Boise City-Nampa	$37,410	$38,330	$38,073	$38,395	2.6%	0.2%	0.8%	$39,811
Coeur d'Alene	$30,561	$31,898	$32,279	$32,432	6.1%	1.7%	0.5%	$32,522
Idaho Falls	$29,582	$30,992	$31,495	$32,077	8.4%	3.5%	1.8%	$31,480
Lewiston	$31,398	$32,554	$33,375	$33,474	6.6%	2.8%	0.3%	$33,413
Pocatello	$29,366	$30,486	$31,930	$31,857	8.5%	4.5%	-0.2%	$31,250

SOURCE: Bureau of Economic Analysis, Regional Economic Accounts, U.S. Department of Commerce.

[13] The average wage per job is not separately reported for "rural" areas of Idaho.

THE ROLE OF PRICES AND BILLS

One primary cause of increasing home energy burdens, and the spiraling Home Energy Affordability Gap, in Idaho lies primarily in increasing home energy prices. Home energy prices, which present themselves in substantially increased bills, are not merely of concern on an annual basis. Even bills that may be affordable on an annual basis can be *unaffordable* on a seasonal basis.

Home Energy Prices

Home energy prices increased substantially in Idaho in recent years. Natural gas prices rose from $0.957 per therm in 2005 to $1.160 per therm in 2009 before moderating in 2010. In contrast, electricity heating season prices have seen steady price increases, with a 2005 price per kWh of $0.059 rising to a 2010 price per kWh of $0.077. Similarly, electricity cooling season prices have increased, moving from $0.068 in 2005 to $0.085 in 2010. Propane prices have seen significant price increases, moving from $1.453 per gallon in 2005 to $2.160 per gallon in 2010. Fuel oil prices also have experienced substantial price increases.

Table 26: Fuel Prices: 2005 – 2010 (Idaho)

	2005	2006	2007	2008	2009	2010
Natural gas heating (ccf) /a/	$0.957	$1.216	$1.171	$1.072	$1.160	$0.898
Electric heating (kWh)	$0.059	$0.061	$0.0058	$0.064	$0.072	$0.077
Propane heating (gallon)	$1.453	$1.745	$1.800	$2.335	$2.037	$2.160
Fuel oil heating (gallon)	$1.887	$2.222	$2.246	$3.059	$1.762	$2.412
Electric cooling (kWh) /b/	$0.068	$0.063	$0.070	$0.076	$0.084	$0.085

SOURCE: Home Energy Affordability Gap (annual).

NOTES:

/a/ Heating prices reflect prices in February of each respective year.
/b/ Electric cooling prices reflect prices in August of each respective year.

Natural gas, electricity and Liquefied Petroleum Gas (LPG or propane) are the three primary heating fuels in Idaho. Amongst Idaho homeowners, more than 224,000 use natural gas to heat their homes. Substantially fewer households use electricity for their primary heating fuel, with LPG users representing an even smaller (but still significant) market share.

In contrast, more renters heat with electricity than with natural gas (80,000 vs. 76,000). A roughly equal number of renters heat with LPG as heat with fuel oil or kerosene.

Table 27: Housing Units by Primary Heating Fuels by Tenure Status (Idaho)

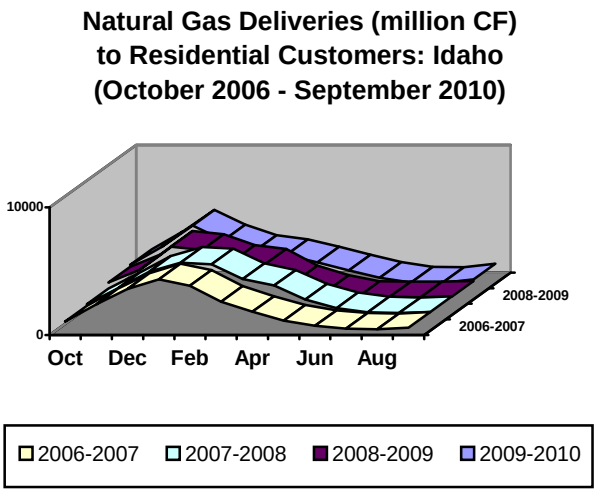
	Total	Natural Gas	Electricity	Bottled/Tank/LPG	Fuel Oil/Kerosene
2010—1 year data					
Homeowners	401,532	224,568	103,041	25,543	9,855
Renters	175,177	75,659	80,481	5,940	3,465

SOURCE: 2010 Census.

Impact of Seasonal Prices and Bills

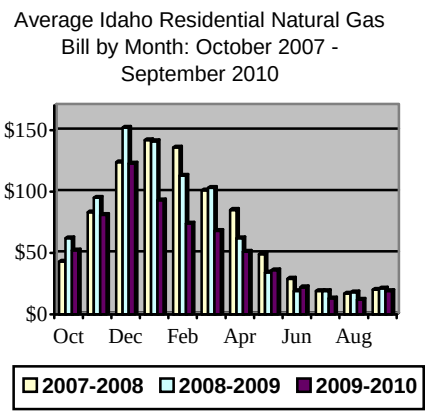
The unaffordability of home energy in Idaho is not merely an annual problem. For many households, even if annual bills might be an affordable percentage of income, seasonal variations in bills can present affordability problems. Home heating, of course, presents the most dramatic seasonal impacts. These impacts occur because of both usage and price. A review of natural gas consumption and prices is illustrative of the seasonal problem.

Seasonal Bills



Not surprisingly, in Idaho, residential natural gas consumption increases significantly in the winter heating months of October through April. While Idaho's natural gas residential deliveries ranged between 435 and 810 million cubic feet (mmCF) in June through September 2010, for example, natural gas deliveries in the winter heating months of November 2010 through March 2011 ranged from roughly 3,349 (November) to 4,395 mmCF (January). While natural gas consumption ranged from 532 to 573 mmCF in June through September 2009, natural gas deliveries in the winter months of November 2009 to March 2010 ranged from 3,214 (November) to 4,817 mmCF (December). As can be seen, the delivery of monthly natural gas supplies to Idaho's residential customers increases by five- to ten-fold in the winter months reflecting temperature-driven consumption.

This sharply increased usage presents itself to consumers in the natural gas bill that consumers have become accustomed to receiving in the winter months. In 2010, monthly natural gas bills in Idaho were nearly identical over the four summer months (ranging from a low of $12 in August to a high of $22 in June). In contrast, in the 2009/2010 heating season, natural gas heating bills ranged up to a high of $123 (December 2009) and $93 in January 2010. In 2009, the summer monthly natural gas bills were nearly identical, ranging from a low of $18 (August) to a high of $21 (September). In contrast, the winter season bills ranged from a low of $95 (November 2008) to a high of $152 (December 2009) (and $141 in January 2009). For many low-income customers, even if the May through October bills might be affordable, the sharp fly-up in winter home heating costs creates a *seasonal* inability-to-pay.



Moreover, some heating seasons are less affordable than others, due to a combination of price and usage. While the 2009/2010 winter period generated an average natural gas bill of $490 in Idaho, the same winter period of 2006/2007 generated a natural gas bill of $678. Despite these year-to-year differences, in each calendar year (2007 through 2009), the winter month period generated between 74% (2007) and 85% (2009) of the total annual residential natural gas bill in Idaho.

Seasonal Burdens

Based upon this data, Table 28 below presents the low-income winter heating burden for four winter heating seasons (2006-2007, 2007-2008, 2008-2009, 2009-2010). The winter period is defined to include the six months of November through April. Income is defined to be one-half of annual income at various Poverty Levels. The bills underlying Table 28 include only natural gas consumption. They do not include electric consumption for natural gas customers.

The winter natural gas burdens for low-income households represent serious affordability problems for low-income households. The 2006-2007 winter bills presented energy burdens of 63% for households in deep poverty (below 50% of the Federal Poverty Level). Even those households for whom heating burdens approached an affordable level on an annual basis (150% to 185% of Poverty Level) are called upon to pay between 6% and 8% of their income for natural gas in the winter heating season, between two and three times higher than what is considered to be an affordable heating burden (3%).

Table 28. Winter Season Low-Income Natural Gas Burdens (Idaho) (2006/07 – 2009/10)

Poverty Range	2006 – 2007	2007 - 2008	2008 - 2009	2009 - 2010
0-49%	63%	61%	58%	43%
50-74%	25%	24%	23%	17%
75-99%	18%	17%	17%	12%
100-124%	14%	14%	13%	10%
125-149%	11%	11%	11%	8%
150-184%	9%	9%	9%	6%
185-200%	8%	8%	8%	6%
Seasonal bills /a/	$678	$671	$666	$490

NOTES

/a/ Seasonal bills are defined to include consumption for the months of November through April

HOUSING CHARACTERISTICS

Housing affordability has a direct impact on the ability of Idaho's low-income households to be able to afford their home energy bills. As housing prices increase, low-income households are increasingly forced out of higher-quality, higher-priced homes into older, lower-quality, less-energy efficient homes. As quality (and energy efficiency) decrease, these low-income Idaho residents face ever-increasing home energy bills thus making the overall cost of shelter even less affordable. Each step of the cycle contributes to the continuation of the cycle.

In particular, a disproportionate number of renters in Idaho are low-income. As Table 29 shows, while 6% of all homeowners have income at or below the Poverty Level, 30% of Idaho renters have incomes this low. There exist 10,000 more low-income (defined as at or below 100% of Poverty for these purpose) renters in Idaho than low-income homeowners. This occurs even though, in total, there are more than three times more homeowners overall.

Table 29: Tenure Status by Poverty Level Status (Idaho) (2010)

	Total Homeowners	Homeowners with Income at or Below Poverty Level		Total Renters	Renters with Income at or Below Poverty Level	
		Number	Percent		Number	Percent
Idaho	307,555	18,305	6%	94,251	28,233	30%

SOURCE: 5010 American Community Survey, Table C17019.

The prevalence of tenants within the low-income population is also significant when considering the ability of residents to exert control over their energy consumption. The fact that low-income households disproportionately tend to be tenants has significance in two respects for the consideration of the availability of accessible energy efficiency as a bill reduction technique. First, tenants have little or no incentive to improve their landlord's property. They do not receive any of the increased value of the property and, in fact, may face rent hikes as a result of the improvements. Second, tenants do not generally have the authority to make decisions over improvements to major housing systems, whether it be a heating system or a hot water system. Indeed, even major appliances such as refrigerators are often owned (and thus controlled) by the property owner rather than by the tenant.

The very lack of income also impedes the ability of these households to invest in energy efficiency measures and thus address their energy affordability problems. When a household lacks sufficient income to pay for basic needs, that household is unlikely to invest in energy efficiency measures, no matter how "cost effective" that investment might be.

The Cost Characteristics of Idaho's Housing

The very fact of high energy costs to Idaho's low-income customers creates a barrier to the implementation of energy efficiency strategies as a strategy to control those costs. As home energy prices increase as a percentage of income, low-income households have fewer available discretionary resources to invest in measures that could reduce their family expenditures. The discussion below examines the stress on household income by focusing on total shelter costs. The relationship between shelter costs and home energy costs is considered as well. Sharply rising home energy prices are a major factor in driving overall shelter prices upwards in Idaho. This impact is true throughout the state. It is a particular problem for the lowest income households.

One impact of the high home energy bills facing Idaho's low-income households is the stress that such bills place on the household budgets of Idaho's poor. A previous section of this report presented the family budgets required to allow Idaho households to meet their essential needs. One assumption in those Basic Family Budgets, however, is that total shelter costs represent no more than 30% of a household's income. A household devoting in excess of 30 percent of income toward shelter costs is nearly universally considered to be over-extended.

In Idaho, more than 52,000 renter households, and an additional 33,000 homeowner households, with annual incomes less than $20,000 have housing burdens of more than 30% of income. An *additional* 57,000 Idaho households with income between $20,000 and $35,000 have housing burdens of more than 30% of income. Overall, as shown in Table 30, more than 140,000 Idaho households with income less than $35,000 have housing burdens of more than 30% of income. Overall, more than 60% of Idaho households with income below $35,000, including nearly 70% of Idaho tenants with these incomes, have housing burdens that exceed 30% of income.

Table 30: Housing Burdens by Income (Idaho) (2010)

	Total Households		Housing Burden > 30%			Pct with Housing Burden >30%		
	Renter	Owner	Renter	Owner	Total	Renter	Owner	Total
Less than $10,000	27,959	17,242	22,849	12,736	35,585	82%	74%	79%
$10 - $19,999	37,220	34,494	28,991	20,146	49,137	78%	58%	69%
$20 - $34,999	46,940	66,911	25,114	32,305	57,419	54%	48%	50%
Below $35,000	112,119	118,647	76,954	65,187	141,141	69%	55%	61%

SOURCE: 2010 Census, Table B25095 and B25105.

As can be seen, the unaffordability of housing is particularly acute for low-income Idaho renters. While the affordability of housing prices has remained relatively constant for two-bedroom units in 2010 in Idaho, overall, housing remains unaffordable. In every region of the state, nearly half of all renters were not able to afford a two-bedroom housing unit in 2010. In no region did the percentage of renters unable to affordable a two-bedroom unit fall below 40% for low-income households.

As Table 31 below shows, throughout the state, Idaho rental housing was often unaffordable in 2010. The minimum income required to rent a two-bedroom unit (for a two-person household) ranged from a low of 85% of median income (Boise-Nampa MSA) to a high of 108% of median income (Lewiston).

Energy costs and shelter costs march hand-in-hand in any discussion of "affordability." The energy (and other utility) costs associated with housing are one component of the overall "rent" that is used to determine "housing affordability." Fair Market Rents (FMRs), published annually by the U.S. Department of Housing and Urban Development (HUD), include all utility costs (except telephone). One aspect of the overall unaffordability of the rents presented above is the unaffordability of the underlying home utility costs.

The National Low-Income Housing Coalition measures the affordability of rental housing by reference to what is termed the "housing wage." The "housing wage" is that wage required for a recipient to be able to afford a two-bedroom unit at the Fair Market Rent published by the U.S. Department of Housing and Urban Development (HUD). In contrast, the "renter wage" is the actual median wage received by a renter household in the geographic area being studied. As

Table 31 shows, the "housing wage" in Idaho ranges from just over 120% to more than 180% of the renter wage. Statewide, the housing wage (that wage needed to be able to afford a two-bedroom unit) is nearly 130% of the actual wage renter wage.

Table 31. Housing Affordability in Idaho by Geographic Region (2010)

COUNTY/METRO	Mean Renter Income	Income needed to afford 2 bdrm FMR	Percent of median renter income needed to afford 2 bdrm FMR	Housing Wage for 2 bdrm FMR /a/	Rent affordable with full-time job paying mean renter wage	2 bdrm housing wage as % of mean renter wage	Estimated percent of renters unable to afford 2 bdrm FMR
State	$29,841	$27,335	92%	$13.14	$532	128%	44%
Non-Metro	$28,860	$26,680	92%	$12.83	$538	124%	45%
Boise City-Nampa HMFA	$32,891	$28,080	85%	$13.50	$575	122%	41%
Coeur d'Alene MSA	$32,214	$29,600	92%	$14.23	$523	142%	45%
Gem County HMFA	$27,956	$27,200	97%	$13.08	$396	172%	47%
Idaho Falls MSA	$28,895	$26,040	90%	$12.52	$429	152%	43%
Lewiston MSA	$24,357	$26,200	108%	$12.60	$466	141%	52%
Logan MSA	$28,324	$27,080	96%	$13.02	$371	183%	47%
Pocatello MSA	$24,241	$24,960	103%	$12.00	$405	154%	50%

SOURCE: Out of Reach: National Low-Income Housing Coalition (2011)

NOTES:

/a/ Wage required to be able to afford two-bedroom units at Fair Market Rent.

As noted above, this housing unaffordability has two implications from an energy perspective. On the one hand, as housing prices increase, low-income households are increasingly forced out of higher-quality, higher-priced homes into older, lower-quality, less-energy efficient homes. On the other hand, the unaffordability of shelter also impedes a lower-income household's ability to respond to high energy costs. High shelter costs divert resources that might otherwise be available to invest in cost-effective energy usage reduction measures. When households cannot afford to pay their basic shelter costs, they do not "invest" money in measures to save energy, even if those measures might generate even a moderate-term payback.

Physical Characteristics of Rental Housing

Quite aside from the characteristics of Idaho's low-income tenants, and the cost characteristics of Idaho's housing units, the physical characteristics of the housing units occupied by the state's

low-income population have a substantial influence on the unaffordability of home energy as well.

The age of Idaho's low-income housing is perhaps the most significant of these attributes. Having found that a substantial number of Idaho's low-income households, particularly those that are tenants, cannot be expected to implement energy efficiency on their own, this section turns to a discussion of the extent to which there is likely to be a *need* for energy efficiency investments. The first way to develop a surrogate for energy efficiency is to consider the age of the housing units in which low-income households live. While no direct measurement exists of the number of energy inefficient housing units in Idaho, some correlation can be drawn between energy efficiency and the age of housing units.

Tens of thousands of Idaho households live in old, and presumptively energy inefficient, housing units. Table 32 shows that nearly one-quarter of Idaho's Poverty Level homeowners, and roughly 20% of Idaho's Poverty Level renters, live in housing that was constructed before 1950. More than 30% of both homeowners and renters live in housing units that were constructed before 1960.

Table 32: Tenure Status by Poverty Status by Age of Housing Unit (Idaho) (2000)

	Total Below Pov. Level	Year in which Housing Unit Built (Households with Income < Poverty Level)								
		1999 – Mar 2000	1995 - 1998	1990 - 1994	1980 - 1989	1970 - 1979	1960 - 1969	1950 - 1959	1940 - 1949	1939 or earlier
Homeowners	21,453	571	1,893	1,548	2,679	5,562	2,200	2,082	1,865	3,053
Renters	31,120	501	2,545	1,955	4,182	8,586	3,793	3,092	2,332	4,154

SOURCE: 2000 Decennial Census, Table HCT023.

While the age of the housing unit is not a conclusive indicator of energy inefficiency for all end-uses, the age of a housing unit and the efficiency of home heating have been found to be closely associated. The U.S. Department of Energy's Residential Energy Consumption Survey (RECS), for example, reports on energy consumption devoted to space heating disaggregated by the year in which a housing unit was constructed. That data is presented in Table 33 below.

For all types of heating fuels, the oldest housing units have the greatest energy consumption. For electric space heating, which is used by more than 180,000 Idaho households, the oldest housing uses more than 1,200 additional kWh than does the average housing unit, and 640 more kWh than does the most recently constructed housing. For natural gas space heating, used by 300,000 Idaho households, residents of Idaho's oldest housing use 14 more MCF than do the average housing units, and more than 30 MCF more than the most recently constructed. Households using LPG for space heating demonstrate the same patterns of consumption.

Table 33: Space-Heating Energy Consumption by Year of Housing Unit Construction

	Before 1940	1940 - 1949	1950 - 1959	1960 - 1969	1970 - 1979	1980 - 1989	1990 - 1999	2000 – 2005
Space Heating Btu Consumption per Household where the Main Space Heating Fuel is (mmBtu):								
Electricity	2,715	1,663	1,909	1,980	2,064	2,203	2,272	2,075
Natural gas (MCF)	72	49	51	50	45	37	42	38
Fuel oil	718	619	643	624	667	638	636	505
LPG	595	612	489	507	527	468	563	663

SOURCE: Residential Energy Consumption Survey (2005) Table SH7.

TWELVE IMPORTANT FINDINGS

1. The income required to meet a Basic Family Budget in Idaho ranges from considerably more than 200% of Federal Poverty Level to nearly 300% of Poverty Level. The income of households below 200% of Federal Poverty Level is inadequate to meet Idaho's Basic Family Budgets. These households consistently experience an absolute mismatch between household expenditures on basic needs and the income available to pay those expenses.

2. The proportion of Idaho residents that are "poor" by virtually any definition is growing. The percentage of Idaho residents in "deep Poverty" (at or below 50% of the Poverty Level) has more than doubled since 2007. The proportion of households with income at or below 150% of Poverty has increased by one-quarter. The proportion of persons living below 100% of the Poverty Level has increased by nearly half.

3. Declining income is not merely the province of the poor in Idaho. Median income has stagnated, if not declined in real terms, in recent years. The state median income reached its highest point in 2008. It declined in 2009. Median income declined again from 2009 to 2010.

4. Income in Idaho has age implications to it. In all years 2005 through 2010, median income increases through a householder's working years; the level of median income is higher at each working age level than for the age level immediately below. For householders aged 65 and below, however, there is a dramatic drop in income.

5. Children living in families with single parents are more likely to face home energy unaffordability. Fully one-fifth of families with children in Idaho live with single parents. Both single-mother and single-father families have median income less than married couple families. Both types of single-parent families have median incomes considerably less than the Basic Family Budget.

6. The increasing movement of home energy unaffordability into the middle class is reflective of the growing mismatch between working incomes and the income a household requires to meet its basic family needs. The average wage per job is inadequate to cover a Basic Family Budget in Idaho.

7. Home energy prices have increased substantially in Idaho in recent years. Natural gas prices rose from 2005 to 2009 before moderating in 2010. Electricity heating prices have seen steady price increases. Propane prices have seen significant price increases, as have fuel oil prices. Natural gas is the primary space heating fuel in Idaho. Substantially fewer households use electricity for their primary heating fuel, with LPG users representing an even smaller (but still significant) market share.

8. The unaffordability of home energy in Idaho is not merely an annual problem. For many households, even if annual bills might be an affordable percentage of income, seasonal variations in bills can present affordability problems. Home heating presents the most dramatic seasonal impacts. These impacts occur because of both usage and price.

9. Housing affordability has a direct impact on the ability of Idaho's low-income households to be able to afford their home energy bills. As housing prices increase, low-income households are increasingly forced out of higher-quality, higher-priced homes into older, lower-quality, less-energy efficient homes. As quality (and energy efficiency) decrease, these low-income Idaho residents face ever-increasing home energy bills thus making the overall cost of shelter even less affordable. Each step of the cycle contributes to the continuation of the cycle.

10. A disproportionate number of renters in Idaho are low-income. There exist 10,000 more low-income renters in Idaho than low-income homeowners. This occurs even though there are more than three times more homeowners overall.

11. The physical characteristics of the housing units occupied by the state's low-income population have a substantial influence on the unaffordability of home energy. The age of Idaho's low-income housing is perhaps the most significant of these attributes. Tens of thousands of Idaho households live in old, and presumptively energy inefficient, housing units.

12. While the age of housing units is not a conclusive indicator of energy inefficiency for all end-uses, the age of a housing unit and the efficiency of home heating have been found to be closely associated. Older homes are significantly less energy efficient.

PART 3:
THE CONSEQUENCES OF HOME ENERGY UNAFFORDABILITY

Addressing the unaffordability of low-income home energy in Idaho will generate positive social benefits. It will improve public health and safety and bolster the competitiveness of local business and industry. Addressing the unaffordability of low-income home energy, however, will also generate positive utility benefits. It will reduce the costs of nonpayment and improve the efficiency and effectiveness of utility collection efforts. It would be inappropriate to view low-income unaffordability simply as a non-utility "social" problem.

The discussion below considers an array of consequences arising from unaffordable home energy.

THE SOCIAL PROBLEMS OF HOME ENERGY UNAFFORDABILITY

The findings of the unaffordability of home energy in Idaho are sobering from a social perspective. The unaffordability of energy manifests itself in more than simply unpaid bills. While researchers have not studied the issue specifically in Idaho, research from other jurisdictions is informative. According to a series of survey studies published by the National Energy Assistance Directors Association (NEADA),[14] "despite. . .significant residential energy expenses, most low-income households pay their energy bills regularly. But at what cost?" The NEA survey found that "LIHEAP recipients faced life-threatening challenges."[15] NEADA reports:

- 17% of the national respondents had their heating disconnected or discontinued because of an inability-to-pay.

- 8% had their electricity (as opposed to heating) disconnected due to an inability-to-pay.

[14] Apprise, Inc. (April 2005). *National Energy Assistance Survey Report*, National Energy Assistance Directors Association: Washington D.C. Similar survey studies, with similar results, have been published in 2003, 2008 and 2009.

[15] LIHEAP is the Low-Income Home Energy Assistance Program, the federally-funded fuel assistance program in the United States.

- 38% went without medical or dental care in order to have money to pay their home energy bill;

- 30% went without filling a prescription or taking the full dose of a prescribed medicine.

- 22% went without food for at least one day.

Low-income customers frequently have little incentive, and even fewer choices, to pursue constructive responses to their energy poverty. All too frequently, the customer is faced with an immediate need (*e.g.*, bill payment by a date certain) with the available constructive responses to an inability-to-pay unable to deliver assistance either in the form, the time period, or the magnitude necessary to meet that need. Given the immediate consequences of failing to address the short-term nonpayment crisis, the customer is presented with a choice between untenable alternatives.

Public Health Implications

The disconnection of electricity and/or natural gas service represents a distinct public health threat, particularly to aging households and to low-income households with children. The impact of service disconnections on the public's health and safety can hardly be debated in light of recent research. According to the 2005 NEADA survey, the loss (and threatened loss) of home heating service has significant health consequences to low-income households with children. NEADA found that survey respondents reported becoming ill because their home was too cold in the winter heating months. Nearly 1-in-6 of all energy assistance recipients reported that someone in the home became sick because the home was too cold in the past five years.

These illnesses were frequently severe enough to require medical treatment. According to NEADA, 11% of the surveyed energy assistance recipients reported that someone in the home had become ill enough to require going to a doctor or hospital because the home was too cold in the past five years.

A variety of reasons contribute to the overall rate of illness, as well as to the rate at which illnesses required medical treatment within the low-income energy assistance recipient population.[16] The primary contributing factor to the adverse health outcomes involves the tendency of low-income households to keep their homes at unsafe or unhealthy temperatures, given the unaffordability of home energy to the household. Of the households with children under age 18, between 20% and 25% kept their homes at "unsafe or unhealthy temperatures" because they did not have enough money to pay their home heating bills. Aside from households with children, the adverse health impacts of cold temperatures within a home are particularly acute for elderly households.[17]

---

[16] See generally, Wilkins et al (2001). *Cold Comfort: The Social and Environmental Determinants of Excess Winter Death in England 1986 – 1996*. The Policy Press: Bristol; Maheswaran et al. (2004). Socio-economic deprivation and excess winter mortality and emergency hospital admissions in South Yorkshire Coalfields Health Action Zone, UK. *Public Health* 118. 167 – 176.

[17] Brennan et al. (1982). Seasonal variation in arterial blood pressure, *British Medical Journal*. 285. 919 – 923; Wilkinson et al. (2004). Vulnerability to winter mortality in elderly people in Britain: population based study.

Other research, both in the United States and elsewhere, confirms these NEADA findings. A 2006 study by the Child Health Impact Assessment Working Group, at the Boston Medical Center, reported that "a five city (Baltimore, Boston, Little Rock, Minneapolis, Washington D.C.) study of predominantly low-income children under 3 years of age seen in primary care clinics and emergency departments found significant associations between not receiving LIHEAP and important health and growth indicators."[18] For example, "young children not receiving LIHEAP were 30% more likely to be admitted to the hospital." In addition, the CHIWG report found that "budget tradeoffs between energy costs and food expenditures result in food insecurity. . .[F]ood insecure children are 2 – 3 times more likely to be in fair or poor health or chronically ill." The reason is that "a nutritionally inadequate diet makes children susceptible to an 'infection-malnutrition cycle' by impairing children's immune functions making them more prone to infection and illness."

The association between unaffordable home energy and adverse health outcomes is rapidly becoming better understood. A 2001 study in the United Kingdom (UK), for example, found that, in the UK, 45,000 more deaths occurred in winter than in summer each year. "For every 1° C fall in temperature below 20° C, mortality increases by between one and two percent in the UK."[19] According to Rudge:

> The widespread perception is that hypothermia causes cold-related deaths, but this accounts for very small numbers of annual deaths. In fact, winter has the greatest proportional effect in respiratory mortality. Cardiovascular disease accounts for the greatest number of excess winter deaths and 10% of these are attributable to cold, independently of other factors.
>
> * * *
>
> Circulatory illness, or cardiovascular disease, is exacerbated by 'cold stress,' which results from fluctuations in temperature. This can arise from. . .moving between warm and cold rooms indoors. If the fuel poor can only afford to keep one room heated, the risk of cold stress in the home is increased. This affects older people in particular, whose blood pressure is likely to be raised in the winter. Furthermore, moving from a cold dwelling to the cold outside produces greater cardiovascular strain than going out from a warm house.

British Medical Journal 329. 647 – 652; Collins (1986). Low indoor temperatures and morbidity in the elderly. *Age and Aging* 15(4):212-20.

[18] Child Health Impact Working Group (April 2007). *Unhealthy Consequences: Energy Costs and Child Health*, Boston Medical Center: Boston (MA).

[19] Rudge and Gilchrist (2007). "Measuring the health impact of temperatures in dwellings: investigating excess winter morbidity and cold homes in the London Borough of Newham." *Energy and Buildings*, 39:847-858; see also, Rudge. And Gilchrist (2006). "Health impact of fuel poverty: contributing to the evidence base," in *Proceedings of Healthy Buildings 2006*, Lisbon, 4-6 June 2006 (Fernandes et al, Eds), Vol V:327-330; Rudge (March 2006). "Poor Housing Makes for Poor Health - finding the evidence," *Energy Action*, Issue 96; Rudge and Gilchrist (2005). "Excess winter morbidity among older people at risk of cold homes: a population-based study in a London borough" *Journal of Public Health*, Vol. 27, No.4: 353-358.

These adverse health outcomes not only create social consequences, but they also impose substantial economic costs. "Although these costs are often difficult to measure, one example is the substantial cost of preventable hospitalizations, borne by low-income families, payers, and health care providers."[20] Nationwide, the average charge for a "general pediatric hospitalization" was $9,945 in 2006. The average hospitalization charge for bronchitis and asthma was $7,386. "These economic costs are 5 to 8 times the average cost of heating a home in the Northeast and 7 to 10 times the maximum home heating benefit from the LIHEAP program in 2006."[21]

Nutrition Implications

Unaffordable home energy has a substantial impact on the nutrition of low-income households. According to the Congressionally-funded NEADA study, one-in-five low-income energy assistance recipients went without food for at least one day due to energy bills in the past five years. Renters experience food deprivation more frequently than do homeowners. While 10% of elderly homeowners went without food because of the need to pay home energy bills, 17% of elderly renters did. While 24% of non-elderly owners went without food due to energy bills, 28% of non-elderly renters did.

The impact of unaffordable home energy bills on nutrition is a phenomenon in all parts of the United States and across all climate regions. While the highest penetration of households going without food was in the West (31%), the existence of food deprivation attributable to the need to pay home energy bills was consistent throughout the remaining regions, including the Northeast (20%), Midwest (17%), and South (19%). There is no reason to believe, therefore, that the data presented in the NEADA survey is not transferable to Idaho.

The conclusions of the NEADA survey are bolstered by significant academic research documenting a relationship between unaffordable home energy bills and nutritional deficiencies. One November 2006 article published in *Pediatrics*, the journal of the American Academy of Pediatrics, reports that "convergent evidence suggests that the periodic stress of home heating and cooling costs may adversely impact the health and nutritional status of children and other vulnerable populations."[22] According to this *Pediatrics* article, a study of children 6 to 24 months of age in Boston (MA) found higher proportions of children with weight-for-age below the 5th percentile in the three months after the coldest months, compared with all of the other months of the year.

The article reported further that:

> there is also evidence that hunger and food insecurity are associated with high utility costs and cold weather. In the United States, data show that families reporting unheated days or threats of utility turnoff are more likely to report that

[20] Children's Sentinel Nutritional Assessment Program (C-SNAP). *Fuel for our Future: Impacts of Energy Insecurity on Children's Health*, Nutrition and Learning, Boston Medical Center: Boston (MA).
[21] Id.
[22] Frank et al. (2006). "Heat or Eat: Low Income Home Energy Assistance Program and Nutritional Risk Among Children Under 3 Years Old." *Pediatrics*.

> their children were hungry or at risk for hunger than families without either experience. In addition, national data collected from 1995 to 2001 as part of the Current Population Survey Food Security Supplement suggest that rates of food insecurity with hunger increased during the winter and early spring among low-income families in areas with high winter heating costs and during summer in regions with high summer cooling costs.[23]

Other research on food insecurity has shown that food budgets are those most often sacrificed to meet other survival needs in low-income families.[24]

The nutrition threats are not limited simply to children. A November 2006 article in *The Journal of Nutrition* examined the association between household food insecurity and seasonally high heating and cooling costs for low-income elderly.[25] The study "examined the extent to which greater proportions of poor households, especially poor elderly households, experienced very low food security (the more severe range of food insecurity) during times of the year when home heating and cooling costs were high, controlling for important covariates." "Very low food security" is a severe range of food insecurity, which the U.S. Department of Agriculture referred to as "food insecurity with hunger" in its pre-2006 reports. The study found that "the odds of very low food security were 27% higher in the summer than in the winter in a high-cooling state. In a high-heating state, the odds of very low food security were 43% lower in the summer than in the winter. . ."

The study found that there was a direct relationship between unaffordable home energy bills and the nutrition deficiencies that were documented. It concluded that "the association of interest appears, therefore, to represent a causal effect of home heating and cooling costs and not to be a spurious artifact caused by other seasonally variable economic factors. If anything, the effects of seasonally high home heating and cooling costs on food insecurity may be somewhat ameliorated by seasonal differences in economic factors." The authors concluded that "our analysis shows that in high-heating states, households with incomes below the poverty line were substantially more vulnerable to very low food security during the winter than during the summer, whereas the opposite was true in high-cooling states."

[23] *Heat or Eat*, supra.
[24] See generally, Frank, et al. (1996). "Seasonal variation in weight-for-age in a pediatric emergency room," *Public Health Reports*, 1996; 111:366-371; Bhattacharya , DeLeire and Currie (2006). "Heat or eat? Cold-weather shocks and nutrition in poor American families," *Am. J. Public Health*. 2003; 93:1149-1154; Frank, et al. (2006). *Unhealthy Consequences: Energy Costs and Child Health: A Child Health Impact Assessment of Energy Costs and the Low-Income Home Energy Assistance Program*, Child Health Impact Working Group: Boston Medical Center: Boston (MA); Colton (2008). *Public Health Outcomes Associated with Energy Poverty: An Analysis of 2007 Behavioral Risk Factor Surveillance System (BRFSS) Data from Iowa*, Iowa Department of Human Rights: Des Moines (IA).
[25] Nord and Kantor (2006). "Seasonal Variation in Food Insecurity is Associated with Heating and Cooling Costs Among Low-Income Elderly Americans," *Journal of Nutrition*. 2006; 136:2939-2944.

Public Safety Implications

In addition to these public health and nutrition issues, the unaffordability of home heating service represents a distinct public *safety* threat as well. According to the Canadian Housing and Rental Association, energy poverty can cause households to turn to unsafe heating practices, including heating their home with an open oven door or faulty electric heater. Supplemental heaters cause 120,000 residential fires and 600 deaths annually in the United States.

The loss of *electric* service (not merely heating service) poses a particular threat to the health and safety of low-income Idaho households with children. The home electric service that is being disconnected to low-income households is frequently essential to the operation of some medically-necessary equipment in the home. A full 25% of all energy assistance recipients surveyed for the NEADA study, that had children under the age of 18, reported that a member of the household used medical equipment that requires electricity. A full 6% of all energy assistance recipients surveyed by NEADA reported that the equipment using electricity was used to treat asthma. Nearly as many (4%) said that someone in the household was taking medication that required refrigeration.

The move to auxiliary heating sources when primary heating fuels are disconnected opens up the possibility of an associated fire risk for low-income households. While home heating equipment is no longer the *single* most substantial cause of home fires,[26] it remains *one* of the leading factors contributing to fires, as well as to fire-related injuries and deaths. In particular, portable and fixed space heaters present a risk of harm. While portable space heaters are not the major cause of home heating fires, they play a much more substantial role in deaths and injuries. Portable and fixed space heaters (and their related equipment such as fireplaces, chimneys and chimney collectors) accounted for roughly two of every three (65%) home heating fires in 1998 and three of every four (76%) associated deaths.[27] Each of these devices has a higher death rate per million households using them than do the various types of central heating units or water heaters.

The National Fire Protection Association (NFPA) reports data confirming these data and conclusions. According to the NFPA, "not being able to afford utilities" is one of the "major factors of increased fire risks" for low-income households. "In poor homes, small portable heaters or space heaters may be used to heat areas much too large for their capacity, and some households supplement heating equipment by turning on their ovens and leaving the door open."[28]

[26] The term "`homes' refers to one- and two-family dwellings (which includes manufactured homes) and apartments. . ." The share of fires involving heating equipment, the National Fire Prevention Association (NFPA) says, "is quite different for the two types of homes." While heating equipment is the second leading cause of fires in one- and two-family dwellings, it was only the seventh highest cause of fires in apartments.

[27] Ahrens (June 2001). *The U.S. Fire Problem Overview Report: Leading Causes and Other Patterns and Trends*, at 55, National Fire Protection Association: Quincy (MA).

[28] "Burning Issues," *NFPA Journal*, at 104 (January/February 1996).

The Competitiveness of Business and Industry

Not all impacts arising from unaffordable home energy affect only the individual (or household) experiencing the unaffordable bill. An increasing body of research has documented how the problems associated with inability-to-pay affect the competitiveness of local business and industry as well.

This conclusion is neither profound nor much disputed by researchers that consider the impacts of programs such as home energy affordability subsidies on private employers. One comprehensive study published in 2004 concluded:

> [E]mployers have good reason to be concerned that large numbers of working people with low family incomes do not take advantage of the public benefits intended to help them and their families achieve economic sufficiency -- benefits that also help employers by contributing to the economic stability of their workforces. These public benefits bolster the ability of low-income workers to meet their basic needs, in effect providing a wage supplement to employers.[29]

This joint study, performed in collaboration with the Center for Workforce Preparation of the U.S. Chamber of Commerce and the Center for Workforce Success of the National Association of Manufacturers, reports that many low wage workers fail to access public benefits.

> This not only hurts the workers who miss out on income and benefits; it also hurts their employers through higher turnover and increased absenteeism. Unreliable transportation, inadequate child care, and poor health are leading contributors to absenteeism, tardiness, and turnover among low-income workers. An evaluation of [households leaving the TANF program][30] in New Jersey by Mathematica Policy Research reported that 52 percent had been fired as a result of frequent tardiness or absenteeism related to child care or health problems. In the words of a call center manager who has hired many entry-level workers through the Annie E. Casey Foundation's Jobs Initiative, "these peoples' lives are in chaos. They have so many problems they cannot pay attention to work."
>
> An unpublished survey conducted by ASE in Detroit, Michigan, highlights workplace problems that employers can experience when employees' non-work needs are not addressed. ASE asked entry-level workers and their supervisors in five companies about barriers to employee advancement. After "caring for a dependent," "money problems" were reported more frequently than 19 other potential problems ranging from "understanding work assignments" to "getting along with colleagues." "Financial worry about making ends meet" appears to

[29] Scott (2004). *Private Employers and Public Benefits*, Workforce Innovation Networks (WINS): Boston (MA) and Washington D.C. WINS is a collaboration of Jobs for the Future, the Center for Workforce Preparation of the U.S. Chamber of Commerce, and the Center for Workforce Success, The Manufacturing Institute of the National Association of Manufacturers.

[30] TANF is the Temporary Aid for Needy Families program, that program generally considered to be "welfare" in the United States.

> contribute to absenteeism, distraction on the job, strained relations with supervisors and co-workers, and a number of other factors that reduce productivity.[31]

Affordable home energy can be analogized to other public goods that have been found to provide direct benefits to businesses. The Committee on Economic Development[32] has quantified the beneficial impacts to business from reducing the causes of employee absenteeism and employee turnover associated with unaffordable child care. According to the Committee:

> Studies have found that employee turnover produces disruption and inefficiency in the work environment and that the cost of replacing employees is high. For example, Merck & Co., Inc. found that it costs. . . about 75 percent of salary to replace a clerical or technical employee. It also found that it may take considerable time to fill a vacant position and an average of 12.5 months for a new employee to become adjusted to the job.[33]

Other research reaches similar findings. One professor at Johns Hopkins University considered the extent to which increased low-income status results in increased overall costs to business. She found a variety of costs to business, reporting:

> Poverty. . .produces ill-prepared workers whose lives are easily disrupted by small catastrophes. If the car breaks down, if the kid gets sick, it suddenly becomes impossible to be a reliable worker. Poverty also generates poor health among workers, making them less reliable still and raising the cost of employing them.[34]

The conclusion from this multitude of research is that the unaffordability of home energy impedes the competitiveness, productivity and profitability of business. With low-wage employees, in particular, unaffordable home energy directly contributes to lowered productivity related to the unaffordability of home energy. Increased personal illness, increased employee turnover, and increased family care responsibilities are but three of the factors contributing to lower employee productivity.

---

[31] "Private Employers and Public Benefits," at 5.

[32] CED is a national business-academic partnership. One objective of CED is "to unite business judgment and experience with scholarship in analyzing the issues and develop recommendations to resolve the economic problems that constantly arise in a dynamic and democratic society." *Objectives of the Committee for Economic Development.* The Research and Policy Committee of the CED is directed under the organization's bylaws to "initiate studies into the principles of business policy and of public policy which will foster the full contribution by industry and commerce to the attainment and maintenance" of the objectives of the organization.

[33] Research and Policy Committee (1993). *Why Child Care Matters: Preparing Young Children for a More Productive America, A Statement by the Research and Policy Committee of the Committee for Economic Development*, at 1, Committee for Economic Development: New York.

[34] Schoenberger (1999). *The Living Wage in Baltimore: Impacts and Reflections*, John Hopkins University Department of Geography and Environmental Engineering: Baltimore (MD).

Summary

The unaffordability of home energy facing low-income Idaho residents has severe social, economic, and business consequences that ramify throughout all sectors of the economy. From a social perspective, unaffordable home energy not only threatens the ability of low-income customers to maintain access to their utility service, but also imposes a range of adverse consequences threatening the health, housing, and general welfare of those households. The paid-but-unaffordable home energy bill is a real phenomenon in Idaho. Paying an unaffordable home energy bill means that low-income Idaho residents will go without food, medical care, and other life necessities.

In addition, research has found that the prevalence of money problems (such as unaffordable home energy bills) has a direct and substantial impact on the ability of business and industry to remain competitive.

In short, unaffordable home energy has an adverse impact not only on low-income households, but also on the local utilities serving those households and on the Idaho economy generally.

WHY THE "SOCIAL PROBLEM" OF ENERGY UNAFFORDABILITY IS ALSO A UTILITY PROBLEM.

Quite aside from the impacts that unaffordable home energy has on individual low-income households and local businesses, the unaffordability of home energy has substantial adverse financial and economic impacts on the utility itself. As the vendors charged with serving these low-income customers who cannot afford to pay their bills, these local public utilities incur the expenses associated with non-payment, including collection expenses, working capital, and uncollectibles.

Home Energy Burdens and Utility Bill Payment Problems

An extensive body of research finds that the unaffordability of energy, and the payment problems resulting from that unaffordability, represent issues specifically associated with energy bills as they relate to low-income status, and are not simply associated with the poverty status of low-income households. One tool that is used to comprehensively measure the impact of energy unaffordability on household well-being is the Home Energy Insecurity Scale. The Home Energy Insecurity Scale was developed for the U.S. Department of Health and Human Services (HHS) to take into account the multiple aspects of energy unaffordability.[35] When households face unaffordable home energy bills, they can engage in different types of behavior. They might pay their energy bills while experiencing deprivation in other household necessities. They might not pay their energy bills, while maintaining their other necessities. Or they might engage in a reduction in energy use, beyond mere conservation, and face household deprivation in those respects.

[35] Colton (2003). *Measuring the Outcomes of Low-Income Energy Assistance Programs through a Home Energy Insecurity Scale*, LIHEAP Committee on Managing for Results, U.S. Department of Health and Human Services.

A study of "energy poverty" in Missouri, performed for the National Low-Income Energy Consortium (NLIEC)[36] in 2004, found that home energy insecurity was not simply a function of poverty and/or income but rather a function of energy burdens.[37] "Energy burden" is a household's home energy bill as a percentage of income. Households with lower energy burdens tended to have higher home energy security in Missouri.[38] Twice as many households with energy burdens of 6% or less had Home Energy Insecurity thresholds of Stable or higher as compared to households with energy burdens in excess of 12%. In addition, households with higher energy burdens (i.e., their home energy bills took increasingly larger portions of their income) had progressively lower Home Energy Insecurity ratings.

Other research confirms these findings. The 2006 evaluation of the New Jersey Universal Service Fund (USF) left little question but that utility bill payment problems were a function of energy burdens rather than simply being a function of income and/or poverty. The USF Evaluation expressly found that increasing the percentage of income burdens charged to USF participants had an adverse impact on the ability of USF participants to maintain payment compliance under the program. The New Jersey evaluation reported:

- "More than 80% of households with an effective [energy burden] below 3 percent covered 100 percent or more of their annual bill. Less than 60 percent of households with a [net energy burden] at or above 8 percent covered 100 percent of their annual bill."

- While 26% of the participants with net energy burdens exceeding 8% of income paid between 50% and 90% of their bill, only 6% of households with energy burdens of between 2% and 3% had coverage rates that low.

The USF evaluation reported the same types of results for gas/electric combination USF participants.

- While nearly 80% of participants with burdens of less than 4% paid 100% or more of their bills, only 43% of participants with burdens exceeding 12% did.

- While 31% of USF participants with burdens exceeding 12% paid between 50% and 90% of their bills, only 9.0% of participants with burdens less than 4% had bill coverage rates that low.

[36] NLIEC is a public-private partnership, governed by a board of organizations representing the full spectrum of perspectives in the low income energy community.
[37] Colton (2004). *Paid but Unaffordable: The Consequences of Energy Poverty in Missouri*, National Low-Income Home Energy Consortium: Washington D.C.
[38] "Energy insecurity" is a comprehensive measurement of the impacts of home energy affordability developed for the U.S. Department of Health and Human Services (HHS), the federal agency that administers the federal fuel assistance program in the United States. The Home Energy Insecurity Scale, modeled after the U.S. Department of Agriculture's "food security" scale, places households in one of five levels of "energy security," depending upon their ability-to-pay their home energy bills. The lowest level of energy security is "in-crisis" while the highest level is "thriving." The middle levels in order from top to bottom are "capable," "stable" and "vulnerable."

The New Jersey USF evaluation documents quite clearly that as percentage of income payment responsibilities increase, payment compliance decreases. Recognizing that high energy burdens are directly related to nonpayment, a variety of payment and collection data is examined below.

Utility Bill Payment Problems

Given the extraordinary home energy burdens facing low-income utility customers today, it comes as no surprise that many of those customers cannot afford to pay their bills in a full, timely and regular basis. As a result, not only do these low-income customers face the social and economic deprivations associated with their inability-to-pay, but the utilities that provide service to them incur the business expenses associated with that inability-to-pay as well. These business expenses include not only the costs of carrying arrears, but the costs of charge-offs and the cost of collections also.

The Early Data

The energy bill payment problems associated with energy poverty have long been recognized. Early national data published by the U.S. Census Bureau documented the disproportionate utility bill payment problems faced by low-income households. According to the U.S. Census Bureau, while 9.8% of non-poor families could not pay their utility bills in full, 32.4% of poor families could not do so.[39] The Census Bureau reported that while 1.8% of non-poor families had their electric and/or natural gas service disconnected for nonpayment, 8.5% of poor families suffered this same deprivation.[40]

Information from various states corroborated this national data.[41] While one 1998 Illinois report indicated that 44.5% of low-income natural gas customers were in arrears,[42] an analysis by the staff of the New Hampshire Public Utilities Commission estimated that roughly 35% of the low-income *electric* customers entering that state's Electric Assistance Program (EAP) entered the program with arrearages.[43] After an extensive empirical review, the Pennsylvania Public Utilities Commission estimated that 40% of all identified low-income gas and electric customers are in arrears at any given time.[44]

A study of low-income and non-low-income customers[45] on the Missouri Gas Energy (MGE) system presents one of the most complete examinations of bill payment problems by poverty

[39] U.S. Census Bureau, *Extended Measures of Well-Being: 1992*, P70-50RV (November 1995).
[40] U.S. Census Bureau, *Extended Measures of Well-Being: 1992*, P70-50RV (November 1995).
[41] Some care must be taken in interpreting this data. Frequently, "low-income" data is available only for households *identified* as being low-income. A low-income customer that pays in a full and timely fashion, however, has no reason to have been identified as low-income by the energy company.
[42] Department of Energy and Community Affairs, *Residential Energy Costs and Assistance in Illinois: The 1997 – 98 Winter*, at 6, Springfield (IL).
[43] Colton (2002). *Payment-Problems, Income Status, Weather and Prices: Costs and Savings of a Capped Bill Program*, at 4, Fisher, Sheehan & Colton: Belmont (MA).
[44] Bureau of Consumer Services (1992). *Final Report on the Investigation into the Control of Uncollectible Balances*, at 33 - 34, Docket NO. I-900002, Pennsylvania Public Utilities Commission: Harrisburg (PA).
[45] "Low-income" and "non-low-income" were defined as "energy assistance recipients" and "energy assistance non-recipients." In turn, the "no-energy assistance" population was, in fact, a population selected irrespective of whether

status for a single utility. This MGE study found that low-income customers performed less well than their higher income counterparts on a number of different payment metrics.[46] Four payment attributes were considered in the MGE study:

- A measurement of *complete* payments of bills;
- A measurement of the *prompt* payment of bills;
- A measurement of the *regular* payment of bills; and
- A measurement of the *automaticness* of payment of bills.[47]

The Missouri Gas Energy study found that low-income customers, unassisted by the bill payment program offered by the company, exhibited substantively less favorable payment characteristics than did the total residential population. The study found:

- While roughly half of the energy-assistance population carried arrears in any given month, only one-in-five customers in the general residential population did;
- While energy assistance recipients carried an average of between $150 and $200 in arrears, the general population carried an average of between $50 and $100 in arrears;
- While energy assistance recipients experienced arrears of between 2.0 and 4.0 "bills behind,"[48] with substantial seasonal deterioration, the general population experienced arrears of between 1.0 and 2.0 bills-behind, with little seasonal variation;

---

the customers received energy assistance. The population was, in other words, a combination of energy assistance and non-energy assistance accounts.

[46] Colton (October 2003). *The Impact of Missouri Gas Energy's Experimental Low-Income Rate (ELIR) on Utility Bill Payments by Low-Income Customers: A Preliminary Assessment*, prepared for Missouri Gas Energy: Kansas City (MO)).

[47] "Automatic" bill payment was, in turn, defined as bill payment without need for the utility to resort to any collection activity. "Un-promoted bill payment" (or "unsolicited bill payment") may perhaps be better descriptors of this measurement.

[48] The use of "weighted arrears" as a mechanism to assess payment outcomes is based on a foundation first provided by the Bureau of Consumer Services (BCS) of the Pennsylvania Public Utilities Commission. According to a 1983 BCS analysis, contrary to the argument by that state's utility companies, the Pennsylvania winter shutoff moratorium did not result in an increase in the number of unpaid bills, or the amount of unpaid bills, that would have existed in the absence of a moratorium. The BCS study reported that:

> Average overdue bills are at a low in November and rise to a high point in March or April. The apparent relationship of this pattern to Public Utility Commission regulations is obvious. That is, arrears are greatest at the end of the Commission's winter termination restrictions (December 1 to March 31 of the following year) and have been reduced to their lowest point immediately prior to the introduction of those restrictions for the following year. This pattern is consistent with the assertion put forward by utilities that they would be able to control arrearages if there were no winter termination restraints. However, the seasonal fluctuations are substantial only for heating accounts. Arrearages for non-heating accounts show only minor seasonal fluctuations. A comparison of [the data] suggests a simple explanation for this difference, that is, that the size of arrearages is related to the size of monthly bills. Heating customers' bills grow radically in the winter and so do their arrearages. Non-heating customers' bills change very little

- While energy assistance recipients made between 0.5 and 0.7 payments for each monthly bill that was rendered, the general population made 0.9 (or more) payments per bill.

With respect to each payment metric, the general population exhibited more favorable results than did the energy assistance population.[49]

The More Recent Data: SIPPs and RECS

The conventional wisdom that low-income customers are disproportionately payment-troubled[50] appears to have a solid empirical basis in recent research occurring both at the national level and at the individual state level.

The federal LIHEAP office, in seeking to test the Home Energy Insecurity Scale (HEIS) [51] asked one of the country's leading analysts of low-income energy assistance and weatherization programs –Apprise, Inc. of New Jersey—to analyze "insecurity" data collected through two national surveys: (1) the U.S. Department of Energy's (DOE) Residential Energy Consumption Survey (RECS); and (2) the U.S. Census Bureau's Survey of Income and Program Participation (SIPP).

Apprise found from the RECS that not only heating service disruptions, but also the ***threat*** of heating service disruptions was related to income as a percent of Federal Poverty Level.[52] According to Apprise, 1.7% of all low-income customers experienced a heating service disruption because they were unable to pay for natural gas service; an additional 4.7% experienced a heating service disruption because they were unable to pay for electric service.[53]

Apprise found that the loss of heating service due to the inability-to-pay for a bill was directly associated with income as a percentage of Federal Poverty Level. While 6.6% of households

---

> seasonally and their arrearages follow suit. In other words, if the assertion that winter termination restraints invite nonpayment were correct, then non-heating arrearages should show the same seasonal pattern of variations as do heating arrearages. That they do not casts substantial doubt on the assertion that PUC winter termination restraints are responsible for willful non-payment and consequent collection problems.

Farrell (1983). *Utility Payment Problems: The Measurement and Evaluation of Responses to Customer Nonpayment*, at 19, Pennsylvania Public Utility Commission: Harrisburg, PA

[49] With each payment metric, also, the population receiving ratepayer-provided rate affordability assistance exhibited more favorable characteristics than did the population receiving only energy assistance.

[50] This is not to say that ***all*** low-income customers are payment-troubled. This is to indicate that low-income customers are ***disproportionately*** payment-troubled.

[51] Colton (2003). *Measuring the Outcomes of Home Energy Assistance Programs through a Home Energy Insecurity Scale*, at 1, U.S. Department of Health and Human Services, Administration for Children and Families, Office of Community Services, Division of Energy Assistance: Washington D.C. (hereafter, LIHEAP Home Energy Insecurity Scale).

[52] Apprise, Inc. (February 2010). *LIHEAP Special Study of the 2005 Residential Energy Consumption Survey: Dimensions of Energy Insecurity for Low Income Households*, prepared for U.S. Department of Health and Human Services, Administration for Children and Families, Office of Community Services, Division of Energy Assistance: Washington D.C. (hereafter, *Dimensions of Energy Insecurity*).

[53] *Dimensions of Energy Insecurity*, at 4. An additional number experienced disruptions due to an inability-to-pay for bulk fuel service.

with income below 100% of Poverty Level lost heating service due to their inability-to-pay for electricity, only 2.1% of households with income over 150% of Poverty Level did. While 5.1% of households with income less than 100% of Poverty Level lost heating service due to their inability-to-pay for natural gas, only 2.8% of those with income above 150% of Poverty Level did.[54] The data is set forth in Table 34.

Table 34. Heat Interruption: Inability to Use the Main Source of Heat in the Past 12 Months by Poverty Level (2005).

Reason for Heating Interruption	Poverty Level		
	<=100%	101% – 150%	>=150%
Unable to pay for bulk fuel delivery	7.2%	4.4%	2.7%
Unable to pay for electric service	6.6%	4.1%	2.1%
Unable to pay for natural gas service	5.1%	3.1%	2.8%

SOURCE: 2005 RECS.

The loss of utility service, however, is not related exclusively to home heating. The RECS data, Apprise reported, indicates both substantial heating and cooling service losses.

It is not merely the actual loss of heating service that is critical to an analysis of the impact of low-income status on utility bill payment problems. The problem extends further to the potential (or threatened) loss of service as well. As shown in Table 34, nearly twice as many low-income customers as non-low-income customers face that potential (or threat) as evidenced by a receipt of a shutoff or disconnection notice. While 3.9% of households with income less than 100% of Poverty received a shutoff notice "almost every month," only 2.1% of households with income above 150% of Poverty did.

[54] *Dimensions of Energy Insecurity*, at 23.

Table 35. Received Notice or Threat to Disconnect or Discontinue Electricity or Home Heating Fuel Due to not having Enough Money for the Energy Bill During the Past Year: By Poverty Level (2005).

	Poverty Level		
	<=100%	101% – 150%	>=150%
Almost every month	3.9%	1.4%	2.1%
Some months	11.5%	6.6%	6.1%
1 or 2 months	10.7%	9.5%	7.2%
Never / No	73.8%	82.5%	84.5%
SOURCE: 2005 RECS.			

In fact, it is perhaps not income so much as energy burden that is the primary driving factor in the loss, or potential loss, of home heating service. The Apprise analysis of RECS data considered three levels of "residential energy burdens":[55] (1) a "high" burden, defined as a burden exceeding 4.3%; (2) a "moderate" burden, defined as a burden above 2.6% but less than 4.3%; and (3) a "low" burden, defined as a burden less than 2.6%. As the energy burdens increased, so, too, did the incidence of heating service interruptions due to the inability-to-pay.

- 6.2% of all "high" burden households lost heating service due to their inability-to-pay a bill;
- 4.3% of "moderate" burden households lost heating service due to their inability-to-pay a bill;
- 3.6% of "low" burden households lost heating service due to their inability-to-pay a bill.[56]

Finally, Apprise found that there was a significant continuum of bill payment problems from the lowest income to the highest income. In its study of the 2005 SIPP data,[57] Apprise found that the incidence of both "service disconnections" and "bill payment problems" decreased as income increased. The data is set forth in Table 36.

[55] "Residential energy burdens" included all home energy service, not merely the primary heating fuel.
[56] *Dimensions of Energy Insecurity*, at 34.
[57] Apprise, Inc. (November 2011). *LIHEAP Home Energy Notebook for FY 2009: SIPP Study of Energy Affordability*, prepared for U.S. Department of Health and Human Services, Administration for Children and Families, Office of Community Services, Division of Energy Assistance: Washington D.C.

Table 36. Energy Affordability Problems by Income Group

	At or Below 100% FPL	>100% <=150% FPL	>150% FPL <=60% SMI	>60% SMI <=75% SMI	>75% SMI <= 100% SMI	>100% SMI
Bill payment problems	27.1%	17.3%	14.5%	12.6%	9.4%	3.8%
Service disconnections	5.8%	2.7%	2.1%	2.6%	1.4%	0.5%

SOURCE: 2004 SIPP Panel.

FPL = Federal Poverty Level
SMI = State Median Income

The Indiana Billing and Collection Reports

For three years, 2005 – 2007, the Coalition to Keep Indiana Warm, a multi-stakeholder organization comprised of state government agencies, public utilities, and low-income service providers, collected information on the collection circumstances facing Indiana's six largest utilities. The objective of the reporting was to compile data that would assist Indiana policymakers, public and private, to identify and respond to the energy needs of low-income Indiana residents. Information was presented for a July through June reporting period.

This report was intended to contribute to that objective in two ways:

- To collect data on a ***uniform basis*** among Indiana utilities so that information could be aggregated and evaluated on a statewide basis knowing that the data is comparable between companies; and

- To institutionalize reporting data on an ***annual basis*** among the Indiana utilities so that information could be assessed from year-to-year given the different external factors that are affecting utility customers.

Data from individual companies was combined into a single statewide figure.[58] Information provided for this report included data on two different populations. First, data was provided for all residential accounts. Second, data was provided for all "low-income" accounts.[59]

The Indiana data found that low-income customers consistently had a higher incidence of arrears (i.e., more accounts in arrears) than did their residential counterparts.[60] The proportion of residential customers in arrears ranged from 24% in 2005 to 20% in 2007, while the proportion of low-income customers in arrears ranged from 56% in 2005 to 31% in 2006.

[58] As a result, it is not accurate to refer to "customers" in making collection assessments. Instead, the report referred to customer "accounts." This difference in terminology is significant. One customer may have had more than one account if that customer took natural gas and electric service from different utility providers.
[59] For purposes of the Indiana annual reports, a "low-income" account was defined as an account to which the company has posted a benefit payment from the federal Low-Income Home Energy Assistance Program (LIHEAP).
[60] The comparison was ***not*** "low-income" to "non-low-income." The comparison was "low-income" to "residential as a whole," which would contain a population irrespective of whether or not customers were low-income.

Table 37. Payment-Troubled Status
of Residential and Low-Income Residential Customers
(Indiana) (2005 – 2007)

Residential	2005	2006	2007
Percentage of accounts in arrears	24%	21%	20%
Average arrears of accounts in arrears	$89	$144	$92
Low-Income	2005	2006	2007
Percentage of accounts in arrears	56%	31%	41%
Average arrears of accounts in arrears	$94	$196	$236

SOURCE: Indiana Billing and Collection Reporting: Natural Gas and Electric Utilities (annual).

In each year, not only the percentage of accounts in arrears, but also the average dollars of arrears, was higher for the low-income (energy assistance) population than it was for the residential population as a whole.

Summary

In sum, it is clear that the unaffordability of home energy presents more than simply "social" problems to the state of Idaho. Indisputably, the unaffordability of home energy creates a range of social problems as discussed above. Equally indisputable, however, is the observation that the unaffordability of home energy manifests itself in a series of business problems presented to the utility. Just as it would be inappropriate to focus on the social problems to the exclusion of the utility problems, it would be equally inappropriate to focus on the positive impacts generated by addressing the social problems to the exclusion of also considering the positive utility impacts by addressing the inability-to-pay.

The disproportionate loss of utility service by low-income households in Idaho is a phenomenon that should be reasonably expected. This loss of service presents distinct a business problem to the utilities seeking to serve Idaho's low-income households.

TWELVE IMPORTANT FINDINGS

1. The unaffordability of energy manifests itself in more than simply unpaid bills. While researchers have not studied the issue specifically in Idaho, research from other jurisdictions is informative. According to a series of survey studies published by the National Energy Assistance Directors Association (NEADA), "despite. . .significant residential energy expenses, most low-income households pay their energy bills regularly. But at what cost?" The NEA survey found that "LIHEAP recipients faced life-threatening challenges."

2. The disconnection of electricity and/or natural gas service represents a distinct public health threat, particularly to aging households and to low-income households with children. The impact of service disconnections on the public's health and safety can hardly be debated in light of recent research. Nearly 1-in-6 of all energy assistance recipients reported that someone in the home became sick because the home was too cold. Illnesses were frequently severe enough to require medical treatment.

3. These adverse health outcomes not only create social consequences, but they also impose substantial economic costs. One example is the substantial cost of preventable hospitalizations, borne by low-income families, payers, and health care providers. The average hospitalization charge is five to eight times the average cost of heating a home in the Northeast and seven to ten times the maximum home heating benefit from LIHEAP.

4. Unaffordable home energy has a substantial impact on the nutrition of low-income households. One-in-five low-income energy assistance recipients went without food for at least one day due to energy bills. Renters experience food deprivation more frequently than do homeowners.

5. There is a direct relationship between unaffordable home energy bills and the nutrition deficiencies. In high-heating states, households with incomes below the poverty line were substantially more vulnerable to very low food security during the winter than during the summer, whereas the opposite was true in high-cooling states.

6. The unaffordability of home heating service represents a distinct public ***safety*** threat as well. The move to auxiliary heating sources when primary heating fuels are disconnected opens up the possibility of an associated fire risk for low-income households. While home heating equipment is no longer the ***single*** most substantial cause of home fires, it remains ***one*** of the leading factors contributing to fires, as well as to fire-related injuries and deaths. While portable space heaters are not the major cause of home heating fires, they play a much more substantial role in deaths and injuries. The National Fire Protection Association (NFPA) reports that "not being able to afford utilities" is one of the "major factors of increased fire risks" for low-income households.

7. An increasing body of research has documented how the problems associated with inability-to-pay affect the competitiveness of local business and industry. The failure of low-income worker to access public benefits not only hurts the workers who miss out on income and benefits, it also hurts their employers through higher turnover and increased absenteeism. Unreliable transportation, inadequate child care, and poor health are leading contributors to absenteeism, tardiness, and turnover among low-income workers.

8. The unaffordability of home energy impedes the competitiveness, productivity and profitability of business. With low-wage employees, in particular, unaffordable home energy directly contributes to lowered productivity related to the unaffordability of home energy. Increased personal illness, increased employee turnover, and increased family care responsibilities are but three of the factors contributing to lower employee productivity.

9. Quite aside from the impacts that unaffordable home energy has on individual low-income households and local businesses, the unaffordability of home energy has substantial adverse financial and economic impacts on the utility itself. The local public utilities incur the expenses associated with non-payment, including collection expenses, working capital, and uncollectibles.

10. An extensive body of research finds that the unaffordability of energy, and the problems resulting from that unaffordability, represent issues specifically associated with energy bills as they relate to low-income status, and are not simply associated with the poverty status of low-income households. Home energy "insecurity" is not simply a function of poverty and/or income but rather a function of energy burdens.

11. More narrowly, there is little question but that energy unaffordability problems are a function of energy burdens rather than simply being a function of income and/or poverty. Increasing the percentage of income burdens charged to low-income customers yields an adverse impact on the ability of customers to maintain payment compliance. Payment-troubled status can be examined by metrics measuring the completeness, promptness, regularity and unsolicited nature of bill payments. With respect to each payment metric, the general population exhibits more favorable results than does the energy assistance population.

12. The conventional wisdom that low-income customers are disproportionately payment-troubled appears to have a solid empirical basis in recent research occurring both at the national level and at the individual state level. Recent national data confirms that not only heating service disruptions, but also the ***threat*** of heating service disruptions is related to income as a percent of Federal Poverty Level. A significant continuum of bill payment problems exists from the lowest income to the highest income. The incidence of both "service disconnections" and "bill payment problems" decreases as income increases.

NOTES

PART 4:
EXISTING LOW-INCOME ENERGY ASSISTANCE IN IDAHO

The primary source of government funds to help pay low-income energy bills in Idaho is generally considered to be the federal Low-Income Home Energy Assistance Program. While LIHEAP provides considerable fuel assistance to the poor of Idaho, to focus exclusively on LIHEAP is to miss millions of dollars of additional resources.

From the perspective of public assistance generally available to help pay low-income home energy bills in Idaho, LIHEAP is by far the major player. A "county indigent assistance" program exists, which represents a government program providing limited emergency funds for a variety of purposes (*e.g.*, food, shelter, energy) to households. Emergency assistance provided through the Federal Emergency Management Act (FEMA) is also quite limited. Two of the three major sources of energy-related assistance are the utility allowances provided as part of affordable housing programs, as well as the "excess shelter deduction" provided through the federal Food Stamp program, but both are limited to participants in specific programs. In addition, the State of Idaho has institutionalized a sales tax exemption for home energy, albeit not limited to low-income households.

THE LOW-INCOME HOME ENERGY ASSISTANCE PROGRAM (LIHEAP)

The primary fuel assistance program generally available in Idaho is the federally-funded Low Income Home Energy Assistance Program (LIHEAP). Through LIHEAP, the state provides basic cash grants to income-eligible households to cover home heating bills. LIHEAP is a federal block grant program. As a block grant program, the state receives a designated amount of funding each federal fiscal year. When that funding is exhausted, the state must stop providing LIHEAP grants. Idaho does not receive additional funding, in other words, merely because its need might have increased (e.g., due to increasing prices) or because the number of applications might have increased (e.g., due to a severe winter).

Congress does supplement its basic LIHEAP appropriation with "contingency" funding that may be released from time-to-time at the order of the President. When such contingency funds are released, however, Idaho may, but need not necessarily, receive a portion of such funds. For example, the contingency funds released in August 2007 were limited to states with cooling-related emergencies. Contingency funds released in February 2008 were limited to states with high penetrations of fuel oil used for home heating.

Not all LIHEAP funding is devoted to the payment of home energy bills. A portion of LIHEAP dollars –not to exceed 10% under federal law-- is used for administrative expenses. In addition, states may earmark portions of their LIHEAP dollars for use in weatherizing homes rather than providing cash grants. Idaho makes use of this weatherization earmark of LIHEAP funds.

The Availability of LIHEAP Funding.

Over the past four years, Idaho's LIHEAP program has received roughly $89.2 million as its basic annual allocation. In 2009 and 2010, Congress appropriated additional LIHEAP "contingency" funding, of which Idaho received roughly $3.0 million each year. Contingency funds were substantially reduced in the 2011 LIHEAP program ($1.090 million for Idaho). Contingency funding should not be considered a stable LIHEAP funding source. Nor should it be considered a source to pay basic home heating bills. Contingency funding is made available only in those circumstances where weather or home heating fuel prices have created an emergency situation. The ongoing, fundamental unaffordability of energy that is not related to specific exigent events (such as severe weather or price spikes) is not addressed by LIHEAP contingency funding.

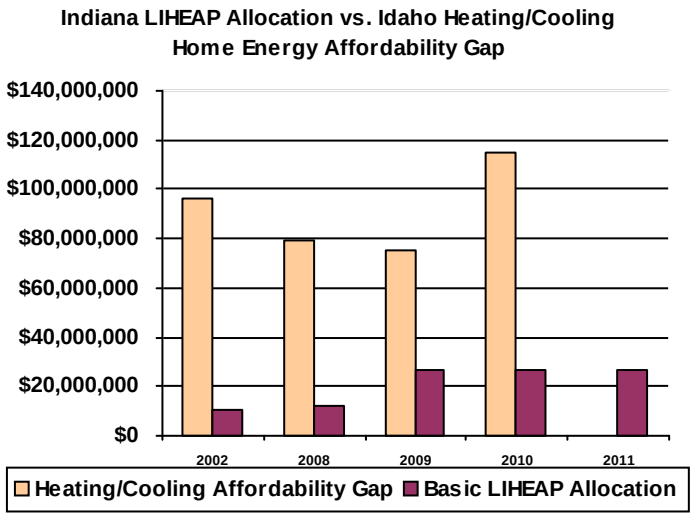
Table 38: LIHEAP Allocations to Idaho by Fiscal Year (2008 – 2011)

	2008	2009	2010	2011
Basic allocation	$12,238,378	$25,632,242	$25,632,242	$25,736,498
Tribal set-aside	$593,868	$1,307,238	$1,307,238	$1,315,660
State allocation & tribal set-aside	$11,644,510	$26,939,480	$26,939,480	$27,052,158
Contingency release	$1,603,043	$2,923,679	$3,092,659	$1,090,945
Contingency tribal set-aside	$74,708	$149,102	$125,423	$55,637
Contingency and tribal set-aside	$1,677,751	$3,072,681	$3,218,112	$1,146,582
Total for year	$13,916,129	$30,012,161	$30,157,592	$26,827,443

SOURCE:

LIHEAP Clearinghouse, www.ncat.org/liheap/Funding/funding.htm (November 2011).

The Adequacy of LIHEAP Funding



Federal appropriations for the Low-Income Home Energy Assistance Program are inadequate, and are becoming more so every year. In reaching this conclusion, it is important to remember that LIHEAP is a heating/cooling program. LIHEAP is not intended to cover home energy bills for end-uses other than heating and cooling. While the *total* Home Energy Affordability Gap in Idaho was $114.5, in 2010, the total Affordability Gap for heating/cooling standing alone was $62.5 million.[61]

Nonetheless, it is possible to compare Idaho's LIHEAP allocations with Idaho's heating/cooling Home Energy Affordability Gap. The 2010 LIHEAP coverage ratio in Idaho (41.0%) is noticeably higher than the 2004 LIHEAP coverage ratio of 26.9%. In 2004, Idaho's LIHEAP allocation of $11.040 million covered a heating/cooling Affordability Gap of $40.998 million. In 2010, the LIHEAP allocation of $25.638 million covered an Affordability Gap of $62.448 million. Despite this proportionate increase, LIHEAP is falling further behind. Since 2004, while the heating/cooling Affordability Gap in Idaho has increased by nearly $21.4 million, the federal LIHEAP allocation to Idaho has increased by only $14.6 million. Moreover, the increase in the federal LIHEAP appropriation due to the combination of increasing energy prices and economic recession is considered to be temporary at best.

Federal LIHEAP Coverage

Much of the burden for the Home Energy Affordability Gap facing Idaho will fall on the private sector (should resources be there to address the problem). As discussed immediately above, funding for the federal Low-Income Home Energy Assistance Program (LIHEAP) has historically been grossly insufficient to meet the Affordability Gap, and is decreasing in its ability keep up with increasing energy prices.

A common misperception is that the dramatic increase in LIHEAP funding in Fiscal Year 2009 placed low-income households in a much better position than they had experienced in previous years. In fact, however, the increase in 2009 LIHEAP funding just continues to meet a small percentage of the total home energy affordability needs in the state. Table 39 presents data comparing LIHEAP appropriations to the *total* Home Energy Affordability Gap. While LIHEAP covered 10.9% of the Home Energy Affordability Gap in 2002, providing $10.5 million of energy assistance against an Affordability Gap of $96 million, even with increased funding,

[61] The 2011 Home Energy Affordability Gap has not been calculated as of the date of this report.

LIHEAP covered only 22% of the Home Energy Affordability Gap in 2010, providing $25.6 million against an Affordability Gap of $114.5 million. Remember, again, however, that LIHEAP is *intended* to be a heating/cooling program; it was never intended to be a comprehensive home energy affordability program to address, among other things, low-income residential electric bills.

Table 39. LIHEAP and Idaho's Home Energy Affordability Gap

Affordability Gap Year	Total Home Energy Affordability Gap[62]	Regular Block Grant LIHEAP Allocation	LIHEAP Coverage Ratio
2002	$96,063,279	$10,478,978	10.9%
2010	$114,530,581	$25,632,242	22.4%
Increase	$18,527,302	$15,153,264	---

Even this "LIHEAP coverage ratio" overstates the effectiveness of LIHEAP in keeping up with increasing home energy bills. The LIHEAP Coverage Ratios in 2002 and 2010 (10.9% and 22.4% respectively) might be construed to indicate that LIHEAP has somewhat improved its ability to fill the state's Affordability Gap. Such a conclusion would be wrong.

In fact, as the Table above shows, while the LIHEAP Coverage Ratio has somewhat increased relative to the Coverage Ratio in 2002 on a percentage basis, the *dollar level* of the Affordability Gap not covered by LIHEAP has nonetheless increased.

LIHEAP continues to be severely inadequate in Idaho. LIHEAP covers a fraction of the Home Energy Affordability Gap for a fraction of income-eligible households.

UTILITY ALLOWANCES FOR PUBLIC AND ASSISTED HOUSING

One of the most substantial sources of energy assistance in Idaho, as elsewhere, involves the "utility allowance" provided to households in HUD-supported housing with tenant-paid utilities. A utility allowance is provided only to residents of rental housing; homeowners do not receive a utility allowance. Nor do tenants who live in master-metered housing units with utility bills that are an undifferentiated part of rent receive a utility allowance.

HUD utility allowances offer substantial advantages over the home energy assistance provided through the federal fuel assistance program (LIHEAP). While LIHEAP is offered as a heating and cooling program, HUD utility allowances are intended to cover complete home energy bills (both heating/cooling and electric appliances). While LIHEAP provides a one-time annual grant, utility allowances provide monthly credits to HUD tenants year-round. While LIHEAP is a federal block grant, with individual benefits only loosely related to individual energy bills or home energy burdens, HUD utility allowances are intended to be tied to typical energy bills based on actual local rates, housing size and type, weather, and other usage-factors. Finally,

[62] The total Home Energy Affordability Gap includes electricity and hot water usage.

while LIHEAP grants are limited by federal appropriations, utility allowances are required, by federal law, to be updated annually, or whenever utility rates –including changes in the price of bulk fuels (e.g., propane, Liquefied Petroleum Gas [LPG])—changes by ten percent (10%) or more, retroactive to the day the change reaches the ten percent level.

The various mechanisms through which HUD housing programs provide energy assistance in Idaho are described below.

Public and Assisted Housing

Nationally, HUD utility allowances provide more energy assistance to low-income households than does the federal LIHEAP program. Table 40 documents how, while fewer households nationwide receive HUD utility allowances, a substantially similar amount of money is spent in providing utility assistance through the HUD programs. HUD tenants received $3.139 billion in utility allowances in 2005. In contrast, although the dates do not exactly match, the *total* basic LIHEAP appropriation in 2011 was $4.5 billion. LIHEAP energy affordability benefits would have been lower than that figure, however, since the total appropriation would be reduced by block grant transfers to weatherization and the social services block grant programs, as well as dollars used for administration.

Table 40. Utility Allowance Expenditures Nationwide (2005)

	Subsidized Housing Units	Occupied Units	% with Utility Allowances	# with Utility Allowances	Amount Spent ($M)
Public Housing	1,213,949	1,090,579	46%	501,666	$411.2
Section 8 Housing Choice Vouchers	2,138,214	1,805,498	91%	1,643,003	$2,122.0
Section 8 Moderate Rehab	39,337	37,764	61%	23,036	$19.8
Section 8 New + Substantial Rehab	845,832	811,999	69%	560,279	$357.1
Section 236	174,175	167,208	54%	90,292	$65.5
Other	390,442	374,824	59%	221,146	$163.0
Total Section 8 (all types)	3,023,383	2,655,261	84%	2,226,318	$2,498.0
Total (non-public/non-Section 8)	564,617	542,032	57%	311,438	$228.50
Total	4,801,949	4,287,872	61%	3,039,423	$3,139.0

SOURCE: U.S. Department of Housing and Urban Development, Promoting Efficiency at HUD in a Time of Change, Report to Congress, at Table 2, page 11 (August 2006).

As can be seen in Table 40, most of the HUD tenants receiving a utility allowance include households living in either public housing or Section 8 housing. A full 90% of those housing units nationwide receiving HUD utility allowances (2.728 million of 3.039 million) were either Section 8 or public housing units. Nationwide, roughly 82% of the combined public/Section 8 housing is, in fact, Section 8 (2.226 million of 2.728 million). A far higher proportion of Section 8 tenants receive a utility allowance (74%) than do public housing units (46%); more public housing units have master-metered home energy.

Idaho public housing authorities administer nearly 12,000 units of public and subsidized housing, more than 10,000 of which receive a utility allowance. In its most recent *Picture of Subsidized Housing* (2008*),* the United States Department of Housing and Urban Development (HUD) reported that Idaho housing authorities owned 831 units of public housing (793 of which were occupied), and administered 6,567 units of Section 8 housing (6,175 of which were occupied).[63] This public and assisted housing serves the very low-income.

Of the 793 occupied public housing units, nearly half (48%) were occupied by households with annual income less than $10,000, while 10% were occupied by households with annual income less than $5,000. Of the 6,200 occupied Section 8 housing units, nearly 60% were occupied by households with income less than $10,000, while 5% were occupied by households with annual income less than $5,000.

Table 41: Selected Assisted Housing Units by Annual Income (2011) (Idaho)

	$0	$ 1 - $5,000	$5 - $10,000	$10 - $15,000	$15 - $20,000	$20 - $25,000	More than $25,000	Total
Public housing	3%	7%	38%	26%	12%	7%	6%	828
Section 8 voucher housing	5%	10%	40%	23%	13%	6%	4%	6,999
Totals //b//	5%	9%	40%	23%	13%	6%	4%	7,382

SOURCE: U.S. Department of Housing and Urban Development, Resident Characteristics Report (September 30, 2011).

NOTES:

/a/ Individual numbers may not sum exactly to total due to rounding.
/b/ Does not include Housing Tax Credit program.

Table 42 shows that Idaho's assisted housing closely reflects national data on the percentage of units that receive utility allowances to cover their home energy bills; a somewhat higher proportion of public housing units receive utility allowances in Idaho than in the nation as a whole. (In fact, utility allowances are designed to pay not only home energy, but all utilities except telephone). More than 80% of all public housing units, and more than 90% of all Section 8 units in Idaho received a utility allowance in 2008.

[63] Housing authorities administer other types of HUD-assisted housing. Due to the fact that public and Section 8 housing represents the bulk of those units, these other programs are not considered in this narrative.

Table 42. Public and Housing Choice Voucher (Section 8) Housing Units (Idaho) (2008)

	Total Units	Occupied Units	Occupied Units with Utility Allowances			
			Number	Percent	Average Monthly Utility Allowance	Sum Annual Utility Allowance
Public Housing	831	793	701	84%	$41	$344,892
Section 8	6,567	---	6,175	94%	$95	$7,039,500

SOURCE: U.S. Department of Housing and Urban Development, A Picture of Subsidized Households in 2008.

The home energy assistance provided to these public and assisted housing tenants in 2008 reached nearly $7.5 million in 2008. Table 42 provides the aggregate utility allowances paid in Idaho in 2008. While public housing tenants received $350,000 in utility assistance, Section 8 tenants received more than $7.0 million. The bulk of this assistance was distributed to households with income between $5,000 and $15,000

.

It is not possible to precisely update the 2008 data to current figures. HUD has not prepared a recent update to its *Picture of Subsidized Households*. As a result, detailed data disaggregated by each local housing authority is not publicly available. A review of annual reports filed with HUD by each housing authority, however, reveals that the number of public and Section 8 housing units has remained relatively constant between 2008 and 2011.

Accordingly, even if the level of utility allowances had remained constant since 2008 –this is unlikely given price increases in that time and the federal mandate that utility allowances be updated annually or whenever prices change by 10% or more—the amount of HUD utility allowance flowing into Idaho in 2011 will exceed the $7.3 million figure experienced in 2008.

Low-Income Housing Tax Credit Developments

The significance of utility allowances promulgated by Idaho's local housing authorities goes well beyond the public housing (owned by the housing authorities themselves) and assisted (Section 8) housing administered by those housing authorities. In addition, developers constructing (or rehabbing) affordable rental housing funded with federal Low-Income Housing Tax Credits (LIHTC) are required by federal law to provide utility allowances to tenants living in these units. As in public and assisted housing, in Tax Credit housing also, the utility allowance is intended to cover the entire utility bill (both energy and water/sewer) to assure that the total shelter costs paid by LIHTC tenants do not exceed 30% of a household's income. LIHTC developers do not promulgate their own utility allowances, however. Instead, they rely on the utility allowances promulgated by the Local Housing Authority in the jurisdiction in which the LIHTC units are located.

Idaho has seen substantial LIHTC development in the past twenty years. The U.S. Department of Housing and Urban Development (HUD) publishes information on the number of LIHTC units developed in each state. Between 1988 and 2009 (the last year for which data is available), Idaho has seen the development of more than 8,500 LIHTC low-income units, of which 7,700 were units for low-income tenants. The bulk of these units had either one-bedroom (2,545 units), two-bedrooms (3,767 units), or three-bedrooms (2,036 units).

If these LIHTC developments provide a utility allowance of only $80 per month (somewhat lower than the somewhat older Section 8 units), the utility allowances provided to Idaho's LIHTC tenants will reach more than $7.5 million in additional energy assistance in Idaho each year. As with HUD housing, utility allowances are provided only for LIHTC rental housing units, not homeownership units.

Table 43. Low-Income Housing Tax Credit Developments (Idaho)

	2004 and before	2005	2006	2007	2008	2009	Total /b/ (1988 – 2009)
No. of total units	6,650	265	589	295	392	345	8,510
No. of LI units	5,905	251	579	280	390	343	7,748
0 bedrooms /a/	72	0	0	0	0	4	76
1 bedroom /a/	2,002	62	191	22	158	110	2545
2 bedrooms /a/	2,851	118	294	190	152	162	3767
3 bedrooms /a/	1,611	86	100	83	82	74	2036
4 bedrooms /a/	114	0	4	0	0	5	123

SOURCE:

U.S. Department of Housing and Urban Development inventory of LIHTC developments.

NOTES:

/a/ Not limited to low-income units.
/b/ Some totals may not equal the sum of the columns due to rounding.

As can be seen, the provision of utility allowances to low-income renters living in LIHTC tax credit developments throughout Idaho represents a substantial source of energy assistance for the poor of Idaho.

HOME-Supported Affordable Housing Developments

Affordable rental housing developments in Idaho supported through programs such as the federal Home Investment Partnership Program (HOME) also provide energy assistance to the residents of these publicly-subsidized units. The federal HOME program provides funding directly to specified cities throughout Idaho as well as to the state. HOME dollars received by the state are then distributed through an application process. HOME-assisted housing units involving tenant-paid utilities receive a "utility allowance" of the same type received by tenants of public and Section 8 housing.

HOME dollars provide significant numbers of new housing units throughout the State of Idaho. Table 44 shows the number and types of housing units produced in Idaho with federal HOME funds since the inception of the HOME program in 1992. More than 5.500 affordable housing units have been newly constructed or rehabbed using federal HOME funds in Idaho since 1992. Different jurisdictions focus their HOME funds on different types of housing development. Both the City of Boise and the State of Idaho produce mostly units for homebuyer purchase. While the state produces more new construction units, the City of Boise produces modestly more rehabbed units. For purposes of energy assistance, rental units are important because they receive a "utility allowance" as a credit against rent, in much the same way that a tenant of public or Section 8 housing would receive a utility allowance, while homeownership units do not. Somewhat over 1,100 rental units in Idaho have been assisted with HOME funds.

Table 44. Cumulative HOME-Supported Affordable Housing Production (Idaho)

	HOME Investment Partnership Production						
Participating Jurisdiction	Cumulative Expenditure	Cumulative units /a/	Home-buyer	HO Rehab	Rental	TBRA /b/	Year Became PJ
State of Idaho	$92,824,219	5,048	3,944	77	1,027	0	1992
Boise Idaho	$13,206,823	514	331	33	81	69	1992
Total	$106,031,042	5,562	4,275	110	1,108	69	---

SOURCE: U.S. Department of Housing and Urban Development, Integrated Disbursement and Information System (IDIS), Dashboard Report Reference Sheet, Snapshot of HOME Performance (June 30, 2011).

NOTES:

/a/ Through June 2011.

/b/ TBRA = Tenant-Based Rental Assistance.

CRISIS ASSISTANCE

Crisis assistance involves funding directed toward households that face emergency situations that not only might affect the household's ability to stay in its home (thus contributing to homelessness), but also might present an immediate threat to public health and safety as well. Crisis funding can be publicly- or privately-generated.

Publicly-Provided Crisis Assistance Funding.

Idaho provides two major types of publicly-funded crisis assistance for home energy bills. Using locally-generated funds, Idaho counties provide what is called "non-medical indigent assistance." These dollars can be used to respond to a range of hunger, housing, energy and other related problems. In addition, federal FEMA dollars are distributed, primarily to prevent homelessness, on a local basis. A limited amount of HUD dollars are made available statewide for "homelessness prevention" through the HUD Emergency Shelter Grant (ESG) program. These funds, while limited, are also spread over multiple uses (including rental payments, utility payments and the like).

County Non-Medical Indigent Assistance

Idaho provides emergency assistance to low-income households through its "nonmedical indigent assistance" program.[64] Under this program, county commissioners are mandated to "evaluate the need and provide for indigent person(s) nonmedical assistance in a temporary situation. . ." Under the statute, assistance need only be provided "when no alternatives exist. . ."[65] Moreover, the statute provides that "nothing in this chapter shall imply county assistance is to be provided on a continuing basis."[66]

Circumstances under which nonmedical indigent assistance will be granted are to be identified in policies and procedures to be promulgated by county commissioners. Funding for the program may be provided by an ad valorem tax which county commissioners are authorized to levy.[67]

Under the Idaho program, an "indigent" person is considered to be any household "who does not have resources available from whatever source which shall be sufficient to enable the applicant to provide nonmedical assistance. . ."[68] An "emergency" is defined to include "any circumstances demanding immediate action."[69] Nonmedical assistance will be made available for the "reasonable costs for assistance which includes food and shelter and other such necessary services" as determined by each county.[70] Counties may, but are not required to, provide assistance for more than one month out of any 12-month period.[71]

There is a considerable process that must be negotiated to receive nonmedical indigent assistance in Idaho. A county resident must apply in writing for such assistance on prescribed forms. The application must be sworn to under oath and must "set forth and describe all household

[64] Idaho Statutes, Section 31-3401 (2010).
[65] In particular, "if federal, state or other programs for assistance are available to meet the needs of a household, an eligible applicant must apply to those programs."
[66] Idaho Statutes, Section 31-3401 (2010).
[67] Idaho Statutes, Section 31-3508 (2010).
[68] Idaho Statutes, Section 31-3403(10) (2010).
[69] Idaho Statutes Section 31-3403(8) (2010).
[70] Idaho Statutes, Section 31-3405 (2010).
[71] Idaho Statutes, Section 31-3405 (2010.

resources."[72] "Evidence of need, indigency and residency" must be supplied as part of the application. Finally, "applicants and all household members who are not fully employed and are capable of employment shall be required to file an application with the department of employment, use their best efforts seek employment and to provide verification of such efforts to the county. . ."[73]

Finally, Idaho requires recipients of nonmedical indigent assistance to repay any assistance provided. The statute provides that "by acceptance of county assistance an applicant agrees to repay the county for all or any portion of expenses paid, when the board finds the applicant is able to repay all or any portion of the charges over a reasonable period of time and/or has assets which can be encumbered for future repayment."[74]

No entity maintains consolidated records of the amounts of assistance provided by Idaho's counties in nonmedical indigent assistance, let alone the amount of indigent assistance specifically provided to help pay past-due utility bills. Different counties appear to have significantly different commitments to indigent assistance. For example, Ada County, the most populated county in the state, reports that in 2009, it considered 139 "special cases" and 34 "hardship requests" for indigent services (not specifying any distinction between medical and non-medical services). In contrast, Bannock County (with a population about one-fifth the size of Ada) reports that it reviewed 391 indigent claims in Fiscal Year 2010 (July – June), while granting 268 of those claims (again, not specifying any distribution between medical and non-medical claims). The Bannock County data for 2004 through 2010 is set forth in Table 45 shows that, while available, the non-medical indigent assistance funds are not a major source of funding for energy assistance in Idaho.

Table 45. Indigent Claims Reviewed and Paid
Bannock County (Idaho) (2004 – 2010)

	2004	2005	2006	2007	2008	2009	2010
Indigent claims reviewed	665	362	282	351	348	416	391
Indigent claims paid	187	148	143	168	157	222	268

SOURCE: Bannock County "Operation Indicators', Schedule 15 (FY 2010).

No distinction is made in the Bannock County report between the specific uses of the "indigent claims paid" (e.g., whether used for rent, medical, utility, etc.).

[72] Idaho Statutes, Section 31-3404 (2010).
[73] Idaho Statutes, Section 31-3404 (2010).
[74] Idaho Statutes, Section 31-3414 (2010).

Federal Emergency Management Assistance (FEMA) Funding

In addition to these locally-generated funds, the Federal Emergency Management Agency (FEMA) provides limited funds to Idaho that can be used, in part, to help address home energy payment problems. FEMA money can be used to help retire arrears in order to prevent the disconnection of service and the potential resulting forced homelessness of the assisted household. FEMA monies are distributed through the Emergency Food and Shelter National Board Program (EFSP). EFSP was created to help meet the needs of hungry and homeless people. Chaired by a FEMA representative, the EFSP national governing board is made-up of representatives of organizations such as the Red Cross, the United Way, Catholic Charities, and the Salvation Army, amongst others.

EFSP funds are distributed nationally on a formula basis. According to FEMA, the National Board "uses a formula involving population, poverty, and unemployment data to determine the eligibility of a civil jurisdiction." For the most recent round of funding, local jurisdictions qualified for EFSP funding if they met any *one* of the following criteria:

- The number of unemployed reached 300+ with a 11.5% rate of unemployment; *or*
- The number of unemployed was 300 or more with a 14.4% rate of poverty.

One of the eligible uses for EFSP funding is the payment of one month of utility bills for a person in danger of becoming homeless due to an unpaid utility arrears.

The State of Idaho has received between $370,000 and $820,000 each year in EFSP funding for the past four federal fiscal years. The EFSP funding received a bump upwards in 2010 (to $823,140) and received a one-time influx of ARRA funding in 2009 ($545,639 of ARRA funding in addition to EFSP funding of $369,218). The FY2010 award of $424,426 is roughly the same allocation Idaho received in 2008 ($410,901). EFSP funding to Idaho is provided entirely through direct awards to local jurisdictions. The State has not received independent funding in recent years.

Table 46 sets forth total EFSP/FEMA funding to Idaho for 2007 through 2011. No data is available, however, on the distribution of specific EFSP/FEMA grant uses (e.g., shelter, rent, food, etc.).

Table 46. EFSP/FEMA Awards to Idaho: 2007 – 2011			
Year	Direct Award /a/	State Award	Total Award /b/
2007	$462,409	$0	$462,409
2008	$410,901	$0	$410,901
2009	$369,218	$0	$369,218
2009 (ARRA)	$545,639	$0	$545,639
2010	$823,140	$0	$823,140
2011	$424,426	$0	$424,426

NOTES:

/a/ Direct awards include those awards made directly to local jurisdictions meeting EFSP qualification criteria.
/b/ This total award includes assistance for both utility and non-utility emergencies.

SOURCE: Emergency Food and Shelter National Board Program, Federal Emergency Management Agency (FEMA), www.efsp.unitedway.org/EFSP.

HUD Emergency Shelter Grant (ESG) Funding

One limited source of utility assistance in Idaho involves funding set aside from the state's allocation of HUD Emergency Service Grant (ESG) grants. Administered by the Idaho Housing and Finance Association (IHFA), the ESG program provided a statewide allocation of $533,040 in 2009 and $535,848 in 2010. According to IHFA, the state seeks to devote 10-15% of its ESG funding to "homeless prevention" activities each year. In 2010, IHFA allocated $50,000 of ESG funding, matched with $50,000 in "private resources" for such purposes.[75]

In addition to being limited in quantity, the ESG assistance is limited in purpose. IHFA says that these funds "will be distributed to each region of the state to be used in conjunction with other available homeless prevention funds to assist eligible persons receive mortgage/rental assistance and utility assistance." ESG funds can be used to "help prevent individuals and families from losing their homes through a limited, one-time rental and utility assistance."

The ESG assistance is not considered to be adequate. According to IHFA, "anecdotally, most providers offering emergency assistance have insufficient resources to keep up with growing demand."[76] The state does not, however, track the actual expenditures on utility assistance provided through ESG funds.

[75] IHFA (2010). *Five-Year Strategic Plan for Housing & Community Development Programs: April 2, 2010 through to March 31, 2014*, at 45.
[76] Id., at 88.

PRIVATE ENERGY ASSISTANCE

Private energy assistance in Idaho is made available both to supplement insufficient levels of resources that are publicly made available to low-income households and to cover the gaps that many stakeholders believe exist in the energy affordability safety net.

Idaho, however, does not generate substantial sums of private "fuel fund" crisis assistance throughout the State. Idaho's LIHEAP office reports fuel fund expenditures and community/church contributions toward energy assistance as part of its annual "leveraging" report to the federal government. Church and community contributions comprise the bulk of these funds. No separate funding is listed for "fuel funds." Nor do the State's utilities contribute to crisis assistance. Private energy assistance in Idaho is presented in Table 47.

Table 47. Private Energy Assistance Benefits (Idaho) (2007 – 2010)

	FY 2007	FY 2008	FY 2009	FY 2010
Fuel funds	$0	$0	$0	$0
Church and community contributions	$457,327	NA	$223,417	$272,937
Utility waivers	$0	$9,165	$0	$0

SOURCE: LIHEAP Clearinghouse, State Leveraging Reports (annual).

NON-ENERGY-RELATED ENERGY ASSISTANCE

Not all "energy assistance" in Idaho (or elsewhere) is delivered in the form of direct dollars of benefits to help pay a low-income household's home energy bill. One of the primary programs that delivers assistance based, in part, on the size and unaffordability of a home energy bill is the federal Food Stamp program. The availability of the Food Stamp program's "excess shelter deduction" to Idaho residents is discussed below. The Earned Income Tax Credit (EITC), too, places cash in the hands of low-income households jut at the time the customer might most need funds to retire winter arrears.

Food Stamp Excess Shelter Deduction[77]

The federal Food Stamp program can deliver some energy-related relief to low-income households as home heating prices continue to escalate from year-to-year. One part of the calculation of a family's Food Stamp benefits is a determination of whether the family is entitled to an "excess shelter cost deduction." To the extent that a family has excess shelter costs, the amount of the

[77] The "Food Stamp" program is now called the Supplemental Nutrition Assistance Program (SNAP). Since the name change is relatively recent, and many people do not recognize SNAP as being the equivalent of "Food Stamps," this discussion will continue to refer to the program as "Food Stamps."

excess is, under a prescribed formula, deducted from the family's income for purposes of determining an appropriate monthly Food Stamp allotment up to a federal ceiling.

In brief, the excess shelter cost deduction for Food Stamps works like this. The amount of Food Stamps a family receives is based on the family's "countable income." Countable income includes pre-tax earnings and welfare benefits, minus an earnings deduction (for families with earnings), minus a child care deduction (for families with out-of-pocket child care expenses), minus the excess shelter cost deduction (for families with high shelter costs relative to their incomes). The "excess" shelter cost is the extent to which a family's shelter costs exceed 50% of the family's total adjusted income up to a maximum dollar ceiling established by federal regulation. "Shelter costs," for purposes of calculating the excess shelter deduction, include both rent/mortgage and utility costs.[78]

The assumption behind the distribution of Food Stamps is that the cost of food takes up a particular proportion of a household's available resources. If, due to substantial increases in energy prices, however, that available income is much less, the cost of food will take up a much greater portion of the available income, thus making it more likely that inadequate nutrition will result. It is now commonly recognized that high home energy bills have substantive adverse impacts on a household's nutrition intake.

Under the Food Stamp excess shelter deduction, increases in home energy prices will have one of two impacts on Food Stamp families:

- Some families that had not previously qualified for an excess shelter cost deduction now will qualify; and

- Some families that had previously qualified for an excess shelter cost deduction will now qualify for a bigger deduction.

In either case, the family would be entitled to a larger allotment of Food Stamps as a result of increases in energy costs. Ensuring that low-income families re-qualify themselves for Food Stamps, with an excess shelter cost deduction appropriately based on the increasing energy prices, would certainly help low-income families absorb spiraling energy costs in Idaho.

On a statewide basis, the Excess Shelter Deduction provides additional financial resources to a significant number of Idaho households. According to the U.S. Department of Agriculture's (USDA) Food and Nutrition Service (FNS), in 2010, nearly four-of-five Idaho Food Stamp recipients claimed an Excess Shelter Deduction. Table 49 reports that in 2010, 60,000 (78.0%) of Idaho's Food Stamp recipients claimed the Excess Shelter Deduction.

While USDA does not track the ***cause*** of changes in the claim of excess shelter deductions, Table 49 documents that the number of families claiming an Excess Shelter Deduction in Idaho more than doubled in the four years 2007 to 2010. In 2007, 28,000 Idaho Food Stamp recipient households claimed the Excess Shelter Deduction (79.5% of the total Food Stamp population). By

[78] "Utility" costs do not include telephone costs.

2010, that figure had increased to 60,000 (78.0%). Even though the absolute numbers of Food Stamp recipient households claiming the Excess Shelter Deduction have continued to climb, the proportion of recipient households has stabilized.

Table 48. Excess Shelter Deductions for Idaho Food Stamp Recipients (2007 – 2010)

	2007	2008	2009	2010
Households with shelter deduction	28,000	32,000	43,000	60,000
Households with shelter deduction	79.5%	79.2%	79.5%	78.0%
Households at shelter cap	6,000	7,000	12,000	18,000
Households at shelter cap	16.2%	18.7%	22.6%	23.5%
Average monthly shelter expense /a/	$584	$629	$710	$731
Average shelter deduction /b/	$294	$308	$351	$348

NOTES:

/a/ Over households having shelter expenses.
/b/ Over households having a shelter deduction.

SOURCE:

USDA, Characteristics of Food Stamp Households, Table B-4 (annual).

The availability of the Food Stamp Excess Shelter Deduction to deliver continuing energy-related assistance is substantial as well. Even though the average shelter deduction increased by 20% between 2007 and 2010 (from $294 to $348), few Idaho households have reached the statutory ceiling on the Excess Shelter Deduction that is available to them. Only 23.5% of the Idaho Food Stamp population has reached the maximum Excess Shelter Deduction available under the law. It is, however, necessary to acknowledge the converse. The 23.5% of Idaho Food Stamp families having reached the cap on their excess shelter deduction available under federal law represent 18,000 Idaho families that cannot receive additional Food Stamp benefits as their home energy bills continue to increase.

The Earned Income Tax Credit as Energy Assistance

One group of households that is often "missed" by existing fuel assistance programs involves the working poor. Often with incomes too high to qualify for public assistance programs, these households nonetheless also have too little income to be able to afford their winter home heating bills. The discussion earlier in this narrative documents how the working poor lack sufficient funds to meet their Basic Family Budget. The federal Earned Income Tax Credit (EITC) helps to meet the needs of these households.

The Importance of the EITC to Idaho's Utilities

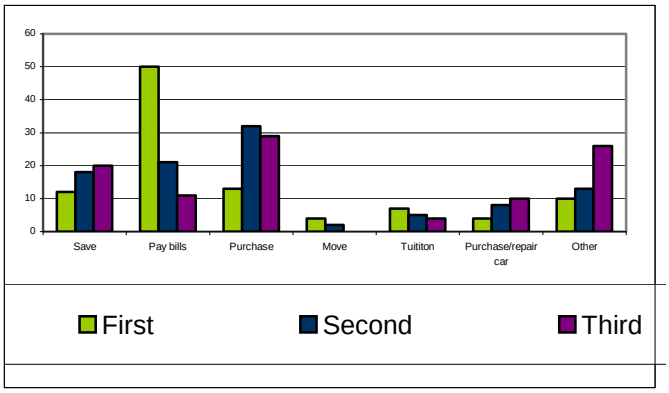
EITC funding is important for low-income utility customers in three respects.

- First, coming as part of the federal income tax return process, the money will come at the time when low-income households are most vulnerable to unpaid energy bills. Tax returns filed in January and February would easily put cash in the hands of low-income households during the high bill winter months.

- Second, tax credits coming back to customers in April may well also serve as a source of downpayment on a payment plan to prevent the loss of service at the very time Idaho's winter shutoff protections are ending.

- Third, while a low-income household would need to file a tax return in order to receive the EITC, the household need not have a tax liability in order to receive the credit. The credits can place actual cash in the pockets of households. Under the EITC, workers can receive a refundable tax credit from the federal government. If a household has had taxes withheld, the federal government will return her withheld taxes and pay her an additional amount up to the maximum EITC to which she is entitled. If the household has had no taxes withheld, the federal government will send her a check for the maximum EITC to which she is entitled.

In addition to these substantive benefits of the EITC, the EITC provides process benefits as well. Perhaps most importantly, the EITC is not a "use it or lose it" proposition. An income-eligible household may make "back claims" for EITC credits within a three-year statutory limit. Claims for Tax Year 2009, in other words, expire only if not made by April 15, 2012.



It would seem evident on its face that a utility would benefit from any increase in financial resources to be brought to bear on low-income living expenses. More than intuition, however, supports the conclusion that increasing EITC claims will help pay utility bills. According to a study of EITC recipients in New York, performed by faculty at Colgate University, 40% of the households reporting using their EITC to pay bills used those benefits to pay utility bills, a higher percentage than those using the EITC to pay for rent (31%), credit cards (28%), car payments (22%), and groceries (21%).[79] More than two-thirds of EITC recipients use their credits to pay for basic needs, while half use their credits to pay off a debt. Another study found that 65% of EITC recipients have a "making ends meet" use for their credits, with the payment of utility bills and rent the most important use, followed by the purchase of food and clothing.[80]

[79] Simpson, et al. (October 2006). *The Efficacy of the EITC: Evidence from Madison County (New York)*, Colgate University Department of Economics.
[80] Smeeding, et al. (December 2000). "The EITC: Expectation, Knowledge, Use and Economic and Social Mobility," *National Tax Journal*, 53(4): 1187, 1198. Smeeding is with the Center for Policy Research, The Maxwell School, Syracuse University (NY).

In addition, an Edison Electric Institute (EEI) staffperson reports, for example, that 90 percent of New Jersey EITC recipients used their tax credit to pay household living expenses. One-third of all recipients used their EITC to pay *past-due* bills and one-quarter used part of their refund to pay utility bills. In addition, according to data provided by the Internal Revenue Service (IRS), which administers the EITC at the federal level, fully one-half of households receiving the EITC use those dollars to "pay bills" as their first use. More than 70% of EITC recipients use those funds to "pay bills" as either their first or second use.

One benefit of the EITC is that it can reach beyond merely serving the objective of helping EITC recipients pay their home utility bills. One study in San Antonio, for example, found that every $1 in EITC benefits received in that city generated $1.58 in local economic activity. The San Antonio study found further that every $37,000 in local economic activity would generate one additional permanent job.[81] According to the Brookings Institution, the EITC generates a concentrated infusion into local economies, in many cities, more than $1.0 million per square mile. One study in Cuyahoga County (OH) found that the EITC benefits claimed in the early months of 2003 exceeded all the wages and benefits paid in the local hotel industry in that quarter.[82]

The EITC brings substantial dollars into the State of Idaho. As Table 49 shows, in 2009, 138,860 Idaho taxpayers received $293 million in EITC benefits, of which $258 million was paid in cash (the remainder being paid as a credit against tax liability). These EITC credits claimed in Idaho were a substantial increase over 2006, when 107,000 taxpayers received $196 million, of which $171 million was paid in cash.

[81] Berube (2005). *Using the Earned Income Tax Credit to Stimulate Local Economies*, Brookings Institution: Washington D.C.
[82] Berube (2005). *Connecting Cleveland's Low-Income Workers to Tax Credits*, Brookings Institution: Washington D.C.

Table 49. EITC Credits Claimed in Idaho by Year (2006 – 2009)

	2006	2006	2008	2009 /a/
Earned income credit (number)	106,991	115,917	120,054	138,860
Earned income credit (amount)	$196,083,000	$215,286,000	$232,572,000	$293,028,000
Average credit (amount)	$1,833	$1,857	$1,937	$2,110
Excess earned income credit (refundable) /b/	92,592	100,244	104,535	121,534
Excess earned income credit (amount)	$171,082,000	$186,915,000	$203,171,000	$258,096,000
Average excess credit (amount)	$1,848	$1,865	$1,944	$2,124

SOURCE:

Internal Revenue Service, Table 2, Individual Income and Tax Data by State and Size of Adjusted Gross Income.

NOTES:

/a/ 2009 is the last year for which data has been published.
/b/ The "excess" earned income credit is that portion of the EITC that is in excess of total tax liability. The excess credit includes any portion of the EITC that is paid as an "advance earned income credit payment" for those returns that had an excess.

Helping income-eligible households claim their entire federal Earned Income Tax Credit (EITC) is one initiative that Idaho stakeholders should pursue for the state's high range poverty households. The EITC is the nation's primary anti-poverty program. In Idaho:

- In 2007,[83] more than 115,000 households claimed a total of $215.3 million in Federal EITC credits (an average credit of $1,857);
- In 2008, 120,000 households claimed a total of $232.6 million in Federal EITC credits (an average credit of $1,937);
- In 2009, 139,000 households claimed a total of $293.0 million in Federal EITC credits (an average credit of $2,220).

Taxpayers receiving their EITC as cash (above and beyond any reduction in their tax liability) actually receive somewhat more money on average than the EITC population as a whole. While the average EITC amount in 2009 for all Idaho taxpayers receiving the EITC was $2,110, persons receiving their EITC as cash (rather than a reduction in their tax liability) received $2,124.

[83] 2007 is the last year for which data is available.

Table 50. EITC Tax Returns, Refund Anticipation Loans, Paid Tax Preparers (2005 – 2008) (Idaho)

	EIC Number	Paid Preparers	Refund Anticipation Loans
2005	102,577	61,869	15,523
2006	103,318	61,560	18,157
2007	111,246	64,537	18,404
2008	116,430	64,767	16,613

SOURCE: Brookings Institution, EITC Interactive (annual)

NOTES:

/a/ 2008 is last tax year for which data is reported.

Even aside from helping those working poor households that have not historically claimed the EITC, helping those who have filed such claims can generate benefits for low-income ratepayers. In Idaho, of the low-income households claiming the EITC in 2008, more than 55% used paid tax preparers, while more than one-in-seven received "tax anticipation loans." In these circumstances, the cost of the tax preparation, according to one Brooking Institution study, is $150, with an additional cost of $130 for the Refund Anticipation Loan (RAL), $280 total. The Brookings Institution found that low-income households receiving such Refund Anticipation Loans pay an annual percentage rate of 171% in interest. These two processes (i.e., the use of paid tax preparers and the use of RALs) pull millions of dollars out of the low-income community in Idaho each year.

The Households Who Claim the EITC

In Idaho, the EITC is focused in the lowest income brackets. Table 51 presents a distribution of EITC tax returns by income for the years 2005 through 2008. More than 70% of all EITC returns in Idaho were filed by households with income less than $15,000 in each of the past four years for which data is available. Indeed, roughly one-in-three of all EITC returns were filed by households with income less than $10,000. In 2008, a 2-person household living at 100% of the Federal Poverty Level would have had an income of $14,000; a 3-person household would have had an income of $17,600 at 100% of Federal Poverty Level in 2008.

Table 51. EITC Tax Returns by Adjusted Gross Income (2005 – 2008) (Idaho)

	$0 - $5000	$5 - $10,000	$10 - $15,000	$15 - $20,000	$20 - $25,000	$25 - $30,000	$30 - $35,000	$35 - $40,000	>$40,000
2005	12,685	19,630	16,858	13,732	13,372	12,495	8,123	1,814	---
2006	12,043	18,809	17,101	13,338	13,358	12,576	9,008	2,964	---
2007	14,132	19,963	18,585	13,501	13,514	12,638	10,101	4,853	---
2008 /a/	13,891	19,909	19,469	14,024	13,720	12,807	10,503	6,103	1,069

SOURCE: Brookings Institution, EITC Interactive (annual)

NOTES:

/a/ 2008 is last tax year for which data is reported.

Sales Tax Exemption

The State of Idaho provides a sales tax exemption for residential utility and heating fuels. Idaho imposes a six percent (6%) sales tax. State statute, however, exempts the "sale or purchase of natural gas, electricity and water when delivered to consumers at the place of consumption. . ."[84] Moreover, the state exempts "the sale or purchase of any matter used to produce heat by burning. . .for domestic home use. . ."[85] Specifically included in this latter exemption are wood, coal, petroleum and gas.

The sales tax exemption is not limited to low-income customers or even to residential customers. According to the state, in Fiscal year 2011, the sales tax exemption for all customers was valued at $90.638 million for utilities and at $5.232 million for heating fuels.

SUMMARY OF EXISTING RESOURCES

While the State of Idaho faces a daunting Home Energy Affordability Gap, considerable resources exist within the state to help fill that Gap. The largest program generally available to provide home energy assistance is the federal Low-Income Home Energy Assistance Program (LIHEAP). In Idaho, however, LIHEAP is currently insufficient and is falling further behind. While LIHEAP is "covering" a higher proportion of home heating and cooling bills today than in the past, in absolute dollar terms, low-income Idaho residents are falling further and further behind. Moreover, LIHEAP is designed to cover only heating and cooling bills. When compared to affordability needs defined to also include home electric bills, the program covers a fraction of the bill for a fraction of the eligible population.

[84] Idaho statutes, section 63-3662F (2010).
[85] Idaho statutes, section 63-3662G (2010).

Other energy affordability resources exist in the state that equal or exceed the reach of LIHEAP. While each is extensive in its own right, each also has its own limitations. Compared to LIHEAP's provision of an average benefit of $355 to 55,000 Idaho households, for example, the federal Food Stamp program provides an "excess shelter deduction" averaging $348 to 60,000 households. Excess shelter costs incorporate all shelter costs, including utility costs (energy plus water/sewer plus local telephone). Idaho's county non-medical indigent assistance program distributed "county assistance" dollars, but these funds are limited and available only on an emergency basis. The federal Earned Income Tax Credit distributed a cash tax credit averaging more than $2,100 to nearly 140,000 Idaho households. The EITC, however, is focused primarily on the working poor.

Aside from LIHEAP, perhaps the largest direct energy assistance program available in Idaho involves the "utility allowance" provided through HUD's housing programs. Utility allowances, while helping fewer households than LIHEAP, provide substantial dollars of assistance. Utility allowances cover the complete home energy bill for more than 6,600 Section 8 tenants, more than 800 Public Housing tenants, more than 7,700 tenants of homes built or rehabbed with Low-Income Housing Tax Credits and more than 1,100 tenants in homes built or rehabbed with federal Home Investment Partnership (HOME) funds. To receive a "utility allowance," however, a household must be a tenant with tenant-paid utilities in one of the HUD-assisted housing programs. Nonetheless, it appears that there may be more than 16,000 such households throughout Idaho.

Historically, attention devoted to "home energy assistance" has focused almost exclusively on maintaining current levels of LIHEAP funding. Such a narrow focus runs counter to the multiple programs available in Idaho and the sources of funds that can and should be accessed to help pay low-income home energy bills.

ENERGY EFFICIENCY AND WEATHERIZATION ASSISTANCE

In contrast to cash assistance discussed throughout above, energy efficiency and weatherization programs targeted to the poor reduce bills and promote affordability by reducing consumption. Efficiency investments can be an effective tool to use in reducing low-income energy needs for some, but not all, households.[86]

Energy efficiency investments are an effective supplement to the distribution of bill assistance to address low-income energy needs over the long term. Energy efficiency provides continuing benefits year-in and year-out. Investments in residential energy efficiency help deliver efficient end-uses to consumers. In both the medium- and long-term, energy efficiency will reduce the costs of the rate assistance program.

[86] "Weatherization" and "energy efficiency" programs are sometimes distinguished below. An "energy efficiency" program may deliver non-weatherization services. Both terms are used so as to indicate that funding for both weatherization and non-weatherization is beneficial.

Sources of Low-Income Efficiency and Weatherization Funding

While the U.S. Department of Energy's (DOE) Weatherization Assistance Program (WAP) is often considered to be "the" low-income weatherization program in the country, in Idaho, WAP provided less than 20% of total low-income energy efficiency funding in 2010. Table 52 shows that while, with the exception of a bump in 2009 WAP funding, the Idaho low-income weatherization program receives funding from a LIHEAP weatherization set-aside as well as from utility energy efficiency expenditures.

The Idaho state fuel assistance agency appears to have committed to an effort to fund roughly half of the state's total weatherization funding. In the three years 2006 through 2008, half of those energy assistance funds came from a LIHEAP set-aside while the other half came from "oil overcharge" funds.[87] When oil overcharge funds, which were comprised of a limited non-recurring fund, ran out, the LIHEAP contribution was able to meet the difference.[88]

Table 52. Weatherization Funding by Year and Source (2006 – 2010) (Idaho)

	2006	2007	2008	2009	2010
Total	$7,846,308	$9,782,584	$8,311,847	$10,257,617	$7,839,911
DOE	$1,961,577	$2,445,646	$1,964,431	$3,366,002	$1,558,041
DOE pct	25.0%	25.0%	23.6%	32.8%	19.9%
LIHEAP	$1,961,577	$2,445,646	$2,008,734	$4,476,820	$4,476,820
LIHEAP pct	25.0%	25.0%	24.2%	43.6%	57.1%
Other (utility, BPA)	$1,961,577	$2,445,646	$2,328,948	$2,414,795	$1,805,050 /b/
Other pct	25.0%	25.0%	28.0%	23.5%	23.0%
PVE	$1,961,577	$2,445,646	$2,009,734	$0	$0
PVE pct	25.0%	25.0%	24.2%	0.0%	0.0%
Total	$5,884,731	$7,336,938	$6,302,113	$10,257,617	$7,839,911

SOURCE: National Association of State Community Service Programs (2010 Funding Survey).

NOTES:

/a/ No ARRA monies are included in this Table since that funding was not ongoing.
/b/ Bonneville Power Administration (BPA) annual funding of roughly $500,000 was no longer available beginning in 2010.

[87] "Oil overcharge funds" are also commonly referred to as Petroleum Violation Escrow (PVE) funds.
[88] LIHEAP funding was substantially increased at the federal level in those years. As a result, the LIHEAP weatherization set-aside could increase in dollar terms without increasing in percentage terms.

By federal statute, the state LIHEAP office may not set aside more than 25% of the state's total LIHEAP allocation for weatherization funding.[89] Given the substantial increase in LIHEAP funding in 2009 and 2010, the corresponding weatherization set-aside could increase as well. To the extent that these levels of federal LIHEAP expenditures are not expected to continue, however, the Idaho LIHEAP allocation will decrease along with a concomitant cut in the absolute dollar amount of the weatherization set aside.

Utility funding of low-income weatherization in Idaho was maintained at nearly $2.5 million for the years 2007 through 2009. Those utility dollars, however, were supplemented with a one-time three-year commitment of $500,000 annually from the Bonneville Power Administration (BPA). Beginning in 2010, these BPA funds were no longer available and the overall utility contribution to low-income weatherization decreased correspondingly.

In sum, Idaho weatherization funding is likely to experience a significant decrease in future years. PVE and BPA monies will no longer be available. Moreover, to the extent that overall LIHEAP funding decreases at the federal level, resulting in lower LIHEAP allocations to Idaho, even if the set-aside remains at the statutory maximum, Idaho will return to a more predominant reliance on federal WAP funds to deliver low-income weatherization services.

Benefits of Weatherization and Energy Efficiency as Affordability Assistance

The delivery of energy efficiency investments to low-income customers not only yields resource conservation and avoided cost benefits to the affected utility, but delivers a broad range of other utility cost reductions as well. Accordingly, low-income energy efficiency programs should be implemented not only as a resource efficiency measure, but also as an important tool in controlling other system-wide utility costs. Avoided costs commonly associated with low-income energy efficiency would include savings such as reduced arrears, reduced working capital, reduced credit and collection expenses, and the like.[90]

The existence of direct financial benefits to utilities arising from energy efficiency programs targeted specifically to low-income households has been recognized for nearly 25 years. The presence of such avoided costs was first postulated in 1987. That analysis stated that targeted electric energy efficiency programs had advantages that went beyond the traditional energy and capacity savings associated with energy efficiency measures:

> The cost-effective reduction of system costs is relevant and important in every part of the business operations of the utility, not simply to the power supply function. Accordingly, a utility should be concerned with the problem of nonpayment, overdue payment, and partial payment of utility bills. Bad debt arises when ratepayers demand power from the system and then do not pay for it on a timely basis. . . .[A] new conservation program [can be proposed] that is

[89] The State may set aside 15% of LIHEAP funding for low-cost weatherization or may, with federal approval, set-aside up to 25% of LIHEAP funding for weatherization. 42 U.S.C. Section 8623(k) (2010).

[90] In this fashion, low-income energy efficiency programs are closely akin to low-income rate affordability programs in their ability not only to serve the social function of addressing energy unaffordability problems, but also in serving the business purpose of reducing the business costs associated with an inability-to-pay.

> justified on an avoided cost basis. The proposal rejects the historical view that avoided costs include only an energy and a capacity component. Instead, it introduces the notion of avoided bad debt. As long as the energy efficiency program costs less than the bad debt it will avoid, the program is cost-justified.[91]

In this 1987 article, "bad debt" was defined to include all aspects of costs associated with payment troubles. The term was used to include not only written-off accounts, but credit and collection expenses, working capital expenses, and a host of other expenses related to nonpayment. Since that time, the existence and importance of such expanded avoided costs has become generally-accepted. Analysts have since repeatedly confirmed that low-income energy efficiency generates benefits beyond simply energy and capacity savings.

These benefits are not theoretical. They are both real and substantial. Pennsylvania's natural gas and electric utilities operate what that state's Public Utility Commission (PUC) calls the Low-Income Usage Reduction Program (LIURP). LIURP involves the offer of the following types of usage reduction packages to low-income households: (1) an electric space heating package; (2) an electric water heating package; (3) a baseload electric package; and (4) a natural gas heating package.

Pennsylvania's electric utilities deliver "baseload" electric LIURP services to homes that do not heat with electricity. Since LIURP first began in 1989, baseload electric jobs have represented roughly two-in-five (115,098 of 292,071 total jobs: 39.4%) of all LIURP homes.[92] Over a 20-year period, baseload electric usage reduction jobs have outnumbered every other type of usage reduction treatment, including the treatment of electric space heating homes (n=85,999 jobs).

The objectives established for the Pennsylvania LIURP initiative are similar to the objectives that underlie most low-income weatherization and non-weatherization efficiency programs, including:

- To assist low-income residential customers in conserving energy by reducing their energy consumption;
- To assist participating households in reducing their energy bills;
- To decrease the incidence and risk of customer payment delinquencies and the attendant utility costs associated with customer arrearage and uncollectible accounts; and
- To reduce residential demand for electricity and gas, and peak demand for electricity.

[91] Colton and Sheehan (1987). "A New Basis for Conservation Programs for the Poor: Expanding the Concept of Avoided Costs," 21 *Clearinghouse Review* 135, 139.
[92] Customer Services Information System Project, Pennsylvania State University (January 2009). *Long-Term Study of Pennsylvania's Low-Income Usage Reduction Program: Results of Analyses and Discussion*, prepared for Pennsylvania Public Utility Commission, Penn State University: State College (PA).

In January 2009, Penn State University released a comprehensive long-term evaluation of the LIURP program. According to that Penn State evaluation of the LIURP initiative:

> To meet these goals, LIURP is targeted toward low-income households with the highest energy consumption. Of these households, those with payment problems and high arrearages are targeted. Since the program's inception in 1988 through 2006, the major electric and gas companies required to participate in LIURP have spent over $330 million to provide weatherization treatments to more than 292,071 low-income households in Pennsylvania.

Prepared for the Pennsylvania PUC, the Penn State evaluation examined data over the first 18 years of program operation. The evaluation provides important lessons with respect to recognizing the full-range of benefits from low-income weatherization and energy efficiency programs in Idaho. The LIURP evaluation reported:

- "LIURP is a cost-effective method of reducing both energy consumption and energy bill arrearages. . .Sixty nine percent of LIURP households reduce their energy consumption following weatherization treatments, with an average reduction of 16.5 percent." Electric baseload jobs generated a usage reduction of 698.2 kWh, or 19.1%.

- "Of those households with energy bill arrearages, 40 percent reduce their arrearage following weatherization services. Thirty-seven percent of electric industry households reduce their arrearages. . ."[93] LIURP was targeted to households with arrears (within the population of high use consumers). The LIURP evaluation found that "by the end of the year following weatherization, 68 percent of the households have an energy bill arrearage, a decrease of 29 percent. . .Although the average number of full payments made does not vary from the pre- to post-period, the percent of households with missed payments decreased and the average number of partial payments increased."[94]

- "The [third] most significant, and most common, variable that is positively related to reductions in energy consumption is the amount of arrearage owed in the pre-period [before usage-reduction treatments are installed], suggesting that households with large arrearages are motivated to make the necessary behavioral changes to contribute toward additional reductions in energy consumption. It therefore makes sense to target households with higher arrearages when prioritizing LIURP jobs."

[93] The LIURP evaluation found that this result was consistent with prior U.S. Department of Energy (DOE) research, which found that "low-income families who receive weatherization have a lower rate of default on their utility bills and require less emergency heating assistance." Tonn, et al. (2001). *Weatherizing the Home of Low-Income Home Energy Assistance Program Clients: A Programmatic Assessment*, U.S. Department of Energy: Washington D.C.

[94] The evaluation noted that participation in LIURP was associated with increased participation in energy assistance programs. It was difficult to distinguish the impact of the two.

While low-income energy efficiency investments generate the traditional benefits (i.e., avoided energy and capacity costs) associated with usage-reduction programs, as is evident, the benefits flowing from low-income efficiency extend far beyond those traditional benefits.

Limits of Weatherization as Affordability Assistance

Despite the benefits of low-income weatherization and efficiency programs identified above, the effectiveness of the role that energy efficiency can play in addressing home energy affordability, however, is limited by several considerations:

- For many low-income customers, energy efficiency cannot deliver affordable home energy service because unaffordability is driven by income rather than consumption. Even an extremely low consumption level yields a bill that imposes an unaffordable home energy burden on the household.

- For many low-income customers, energy efficiency cannot deliver affordable home energy service because consumption is driven by factors that are beyond the ability of efficiency investments to control. Even a substantial reduction in energy consumption leaves annual usage at high levels.

- The need for affordability assistance in Idaho extends to tens of thousands of low-income households per year, a number significantly beyond the ability of the state (including all sources of weatherization and efficiency funding) to treat through efficiency services.

- For many low-income customers, energy efficiency cannot deliver affordable home energy service because the unaffordability is driven by arrears rather than by current consumption. Even if efficiency services were to reduce future bills for current use to an affordable burden, the asked-to-pay amount of the customer would exceed the ability-to-pay due to the need to retire arrears.

A multi-state study of affordability programs in the United States found that "every state that has adopted a home energy affordability program has incorporated an energy efficiency component into that affordability initiative."[95] The study found that "these [low-income efficiency] programs can effectively complement the impacts of affordability programs." The study reported that energy efficiency "programs can have the greatest overall impact if they target lower income households, households with vulnerable household members, and customers that are participating in a ratepayer-funded affordability program."

TWELVE IMPORTANT FINDINGS

1. The primary source of government funds to help pay low-income energy bills in Idaho is generally considered to be the federal Low-Income Home Energy Assistance Program.

[95]Carroll, Colton and Berger (2007). *Ratepayer Funded Low-Income Energy Programs: Performance and Possibilities*, at 132, Apprise, Inc.: Princeton (NJ).

While LIHEAP provides considerable fuel assistance to the poor of Idaho, to focus exclusively on LIHEAP is to miss millions of dollars of additional resources.

2. Through LIHEAP, the state provides basic cash grants to income-eligible households to cover home heating bills. LIHEAP is a federal block grant program. As a block grant program, the state receives a designated amount of funding each federal fiscal year. When that funding is exhausted, the state must stop providing LIHEAP grants.

3. Federal appropriations for the Low-Income Home Energy Assistance Program are inadequate, and are becoming more so every year. In reaching this conclusion, it is important to remember that LIHEAP is a heating/cooling program. LIHEAP is not intended to cover home energy bills for end-uses other than heating and cooling.

4. A common misperception is that the dramatic increase in LIHEAP funding in Fiscal Year 2009 placed low-income households in much better position than they had experienced in previous years. In fact, however, the increase in 2009 LIHEAP funding just continues to meet a small percentage of the total home energy affordability needs in the state.

5. One of the most substantial sources of energy assistance in Idaho involves the "utility allowance" provided to households in HUD-supported housing with tenant-paid utilities. A utility allowance is provided only to residents of rental housing; homeowners do not receive a utility allowance. Nor do tenants who live in master-metered housing units with utility bills that are an undifferentiated part of rent receive a utility allowance.

6. The significance of utility allowances promulgated by Idaho's local housing authorities goes well beyond the public housing (owned by the housing authorities themselves) and assisted (Section 8) housing administered by those housing authorities. In addition, developers constructing (or rehabbing) affordable rental housing funded with federal Low-Income Housing Tax Credits (LIHTC) are required by federal law to provide utility allowances to tenants living in these units. Affordable housing developments in Idaho supported through programs such as the federal Home Investment Partnership Program (HOME) also provide energy assistance to the tenants of these publicly-subsidized rental units.

7. Idaho provides two major types of publicly-funded crisis assistance for home energy bills. Using locally-generated funds, Idaho counties provide what is called "non-medical indigent assistance." These dollars can be used to respond to a range of hunger, housing, energy and other related problems. In addition, federal FEMA dollars are distributed, primarily to prevent homelessness, on a local basis. A limited amount of HUD dollars are made available statewide for "homelessness prevention" through the HUD Emergency Shelter Grant (ESG) program. These funds, in addition to being quite limited, are also spread over multiple uses (including rental payments, utility payments and the like).

8. The State of Idaho provides a sales tax exemption for residential utility service and heating fuels. The sales tax exemption is not limited to low-income customers or even to residential customers.

9. Private energy assistance in Idaho is made available both to supplement insufficient levels of resources that are publicly made available to low-income households and to cover the gaps that many stakeholders believe exist in the energy affordability safety net. Idaho, however, does not generate substantial sums of private "fuel fund" crisis assistance throughout the State.

10. The federal Food Stamp program can deliver some energy-related relief to low-income households as home heating prices continue to escalate from year-to-year. One part of the calculation of a family's Food Stamp benefits is a determination of whether the family is entitled to an "excess shelter cost deduction." To the extent that a family has excess shelter costs, the amount of the excess is, under a prescribed formula, deducted from the family's income for purposes of determining an appropriate monthly Food Stamp allotment up to a federal ceiling.

11. One group of households that is often "missed" by existing fuel assistance programs involves the working poor. Often with incomes too high to qualify for public assistance programs, these households nonetheless also have too little income to be able to afford their winter home heating bills. The federal Earned Income Tax Credit (EITC) can be an important source of "energy assistance" to help to meet the needs of these households.

12. Energy efficiency and weatherization programs targeted to the poor reduce bills and promote affordability by reducing consumption. Energy efficiency investments are an effective supplement to the distribution of bill assistance to address low-income energy needs over the long term. While the U.S. Department of Energy's (DOE) Weatherization Assistance Program (WAP) is often considered to be "the" low-income weatherization program in the country, in Idaho, WAP provided less than 20% of total low-income energy efficiency funding in 2010. The Idaho low-income weatherization program receives funding from a LIHEAP weatherization set-aside as well as from utility energy efficiency expenditures.

NOTES

PART 5:
A LOW-INCOME AFFORDABILITY PROGRAM FOR IDAHO

In response to the affordability problems documented above, and the broad range of utility, social, and business competitiveness impacts arising because of these problems, this report outlines the essential components comprising an effective and efficient low-income affordability program for Idaho. These components include:

- A rate assistance component;
- An arrearage management component; and
- A crisis intervention component.

Since utility energy efficiency programs have been addressed in detail in separate proceedings before the Idaho Public Utilities Commission, energy efficiency is not considered in this report. This exclusion should not be construed as an indication that efficiency investments are unimportant, but rather that they are beyond the purview of this analysis.

THE RATE ASSISTANCE COMPONENT

The first critical component of a low-income affordability program is a rate assistance program. Through the rate assistance program component, the price of home energy is set at a percentage of income, a level that will generate an enhanced ability of low-income customers to make actual payments. The state should adopt a program for both electric and natural gas service.

An Overview and Summary.

Building a rate assistance program consists of the following basic steps:[96]

1. **Eligibility:** Defining the eligibility for the rate assistance program should allow the program to be *open to enrollment* by any low-income consumer. For purposes of this program, a "low-income consumer" is any consumer with gross household income at or below 185% of the Federal Poverty Level.

2. **Outreach:** Informing low-income customers of the availability of the rate assistance program involves both education about the *existence* of the program and education about *how to enroll* in the program. The most effective forms of outreach for ratepayer-funded programs have been found to involve the use of community-based organizations as well as organizations that deliver social assistance benefits to the same households that are eligible to receive rate affordability benefits. Outreach should also occur through the local utility channeling customers to the program when, based on utility records, those customers are found to be payment-troubled.

3. **Intake:** Enrolling customers in the rate assistance program involves making customers into program participants. The primary intake should occur by contracting with relevant federal and state agencies to "match" electronic lists of residential customers with lists of social assistance program participants.[97] This income verification is effective and inexpensive. In addition, consumers should be given the opportunity to complete an in-person application through a community-based site whether or not they participate in a social assistance program.

4. **Collections:** Enforcing customer payment obligations after a customer receives a rate assistance benefit should occur through the same credit and collection activities directed toward any residential customer. If a customer receiving service through an affordable rate does not make appropriate payments, that customer enters the collection cycle with the same rights and responsibilities as any other customer. In this fashion, no new or special administrative process is created for the rate assistance participants.

5. **Recertification:** Recertifying income for customers whose income cannot reasonably be determined to be non-variable over the long-term should occur on an annual basis. Most participants will have their income recertified automatically through a contract with the appropriate social assistance agency. For those customers whose income cannot be recertified in this fashion, the customer will be notified at an appropriate time before his or her anniversary date of the need for recertification.

[96] *See generally*, Colton (2007). *Best Practices: Low-Income Affordability Programs, Articulating and Applying Rating Criteria*, prepared for Hydro-Quebec, Fisher, Sheehan & Colton: Belmont (MA).
[97] This is the process used by Massachusetts utilities, as dictated by the Massachusetts Department of Public Utilities, for enrollment of customers into that state's low-income discount program.

Having provided this summary, the remainder of this section will address the structural and operational issues of rate assistance in more detail.

Proposed Structure for an Idaho Rate Assistance Program.

Rate assistance for Idaho customers should be tied to the current year Federal Poverty Level. The proposal here is to set eligibility equal to 185% of Poverty. For a household with three persons, the maximum eligibility[98] under this guideline would be $33,948.[99]

Why Percentage of Income

It should be recognized that under a rate assistance program that is based on affordable home energy burdens, if, because of relatively higher income or relatively lower home energy bills, the pre-determined percent of a household's income will exceed their annual electric bill, the household will receive no benefit. In those instances, the home energy bill is deemed "affordable" and the local utility will collect the entire bill calculated at standard residential rates. Only in those instances where the household, due to low incomes or high bills, faces a utility bill that exceeds the designated percentage of its income, is the bill deemed to be “unaffordable” and the rate is offered to reduce the burden to an affordable level.[100]

Rate assistance in Idaho should be distributed on a percentage of income basis. Using a percentage of income approach to targeting provides a more efficient use of scarce rate assistance resources. This can be demonstrated by comparing a percentage discount to a percentage of income approach. While a percentage of income approach delivers those benefits, but only those benefits, needed to bring low-income bills into an affordable range, a percentage discount does not. Using a percentage discount, the rate assistance program would pay some customers *more* than is necessary to bring bills into an affordable range while paying other customers *less* than is necessary to bring bills into an affordable range. Accordingly, it is most appropriate to base the rate assistance component of the low-income affordability program on a percentage of income targeting mechanism.[101]

Why a Fixed Credit

Although a variety of percentage-of-income based approaches exist, delivery of rate affordability assistance using a fixed credit approach is most appropriate. The fixed credit approach begins as an income-based approach. In order to be eligible for the rate, a household must meet *both*

[98] The fact that the maximum eligibility is discussed here does not mean that the average income for eligible customers will be at this income level. The average income will be much lower.

[99] The 2011 Federal Poverty Level for a three-person household was $18,350. Accordingly, 185% of Poverty would be $18,530 * 1.85 = $33,948.

[100] To illustrate, assume a household has an annual income of $25,000, an annual energy bill of $1,200, and is asked to pay six percent (6%) of her income toward her energy bill in an income-based program. This customer's income-based energy bill payment would be $1,500 ($25,000 x .06 = $1,500). Hence, this customer would *not* participate in the income-based rate, since her bill at standard residential rates is *less* than the bill rendered under the rate assistance program.

[101] Two states in the United States have adopted a “tiered discount” program to serve as an alternative to an across-the-board discount (New Hampshire and Indiana).

eligibility criteria: (1) that the household income is at or below the income eligibility; and (2) that the household energy burden exceeds the burden deemed to be affordable.[102]

The Benefit Calculation

The fixed credit approach calculates what bill credit would need to be provided to the household in order to reduce the household's energy bill to a designated percent of income. To calculate the fixed credit involves three steps: (1) calculating a burden-based payment; (2) calculating an annual bill; and (3) calculating the fixed credit necessary to reduce the annual bill to the burden-based payment. Each step is explained below.

1. **Burden-based payment:** The first step in the fixed credit model is to calculate a burden-based payment. Assume -- simply for the sake of illustration here -- that the household has an annual income of $8,000 and is required to pay six percent (6%) for its home energy bill. The required household payment is thus $480.[103]

   Distinctions in the percentage of income payment are made based upon whether the customer is a heating or non-heating customer. The payment is split evenly between the heating and non-heating component of the utility bill. Under a 6% scenario, a natural gas heating customer would be asked to pay three percent (3%) of the household's income toward her home heating bill, and another three percent (3%) toward her electric bill. An all-electric customer would pay six percent (6%) toward her electric bill.[104]

   The energy burden represented by a combined heating and non-heating energy bill should not generally exceed six percent (6%) of income.[105] It is generally accepted that a household's "shelter burden" (rent/mortgage plus taxes plus utilities) should not exceed 30% of income. In addition, a household's home utility bill should not exceed 20% of the household's shelter costs. Combining those two yields an affordable home energy burden of six percent (6%).[106]

2. **Projected annual bill:** The second step is to calculate a projected annual household energy bill. This calculation is to be made using whatever method the local utility *currently* uses to estimate annual bills for other purposes. A utility, for example, will likely have an established procedure for estimating an annual bill for purposes of placing residential customers (low-income or not) on a levelized Budget Billing Plan

[102] A customer may still participate in the arrearage management program component even if he or she does not participate in the rate affordability component.
[103] This is calculated simply by: $8,000 x .06 = $480.
[104] Should the state select a percentage of income other than 6%, that alternative percentage burdens would be similarly split half-and-half (8% converts to 4% toward each fuel; 10% converts to 5% for each fuel).
[105] Clearly, however, the reasonableness of an energy burden is a range and not a point. Ultimately, whether an affordable burden should be set as 6% or as 8% (or some other figure) is a policy decision. The percentage of income burden that triggers significant payment-troubles (*e.g.*, service disconnections) appears to be in the range of 10% to 12% of annual income.
[106] This report sets aside for the moment the inclusion of water and sewer utility bills in this six percent.

(where bills are paid in equal installments over 12 months). That same process can be used to estimate an annual bill for purposes of calculating the needed fixed credit.

3. **Fixed credit determination:** The final step is to calculate the necessary fixed credit to reduce the annual bill to the burden-based payment. Given an annual bill projection of $1,200 and a burden-based payment of $480, the annual fixed credit would need to be $720 ($1,200 - $480 = $720). The household's *monthly* fixed credit would be $60 ($720 / 12 = $60).

The Conservation Incentive

In addition to various administrative benefits from the use of a fixed credit, the fixed credit also offers the advantage of providing a strong conservation incentive to the low-income customer. Under the fixed credit model, the local utility provides a monthly $60 fixed credit to the low-income household irrespective of the household's actual bill. If the household increases its consumption, and thus has a higher bill, the household pays the amount of the increase. If, in contrast, the household conserves energy and thus lowers its bill, the household pockets the savings.

The Administrative Advantages

The administrative advantages of the fixed credit program are two-fold. First, use of fixed credits as a benefit distribution mechanism allows the program to work within a fixed operating budget. Once a low-income customer is enrolled in the universal service program, the maximum possible financial exposure for the time of the enrollment is established. In contrast, benefit expenditures through either a straight percentage of income program or a percentage of bill program may vary based upon changes in consumption.

In addition to this budgeting advantage, the fixed credit approach makes the billing less complicated as well. Using the same process that currently exists to establish a levelized budget-billing plan, fixed credits can be subtracted from a customer's levelized annual bill. The monthly bill is then rendered based upon this one-time annual adjustment. The utility does not need to make monthly billing adjustments as is the case with either the straight percentage of income, or with the percentage of bill, approach.

Fixed Credit Summary

In sum, the following critical components of the proposed rate affordability component of a rate assistance program are proposed above:

- Eligibility is set at 1.85% of the Federal Poverty Level;
- Enrollment should be, to the maximum extent feasible, implemented through an automated data exchange with social assistance agencies;
- Rate assistance benefits are to be delivered through a fixed credit approach;

- The level of "affordability" should be set at 6% of household income. This affordability factor should be split evenly between baseload electric usage (3%) and space heating (3%). An all-electric household should pay the full 6%.[107]

A "Small Utility" Alternative Structure for a Rate assistance program.

Not all electric and/or natural gas utilities have the financial wherewithal to adopt the fixed credit rate affordability described above. For small utilities in particular,[108] a rate assistance alternative is available. The substantive benefits of a rate assistance program can be generated without incurring the administrative costs of implementing a fixed credit program.

The alternative to a fixed credit program involves the adoption of a tiered discount program. As with the fixed credit program, a tiered discount program is tied to an affordable energy burden. The tools this alternative uses to reach the affordability objectives, however, are somewhat blunter and less-well tailored to assure that all customers achieve affordability. Instead of the targeted affordability benefits, a tiered discount program is aimed at ensuring affordability on average.

The purpose of a rate assistance program is to promote the supply of affordable home energy service to low-income customers. As described above, energy burdens are the generally-accepted mechanism by which to measure "affordability." The fixed credit approach to distributing home energy affordability benefits, as described above, explicitly reduces low-income electric bills to a point where those bills present an affordable burden. The fixed credit is based on a household's actual annual income and actual home energy bills (with some exceptions). The fixed credit defrays the cost of bills that exceed the affordable burden.

In contrast to the fixed credit approach, a tiered discount approach can only approximate an affordable burden. A tiered discount approach to distributing benefits is designed to reduce a bill to an affordable percentage of income (with the percentage differing depending on whether the customer is a base load customer or a space heating customer) *assuming that the household consumes at the average level of consumption*. To the extent that a household consumes more or less than average, the household will bear a burden either higher or lower (respectively) than the affordable burden.

[107] As discussed in more detail above, however, the affordable burden is a range and not a point. Total energy burdens of up to as high as 10% could be determined, by policy, to be within a range of reasonableness.

[108] The Belmont (MA) Electric Light Department, a municipal utility serving 10,000 residential customers, adopted a "small utility" rate affordability alternative effective January 2006. One alternative to defining "small utility" by policy is to establish the "small utility" alternative and require a utility to petition regulators for the option of adopting the small utility alternative.

The Tiered Discount Calculation

To calculate a tiered discount, all low-income customers are placed into buckets demarcated by annual income levels. Buckets used to develop a tiered discount can be disaggregated into as large (or small) of a range as desired. Using the mid-point of each income bucket, an affordable bill can be calculated by applying the energy burden determined to be "affordable."[109]

The *difference* between the average bill and the affordable bill is determined. For example, in Table 53 below, the amount by which the actual average bill exceeds the affordable bill for a household in the bucket with less than $10,000 of income (mid-point of $5,000) is $1,500 for electric heating customers ($1,800 - $300 = $1,500) and $560 for electric baseload customers ($710 - $150 = $560).

This difference is the benefit that a tiered discount is designed to deliver. So long as a customer has annual expenditures that are equal to the company's residential average, application of a tiered discount will reduce that customer's annual electric bill to the burden determined to be affordable. Converting the data above into discounts would result in the discounts illustrated in Table 53.

Table 53. Affordable Bills by Electric Heating and Electric Baseload

	Electric Heating			Electric Baseload		
Annual Income	Average Bill	Average Deficit	Discount	Average Bill	Average Deficit	Discount
< $10,000	$1,800	$1,500	80%	$710	$560	80%
$10 - $19,999	$1,800	$900	50%	$710	$260	37%
$20 - $29,999	$1,800	$300	15%	$710	$0	15%
$30 - $39,999	$1,800	$0	CCW	$710	$0	CCW
$40 - $49,999	$1,800	$0	CCW	$710	$0	CCW
$50 - $59,999	$1,800	$0	CCW	$710	$0	CCW
$60,000 or more	$1,800	$0	CCW	$710	$0	CCW

CCW = 100% Customer charge waiver. The percentage discounts are otherwise applied to the customer charge.

Table 53 demonstrates that a six percent (6%) energy burden is achieved for a household with an annual income at the mid-point between $10,000 and $19,999 ($15,000) by providing a 50% discount to an $1,800 home energy bill. An affordable burden (6%) is achieved for a household with an annual income at the mid-point between $20,000 and $29,999 ($25,000) by providing a discount of 15%.

[109] A further refinement of the tiered discount approach is to base the discounts on a tiered energy burden. This approach quite reasonably is based on the observation that 3% of income is "more important" to households in the lowest income tiers than it is to households in the higher income tiers. This refinement, however, is set aside for now.

The discount is "tiered" because, as incomes decrease, it takes a deeper discount to deliver a benefit equal to the difference between an affordable bill and the average bill. The more levels of discount that exist (i.e., the more "tiers"), the more highly targeted the discount will be. State policymakers would need to determine, by policy, how many tiers they might wish, should they choose to adopt a tiered discount program.

In all matters other than benefit level, a tiered discount affordable rate should deliver the same program components (e.g., arrearage management, crisis assistance, availability to energy efficiency) to all tiers.

The Policy Choices between the Two Alternative Rate assistance programs.

A decision on whether to implement a fixed credit program or implement a tiered discount alternative for Idaho presents two levels of issues. The issues are of two kinds:

- A policy issue, and
- A program issue

The Policy Issue

The first issue is one of policy. On the one hand, the fixed credit program clearly better targets benefits to low-income customers. A customer would consume at a utility's average residential consumption only by happen chance. Because discounts are based on average consumption, in nearly every case, low-income customers will receive either more benefits than are needed to reduce their expenditure to an affordable burden or fewer benefits than are needed.

And this result does not even consider the fact that average consumption is combined with the use of the mid-point of the income range. Even if a customer consumes exactly at a company's average, unless that customer *also* has annual income exactly at the mid-point of the income bracket for which the discount is established, a tiered discount will give the customer either "too much" or "too little."

The response to this is that, setting aside whether the tiered discount is *exactly* correct in its reduction of energy burdens to an affordable level, in *every* case, the customer is *better off* than had the customer received no discount at all. The adage that it is better to be approximately correct than precisely wrong informs this observation. Even if the lowest income customers do not have their electric burdens reduced to exactly six percent (6%), paying eight percent (8%) with the discount leaves the customer better off than paying 40% without the discount.

The fixed credit, on the other hand, precisely targets benefits. The issue of whether some customers receive "too much" and others receive "too little" does not arise. This precision in targeting, however, comes with a cost. Some utilities argue that the cost of setting-up and administering a fixed credit program is higher than the cost of setting-up and administering a tiered discount program. The significance of the higher set-up and administrative costs is that

every dollar that goes for set-up and administration is a dollar that is *not* going to pay energy assistance benefits.

The Program Issue

The program issue is raised by the fact that a fixed credit is "fixed." Once determined at the beginning of the program year, the risk that bills will change (based either on weather or on price) lies with the customer. If the customer has a lower bill, he or she pockets the difference. If the customer has a higher bill, he or she bears the burden of the increase.

In addition to creating a conservation incentive, this approach provides operational benefits. The maximum program expenditure for each customer is established at the time the customer enters the program. Changes in weather or price will not drive program costs up. In contrast, with a tiered discount, program costs will fluctuate based on both weather and price. If there is a very cold winter (or a very hot summer), with correspondingly higher bills, the program must bear the cost of the higher discounts that will be provided.

Tiered Discount Summary

Outside of these two major issues, the fixed credit and tiered discount programs should operate in much the same fashion. No inherent differences exist. The tiered discount and the fixed credit are simply alternative ways of delivering benefits. The programs remain basically constant. The fixed credit program assures that all rate affordability assistance is precisely targeted; this assurance comes with a somewhat more involved administrative structure. The tiered discount program has a somewhat less involved administrative structure; this simplicity comes with an inherent level of mis-targeting, with some customers receiving "too little" and other customers receiving "too much."

THE ARREARAGE MANAGEMENT COMPONENT.

The second critical component to a low-income affordability program involves arrearage management. An arrearage management program component is designed to reduce pre-program arrears to a manageable level over an extended period of time. Through an arrearage management program, a customer earns credits toward his or her preprogram arrears over a period of time, so long as the customer remains current on the affordable rate. By the end of the time period, the household's preprogram arrears will be reduced to $0.

The Need for an Arrearage Management Program Component

An arrearage management program component is necessary to help get low-income customers "even" so they have a chance at future success in making payments. It makes no difference to have *current* bills be affordable if the total bill is unaffordable due to payment obligations required to retire *past due* bills incurred before the program began (known as preprogram arrears).

The 2006 evaluation of the New Jersey Universal Service Fund (USF) left little question but that that program's arrearage management provisions (called the "Fresh Start program") were necessary to help participants in the New Jersey affordability program (called the Universal Service Fund, or "USF") to successfully comply with the payment terms of USF bills.[110] In the absence of Fresh Start, USF program participants would be responsible for complete payment of their pre-program arrears. These arrearage payments would be above and beyond the percentage of income burdens found to be affordable.

The New Jersey evaluation expressly found that increasing the percentage of income burdens charged to USF participants had an adverse impact on the ability of USF participants to maintain payment compliance under the program. As the evaluation noted, "more than 80% of households with a [net energy burden] below 3 percent covered 100 percent or more of their annual bill. Less than 60 percent of households with a [net energy burden] at or above 8 percent covered 100 percent of their annual bill." Indeed, while 25.6% of the participants with net energy burdens exceeding 8% of income paid between 50% and 90% of their bill, only 6.0% of households with energy burdens of between 2% and 3% had coverage rates that low.

Table 54. Distribution of Effective Bill Payment Coverage Rate by Net Energy Burden: New Jersey Universal Service Fund (USF)

Net Energy Burden	Bill Payment Coverage Rate			
	<50%	50% - <90%	90% - <100%	100% or more
Less than 2%	0.0%	2.7%	5.3%	92.0%
2% - 3%	0.0%	6.0%	11.5%	82.5%
3% - 4%	0.0%	10.0%	13.2%	76.9%
4% - 6%	0.0%	11.6%	16.6%	71.6%
6% - 8%	0.4%	16.6%	17.4%	65.5%
Over 8%	1.0%	25.6%	16.1%	57.4%

The New Jersey evaluation reported the same types of results for gas/electric combination USF participants. While nearly 80% of participants with burdens of less than 4% paid 100% or more of their bills, only 43% of participants with burdens exceeding 12% did. While 31.1% of USF participants with burdens exceeding 12% paid between 50% and 90% of their bills, only 9.0% of participants with burdens less than 4% had bill coverage rates that low. The New Jersey USF evaluation documents quite clearly the need for an arrearage management program component in a low-income affordability program. Making payments toward pre-existing arrears increases payments as a percentage of income. As percentage of income payment responsibilities increase, payment compliance decreases.

[110] Apprise, Inc. (2006). *Impact Evaluation and Concurrent Process Evaluation of the New Jersey Universal Service Fund*, prepared for the New Jersey Board of Public Utilities, Apprise, Inc.: Princeton (NJ).

The Operation of an Arrearage Management Program Component

While some utilities simply forgive all arrears brought into a low-income program at the time the program begins, most utilities provide arrearage management over an extended period of time. In the latter situations, the time period over which to provide preprogram arrears credits needs to stay within the reasonable planning horizon of the customer.[111] The program design recommended for Idaho involves an arrearage management period of three years. Arrearage credits are earned on a monthly basis.[112]

No Prerequisite for Arrearage Credits

No prerequisite is proposed for the offer of arrearage management credits. While at first blush, it may seem desirable to make the grant of credits toward preprogram arrears contingent upon full and timely payment of current bills, there are both policy and operational reasons not to do this.

First, there are the operational issues. To implement such a contingent credit, the local utility would need to develop an information system process that determines, on a monthly basis, not only whether the full bill has been paid, but whether it has been paid on a timely basis. Depending on the answer to those inquiries, different bills will be generated by the utility (either one reflecting an arrears credit or one not reflecting such a credit). Layering a process for "curing" missed payments adds further administrative complexity.[113]

Second, from a policy perspective, program administrators have learned that creating layer upon layer of "incentives" for payments clouds the fundamental underlying proposition of the rate assistance program. That proposition posits that, in recognition of the underlying unaffordable burden posed by utility bills at fully-embedded rates, the low-income customer is allowed to take service under the low-income program. Given that response to unaffordability, customers then have the responsibility to make full and timely payment of their bills irrespective of any further "incentive."

Accordingly, nonpayment for service provided under the affordable low-income rate will be met by placing the customer into the same collection process as that which would be faced by any other customer. Nonpayment does not result in suspension from the program. Instead, while the customer would continue to take service under the low-income rate, nonpayment under the low-income rate will place the program participant in the collection process.

[111] To suggest, for example, that arrears will be reduced to $0 over a period of four or more years is outside the horizon within which low-income households do their planning.
[112] While arrearage credits are to be *earned* on a monthly basis, they can be *credited* to the account (or "posted" to the account) on a quarterly or semi-annual basis. The point at which earned preprogram arrears credits are actually credited is often a matter of billing system programming rather than a program policy question.
[113] A reasonable "middle ground" involves granting an arrearage credit upon full payment of a bill, whenever that payment occurs. So, if a customer misses her February payment, but brings her payments current in March, that customer would receive the arrearage credit for both February and March.

Monthly Copayments toward Arrears

The program proposal recommended for Idaho involves low-income customers making a monthly co-payment toward preprogram arrears. In this fashion, customers with minimum levels of payment troubles will not receive credits toward their arrears. In addition, in this fashion, low-income customers will bear some responsibility for their preprogram debt.[114]

The requirement of a customer copayment toward a preprogram arrears, however, should not interfere with the underlying affordability goals of the affordable rate. Accordingly, this proposal recommends setting the customer copayment level equal to $5 per month. Over the three-year arrearage management period, low-income customers will pay $180 toward their pre-existing arrearages ($5/month x 12 months/year x 3 years = $180). Only if customers have a pre-existing arrearage greater than $180 will the arrearage management component of the program create a program cost.

Arrearage Management Summary

In sum, the following critical elements of the proposed arrearage management component of a low-income affordability program are proposed above:

- Arrears are to be retired over a three-year period;
- Customers are to make copayments toward their arrears;
- Copayments are to be set equal to $5 per month ($60 per year);
- No pre-condition is established for the grant of arrearage management credits; and
- The appropriate response to nonpayment is to place the program participant in the same collection process as any other residential customer.

THE CRISIS INTERVENTION COMPONENT.

The third critical component of a low-income affordability program involves crisis intervention. The need for a crisis intervention program arises from three different attributes of low-income households.

- First, one attribute of low-income households is their lack of cash assets to allow them to weather the storm of unexpected expenses or unexpected loss of income. Low-income households do not have the ability to withstand a significant expense associated with a family emergency, or the loss of income associated with such an emergency. Given such exigencies, there is a likelihood that some proportion of

[114] However, some utilities have decided that the cost of developing a billing capacity for the customer copayment is not merited by the amount of revenue produced by the copayment process. These utilities provide credits toward 100% of the preprogram arrears.

customers taking service under the low-income program will have occasional exigencies that can be met through a crisis intervention program.

- Second, one attribute of a low-income household is that low wage workers tend to be hourly wage workers. The overwhelming majority of these workers lack paid leave. The need for either medical leave or family care leave, in other words, leads directly to lost income when paid leave is not provided. The lack of paid leave time may directly affect the ability of a working poor customer to maintain payments on their monthly utility bill. A person working 35 hours a week on hourly wages may lose three days of work simply due to a sick child missing school and requiring care. If no paid leave time exists for that employee, the sick child translates into permanently lost wages.

- Third, low wage workers tend to have lower quality jobs, often marked by considerable income fluctuations due to the number of hours they are called upon to work. The number of lost hours, and thus the amount of lost wages, is referred to as involuntary part-time employment. This fact of unstable income presents no commentary on the working poor individuals themselves. Rather it reflects the nature of work in which the working poor find themselves.

Given these attributes of the target population, the crisis component of the low-income program represents a budget from which to provide crisis intervention assistance on an as-needed basis.

Income Eligibility for Crisis Assistance

Crisis intervention assistance should not be based on income eligibility such as that established for the rate assistance. Crisis intervention is frequently triggered by unusual expenses rather than by persistently low-income. A senior citizen facing medical expenses, as well as a working poor household facing substantial automobile repair expenses, may be marginally capable of paying their monthly bills but for their unusual expenses. The agency or community-based organization administering crisis interventions should be provided the flexibility to distribute crisis intervention funding on an as-needed basis rather than be bound by income limitations.

Given this, assistance provided through the crisis intervention component should be on a limited-time basis. The crisis intervention is intended to help meet financial exigencies rather than to provide monthly rate affordability assistance to customers.

Crisis Assistance Summary

In sum, the following critical elements of the crisis intervention component of a low-income program are proposed above:

- The crisis intervention component should not be based on income-eligibility;

- The crisis intervention component should provide administering agencies with the flexibility to distribute assistance on an as-needed emergency basis;

- The crisis intervention component should be on a limited-time basis; and

- The crisis funding should be distributed through existing crisis intervention programs.

THE COLORADO MODEL FOR AN ENERGY AFFORDABILITY PROGRAM

A low-income rate affordability program can be adopted pursuant to statute. The statutory basis for a low-income program can be of two types. A statute can ***authorize*** a low-income program or a statute can ***mandate*** a low-income program.

The most recent low-income program to be adopted is the program authorized by Colorado statute and subsequently mandated by the Colorado Public Utility Commission. Under Senate Bill 22 (2007), the Colorado legislature provided that:

> Notwithstanding any provision of articles 1 to 7 of this title to the contrary, the Commission may approve any rate, charge, service, classification, or facility of a gas or electric utility that makes or grants a reasonable preference or advantage to low-income customers, and the implementation of such commission-approved rate, charge, service, classification, or facility by a public utility shall not be deemed to subject any person or corporation to any prejudice, disadvantage, or undue discrimination.[115]

The statute defined a "low-income" customer as being a household with income at or below 185% of the Federal Poverty Level. The regulations ultimately adopted by the Colorado PUC pursuant to this legislation are set forth in Appendix A to this report.[116]

The Colorado Public Utilities Commission (CPUC) adopted a "safe harbor" approach to providing low-income affordability assistance. ***All*** low-income affordability programs adopted by Colorado electric and natural gas utilities must have certain specified program components:

- An integration with exiting energy efficiency or utility "demand side management" programs, or, in the alternative, an integration with existing weatherization programs offered by the state;

- An integration with the federal Low-Income Home Energy Assistance Program (LIHEAP); and

- An offer of arrearage forgiveness sufficient to reduce pre-existing arrears to $0 within twenty-four (24) months).

[115] Codified as C.R.S. 40-3-106(d) (2010).
[116] These regulations are effective December 15, 2011.

In addition, each program is to be supported by a "needs assessment identifying an estimate of the total number of low-income participants; the number of identified low-income participant accounts; and the projected program enrollment."

The "safe harbor" provision of the Colorado PUC's regulations provides that it represents "an option that each utility may propose as a low-income energy assistance program." A program reflecting the safe harbor provisions "may be adopted by a utility in satisfaction of the requirements of this rule. . ." If the Commission verifies that a program is in compliance with the safe harbor design, "the Commission will deem the filing in compliance and approve the safe harbor program without setting it for evidentiary hearing or otherwise subjecting the tariff filing to any further adjudicatory process."

The safe harbor program would be limited to a utility's LEAP participants. Under the program "participant payments for electric bills rendered to safe harbor participants shall not exceed a percentage of the participant's annual income."[117] The Colorado PUC adopted a tiered percentage of income program:

- For electric accounts for which electricity is the primary heating fuel, households with income at or below 75% of Poverty Level would pay four percent (4%) of income; households with income exceeding 75% but at or below 125% of Poverty would pay five percent (5%); and households with income exceeding 125% but at or below 185% of Poverty would pay six percent (6%).

- For electric accounts for which electricity is ***not*** the primary heating fuel, as well as for natural gas service, households with income at or below 75% of Poverty Level would pay four percent (4%) of income; households with income exceeding 75% but at or below 125% of Poverty would pay five percent (5%); and households with income exceeding 125% but at or below 185% of Poverty would pay six percent (6%).

- Despite the percentage of income requirements, a utility may establish a minimum payment of no more than $20 per month for electric heating accounts and no more than $10 a month for electric non-heating (and natural gas) accounts.

The Colorado regulations provide that "a utility shall, unless infeasible, deliver safe harbor benefits as a percentage of income-based fixed credit on a participant's bill." In those situations where the utility finds a fixed credit to be "infeasible," "a participant's annual payment each year shall be calculated as a percentage of household income and converted to a percentage of the participant's full annual bill. A participant will pay that percentage of the total bill irrespective of the level of the full annual bill." Again, with an "infeasibility" exemption, the Colorado regulations finally provide that a utility shall enroll a program participant in its "levelized budget billing program as a condition of participation in safe harbor."

The Colorado affordability program dictates an "arrearage credit" program component. Arrearage credits are to be sufficient to reduce pre-existing arrears to $0 over a 24-month period.

[117] An equivalent natural gas program was adopted as well.

Utilities are allowed, but not required, to condition the grant of arrearage credits on "the receipt of regular payments toward safe harbor bills for current usage." Moreover, utilities are allowed, but not required, to condition arrearage credits on "the payment of a participant copayment toward the arrearages so long as the participant copayment does not exceed one percent of gross household income." Under the Colorado program, an income-eligible household may receive arrearage credits whether or not the household also qualifies for safe harbor fixed credit benefits (e.g., if the bill as a percentage of income is less than the percentage of income levels).

The safe harbor program has the same income eligibility as the affordability program as a whole. The safe harbor program, too, is to be ***targeted*** to payment-troubled customers. While program eligibility is to extend to all income-eligible customers, the program outreach is directed specifically ("targeted") toward income-eligible customers who historically have had difficulty in paying their bills.

Aside from the "safe harbor" provisions of the low-income affordability program, the Colorado PUC adopted specific regulations regarding cost-recovery. Cost recovery is allowed for program credits or discounts; for program credits applied against pre-existing arrearages; for administrative costs. And for "other reasonable costs that the utility is able to demonstrate are attributable to the program.

The Colorado PUC, however, explicitly acknowledges the existing of expense reductions attributable to the program" that reduce the net cost of the program to non-participating ratepayers. The Colorado PUC provides:

> The utility shall apply, as an offset to cost recovery, all program expense reductions attributable to the program. Program expense reductions include decreases in utility operating costs; decreases in the return requirement on cash working capital for carrying arrearages; decreases in the cost of credit and collection activities for dealing with low-income participants; and decreases in uncollectable account costs for these participants.

Overall, the Colorado low-income affordability program ***statute*** applies to "electric [natural gas] utilities with Colorado retail customers. . ." The Colorado low-income affordability ***regulations*** of the Colorado PUC apply to "investor-owned electric [natural gas] utilities subject to rate regulation" by the Colorado PUC.

THE ESTIMATED COST OF THE PROPOSED LOW-INCOME AFFORDABILITY PROGRAM

The estimated annual cost of the proposed Idaho rate assistance program is $58.5 million. The program cost is divided into three sections: (1) rate discount; (2) arrearage management; and (3) crisis intervention. The rate discount and arrearage management costs are considered together.

The Cost of the Rate Discount

The total cost of the rate discount program is estimated to be $55.7 million. This cost is based on a 40% participation rate and average 2010 residential bills. The program cost is based on an 8%

affordable energy burden for electric heating customers and a 4% affordable energy burden for natural gas heating and electric baseload customers.

The cost of the rate discount includes an arrearage management program. This cost is based on the following observations about low-income participation in affordability programs:

- 35% of eligible customers will participate in the program;[118]
- 40% of program participants will enter the program with pre-existing arrears;

The Cost of the Crisis Intervention

The cost of the crisis intervention program should be set equal to a reasonable percentage of the sum of the rate discount and arrearage management. A crisis intervention program funded at 5% of the costs of these two program components is not unreasonable. The annual cost of the crisis intervention would thus be $2.8 million.

Total Program Costs

The total cost of the proposed low-income affordability program is $15.50 million. The derivation of this total cost is set forth in Table 55.

Table 55. Total Costs of Proposed Idaho Low-Income Affordability Program (million $s)

Rate discount (plus arrearage management)	$55.7
Crisis intervention	$2.8
Total	$58.50

Cost Recovery for Non-Efficiency Program Components

This proposal recommends the recovery of costs through a fixed meters charge. The use of a meters charge minimizes differences in intra-class burdens that might arise if cost recovery is undertaken on a volumetric basis. A meters charge cost recovery structure imposes a fixed charge on customers varying by customer class. The fee within any given class, however, does not vary between customers. A residential customer using 600 kWh each month pays the same fee that a residential customer using 1,500 kWh pays.

[118] In program year 2010, the Idaho LIHEAP program had roughly 55,000 participants out of a total eligible population of 188,800 (29%). This program participation rate has been slightly increased to introduce a conservativeness to the cost estimate.

A meters charge is structured to obtain a payment from each customer class, while at the same time protecting high use customers within any given class from bearing a disproportionate burden of the program costs.[119]

Table 56. Distribution of Low-Income Affordability Program Costs through Meters Charge (Idaho)

Electric customers /a/	Number of Customers	Months In Year	Monthly Meters Charge	Annual Meters Charge	Total Revenue
Residential	552,798	12	$1.00	$12.00	6,633,576
Commercial	85,699	12	$10.00	$120.00	$10,283,880
Industrial	23,238	12	$150	$1,800	$41,828,856
Total revenue					$58,745,856
Total program cost					$58,468,329

NOTES:

/a/ On a post-LIHEAP basis, an Idaho rate assistance program for natural gas customers would impose no cost on residential customers.

WHY ALL CUSTOMER CLASSES SHOULD CONTRIBUTE TO PROGRAM COSTS

Should Idaho adopt a program to redress the unaffordability of home energy, the question of which other customers may legitimately be called upon to pay for such programs presents itself. The analysis below concludes that *all* customer classes should bear some responsibility for a share of any charge that is imposed in support of affordability programs.

The reasoning of the Bureau of Consumer Services (BCS) of the Pennsylvania PUC, in recommending cost recovery from all classes for the BCS's proposed low-income affordability program, is instructive on the question of who should pay. When BCS submitted its report on the PUC's investigation into the control of uncollectible balances, it found that "the problem of the inability of some low income customers to pay their entire home energy bills is caused primarily by societal economic conditions that *are unrelated to any one rate class*." (emphasis added).[120] BCS continued to find:

> The Bureau does not find any logic to the argument that because the larger societal economic conditions are negatively affecting the ability of some low income residential customers to pay their bills, that the problem is somehow caused by the residential class and should therefore be paid for by that class. If the Commission, as a regulatory authority, decides that it is in the public interest to provide home energy services for necessities of life to disadvantaged ratepayers

[119] In fact, however, the rate increases will be much lower. This calculation of a percentage increase does not account for any decreases in normal operating costs caused by the low-income rate.
[120] Bureau of Consumer Services, *Final Report on the Investigation of Uncollectible Balances*, at 157, Docket I-900002 (February 1992).

without full payment, then the costs should be borne by all ratepayers who benefit from the companies operating as public utilities.[121]

Aside from this BCS analysis, the discussion below separately considers three rationales for spreading the costs of affordability programs over all customer classes:

- The need for all customer classes to pay the public compensation provided by utilities for the grant of certain public perquisites.
- The need for all customer classes to pay for "public goods" from which they derive benefits.
- The need for all customer classes to contribute to the resolution of inability-to-pay problems to which they, themselves, contribute.

Each rationale will be examined in more detail below.

Payment for Public Perquisites

The offer of programs in support of universal service for all customers is an explicit *quid pro quo* that was exacted in exchange for substantial --and continuing-- public perquisites provided to the public utility industry. So long as all customer classes enjoy the fruits of that exchange, they should also contribute to paying for the obligations that were bargained for as part of the exchange.

Public utilities have been granted two sets of public perquisites in their capacity as public utilities: (1) the right to exercise eminent domain;[122] and (2) the right to use the public's streets, alleys and public ways as transportation corridors.[123] In accepting these public perquisites, public utilities have dedicated the property supported by these perquisites to a public use. The "bargain" that has been made in consideration of these two public perquisites is both explicit and continuing.

In accepting and exercising the power of eminent domain, and the right to use public streets and ways, an explicit exchange has occurred. The utilities have received the two perquisites and, as compensation for those benefits, have agreed to "pay" the local governments providing the perquisites through the support of universal service. As the Practicing Law Institute, a national organization charged with documenting the law in various subject areas, has articulated for cable television:

---

[121] *Bureau of Consumer Services*, at 157 - 158.

[122] See generally, "Progress of Regulation, Trends and Topics, Electric Utilities and Eminent Domain Laws," 106 *Pub. Util. Fort.* 49-51 (July 28, 1980).

[123] McQuillan, *The Law of Municipal Corporations*, section 34.01 (3d ed. 1986). ("One thing should be kept constantly in mind, and that is that the rules of law governing franchises to use the streets do not depend, except to a very limited extent, on whether the grantee of the franchise is a gas company, or a water company, or an electric light company, or a telegraph or telephone company, or a street railway company, or any other public service company.")

> Local governments are realizing the unique value of public rights-of-way for which they act as trustee. Public rights-of-way are acquired and paid for through government action, usually the exercise of a jurisdiction's eminent domain powers. Thus, the public rights of way are the most valuable property rights in the hands of government. . .Local governments must receive fair compensation for granting use of the rights-of-way. Otherwise, government is merely subsidizing the businesses of private rights-of-way users. . .Traditional users of the public rights-of-way were deemed to provide public compensation in the form of universal service and regulated rates. . .With traditional users of public rights-of-way, compensation for use of the public rights-of-way was passed onto the end consumer through rate regulation and other public benefits like universal service, rather than being paid directly to the governments, the actual owner of the public rights-of-way.[124]

The principle has been recognized in the electric industry as well.

> Others argue that the obligation to provide for universal service is not one imposed upon the industry, but rather an obligation that the utility industry accepted as part of its franchise agreement. This obligation is one that serves as the industry's "payment" for the grant of substantial public benefits provided to it. So long as the utilities enjoy the fruits of that exchange, they must abide by the obligations that were bargained for as part of that exchange.[125]

In sum, the support of public purpose programs in furtherance of home energy affordability (and, by extension, universal service) is a type of public compensation for two different public perquisites granted to public utilities: (1) the grant of the right to exercise the power of eminent domain (which power is otherwise reserved exclusively to government); and (2) the grant of the right to use public streets, alleys and public ways.

This principle then supports the conclusion that all customer classes should help fund public purpose programs. The public perquisites that have been provided to the utility have not simply a discernible value to the utility, but they have a *substantial* value.[126] That value inures to the benefit of all ratepayers. If a utility could *not* use eminent domain, in other words, or if it could not use the streets and public ways as transportation corridors for its lines or pipelines, the increased costs that would arise as a result would be borne by all ratepayers. By having the utility receive the public perquisites, therefore, all customers of the utility gain substantial financial benefits.

---

[124] Miller and Nven (1996). "What is the Emerging Role of Local Governments in This New World of Telecommunications," in *Cable Television Law 1996: Competition in Video and Telephony*, at 12 - 13 (1996: Practicing Law Institute).

[125] Fox-Penner (1997). *Electric Utility Restructuring: A Guide to the Competitive Era*, at 329, Public Utility Reports: Arlington (VA).

[126] Indeed, the right to eminent domain is not only *valuable*, but is essential to public utilities. ". . .the specific right of the power of eminent domain has been given to most utilities. This right enables them to condemn private property and, with the payment of just compensation, to take it for `public use' when necessary to the proper conduct of their business. This right is essential to resolve the complex property acquisitions required for powerline and pipeline right of way." Aspen Institute for Humanistic Studies, *Utility Obligations in Competitive Markets*, at 10, Aspen Institute for Humanistic Studies: Queenstown, MD.

Having received the financial benefits of the bargain, all customers of the utility should thus pay some part of the financial compensation to the public for having provided those benefits. There has been an exchange of consideration. With all end users having pocketed their share of the benefits of the bargain, all end users should then also be required to pay their fair share of the responsibility part of the bargain. To allow otherwise would be to grant the benefit while forgiving the costs.

Payment for Public Goods

One well-accepted tenet of utility ratemaking is that certain expenses incurred by a public utility are for "public goods." Due to the nature of public goods, all customers receive benefits from public goods and, accordingly, the costs of such goods are spread over all customer classes. Each end user makes a financial contribution to the utility's delivery of public goods.

The "public goods" doctrine is applied in a variety of settings as a justification to spread designated utility costs over all customer classes. Fire hydrants and street lights, for example, have been found to be public goods. Subway service has been found to be a public good. The basic telecommunications network has been found to be a "public good" as a justification for spreading network costs over all customer classes..

In economic theory, public goods are those products and services that are valuable to society but which are undersupplied when society relies on private markets to provide them. Even though deemed to be needed, public goods will not be made sufficiently available through private markets. Classic examples of public goods include street lights, city roads, and police protection.

The undersupply of public goods occurs because individuals cannot be prevented from using these items whether or not they pay for them. Furthermore, the use of such goods by one person does not diminish the ability of others to use that product. Under such circumstances, everyone has a powerful incentive to be a free-rider—to consume but not to pay—and there can be little effective opposition to their doing so.[127] One commentator defined a "public good" as:

> one which is available for consumption to anyone regardless of whether or not one is able to pay for it. Once it is produced, it is not subject to the exclusion property.[128] Moreover, the additional cost of providing another unit is at least negligible[129]

A product can represent a "public good" even though the direct service is provided to an individual. For example, businesses do not go to school, individuals do. Businesses do not go to doctors, individuals do. Businesses do not place their children in day care, individuals do. Despite this, in each of these instances, the direct benefits to business from the affordable provision of these "public goods" have been documented. Affordable health care and child care are all akin to affordable home energy in their nature as public goods which provide direct and

[127] Mandle and Mandle (Sept./Oct. 1999). "Elections as a Public Good," 42 *Challenge* 50.
[128] The "exclusion property" refers to the ability to withhold goods or services from those who are unwilling or unable to pay for them."
[129] Karsten (April 1995), "Health Care: Private Good vs. Public Good," 54 *The American Journal of Economics and Sociology*, 129.

substantial benefits to business as well as individuals. Accordingly, business, as well as individuals, should be responsible for helping to pay for these public goods.

Affordable health care –to be distinguished from health insurance—is considered to be a public good under these definitions. The reasoning cites the widespread public benefits that will arise from a healthy workforce. Health care is an important analogy to affordable energy because of the direct benefits it has been found to provide to business. It is recognized that, while it is obviously individuals who see doctors, affordable health care does not simply inure to the benefit of the individuals receiving health care. For example, business benefits as well. "The. . .improvement in the stock of human capital, similar to that derived from universal education, would increase the productivity and competitiveness of labor, resulting in an upward shift in society's production function."[130]

Investment in child care has been found to yield direct benefits to business. On a macro basis, as the Committee for Economic Development has reported, "business and the economy as a whole gain a more productive work force when employees feel confident that their children are secure and learning."[131] This is not merely a statement of policy, it is a conclusion based on considerable empirical research: "Those companies that have taken steps to address the child care needs of their work force report that they have improved their ability to attract and retain high-quality personnel, thereby enhancing their current work force and their competitiveness."[132]

The corresponding problems arising from unaffordable home energy bills have been documented in detail above.

- Unaffordable home energy bills lead to the frequent mobility of households.
- Unaffordable home energy leads to more frequent childhood illnesses.
- The inability to stay warm due to unaffordable home energy bills leads to increased illnesses, including pneumonia, influenza, and other infectious diseases.

As can be seen, the same business benefits arising from affordable health care and child care arise from affordable home energy as well. Increased productivity, decreased absenteeism, decreased staff turnover, decreased staff training, decreased costs of replacing employees, and decreased "disruption and inefficiency in the work environment."

The Committee for Economic Development stated with respect to business financial investment in universal education that:

> a firm and enduring commitment to excellence in education on the part of America's business community is not merely a matter of philanthropy; it is

[130] *Karsten, supra*.
[131] Research and Policy Committee (1993). W*hy Child Care Matters: Preparing Young Children for a More Productive America, A Statement by the Research and Policy Committee of the Committee for Economic Development*, at 1, Committee for Economic Development: New York.
[132] *Why Child Care Matters*, at 3.

> enlightened self-interest. As employers, taxpayers, and responsible community members, business can regard an investment in education as one that will yield a handsome return.[133]

Precisely the same can be said about an investment in affordable home energy. It "is not merely a matter of philanthropy, it is enlightened self-interest." In sum, affordable energy is a public good from which all customer classes derive benefits. As a result, all customer classes should bear some part of the responsibility of paying for providing that public good.

Contribution to Problem Being Solved

The case for business participation in helping to pay the costs of universal service programs, as a public good, is strengthened even further when one recognizes the contribution which business makes to the creation of the "problem" being addressed.

One of the major contributing factors to the inability of households to make their home energy bill payments is the lack of a livable wage paid to workers. This is not to say that businesses should pay for rate affordability programs on a direct cost causation basis. It *is* to say, however, that if all workers were paid a livable wage with which to begin, the need for affordability programs funded through a system benefits charge would be mitigated, if not eliminated. All sectors of society contribute to the need and, as a result, all customer classes should contribute to the solution.

Recognizing the subsidies provided to employers paying a poverty wage has been a long-established basis for supporting the federal minimum wage. One analysis of "living wages" reported, for example, that:

> . . .employers who pay poverty wages are effectively being subsidized by taxpayers through government assistance programs (e.g., food stamps, Earned Income Tax Credit) which help many low-wage employees survive. . .[B]usinesses that pay poverty wages indirectly rely on government assistance programs to make up the difference between these wages and what it costs their employees to live. Without the intervention of government and private charities, paying poverty wages wouldn't be a sustainable business practice.[134]

The same analysis applies to public utilities. In the absence of cost sharing across all customer classes, what is occurring is that the employers who pay less than a livable wage, in effect, transfer the employee/employment costs of running their business to other ratepayers (in the form of unpaid bills, collection costs, and the like). The transfer is made more likely for public utilities (than for other businesses) because of the essential nature of utility service and the regulated nature of public utilities which places restrictions on the termination of service due to nonpayment. Requiring all

[133] Research and Policy Committee (1985). *Investing in our Children: Business and the Public Schools, A Statement by the Research and Policy Committee of the Committee for Economic Development,* at 5, Committee for Economic Development: New York.
[134] Kraut, Klinger and Collins (2000). *Choosing the High Road: Businesses that Pay a Living Wage and Prosper,* at 14, 16, Responsible Wealth: Boston (MA).

customer classes to help pay for the programs which respond to the inability-to-pay simply recognizes the role which all customers play in creating the problem.

This notion that employers paying less than a livable wage are being paid a direct "wage supplement" by the public through assistance programs is well-accepted. One of the leading academic research institutions examining the use of public assistance to subsidize low wage employment is the Institute for Labor and Employment at the University of California. The seminal study by this Institute found that:

> a growing segment of Californians work year-round but earn too little to provide for their families. As a consequence, these families must often resort to publicly funded 'safety net' programs to supplement their earnings and meet basic needs. Increasingly, public assistance is become an ongoing wage supplement for low wage workers. . .[135]

The study found that some employers "rely[…] on public assistance programs to meet some of their labor costs." The California study found that the highest concentrations of workers needing a wage supplement through public assistance were employed in the retail industry. Moreover, "most of public assistance to working families went to families with full-time workers, dispelling the notion that part-time work largely accounts for the low earnings of poor working families."

The California study is far from the only study reaching these conclusions. A study by the Center on Wisconsin Strategy concluded that ". . .increasing evidence suggests that our system is out of balance. Some employers may be increasingly taking advantage of Wisconsin's strong safety net—using publicly-funded assistance programs as a *private* subsidy."[136] The Wisconsin study fund that "families with strong labor market connections account for 45 percent of the total families in these [public assistance] programs and 45 percent of the costs of these five programs." The study found that health care, retail trade, and durable manufacturing "all stand out for the sheer numbers of workers who are enrolled in public support programs."

In addition, a study by the Center for Urban Economic Development, at the University of Illinois at Chicago, found that:

> It is vital for public benefits programs to provide assistance to Illinois' neediest families. But when profitable industries fail to pay family-supporting wages, they push their costs onto the state and its taxpayers. These hidden public costs of low wage work are an implicit subsidy to these employers.[137]

The Illinois study found that families with at least one full-time worker account for 42% of all families enrolled in these programs, and approximately 38% of total benefits costs.

---

[135] Zabin, et al (November 2004). *The Hidden Public Costs of Low-Wage Jobs in California*, at 3, University of California Institute for Labor and Employment, UC Berkeley.
[136] Dresser (December 2006). *When Work Doesn't Pay: The Hidden Cost of Low-Wage Work*, at 4, Center for Wisconsin Strategy, Madison (WI).
[137] Nik and Doussard (September 2006). *The Hidden Cost of Low-Wage Work in Illinois*, at 23 – 24, Center for Urban Economic Development, University of Illinois at Chicago (Chicago, IL).

In sum, the reason some businesses can offer low wage employment to so many of their employees is because of the external programs such as the low-income rate affordability program that has been proposed in this paper and made available to help fill the wage gap. One analysis reports, for example, that businesses paying low wages:

> . . .are effectively being subsidized by taxpayers through government assistance programs (e.g., food stamps, Earned Income Tax Credit) which help many low-wage employees survive. . .[B]usinesses that pay poverty wages indirectly rely on government assistance programs to make up the difference between these wages and what it costs their employees to live.[138]

The same analysis applies to Idaho utilities. The businesses that pay low wages indirectly rely on the willingness of these utilities to make up the difference between low wages and what it costs the employees to live. Requiring all customer classes to help pay for the rate affordability program which responds to the inability-to-pay resulting from the payment of low wages is simply one mechanism to have all customer classes that contribute to the need for the affordability program pay some part of the costs of that program.

TEN IMPORTANT FINDINGS

1. In response to the affordability problems documented above, and the broad range of utility, social, and business competitiveness impacts arising because of these problems, this report outlines the essential components comprising an effective and efficient low-income affordability program for Idaho. These components include: (1) a rate assistance component; (2) an arrearage management component; and (3) a crisis intervention component.

2. The first critical component of a low-income program is a rate assistance program. Through the rate assistance program component, the price of home energy is set a percentage of income, a level that will generate an enhanced ability of low-income customers to make actual payments. The state should adopt a program for both electric and natural gas service.

3. Using a percentage of income approach to targeting provides a more efficient use of scarce rate affordability resources. This can be demonstrated by comparing a percentage discount to a percentage of income approach. While a percentage of income approach delivers those benefits, but only those benefits, needed to bring low-income bills into an affordable range, a percentage discount does not. Using a percentage discount, the rate assistance program would pay some customers *more* than is necessary to bring bills into an affordable range while paying other customers *less* than is necessary to bring bills into an affordable range.

[138] Kraut, Klinger and Collins (2000). *Choosing the High Road: Businesses that Pay a Living Wage and Prosper*, at 14, 16, Responsible Wealth: Boston (MA).

4. Rate affordability in Idaho should be distributed on a fixed-credit basis. In addition to various administrative benefits from the use of a fixed credit, the fixed credit also offers the advantage of providing a strong conservation incentive to the low-income customer.

5. The second critical component to a low-income affordability program involves arrearage management. An arrearage management program component is designed to reduce pre-program arrears to a manageable level over an extended period of time. Through an arrearage management program, a customer earns credits toward his or her preprogram arrears over a period of time, so long as the customer remains current on the affordable rate. By the end of the time period, the household's preprogram arrears will be reduced to $0.

6. An arrearage management program component is necessary to help get low-income customers "even" so they have a chance at future success in making payments. It makes no difference to have ***current*** bills be affordable if the total bill is unaffordable due to payment obligations required to retire ***past due*** bills incurred before the program began (known as preprogram arrears).

7. The third critical component of a low-income affordability program involves crisis intervention. The need for a crisis intervention program arises from the inherent "fragility" of income for low-income households.

8. The estimated annual cost of an Idaho rate affordability program is $58.5 million.

9. The recovery of costs for this low-income affordability program should occur through a fixed meters charge. A meters charge is structured to obtain a payment from each customer class, while at the same time protecting high use customers within any given class from bearing a disproportionate burden of the program costs.

10. Since utility energy efficiency programs have been addressed in detail in separate proceedings before the Idaho Public Utilities Commission, energy efficiency is not considered in this report. This exclusion should not be construed as an indication that efficiency investments are unimportant, but rather that they are beyond the purview of this analysis.

PART 6:
ASSESSING THE "BUSINESS CASE" OF THE LOW-INCOME PROGRAM

A business case can be made for the low-income program advanced in this paper. Considering the "business case" is important for three reasons.

- First, the business case is contrary to the conclusion that the affordability program should be pursued exclusively at public expense. No reason exists for the public, through state legislative action, to be the exclusive funder of activities that will generate real and substantial financial benefits to the utility.

- Second, the business case shows that stakeholders who might argue that utility rates are not an appropriate mechanism through which to pursue "social" policy miss the point of what a low-income program accomplishes.

- Finally, the business case shows that the net costs to be paid by ratepayers are substantially less than the costs identified in the meters charge discussion. While bills will increase due to the meters charge, they will decrease due to the offsetting business benefits.

In this chapter, the discussion will consider the elements of a "business case" for a low-income affordability program such as has been proposed for Idaho. The discussion will further review the regulatory basis for a low-income affordability program as has been adopted in other state jurisdictions. This business case is not presented in lieu of the social benefits discussed above. It is presented to show that addressing the social problems can also be good business.

SUPPORT OF AFFORDABILITY ASSISTANCE BASED ON TRADITIONAL REGULATORY PRINCIPLES.

A review of the basis for the adoption of two of the oldest low-income rate assistance programs in the United States reveals that such programs are not grounded simply on the social pressure to help those in need of rate assistance. Rather, low-income rate assistance programs are found to serve fundamental regulatory purposes quite apart from, and in addition to, their social functions. The regulatory foundation for these low-income programs is reviewed below. The programs that are reviewed below support the conclusion that such programs have sound regulatory foundations grounded in fundamental utility regulatory principles.

Ohio's Percentage of Income Plan (PIP)

The State of Ohio initiated the first straight Percentage of Income Payment Plan (PIPP) in the United States.[139] The Ohio PIPP was developed by the Public Utility Commission of Ohio (PUCO). The PUCO created the Ohio PIPP in 1983 in response to an emergency arising from the inability of low-income Ohio residents to maintain their home energy service.[140] The Commission found that the disconnection of utility service for nonpayment by those who were financially unable to pay constituted an "emergency" as described by Ohio statute.[141]

The Ohio PIPP, as initially conceived by the PUCO, did not represent a discounted rate for low-income customers. Instead, the PIPP was designed to enable low-income customers to retain their utility service by entering into an agreement pursuant to which the customer would make a utility bill payment equal to a prescribed percentage of income. Customers entering into such agreements, however, would not be relieved of paying bills in excess of the percentage of income. Rather, customers would continue to be liable for those arrears. Those accrued arrears would be subject to repayment by the customers when such customers left the PIPP.

In its 1983 decision, the PUCO found that there were both legal and "practical" reasons to adopt the proposed PIPP. According to PUCO, no legal impediment existed to the adoption of PIPP:

> Contrary to the arguments of those who oppose the percentage of income payment plan, the plan adopted by the Commission. . .does not constitute income redistribution, and is reasonable and lawful. This plan does not constitute income redistribution because those customers who qualify for the plan are still liable for any arrearages on their bills. There is no debt forgiveness. The Commission is just foreclosing one method by which a utility may exercise its rights to collect for the debt. The utility still has available to it all of its other remedies at law. Because the customer is still liable for his/her arrearages, the Commission's percentage of income payment plan does not constitute free service or a rebate as charged by opponents to the plan. . .Nor does the plan adopted by the Commission unlawfully discriminate. All residential consumers similarly situated can take advantage of this

[139] A "straight PIPP" is a rate that bases bills on a percentage of household income for income-qualified customers. It stands in contrast to a "fixed credit" program or a "tiered discount" program, both of which are income-based.
[140] Docket No. 83-303-GE-COI (November 23, 1983).
[141] O.R.C., § 4909.16 (2007).

> plan. The policy of this Commission to prevent those without the present ability to pay their utility bills from freezing is a valid state purpose and is the basis upon which the Commission has established this plan. We believe it to be a rational basis.[142]

The PUCO proceeding that gave rise to Ohio's PIPP in 1983 considered a broad range of issues relating to payment plans, deposits, and voluntary fuel check-offs as a means to generate energy assistance funding. Early in the proceeding, the PUCO declared that an "emergency" existed because of the number of residential gas and/or electric customers who were unable to obtain service for the winter heating season because of the disconnection for nonpayment attributable to economic recession, increases in the cost of gas and electric service, and a decrease in the level of governmental assistance. Based on that emergency, PUCO prohibited the disconnection of gas or electric service during the ensuing winter season, and ordered the reconnection of service by customers who paid either one-third of their outstanding balance or $200, whichever was less. Commonly referred to as the Winter Reconnect Order, that Order is still issued annually as an "emergency" measure, though the payment requirement has been changed to $175 with customers using the rule required to enroll in a payment plan; PIPP is one of the optional payment plans.[143]

Consideration of the PIPP arose out of ***utility*** objections to the Commission's "failure to take into consideration a customer's ability-to-pay before imposing the moratorium. . ." At least in partial response to that objection, the PUCO docketed an investigation into "long-term solutions to the problems arising from the winter emergency situations."

The Commission rejected arguments by Ohio's utilities that proposals such as the PIPP were not "long-term solutions" to winter inability-to-pay problems. PUCO noted that "the utility position in this proceeding is that the only long-term solution to the problem is economic assistance and that all other proposals, falling short of being long-term solutions, are outside of the scope of this proceeding."

In dismissing that argument, the Commission agreed that "the legislature needs to adequately fund energy assistance and weatherization and conservation programs for low income consumers. That does not mean that such aid is the ***only*** ingredient of a comprehensive solution to the problem, only that it is a necessary ingredient." (emphasis added) Moreover, the PUCO found that the proposed Ohio PIPP best accomplished the goals the Commission sought relative to other available alternatives. The goal, PUCO noted, involves protection of the interests of two disparate groups of ratepayers:

> We are not willing to stand by while others, too poor to pay for utility service during the winter, freeze. At the same time, we are ever mindful of protecting the vast majority of customers of utilities under our jurisdiction who pay their bills in full from responsibility for greatly increasing uncollectibles.

[142] Docket No. 83-303-GE-COI, Opinion and Order, at 14.
[143] Docket No. 06-1075-GE-UNC, Entry (September 6, 2006).)

The proposed PIPP, according to the Commission, best served both of those goals given available alternatives:

> We have in this proceeding looked at such alternatives to the percentage of income plan as maintaining the status quo, extending payment plans from six months to twelve or more months, and having another moratorium. All things considered, the percentage of income plan adopted by the Commission today will do the most to assist those in need to maintain utility service while protecting the companies' remaining ratepayers.

In sum, the PUCO found that "from our perspective, the true long-term solution to the problem is three-fold: adequate tax funded energy assistance programs, adequate tax funded weatherization and conservation programs, and adequate Commission rules. Of those, only the first, energy assistance, is totally outside of this Commission's jurisdiction."

The PUCO's decision to adopt the PIPP for Ohio was affirmed by the state Supreme Court, even though the court originally disapproved the initial cost-recovery mechanism.[144] Despite this disapproval of the PIPP cost recovery,[145] the Supreme Court approved the lawfulness of the underlying PIPP decision. The Court noted:

> Pursuant to its emergency powers under R.C. 4909.16, the PUCO created the PIP plan as a response to growing concern "about the number of residential gas. . .[and] electric customers unable to obtain service as a result of disconnection for nonpayment of bills because of the economic recession, increases in the cost of gas and electric service, and a decrease in the level of governmental assistance . . ." (internal citation omitted). . .[I]t is the opinion of this court that it is clearly within the PUCO's emergency powers under R.C. 4909.16 to fashion such relief as that provided by the PIP plan and we find the plan of the commission to be manifestly fair and reasonable as a solution to the crisis.[146]

In sum, while the Ohio electric PIPP is today embedded in statute, its original development occurred under the general regulatory authority of the Ohio state utility commission. In Ohio, the commission has authority to take action under circumstances that it deems to be an "emergency." Having declared that emergency, the commission was authorized to develop payment plans responding to that emergency. The Ohio courts declared the Ohio PIP to be "manifestly reasonable."

---

[144] *Montgomery County Board of Commissioners v. Public Utilities Commission of Ohio*, 28 Ohio St.3d 171, 503 N.E.2d 167, 171 (Ohio 1986).

[145]The Court informed the PUCO: "while we cannot condone the recovery of arrearages through the EFC rate in light of the specific statutory language of R.C. 4905.01 and 4909.191, we do not express the opinion that the PUCO would be precluded from fashioning an alternative accelerated recovery mechanism which is not contrary to statute, including recovery of arrearages on a more current basis rather than only after a twelve-month delinquency." Id., at fn4. The PUCO quickly approved an alternative cost recovery mechanism. Docket No. 87-244-GE-UNC.

[146] 503 N.E.2d at 170 (internal footnotes omitted).

Pennsylvania's Customer Assistance Program (CAP)

The rate assistance programs operated by Pennsylvania natural gas and electric utilities for their low-income customers began more than 20 years ago with a small pilot project by Columbia Gas Company.[147] Since that time, the universal service concept has expanded for Pennsylvania's energy utilities so that the companies now devote more than $400 million each year to support their low-income customers.[148] While the genesis of the Pennsylvania universal service programs can be found in the Pennsylvania PUC's generic authority over the operations of energy utilities, the preservation of those programs has since been written into statute.

Two utilities in Pennsylvania pioneered the use of affordable rates as a means to address the payment troubles experienced by low-income customers. Columbia Gas Company responded with a willingness to pursue a program first proposed by the state Office of Consumer Advocate. Equitable Gas Company also proposed an income-based rate for its low-income customer population.

The Columbia Gas of Pennsylvania Energy Assurance Program (EAP)

The Pennsylvania Office of Consumer Advocate (OCA) proposed that Columbia Gas Company adopt an "Energy Assurance Program" (EAP) as part of Columbia's 1990 rate case. According to the OCA, the issue was one of collection efficiency. "The issue in this proceeding," OCA said, "is not to devise a social response to the broad inability to pay problems of low-income households. The issue is one of what is the most cost-effective means of collection. It is the same issue as whether a utility should pursue new central station capacity, cogeneration or conservation. . .The requirement that utilities provide least-cost service should govern utility collection activities too."[149] The OCA continued: "the issue is this: how can Columbia Gas most effectively and least expensively collect as much as possible from households [that] cannot afford to pay?"[150]

The Pennsylvania Commission agreed. The Commission found that "it is incumbent upon us to initiate a pilot project to test empirically some of the claims made by [OCA] for an EAP. Hopefully, the results of the pilot will prove [OCA's] thesis that EAP will enable more customers to avoid termination and collection actions, while also reducing the uncollectible expense that can be anticipated if existing approaches remain unchanged."[151] The PUC then articulated its philosophy that would govern Pennsylvania's regulatory policy for the next two decades:

---

[147] Pennsylvania Public Utility Commission v. Columbia Gas of Pennsylvania, R-891468, Final Order, at 150 – 160 (September 19, 1990). (hereafter Columbia Gas EAP Order).
[148] Pennsylvania PUC, Bureau of Consumer Service (August 2011). *2010 Report on Universal Service Programs and Collections Performance of the Pennsylvania Electric Distribution Companies and Natural Gas Distribution Companies*, at 45 – 46, Pennsylvania PUC: Harrisburg (PA). (Electric CAP delivered benefits of $202 million in 2010; natural gas CAP delivered benefits of $198 million in 2010.)
[149] Columbia Gas EAP Order, at 152.
[150] Id., at 153.
[151] Id., at 158.

> We, in conjunction with utilities, and social service agencies, have all worked hard to devise ways to [e]nsure that low-income Pennsylvanians have utility services which really are necessities of life as the tragic fire deaths associated with the loss of utility service underlined. . .
>
> However, for the poorest households with income considerably below the poverty line, existing initiatives do not enable these customers to pay their bills in full and to keep their service. . .Consequently, to address realistically these customers' problems and to stop repeating a wasteful cycle of consecutive, unrealistic payment agreements that cannot be kept, despite the best of intentions, followed by service termination, then restoration, and then more unrealistic agreements, we believe that new approaches like PECO's CAP program and the OCA's proposed EAP program should be tried.[152]

Based on this analysis, the Commission directed Columbia Gas to begin a 1,000 customer pilot EAP.

The Equitable Gas Low-Income Rate

Shortly after directing Columbia Gas to implement a pilot low-income rate assistance program, the Pennsylvania Commission further approved a proposal by Equitable Gas Company to pursue a similar program.[153] Unlike the Columbia Gas program, which had been proposed by the state Office of Consumer Advocate (and not opposed by the company), the Equitable Gas program originated with the gas utility, itself.[154] According to the company, the proposed program was:

> Needed to (1) remove these customers from the discouraging and expensive collection cycle, (2) motivate them to increase conservation, (3) increase their annual participation in available funding assistance programs, and (4) encourage consistent bill-payment efforts.[155]

The Equitable Gas program was, at first, disapproved by the hearing examiner who decided the Equitable rate case. While the program is "an apparently well-intentioned attempt to assist those of Equitable's ratepayers who most need assistance in paying their bills," the hearing examiner "concluded that this Commission is without authority to approve a program such as the EAP." The hearing examiner reasoned that if the commission "were to approve the subject [energy affordability] program, our action would be tantamount to authorizing a utility to collect money from one group of ratepayers and to use that money for another group of ratepayers for a reason completely unrelated to the ratemaking process (the subsidization of low-income individuals who are unable to pay their utility bills)."[156] The hearing examiner finally concluded that

[152] Id., at 159.
[153] Pennsylvania Public Utility Commission v. Equitable Gas Company, Docket No. R-901595, Final Order, at 63 – 74 (November 21, 1990). (hereafter Equitable Order).
[154] Equitable Gas had been working with the state Bureau of Consumer Services (BCS), a bureau of the state utility commission, to develop an appropriate program design. Equitable Order, at 63.
[155] Id., at 63.
[156] Id., at 66.

"neither judicial precedent nor the Public Utility Code discuss our statutory authority for the implementation of utility rates based solely on 'ability to pay.'"[157]

The Pennsylvania Commission, however, reversed the hearing examiner's disapproval of the proposed Equitable Gas low-income program. Noting that "we are aware that this Commission's main function in ratemaking is to assure that every rate made, demanded, or received by any public utility shall be just and reasonable," the Commission found that the Pennsylvania statute prohibits only ***unreasonable*** preferences or advantages to any person. The statute, the Commission said, prohibits any ***unreasonable*** difference as to rates between classes of service.[158] "The relevant question, therefore, is whether or not the funding of Equitable's proposed [energy affordability] program results in the 'unreasonable' rate discrimination prohibited by the Public Utility Code."[159]

According to the Pennsylvania Commission, "a mere difference in rates does not violate" the Pennsylvania statute.[160] The Commission then found, on a number of bases, that "the record in this proceeding clearly demonstrates that any 'preference' that EAP would yield to program participants is reasonable, and further, the creation of EAP is in the best interest of all Equitable ratepayers, not just program participants."[161]

The Commission found that "the company's total costs of service will be less with implementation of [the program] than they would be in the program's absence." While the company currently collects approximately 7.5% of household income of prospective EAP participants, the Commission found, the program requires a payment of 8% of income toward their gas bill, thus increasing revenues.[162] In addition, the Commission said, the program cost is substantially less than the uncollectible expense associated with the program participants. Customers that are eligible for the Equitable Gas program "who currently have payment arrangements either negotiated by BCS or the Company pay on average little more than 50 percent of the presubscribed amount." In sum, the Commission concluded that:

> This analysis suggests that the $1.8 million future test year [program] expenses should result in an overall reduction to the Company's cost of service, through its uncollectible expense and savings in credit and collection expenses.[163]

In sum, the Commission said that "we commend Equitable for taking the initiative to propose the [energy affordability] pilot. This program could make it one of the leaders among utilities in the uncollectible arena."[164]

[157] Id.
[158] Id., at 69 (emphasis in original).
[159] Id., at 69.
[160] Id., at 70.
[161] Id., at 70.
[162] Id., at 71.
[163] Id., at 71.
[164] Id., at 73.

The Permanent Pennsylvania Low-Income Affordability Programs

Only two years after initiating the Columbia Gas pilot, the Pennsylvania PUC decided to expand the use of universal service programs to the state's other natural gas and energy utilities.[165] Consistent with its view of the function of such programs as expressed in the early Columbia Gas decision, the policy decision of the Commission was that low-income rate assistance programs were a necessary tool for utilities to use in combating the problem of nonpayment. Indeed, the decision to implement what would become known as Pennsylvania's Customer Assistance Programs (CAPs) arose out of the PUC's investigation into the control of uncollectible accounts.[166] Through that investigation, the Pennsylvania PUC's Bureau of Consumer Services (BCS) had developed recommendations for implementation of CAPs.

> CAPs provide alternatives to traditional collection methods for low-income, payment troubled customers. Generally, customers enrolled in a CAP agree to make monthly payments based on household family size and gross income. These regular monthly payments, which may be for an amount that is less than the current bill, are made in exchange for continued provision of utility service.[167]

The Commission continued:

> As a result of our investigation, the Commission believes that an appropriately designed and well implemented CAP, as an integrated part of a company's rate structure, is in the public interest. To date, few utilities have implemented CAPs. The purpose of this Policy Statement is to encourage expanded use of CAPs and to provide guidelines to be followed by utilities who voluntarily implement CAPs. These guidelines prescribe a model CAP which is designed to be a more cost-effective approach for dealing with issues of customer inability to pay than are traditional collection methods.[168]

In sum, while preservation and expansion of the CAP programs was eventually written into statute as part of the restructuring of the electricity and natural gas industries, the Pennsylvania CAP programs were initiated by the state PUC without explicit statutory authorization. Instead,

---

[165] The Commission directed that utilities adopt pilot projects. The PUC decision was based on the BCS recommendation that CAP pilots "should be large enough to provide some relief to the low-income, payment-troubled customer problem and at the same time small enough that changes can be made to the programs without incurring major costs." Bureau of Consumer Service (Feb. 1992). *Final Report on the Investigation of Uncollectible Balances*, Docket No. I-900002, at 115. (hereafter BCS Uncollectibles Report). The Commission directed that pilot programs were to involve either 1,000 customers or 2% of a company's residential customer base, whichever was greater.

[166] In the Matter of the Investigation into the Control of Uncollectible Accounts, Docket No. I-900002 (initiated October 11, 1990).

[167] Policy Statement on Customer Assistance Programs (CAP), Docket No. M-00920345, at 2 (July 2, 1992).

[168] Id., at 2. This Commission decision was supported by the BCS Final Report, which indicated: "The Bureau's position is that ratepayers are already bearing significant costs attributable to the problems of payment troubled customers and uncollectible balances. Further, BCS believes that incorporating the following recommendations into utility operations will lead to a more rational and cost effective use of existing resources. Over time, proper implementation of the recommendations may result in a reduction of total utility costs." *BCS Uncollectibles Report*, at 120

the PUC found that CAPs should be an "integrated part of a company's rate structure." The purpose of these programs, the Commission found, was not a social purpose. Rather, the CAPs represent "a more cost effective approach for dealing with issues of customer inability to pay than are traditional collection methods."

The focus of the Pennsylvania CAPs as a tool to respond to low-income payment troubles has continued throughout the years. CAPs were considered to be an *alternative* to a way of doing business that simply wasn't working. The objective of CAP was "to stop repeating a wasteful cycle of consecutive, unrealistic payment agreements that cannot be kept, despite the best of intentions, followed by service termination, then restoration, and then more unrealistic agreements. . ."

ASSESSING THE BUSINESS CASE FOR AFFORDABLE LOW-INCOME RATES

Assessing the business case for a low-income affordability program involves performing the following steps:

- Articulating the outcomes the program seeks to accomplish;
- Assessing the effectiveness of the program in achieving those outcomes;
- Assessing the productivity of the program in achieving those outcomes;
- Comparing the costs of the low-income program against the costs of alternatives that would achieve the same or comparable outcomes.

Each of these steps is examined in greater detail below.

Articulating the Objectives of a Low-Income Program

Articulating the objectives of a low-income program is a necessary first step in assessing the business case for a low-income rate assistance program. Without having first identified the business objectives it seeks to accomplish, a utility cannot hope to assess whether it is spending money wisely or unwisely. Identifying the program objectives helps a utility to determine up-front the extent to which it is committing resources in furtherance of some purpose.

For purposes here, the objectives of a low-income affordability program are limited to those objectives that are exclusively related to the utility as a utility. Without endorsing the notion that any social function is beyond the purview of ratepayer dollars –utilities certainly spend money on such "social" functions as workplace safety, environmental protection (including clean air and water), and workplace diversity—for the purposes of the instant analysis, the social function of providing affordable rates because of the social benefits generated by affordability (e.g., housing, public health and safety, nutrition, business competitiveness) is set aside for the moment.

Having done that, the business objectives of a low-income rate assistance program are two-fold:

- To provide an uninterrupted supply of the products and services the utility seeks to sell; and

- To collect the revenue from those sales in a full and timely fashion.

Effectiveness of an Affordability Program in Achieving Business Outcomes

A business case for a low-income program affordability program must consider the effectiveness of the program in accomplishing the articulated outcomes. No matter what level of cost is being incurred, by the program or by the alternatives against which the program is being compared, to the extent that the business objectives are not being accomplished, a "business case" cannot be made for that activity.[169] With this in mind, assessing the business case of a low-income program first considers whether the identified desired outcomes are being accomplished.

The Effectiveness in Maintaining Uninterrupted Service

A low-income rate assistance program can be a more effective mechanism for providing an uninterrupted supply of the products and services which the utility seeks to sell than existing alternatives. For purposes of this analysis, the "interruption of sales" is measured by the involuntary disconnection of service for nonpayment.[170] In turn, the disconnection of service is measured in two ways: (1) the frequency of disconnections; and (2) the duration of disconnections.

The impact of a low-income affordability program on the disconnection of service was directly studied for the rate assistance programs offered by two Indiana utilities. The evaluation of Indiana's disconnections for nonpayment compared the disconnections without the program to the disconnections with the program. It further compared the rate of disconnections for program participants to the rate of disconnections for the residential customer base as a whole.[171]

The Indiana "Universal Service Program" (USP) was more effective in achieving the outcome of uninterrupted service than was the status quo (i.e., delivering undiscounted bills coupled with collection activity, payment plans, and the like). The empirical evaluation found:

- The USP succeeded in reducing the low-income shutoff rate to virtually the same level as the residential population as a whole. In the "high disconnect" months of April and May,

[169] Consider the farmer who is assessing the "business case" for how to keep the grass in his back pasture short. He identifies three alternatives: (1) a push mower (with a low capital investment but high labor costs); (2) a power mower (with a high capital investment but low labor costs); and (3) a herd of sheep. The first question the farmer asks is *not* "what is the cost?" The first question must be: is the grass being kept short?

[170] A second way to measure service interruptions would involve an examination of "final bills." The level of final billed accounts is a more comprehensive metric in that it picks up the voluntary disconnection of service, including the voluntary disconnection associated with frequent mobility. See generally, Colton (1996). The Road Oft Taken: Forced Mobility and Childhood Education in Missouri, 2 *Journal on Children in Poverty* 23.

[171] Colton (2007). *An Outcome Evaluation of Indiana's Low-Income Rate Affordability Programs*, Citizens Gas and Coke Utility/Vectren Energy Delivery/Northern Indiana Public Service Company.; see also, Colton (2009). *An Outcome Evaluation of Indiana's Low-Income Rate Affordability Programs: 2008 – 2009 Program Year*, Citizens Gas and Coke Utility/Vectren Energy Delivery/Northern Indiana Public Service Company.

while Vectren Energy disconnected 13 accounts for each 1,000 residential accounts, the company disconnected between nine (9) and 18 accounts within the low-income population.

- If one limits the comparison to accounts with arrears, the low-income program participants outperformed the residential population as a whole. While Vectren disconnected services for nonpayment to between 13 and 15 of each 100 residential accounts at least 60 days in arrears, the company disconnected service to between 10 and 11 accounts of each 100 low-income program participants who were at least 60 days in arrears.

The improved performance could be attributed to the rate affordability initiatives. In November 2006, the evaluation found, "it is evident that the households who would eventually become program participants were performing less well than the total population. This is true for all three metrics (DNPs[172] to total accounts; DNPs to accounts in arrears; DNPs to accounts 60+ days in arrears). It is not until after the Vectren program delivers its bill payment assistance during the winter months that the DNP performance begins to substantially improve." Low-income customers receiving payment assistance experienced a decrease in disconnections, while low-income customers not receiving such assistance continued to see an increase in the number of disconnections they experienced.

The performance of Indiana's rate affordability participants was far superior to the performance of low-income customers for all utilities statewide in Indiana, including those not offering rate assistance. The 2006 annual "Billing and Collections Report" reported that, statewide, a low-income account in Indiana receiving a shutoff notice was more likely to move to the actual disconnection of service than was a residential account in general. The rate assistance program reversed that result for program participants.

In addition to reducing the *frequency* of involuntary disconnections for nonpayment, the Indiana USP reduced the *duration* of disconnections as well. The Indiana evaluation found that "Vectren succeeded in lessening the duration of service disconnections for nonpayment when compared to the total residential customer base as a whole."[173] The evaluation reported that "low-income customers consistently outperformed the total residential customer base in having their service quickly reconnected. In no month did the reported proportion of short-term reconnections for low-income program participants fall below the proportion of residential customers generally."

The Effectiveness in Collecting Billed Revenue

In addition to the success in maintaining the uninterrupted supply of product, the Indiana rate assistance program generated positive outcomes regarding the collection of revenue as well. This positive outcome was measured in terms of whether the program generated revenue neutrality. Revenue neutrality examines the extent to which, if at all, a low-income rate assistance program generates the same dollars of revenues to the utility despite the offer of

[172] A "DNP" is "disconnect for nonpayment."
[173] *2007 Indiana Outcome Evaluation*, supra.

discounted rates or bills. Revenue neutrality occurs when the discounted rates or bills improve payment patterns sufficiently to offset any reduced billings through the offer of the rate discount.

Revenue neutrality for Indiana's rate assistance program was measured by comparing low-income program participants to customers known to be low-income but not participating in the rate assistance program. One impact of the rate assistance program was to significantly increase the rate at which low-income customers paid their Vectren bills. Customers that participated in the Vectren program paid 82% of their Vectren bill, compared to a payment of 50% for Vectren low-income non-participants.

The results of the Citizens Gas and Coke Utility (CGCU) rate assistance program, while not as substantial, nonetheless demonstrated the same outcome. While CGCU participants paid 79% of their current utility bill, non-participants paid only 64%. The Indiana evaluation found: "As can be seen, the [rate assistance program] was better than revenue neutral to Citizens Gas. While [program] participants were billed 90% of what nonparticipants were billed, they paid 111% of what nonparticipants paid."[174] Table 57 presents the results:

Table 57. Billings and Revenues under CGCU Rate assistance program

Population	Billed Revenue	Collected Revenue ($s)	Collected Revenue (%)
Program participants	$273,627	$215,897	79%
Program non-participants	$304,072	$194,577	64%
Ratio: participant : nonparticipant	0.90	1.11	--

NOTES: Based on study sample.

As the Indiana evaluation found, had the CGCU low-income non-participants paid at the same rate as program participants did, they would have paid nearly $46,000 more than they actually paid (on a base billing of $304,000).

Similar results were found in the recent evaluation of the Xcel Pilot Energy Assistance Program (PEAP) operated by Xcel Energy in Colorado. The PEAP evaluation found that program participants paid 67% of their current bills, compared to PEAP non-participant payments of 51%. According to the PEAP evaluation, rather than collecting $533,684 from customers if they had not participated in PEAP, Xcel Energy collected $701,278 from customers enrolled in PEAP, a gain of $167,469 attributable to the program.[175]

Productivity of an Affordability Program in Achieving Business Outcomes

In addition to assessing the effectiveness of a low-income program in accomplishing desired business outcomes (relative to the alternatives), it is necessary to judge the productivity of the program (i.e., the efficient use of company resources) in accomplishing the desired outcomes.

[174] *2007 Indiana Outcome Evaluation*, supra.
[175] Colton (2010). *Interim Report on Xcel Energy's Pilot Energy Assistance Program (PEAP): 2010 Interim Evaluation*, Xcel Energy: Denver (CO).

Assessing productivity supplements the assessment of "effectiveness" from two different perspectives.

Addressing the productivity of utility efforts helps the utility assess whether there is a proper match between the tool being employed and the type of payment problem that is sought to be remedied. On the one hand, in other words, evaluating the productivity of the program (relative to its alternatives) helps to identify when inappropriately extensive tools are being employed by the utility. An involuntary disconnection of service, for example, is not a collection tool that addresses temporary inability-to-pay. The bill would be paid whether or not the disconnection was employed. In these circumstances, the disconnection serves no business purpose. It is not "productive," in that it generates no additional revenue.

On the other hand, evaluating productivity will help the company evaluate whether it is using a tool that is insufficient given the types of problem extent on the utility's system. Considering productivity, in other words, helps identify when tools are being employed that have no hope for success. A deferred payment plan, for example, is not a tool that addresses chronic inability-to-pay. If a customer could not pay his or her full bill in the past because of a lack of money, it lacks good sense to use a tool that would require that customer to pay the full bill ***plus*** some increment to retire arrears in the future. In these circumstances, the tool is likely to be unsuccessful. It is not "productive," in that it generates no additional revenue.

Productivity implies not only some absolute level of output (i.e., "effectiveness") but some level of output given a designated level of input as well.[176] In order to evaluate productivity, both the input and the output data are needed.

Enhanced Productivity of Individual Collection Activities

The use of a rate assistance program helped the Indiana utilities discussed above to enhance the productivity of their collection efforts. Vectren Energy's rate assistance program, for example, allowed that company to move to an increased reliance on payment plans as a collection device for its low-income program participants rather than relying on the disconnection of service for nonpayment when low-income customers falls into arrears. Table 58 shows that that while the payment plan-to-disconnect ratios are similar for all customers and for low-income customers in the early study months, as the company implemented its rate assistance program, it consistently moved to a greater reliance on payment plans rather than on service disconnections to respond to low-income arrears. In the pre-winter month of November, the ratios of payment plans to service disconnections for nonpayment were virtually identical.[177] The data is disaggregated by the three "tiers" of the rate assistance program (called USP, "Universal Service Program").[178]

[176] If one were to compare the effectiveness of two district offices in collecting bills, the absolute amount of revenue collected would not be the exclusive performance factor to use in the comparison. Even assuming that both offices faced identical numbers of payment-troubled customers with identical payment problems, it would be invalid to say *ipso facto* that one office was more "productive" if it collected 10% more revenue. If the office which collects more had twice the staff, but collected only 10% more revenue, the revenue collection per staff member would be much lower. If the office that collected more had a substantially greater investment in equipment (e.g., auto-dialers), but collected only 10% more revenue, the revenue collection per dollar of capital investment would be much lower.

[177] The Table presents ratios. A ratio of 1.0 means that for every disconnection of service for nonpayment, there is an account on a deferred payment plan. If there were 100 disconnections for nonpayment, in other words, there

- In April, while USP3 customers had 11.1 payment plans for each disconnection for nonpayment, the residential customer base as a whole had only 2.7 payment plans;

- In May, while USP1 customers had 6.9 payment plans for each disconnection, the residential customer base as a whole had only 1.6 payment plans.

Table 58. Ratio of Deferred Payment Arrangements to Disconnections for Nonpayment: Pre- and Post-Winter Heating Season: 2006/2007 (Vectren)

	Nov 2006 /a/	April 2007 /a/	May 2007 /a/
All residential	3.1	2.7	1.6
USP 1	4.4	9.1	7.7
USP 2	3.7	12.1	8.2
USP 3	2.8	11.1	6.0

NOTES:

/a/ Winter months not considered given Indiana's winter shutoff moratorium.

The ability to treat the arrears of its low-income customers in a less intensive fashion is also evident from an examination of the ratio of field collections to the number of other collection activities. Table 59 presents data on the ratio of field collection activities to mail collection activities. If the ratio is 1.0, there is one field collection activity for every 100 mail collection activities. If the ratio is 3.0, there are three field collection activities for every 100 mail collection activities. A higher ratio evidences a greater reliance on the more intensive (and more expensive) field collection activities.

were also 100 accounts on payment plans. A ratio of 3.0 means that for every one account subject to disconnection, there were three accounts on a deferred payment plan.

[178] The Tiered Rate Discount has three tiers to the Discount. "USP1" includes the low-income program participants in the highest income tier; "USP3" includes the low-income customers in the lowest income tier. "USP" represents Universal Service Program, the name of the Tiered Rate Discount.

Table 59. Ratio of Field Collection Activities to 100 Mail Collection Activities: Pre- and Post-Winter Heating Season: 2006/2007 (Vectren)

	Nov 2006 /a/	April 2007 /a/	May 2007 /a/
All residential	4.7	6.7	10.0
USP 1	5.3	3.1	3.8
USP 2	7.8	2.4	2.9
USP 3	8.9	2.7	4.2

NOTES:

/a/ Winter months not considered given Indiana's winter shutoff moratorium.

The Vectren rate assistance program allowed it to move to a less intensive collection activity directed toward its low-income customers when compared to its residential customer base as a whole. In the pre-winter/pre-program month of November, the ratio of field collection activities per 100 mail collection activities was similar between the low-income population and the residential population as a whole. If anything, the intensity of collection effort was greater for a significant portion of the low-income population (USP2 and USP3), with noticeably more field collection activities per 100 mail collection activities than for the residential customer base as a whole.

After operating its rate assistance program, however, Vectren could collect its low-income revenue with less intensive collection activities. Contrary to the pre-program results, after the company implemented its rate assistance program for low-income customers, the company was exerting between two and three times more field collection activities (per 100 mail collection activities) for its residential customer base as a whole than it was for its low-income population.[179]

Enhanced Productivity of Aggregate Collection Activities

In addition to considering the impact of a low-income affordability program on individual collection activities, a productivity analysis should look at the overall collection effort as well. The level of collection effort is an important constraint on any evaluation of revenue collection. Two groups of customers, each of which have paid 80% of their bills for current usage, present substantially different pictures of cost and risk to the utility if one group makes payments with little or no collection effort while the other makes the same dollar payment, but only after the utility exerts considerable collection interventions directed toward the customers.

Improvements in the productivity of collection activities can occur in either of two ways:

[179] These results are consistent with the "theory" of a low-income program. A low-income program will not likely result in an absolute decrease in the number of collection activities. Instead, a low-income program allows a utility to switch its commitment of collection resources away from low-income customers, where the collection activity is not likely to be effective, to non-low-income customers where the activity is more likely to have a positive effect on revenue collection.

- The need for collection interventions can be reduced thus allowing an increased payment per each collection intervention performed; in the first instance, improvement can be seen even if total dollars collected remains the same (but the interventions needed to generate those dollars decreases); or

- The customer response to the collection activity can improve thus allowing an increased payment per each collection intervention performed. In this second instance, improvement can be seen if the total number of collections activities remains the same but the dollars generated by those activities increase.[180]

In essence, this evaluation process considers the effectiveness and efficiency of collection activities from two different but related perspectives. On the one hand, it examines how much revenue is generated by each collection intervention. On the other hand, it examines how many collection activities are associated with the generation of the revenue.

In the discussion below, the effectiveness of collection activities directed toward participants in the Indiana rate assistance program is measured by reference to the average payment per collection activity month.[181] The Indiana utilities exhibited the ability to generate greater payment advantage for its longer-term USP participants. In eleven of the seventeen study months, customers who had participated in USP for both 2007 and 2008 paid more per collection month than did customers who began their USP participation in 2008. This payment productivity increased as the length of participation in the rate assistance program increased. An increase in the average payment per collection month occurs for one or both of two reasons: (1) the payments made in response to collection activity increases; and/or (2) the number of payments made without need of any collection activity increases. The cumulative average payment of the CGCU USP participant by the end of the study period was $366, compared to $291 for the nonparticipant.

Putting it Together: The Cost-Effectiveness of Achieving Business Outcomes

It is finally possible to dollarize the increase in collections efficiency for purposes of assessing whether the utility delivers benefits to its ratepayers through a low-income program. While such an analysis is not required to build a business case based on the increased effectiveness and productivity of a utility in achieving its business objectives,[182] some decisionmakers expect to see such an approach.

---

[180] Productivity is measured by the ratio: DC / CE, where "DC" = dollars collected; and "CE" = collection effort. In the first illustration, "CE" (the denominator) is reduced. In the second illustration, "DC" (the numerator) is increased.

[181] A "collection activity month" is a month in which any level of collection activity occurs.

[182] ". . .many opponents of [cost-benefit analysis], defined as a procedure that seeks to monetize benefits, do not oppose cost effectiveness analysis. . .Cost effectiveness analysis evaluates the costs of different means of achieving a pre-determined goal." Driesen (2005). *Is Cost-Benefit Analysis Neutral*, Syracuse University College of Law. A significant body of literature exists distinguishing a "cost-effectiveness" analysis from a cost-benefit analysis. See generally, Stewart, "A New Generation of Environmental Regulation," 29 *Cap.U.L.Rev.* 21, 41 (contrasting cost effectiveness analysis with cost-benefit analysis); Hahn et al., "Empirical Analysis: Assessing Regulatory Impact Analysis: The Failure of Agencies to Comply with Executive Order 12866," 23 *Harv.J.L. & Pub.Pol'y* 859, 872-74 (2000) (cost effectiveness analysis does not involve monetization of benefits); Anderson et al, "Regulatory

The analysis of benefits should take the following form. The analysis considers the costs of collecting the revenue deficit occurring with and without the rate assistance program. The analysis thus takes into account both of the factors that have been considered above: (1) the effectiveness of the programs in generating payments; and (2) the productivity of the collection effort needed to generate those payments. If the rate assistance program is less effective at collecting revenue, the "revenue deficit" increases as does the total cost.[183] In addition, if the rate assistance program is less productive at collecting revenue, the number of "needed collection activity months" will increase along with the total cost.

Finally, through the use of this Effectiveness/Productivity Analysis, the utility can further assess the impact of other utility activities. A utility might, for example, change the parameters of the analysis by adopting a budget-billing plan. Through a budget billing plan, the revenue deficit or the payment per collection activity month might change, thereby changing the relationships in the calculation. Through application of this analysis, however, the utility would be able to determine whether such a supplemental effort enhances or impedes (or has no effect on) the effectiveness and productivity of collections. If the supplemental efforts increase the effectiveness or productivity, the benefits will have been enhanced. If it decreases the effectiveness or productivity, the benefits will have been impeded.

Table 60 shows the positive financial benefits generated by the low-income program in two ways. On the one hand, Table 60 shows the positive financial benefits attributed to the increased collection productivity.

- On the revenue side, the company collected $21,320 more in revenue from program participants, even though it billed less with which to begin.

- On the collection expense side, the company spent $3,447 less to collect the $215,897 from program participants than it did to collect the $194,577 from non-participants;

If there had been a difference in collection costs –which would be likely since the Xcel evaluation found that program participants required less intense collection activity—the expense differential would have been even greater.

Clearly, the rate assistance program presents the more productive and lesser cost approach to collecting low-income revenue. With the program, the company collected more revenue and spent less on collection costs in the process of doing so.

Improvement Legislation: Risk Assessment, Cost-Benefit Analysis, and Judicial Review," 11 *Duke Ent'l L. & Pol.* 89, 93 (2000 – 2001) (cost effectiveness analysis is used instead of cost-benefit analysis for many applications in public health and medicine); Posner, "Transfer Regulations and Cost-Effectiveness Analysis," 53 *Duke L.J.* 1067, 1069 (2003) (cost effectiveness analysis compares different means of achieving the same regulatory end).

[183] Presumably, if the rate affordability program is less effective at collecting revenue, the productivity (i.e., payment per collection activity) will also decrease.

Table 60. Effectiveness/Productivity Cost-Benefit Ratio for CGCU Rate Assistance Program

	Billed Revenue	Collected Revenue	Payment per Collection Activity Month	Needed Collection Activity Months	Cost per Collection Activity Month	Total Cost
CGCU Initial Collections						
With RAP	$273,627	$215,897	$360	599.7	$50	$29,986
No RAP	$304,072	$194,577	$291	668.6	$50	$33,432
Sub-total benefit		$21,320				$3,447
Total benefit (sum sub-totals)						$24,767

Had the original discount resulted in a revenue loss, this loss would be used as an offset to the collections gain. The decreased billing through the rate assistance program, however, resulted in an absolute (and percentage) increase in collected revenue. That increased revenue resulted in an even greater positive financial benefit to CGCU.[184]

The metric of cost-effectiveness outlined in Table 60 is called "net back." Net back determines the percentage of revenue collected minus collection costs. The low-income participants generated a "net back" of 0.68 ($215,897 billed revenue minus $29,986 collection costs divided by $273,627 billed revenue). The non-participants generated a "net back" of 0.53 ($194,577 revenue minus $33,432 collection costs divided by $304,072 billed revenue). Using "net back" as the cost-effectiveness test, the low-income program for CGCU was clearly good business.

The ultimate conclusion is that a low-income program can be justified through a business case analysis. The low-income programs that have been implemented in other jurisdictions have found that the result is both an improved effectiveness in collecting revenue, and an improved productivity in collecting revenue (both on an individual collection activity basis and an aggregate collection activity basis). In addition, the low-income programs help utilities to achieve their objective of providing an uninterrupted supply of the product that they seek to sell.

Adding in the Indirect Business Benefits of Affordable Low-Income Home Energy

Aside from the direct financial benefits of promoting home energy affordability as discussed above, the provision of affordable rates will generate considerable additional financial benefits to Idaho's utilities as well. These benefits should be considered by the utility as instrumental uses in furthering business objectives.[185] The extent of these instrumental uses document that the offer of low-income

[184] The utility receives further benefit through the collection of additional revenue from nonprogram participants because of the ability of the utility to deploy the resources freed-up by the increased productivity of low-income collections.

[185] See e.g., The Conference Board of Canada (1995). *Dimensions of Diversity in Canadian Business: Building a Business Case for Valuing Ethnocultural Diversity*, The Conference Board of Canada: Ottawa (ONT); see also, Taylor (1995). Building a Business Case for Diversity, *Canadian Business Review*, 22(1):12-14.

affordability programs can be "grounded in economic rationality and self-interest."[186] In this respect, the consideration of these additional business benefits can be viewed in the same way that the business benefits of multiculturalism are viewed. As one analysis found:

> Another problem that emerges in respect of cross-cutting, strategic policies, such as multiculturalism, is the public nature of the benefits they produce. Expenditures on multicultural policies oftentimes yield non-specific benefits (externalities) that cannot be entirely appropriated by any one agency or department. This is a situation that chronically leads to under-investment, even where there is a business case to be made because overall benefits outweigh costs.[187]

The benefits of providing affordable energy are much akin to the business benefits of providing multiculturalism in these regards. The affordability of home energy yields "non-specific benefits" (e.g., public health, public safety, improved nutrition, improved education) that cannot be entirely appropriated by the Idaho utilities providing the energy. As a result, the utility traditionally under-invests in affordability programs.

Workforce Impacts/Internal Productivity

Initiatives such as the affordable home energy program proposed herein can deliver business benefits through enhanced staff productivity. The inability (or unwillingness) to effectively manage the growing presence of factors creating conflict creates business costs that impede "desired organization and business outcomes."[188] According to a February 2010 analysis of the costs and benefits of promoting workplace diversity by the U.S. Military Leadership Diversity Commission, "such costs can be direct (i.e., produced by turnover and absenteeism among employees who are the minority in their work group) or indirect (i.e., the result of conflict or reduced communication between employees who are different)."[189]

The provision of affordable low-income rates allows utility customer service representatives to avoid imposing similar direct and indirect productivity costs on the company. The provision of affordable low-income rates provides utility staffpersons greater satisfaction in their jobs. By enhancing home energy affordability on the front-end, utility staff face fewer customer confrontations, have a greater number of options available leading to successful conclusions from the customer/company interaction, generate a higher success rate in obtaining payment, and reduce the daily stress imposed on staff addressing nonpayment situations.

Improving employee satisfaction delivers business benefits to the utility.[190] "[E]mployees with supportive workplaces are the most satisfied with their jobs and the most loyal, which leads to

[186] Compare, Burstein (2004). *Developing the Business Case for Multiculturalism*, at 9, Outreach and Promotion Directorate, Multiculturalism and Human Rights Branch, Department of Canadian Heritage: Ottawa (ONT); see also, Gandz (2001). *A Business Case for Diversity*, Richard Ivey School of Business, University of Western Ontario.
[187] *Business Case for Multiculturalism*, at 12.
[188] Military Leadership Diversity Commission (2010). *Business-Case Arguments for Diversity and Diversity Programs and Their Impact in the Workplace*, 2, Issue Paper #14, Military Leadership Diversity Commission: Arlington (VA).
[189] Id.
[190] Duboff and Heaton (Jan/Feb. 1999). "Employee Loyalty: A Key Link to Value Growth," *Planning Review*, 27(1).

reduced turnover among workers as well as a reduction in the costs related to such turnover."[191] As the Military Leadership Diversity Commission found, "retention and turnover of personnel are fundamental concerns for. . .businesses. There are significant costs associated with recruiting for replacements, and organizations make considerable investments in training each individual."[192] Helping to reduce "avoidable turnover costs" may have "real bottom-line financial implications for firms."[193] Costs are associated with retention, recruitment, training and related employee activities.

Revenue Impacts: Business Locational Decisions.

Offering affordable rates to low-income customers can be expected to have long-term positive impacts for the utility from the perspective of maintaining and expanding its revenue base. The provision of a strong social safety-net so that individuals and households do not face the deprivation of basic household necessities is a strong and growing factor in businesses making locational decisions. These locational factors are particularly important for high technology firms, which represent a particularly strong future growth potential for the economy. Research for Ontario's Ministry of Enterprise, Opportunity and Innovation, in collaboration with the Institute for Competitiveness and Prosperity, reports that sound economic development policy includes ensuring that "the right social investments are made to ensure social harmony."[194]

These results are confirmed by research looking specifically at the relationship between poverty and business competitiveness. The *Competitive Assessment* of the Indiana economy was prepared by Market Street Services for the Indiana Department of Commerce. According to the final report, released in January 2002, the purpose of that Department of Commerce sponsored study was "to help the State clearly assess its competitive position both in relation to other states and the nation." The Indiana Department of Commerce report said:

> The Corporation for Enterprise Development (CFED) identified several key challenges that must be overcome at the state level in particular, to achieve successful economic development in the near future. The *primary barriers or problems that exist today* include sprawl and unmanaged growth, the negative

[191] Fairfax (2003). "The bottom line on board diversity: A cost-benefit analysis of the business rationales for diversity on corporate boards," 2005 *Wisconsin Law Review* 795, 829 (2005); see also, Harter et al. (2002). "Business-Unit-Level relationship between employee satisfaction, employee engagement, and business outcomes," *Journal of Applied Psychology, 87*, 268 – 274,

[192] *Business-Case Arguments for Diversity*, at 3.

[193] McKay et al. (2007). "Racial differences in employee retention: Are diversity climate perceptions the key?", *Personnel Psychology*, 60, 35-62; see also, Jackson et al. (1991). "Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions and turnover," *Journal of Applied Psychology*, 76, 675-689.

[194] Gertler (2002). *Competing on Creativity: Placing Ontario's Cities in North American Context*, report produced for the Ontario Ministry of Enterprise, Opportunity and Innovation and the Institute for Competitiveness and Prosperity. In this sense, affordable home energy can be viewed in the same way that health and education are viewed. "There are numerous empirical studies that demonstrate the links between education, health and competitiveness. In particular, both health and education are correlated with superior economic outcomes such as higher productivity, higher per capita incomes, and faster growth." *Business Case for Multiculturalism*, at 8.

> impacts of globalization, such as fragmenting markets and global competitors, *and income inequality from unequal earnings*.[195]

(emphasis added). The *Indiana Competitive Assessment* reported that "cost of living is a common consideration for employers making expansion and relocation decisions as they attempt to retain and recruit qualified employees." The Department of Commerce's report then found: "Regional meeting participants stated time and again that they feel Indiana is a very affordable place to live *for people of all income levels*. Participants felt that the moderate cost of living *helps their competitive* [posture] with other Midwestern states as well as places around the country." (emphasis added). The report then finally noted that Indiana should: "keep[…] in mind that pockets of poverty –whether the businesses locate there or not—is not a business climate asset overall."

While this assessment was made with respect to telecommunications, it is consistent with the continuing statements made throughout the Indiana *Competitive Assessment* report about the need, from the perspective of maintaining the competitiveness of Indiana business and industry, to address pockets of poverty to ensure that these pockets are not "left behind."

The observation here is being increasingly recognized as relevant to various services. "It should be noted that businesses focus on quality of life considerations when making location decisions because they are relevant for attracting a high quality workforce."[196]

> Economic developers are increasingly recognizing the importance of quality of life in business location decisions. Quality of life has been deemed particularly influential for companies involved in research and development and high technology, and in enterprises employing highly skilled workers in information or knowledge-based services and production. Evidence of this observation is a study conducted by Love and Crompton in which they surveyed 174 decision makers of businesses that had initiated, expanded or relocated to Colorado in the previous five years. . .quality of life was considered the second most important factor for prompting the business move and not selecting a specific community, as well as the third most important factor in the final selection of a specific community.[197]

The relationship between affordable energy and the competitiveness of a local economy is real. The connection between assuring access to basic household necessities and maintaining the competitiveness of the local economy, however, has been recognized throughout Canada.[198] Given the reliance of utility sales, revenues and profit on a strong economy, to the extent that an

[195] Market Street Services. *Indiana Competitive Assessment*, at 8, Indiana Department of Commerce: Indianapolis (IN).
[196] Taylor, et al. (2006). *A Cost-Benefit Analysis of Universally-Accessible Pre-Kindergarten Education in Texas*, Bush School of Government and Public Service, Texas A&M University: College Station (TX).
[197] Id. (citations omitted).
[198] *Improving the Competitiveness and Standard of Living of Canadians: Common Position of Provincial and Territorial Finance Ministers* (December 1999); see also, Human Resources and Skills Development Canada, *Social and Economic Impact of Labor Standards* (March 2008); Pindus et al. (2007). *Place Matters: Employers, Low-Income Workers and Regional Economic Development*, The Urban Institute: Washington D.C. ("racial inclusion and income equality can enhance regional economic growth") (citations omitted).

Idaho utility contributes to this local competitiveness, the company will derive benefits as a result. In this regard, the local utilities are not merely participants in the local economy, but are direct and active beneficiaries of a thriving local economy.

Reputational Capital.

The adoption of an affordable home energy program will benefit Idaho's utilities in that it will expand the "reputational capital" of the utility. Adopting a low-income program allows the utility to acknowledge that it is taking proactive efforts to ensure the availability of home energy as a basic human need. Pursuing such programs allows the utility to speak from a position of strength of community involvement. The enhanced ability of the utility to speak with "moral authority" is a business asset that adds value to the corporation.[199]

This notion of "moral authority" is not a theoretical construct that has little practical meaning to the financial performance of the utility.[200] It is associated with "reputational capital," which in turn has multiple operational (and thus financial) implications. On the one hand, corporations that enhance their reputational capital through programs such as the low-income discount proposed in this paper help to preserve what the Center for Corporate Citizenship refers to as their "license to operate" (sometimes referred to as their "freedom to operate"). "In coming years, it will be important for companies to find ways to prevent or reduce the cost of challenges to their projects and operations. By developing a presence as corporate citizens through positive actions in communities and society, businesses can preserve and enhance their license to operate."[201] Viewed in this way, the business benefits associated with this impact arise with respect to projects ranging from construction and development proposals to acquisition strategies, both of which are particularly applicable to electric utilities. Enhanced reputational capital attributable to social performance has been found, for example, to allow companies to forego and/or minimize costly battles for site placement with communities and/or government officials.[202]

The contribution which an affordable home energy program makes to enhanced reputational capital generates business benefits to Idaho's utilities in a number of ways.[203] An enhanced reputational capital affects the full-range of stakeholders in the utilities' communities: customers, employees, regulators, and the broader community. Each of these stakeholders with whom the state's utilities interact will contribute to the financial benefits derived by the companies.

---

[199] *Business Case for Multiculturalism*, at 9.

[200] "A University of Pittsburgh Business School review of 46 studies on the links between [corporate social performance] and [corporate financial performance] found a positive relationship between social and financial performance. . .thirty-two studies found a positive relationship between social and financial performance. Five studies found a negative relationship between social and financial performance. Fourteen studies found no effect or an inclusive relationship between social and financial performance." Roman at al. (1999). "The Relationship Between Social and Financial Performance." *Business and Society* 38(1).

[201] *Determining the Value of Corporate Community Involvement*, at 7.

[202] Waddock and Graves (March 1996). *Good Management and Good Stakeholder Relations; Are They Synonymous*," presented at the Annual IAMBS Annual Meeting.; see also, Waddock and Graves (1997). "The Corporate Social Performance-Financial Performance Link," *Strategic Management Journal*, 18(4). 303-319.

[203] Rochlin and Googins (2005). *The Value Proposition for Corporate Citizenship*, at 12, Center for Corporate Citizenship: Boston College, Chestnut Hill (MA); citing Nelson and Bergrem (2003). *Values and Value: Communicating the Strategic Importance of Corporate Citizenship to Investors*, World Economic Forum/International Business Leaders Forum.

Economic Development

Low-income rate assistance programs generate substantial economic development impacts in the jurisdictions in which they operate. As a significant contributor to economic development, low-income rate assistance programs provide substantive benefits to the utility as well as to all customer classes. Because rate assistance programs contribute to additional disposable income within the low-income population, it helps drive additional job creation, income generation, and economic activity for local businesses.

A study for Entergy Services Corporation, a major electric utility serving the Middle South, found that a low-income rate assistance program would be a significant generator of jobs, economic activity, and income throughout the region. The report found:

> The distribution of energy assistance first creates economic activity for the Entergy states through the direct delivery of benefit dollars. In addition to the dollars of cash benefits, however, the delivery of energy assistance will also free up household dollars that would have been devoted to the costs arising from the payment and behavior consequences of energy bill unaffordability. These dollars, too, can then instead be spent (and circulated) in the local economy.
>
> * * *
>
> While the discussion of the economic impacts of energy assistance looks at economic benefits on a statewide basis, in fact, the economic impacts provide particular advantage to low-income communities. Existing research indicates that low-income households tend to shop at local retail establishments. For food in particular, low-income households tend to shop at small, local food stores. Moreover, not only are low-income *households* more likely to shop locally, but the *businesses* serving low-income households are more likely to shop locally as well. It is clear, therefore, that not only will the provision of energy assistance provide income and employment to low-income households, but the earnings and employment that are delivered to such households will likely be spent, retained and re-circulated within the low-income community as well.[204]

Ultimately, the Entergy study found that "energy assistance serves as an economic stimulant for the economy in three distinct ways. It creates economic activity. It generates additional earnings. It supports jobs."

TWELVE IMPORTANT FINDINGS

A business case can be made for low-income rate assistance programs such as that which has been advanced in this paper. Considering the "business case" is important for three reasons. First, the business case is contrary to the conclusion that the affordability program should be

[204] Colton (August 2003). *The Economic Development Impacts of Home Energy Assistance: The Entergy States*. Entergy Services Corp: Little Rock (AR).

pursued exclusively at public expense. No reason exists for the public, through state legislative action, to be the exclusive funder of activities that will generate real and substantial financial benefits to the utility. Second, the business case shows that stakeholders who might argue that utility rates are not an appropriate mechanism through which to pursue "social" policy miss the point of what a low-income program accomplishes. Finally, the business case shows that the net costs to be paid by ratepayers, if any, are substantively less than the costs identified in a cost-recovery mechanism (such as the proposed meters charge).

1. A review of the basis for the adoption of two of the oldest low-income rate assistance programs in the United States (Ohio, Pennsylvania) reveals that such programs were not grounded simply on the social pressure to help those in need of rate assistance. Rather, low-income rate assistance programs are found to serve fundamental regulatory purposes quite apart from, and in addition to, their social functions.

2. A business case for a low-income program affordability program must consider the effectiveness of the program in accomplishing outcomes such as preserving service and collecting revenue. The performance of a rate assistance program in maintaining uninterrupted service has been found to generate performance superior to traditional collection activities directed toward non-participant customers. In addition to reducing the *frequency* of involuntary disconnections for nonpayment, a rate assistance program can be expected to reduce the *duration* of disconnections as well.

3. Rate assistance programs out-perform traditional collection activities in collecting revenue as well. This positive outcome can be measured in terms of whether the program generates the same dollars of revenue to the utility despite the offer of discounted rates. An evaluation of an Indiana rate assistance program found that: "the [rate affordability program] was better than revenue neutral to Citizens Gas. While [program] participants were billed 90% of what nonparticipants were billed, they paid 111% of what nonparticipants paid."

4. Similar results were found for the Pilot Energy Assistance Program (PEAP) operated by Xcel Energy in Colorado. PEAP program participants paid 67% of their current bills, compared to PEAP non-participant payments of 51%. According to the PEAP evaluation, rather than collecting $533,684 from customers if they had not participated in PEAP, Xcel Energy collected $701,278 from customers enrolled in PEAP, a gain of $167,469 attributable to the program.

5. The use of a rate assistance program helped Indiana utilities enhance the productivity of their collection efforts. The Vectren rate assistance program allowed it to move to a less intensive collection activity directed toward its low-income customers when compared to its residential customer base as a whole. The program allowed the company to substitute mail and telephone collections where historically field collections had been required.

6. The effectiveness of collection activities directed toward participants in the Indiana rate assistance program increased as measured by the dollars of payment per collection month. The increase in the average payment per collection month occurred for two

reasons: (1) the payments made in response to collection activity increased; and (2) the number of payments made without need of any collection activity increased.

7. A low-income program can be justified through a business case analysis. The low-income programs that have been implemented in other jurisdictions have found that utilities collect more revenue, while incurring a lower cost of collection in the process.

8. Aside from the direct financial benefits of promoting home energy affordability, providing affordable rates will generate considerable "secondary" business benefits to Idaho's utilities. These benefits should be considered by the utility as instrumental uses in furthering business objectives. These instrumental uses document that the offer of low-income affordability programs can be grounded in economic rationality and self-interest.

9. Initiatives such as an affordable home energy program will deliver business benefits through enhanced staff productivity. The provision of affordable low-income rates allows utility customer service representatives to avoid imposing both direct and indirect productivity and staff turn-over costs on the company.

10. Offering affordable rates to low-income customers can be expected to have long-term positive impacts for the utility from the perspective of maintaining and expanding its revenue base. The provision of a strong social safety-net so that individuals and households do not face the deprivation of basic household necessities is a strong and growing factor in businesses making locational decisions.

11. The adoption of an affordable home energy program will benefit Idaho's utilities by expanding the "reputational capital" of the utility. The enhanced ability of the utility to speak with "moral authority" is a business asset that enhances the financial performance of the utility and adds value to the corporation. "Moral authority" (discussed as "reputational capital") has multiple operational (and thus financial) implications.

12. Low-income rate assistance programs generate substantial economic development impacts. As a significant contributor to economic development, low-income rate assistance programs provide benefits to the utility, as well as to all customer classes. Rate assistance programs contribute to additional disposable income within the low-income population, thus driving additional job creation, income generation, and economic activity for local businesses.

NOTES

PART 7:
ADDITIONAL ENERGY ASSISTANCE FOR IDAHO

As Idaho struggles to address the affordability problems associated with increasing home energy prices, state policymakers should pay particular attention to avoid leaving potential resources on the table. The discussion below identifies sets of new resources that the State of Idaho might capture for low-income energy assistance.

STATE PUBLIC BENEFITS PROGRAMS

One of the most effective low-income fuel assistance program structures outside LIHEAP involves the delivery of rate affordability assistance through public utilities. While clearly not all low-income households use utility fuels such as natural gas and electricity as their primary heating source, the use of electricity is nearly universal and the combination of gas and electric heating covers a substantial proportion of low-income households in Idaho. A variety of program designs, target populations, and justifications exist for the utility programs that operate around the nation. The experience from these programs merits their emulation in Idaho. A comprehensive low-income affordability program was outlined earlier in this narrative.

The Pennsylvania Customer Assistance Program (CAP) represents an exemplary comprehensive statewide effort on the part of utilities to address the payment problems of their low-income households. Under the 1990 Pennsylvania Public Utility Commission (PUC) order directing the establishment of CAPs by both electric and gas utilities, affordable rate programs were to be directed toward income-eligible payment-troubled customers.

The Pennsylvania CAP programs were directed to be implemented by a 1992 Pennsylvania Public Utility Commission order. That order, titled *Policy Statement on Customer Assistance Programs*

(CAP),[205] found that "CAPs provide alternatives to traditional collection methods for low-income, payment troubled customers. Generally, customers enrolled in a CAP agree to make monthly payments based on household family size and gross income. These regular monthly payments, which may be for an amount that is less than the current bill, are made in exchange for continued provision of utility service." The PUC concluded: "as a result of our investigation, the Commission believes that an appropriately designed and well implemented CAP, as an integrated part of a company's rate structure, is in the public interest. These guidelines prescribe a model CAP which is designed to be a more cost effective approach for dealing with issues of customer inability to pay than are traditional collection methods."

Other state universal service programs include:

- New Hampshire's Electric Assistance Program (EAP), operating as a "tiered discount" program;
- New Jersey's Universal Service Fund (USF), operating as a "fixed credit" program;
- Maryland's Electric Universal Service Program (EUSP), operating as a LIHEAP supplement program; and
- Indiana's Universal service Programs (USPs), operating as a tiered rate discount program.

A variety of other states (Ohio, Illinois, Wisconsin, Colorado, Oregon, California) also operate public benefits programs that provide rate affordability assistance.[206]

PROMOTING THE EARNED INCOME TAX CREDIT

The Earned Income Tax Credit (EITC) is the largest public assistance program serving low-income households in Idaho. As discussed in detail above, the EITC delivered roughly $258 million dollars in federal benefits for the Tax Year 2009 (claimed in 2010). Nonetheless, according to the Internal Revenue Service (IRS), national data suggests that jurisdictions leave between 15% and 25% of available EITC benefits on the table each year. In Idaho, this means that between $46 million and $86 million in federal EITC benefits go unclaimed each year.

The increase in EITC benefits, while not uniformly helping all areas of the state, would nonetheless deliver substantial benefits to all counties within Idaho. Not surprisingly, the largest dollars lie in the larger urban counties. At the 25% unclaimed rate, the largest amounts of unclaimed benefits lie in:

- Ada County ($14.645 million)

[205] Docket M-00920345 (July 2, 1992).
[206] The National Consumer Law Center, in Boston, maintains an up-to-date list of public benefits programs. Because such a list is so constantly changing, one is not included in this publication. An analysis of "best practices" within ratepayer-funded rate affordability programs was recently prepared for Hydro-Quebec. Colton (November 2007). *Best Practices: Low-Income Rate Affordability Programs: Articulating and Applying Rating Criteria*, Fisher, Sheehan & Colton: Belmont (MA).

- Bannock County ($4.464 million)
- Bonneville County ($5.556 million),
- Canyon County ($11.909 million),
- Kootenai County ($6.434 million), and
- Twin Falls County ($4.438 million).

According to the Brookings Institution, few jurisdictions lack the capacity to increase the rate at which EITC benefits are distributed by five percent (5%) or more in a given year. The D.C.-based Center on Budget and Policy Priorities (CBPP), which administers the national EITC Outreach Campaign, reports that populations that are particularly underserved include part-time workers, women workers, and Hispanic workers. Such an increase in Idaho would deliver nearly $12.9 million in increased federal EITC benefits to the State. From that $12.9 million, utilities could expect that between four and five million dollars each year would be used to pay for unaffordable home energy bills.

Recommendation

Given the particular benefits of the EITC as "energy assistance," Idaho utilities should take the following action steps:

- Direct targeted EITC outreach to customers in arrears. Indeed, utilities should direct EITC outreach to payment-troubled customers that the utility has previously identified as being low-income through mechanisms discussed throughout this report (e.g., winter payment plan, deferred payment plans, LIHEAP receipt)..
- Fund outreach efforts targeted toward populations that under-utilize the EITC. Rather than doing generic outreach campaigns, Idaho utilities could help fund "gap-filling" outreach. According to the national EITC Outreach Campaign, women fill a disproportionate number of part-time and low-wage jobs. Newly employed women, in particular, are less likely to file for EITC benefits. Moreover, Hispanic parents are much less likely to file for EITC benefits. An Urban Institute study found that only 32% of low-income Hispanic parents knew about the EITC, and only 20% of such parents claimed their EITC. In addition to performing LIHEAP outreach, Idaho utilities should direct funding to specific community-based organizations that can document their ability to reach these under-served populations.
- Refer payment-troubled customers to free tax preparation clinics (called Volunteer Income Tax Assistance, or "VITA," sites). Customers who contact the utility during the tax preparation season who have received energy assistance in the past, are currently receiving the low-income discount, or have otherwise been identified as "low-income," can be directed toward VITA sites in addition to being directed toward energy assistance

agencies. Information on VITA sites can be included with shutoff notices, with written confirmation of payment plan terms, or in other collection initiatives. According to EITC outreach specialists, the primary problem with VITA sites is that not enough people use them. Most people do not know about VITA sites; those that do often find it difficult to find them. Unfortunately, the local IRS telephone assistance lines through which people might obtain information on the location of VITA sites are often busy.

- Add EITC outreach to their existing contacts with its customers. Adding an EITC information message during the call-center hold time would be helpful. Adding EITC outreach materials to the utility web sites would reach a different population. Including EITC outreach with shutoff notices would provide an opportunity for payment-troubled customers to seek additional financial resources.

- In addition to EITC outreach efforts, utilities should financially support the provision of free tax preparation clinics designed to help income-eligible households claim their EITC. The cost to low-income taxpayers of relying on paid tax preparers, as well as using Refund Anticipation Loans (RALs) was outlined above.

Finally, while this report recommends specific action steps for Idaho utilities to take, not all steps need be funded and advanced by the utility industry. Increasing the number of EITC claims in Idaho would benefit the state as a whole, including the business community. Accordingly, one or more of Idaho's utilities (not in their status as utility but in their status as a major player in the Idaho economy) should convene a business roundtable in Idaho, along with appropriate leadership within the nonprofit community, to develop and implement plans specific to Idaho for EITC outreach above and beyond that outreach that the utilities directs to their own low-income, payment-troubled population.

REQUIRING THE IMPLEMENTATION OF UTILITY FUEL FUND CHECK-OFFS

Private fuel funds can be an important source of energy assistance for Idaho's low- and moderate-income households. Fuel funds generally provide private, charitable assistance to low- and moderate-income households that face the imminent loss of home energy service. Unlike rate assistance provided through a rate affordability program such as is described above, and public energy assistance provided through federal programs such as the Low-Income Home Energy Assistance Program (LIHEAP) and HUD utility allowances, fuel funds are not directed toward addressing persistent home energy affordability issues. They are instead directed toward preventing the adverse impacts associated with the loss of utility service due to an inability-to-pay.

The Potential for Short-term Payment Crises

Low- and moderate-income households often face the potential crisis associated with the loss of utility service due to inability-to-pay. This potential is not only possible, but is likely, because low- and moderate-income households live within financial constraints that do not allow the household to respond to financial exigencies. This "fragility" of household income poses real risks to low-income households. The fragility of income refers to the fact that low-income

households are prone to income losses due to exigent circumstances, such as missed work due to family emergencies (combined with a lack of paid leave), involuntary part-time employment, and other related problems associated with low-quality, low-wage jobs. Problems can arise on the expense side of household finances as well. The need for an auto or appliance repair, along with unexpected household medical bills, can push a previously good-paying customer into a nonpayment situation.

Low- and moderate-income households generally do not have the financial *assets* (contrasted to income) to help them respond to unexpected financial events without major disruption. Assets may include simple protections against month-to-month financial fluctuations such as a small savings account.

The recent Georgia REACH program[207] was designed to help identify and address these non-energy problems that create, or exacerbate, home energy affordability problems. According to the Georgia REACH evaluation:

> The inability to address financial exigencies also was a commonly identified risk. Indeed, the inability to respond to exigencies due to a lack of savings, as well as the inability to afford high winter bill burdens (an exigency unto itself), were the most commonly identified risks aside from inadequate income. The lack of control over expenses is a type of acknowledgment of the inability to handle unexpected (or unexpectedly high) household expenses.[208]

The experience of New Jersey SHARES, a statewide fuel fund, confirms these observations. As of the end of September, 2006, New Jersey SHARES had distributed crisis benefits to 11,945 households. Of these, the overwhelming majority experienced needs based on temporary circumstances:

- 7,813 (65.4%) reported a temporary financial crisis (reduced hours, temporary layoff, transportation expenses, family/household expenses);
- 262 (2.2%) reported being unemployed;
- 558 (4.7%) reported medical expenses.

In addition, 3,071 (25.7%) reported a need for crisis funding because of high energy costs.

The Role of a Utility Hardship Fund

The fact that many of these households have incomes too high to qualify for low-income energy assistance exacerbates these problems. As the Pennsylvania Bureau of Consumer Services (BCS) most recent report on universal service programs correctly notes:

---

[207] The REACH program is a component of the federal LIHEAP office. REACH is the acronym for **R**esidential **E**nergy **A**ssistance **CH**allenge grant.

[208] Colton (April 2006). *Georgia REACH Project Energize: Final Impact Evaluation*, at 19 - 20, Georgia Department of Human Services: Atlanta (GA).

> Utility company hardship funds provide cash assistance to utility customers who 'fall through the cracks' of other financial assistance programs, or to those who still have a critical need for assistance after other resources have been exhausted. The funds make payments directly to companies on behalf of eligible customers. Contributions from shareholders, utility employees and customers are the primary sources of funding for these programs.[209]

Hardship funds, while not generating sufficient revenue to support a basic affordability program, can nonetheless support significant crisis benefits. In Pennsylvania, natural gas hardship fund programs distributed more than $4.979 million in the 2009/2010 program year. The natural gas programs assisted nearly 9,950 households. In addition, the Pennsylvania electric hardship fund programs generated disbursements of more than $4.979 million in 2009/2010 and helped nearly 11,400 households. Electric benefits distributed through the state's hardship funds averaged $330, while the average natural gas benefit reached $414.

Recommendation

Every natural gas and electric utility in Pennsylvania is required to operate a hardship fund.[210] So, too, does Iowa law require utilities to solicit fuel fund contributions through a hardship fund. The Iowa statute provides in relevant part as follows:[211]

> The utilities board shall adopt rules which shall require each electric and gas public utility to establish a fund whose purposes shall include the receiving of contributions to assist the utility's low-income customers with weatherization measures to improve energy efficiency related to winter heating and summer cooling, and to supplement the energy assistance received under the federal low-income home energy assistance program for the payment of winter heating electric or gas utility bills.
>
> The rules shall require each utility to periodically notify its customers of the availability and purpose of the fund and to provide them with forms on which they can authorize the utility to bill their contribution to the fund on a monthly basis.[212]

The statute makes clear, of course, that "existing programs to receive customer contributions established by public utilities shall be construed to meet the requirements of this section. Such plans shall be subject to review by the utilities board."[213]

---

[209] Bureau of Consumer Services (2011). *2010 Report on Universal Service Programs & Collections Performance*, Pennsylvania Public Utility Commission: Harrisburg (PA).
[210] The "operation" of a hardship fund may, of course, simply involve providing the hardship fund contributions generated from a utility's customers to a private fuel fund for distribution.
[211] Additional language in the statute concerns the operation of the "customer contribution fund."
[212] Iowa Code Annotated, Section 476.66 (2006).
[213] Section 476.66(7), Iowa Code Annotated.

Just like other company initiatives directed toward resolving low-income payment troubles, fuel fund contributions, as well as participation in the solicitation of contributions to local fuel funds, evidence a company's ability to bring outside resources to bear in helping to address low-income customers' immediate payment troubles. The State of Idaho should adopt legislation akin to that adopted in Iowa. All Idaho utilities should engage in the solicitation and distribution of fuel fund contributions. All Idaho gas and electric utilities, including municipal utilities and Rural Electric Cooperatives (RECs) should engage in the solicitation and distribution of fuel fund contributions.

CAPTURING ESCHEATED UTILITY DEPOSITS

Idaho provides for the escheat of abandoned property to the state. Under state law, property that remains unclaimed for more than five (5) years is "presumed abandoned."[214] Expressly included in the escheat process is any "deposit, including any interest thereon, made by a subscriber with a utility to secure a payment or any sum paid in advance for utility service to be furnished. . ."[215] For purposes of this statute, a "utility" is not merely a ***regulated*** utility; nor does the statute apply only to energy utilities.[216]

Idaho allows these unclaimed utility properties to be devoted to low-income energy assistance. The statute provides as follows:

> The public utilities commission may certify that a utility is participating in a financial assistance program which assists the utility's low income and disadvantaged customers with their utility bills. Upon certification to the administrator, the utility shall pay the funds which would have been presumed to be abandoned under [the statute] to the financial assistance program certified by the public utilities commission. [217]

Despite the fact that state law allows for the use of abandoned deposits and prepayments for low-income assistance, the Idaho state commission has not certified the creation of any low-income "financial assistance program."

A program by which utilities would commit that funding to the Community Action Partnership Association of Idaho (CAPAI) for distribution as emergency assistance to prevent shutoffs would be an appropriate use of these funds. Such a program need only be certified by the Commission to allow utilities to access these funds for low-income assistance.

Devoting abandoned utility deposits to low-income assistance is sound public policy. There is little question but that the mobility of households that leads to the abandonment of utility deposits is likely to be concentrated in the low-income community. Low-income households, overall, have a much higher mobility rate than do households in general. According to the Census Bureau's American Community Survey (ACS), while 33% of all Idaho persons with income below 100% of

[214] Idaho statutes, section 14-502 (2010).
[215] Idaho statutes, section 14-508 (2010).
[216] Idaho statutes, section 15-501(15) (2010).
[217] Idaho statutes, section 15-508(2) (2010).

the Federal Poverty Level moved in 2010, only 12% of persons with income above 150% of Poverty did; 20% of persons between 100% and 150% moved in 2010.

The abandonment of utility deposits is likely to be primarily caused by households moving from their current home and failing to provide the utility a forwarding address. The information presented above leads to the conclusion that not only will low-income Idaho households more likely be called upon to post cash security deposits, but those low-income Idaho households will also more likely be amongst those households that are likely to lose their deposits because of their mobility.

Recommendation

Abandoned utility deposits are available under Idaho state statute for use as low-income energy assistance. The fact that the funding is not used for such assistance is simply attributable to the fact that certifications *have* not been provided, not that such certifications *may* not be provided. The way to access these otherwise abandoned funds is for the state utility commission to certify low-income crisis assistance programs for each utility. The Commission, in collaboration with CAPAI and the state's utilities, should initiate an immediate proceeding to design and certify a statewide program that could serve all utilities.

DEVELOPING NON-TRADITIONAL CHECK-OFFS

Historically, primary attention with check-off systems in support of state or local fuel funds has been devoted toward check-offs involving regulated utility (natural gas and electricity) customers. Idaho should consider the advantages of funding mechanisms that extend beyond those regulated limits. The discussion below considers not only how (and why) to reach into the Rural Electric Cooperative (REC) industry, but also how (and why) to reach into the financial services industries (such as banking and insurance) as well.

The Potential Role of Co-op Patronage Capital Credits

The State of Idaho should seek to work with Idaho's Rural Electric Cooperatives (RECs) to expand the customer contribution financial base for serving low-income customers. One initiative that Idaho should explore involves seeking customer donations from their annual patronage capital credits (or patronage capital refunds as some would refer to them).

The benefits of tapping into refunded money that is flowing back to residential and commercial customers –there is no reason that such an initiative be limited exclusively to residential and commercial customers, but we make that limitation here simply to ease the process of analysis— can be substantial.

In seeking to estimate the impact of solicitations asking REC customers to donate some or all of their annual capital credits to their local customer contribution fund, important lessons can be learned from the past experiences of the Colorado Energy Assistance Foundation (now known as Energy Outreach Colorado, EOC). EOC generated substantial fuel fund contributions through a solicitation directed toward recapturing customer refunds provided through Public Service Company of Colorado (PSCO). In a notice to customers, PSCO told its customers:

> We are very pleased to be returning this money (which includes taxes and interest) and would like to introduce you to an agency which would appreciate a donation of all or a portion of this refund to be used for a very worthy purpose.
>
> The Colorado Energy Assistance Foundation (CEAF) is a non-profit agency helping the Low-Income Energy Assistance Program (LEAP) provide funds to people who need help paying their energy bills. CEAF's operation costs are paid entirely through corporate donations, so all private donations go directly to the people who need help.
>
> This is a great way to give! Just check the box on the tear-off form below, mail it in the enclosed return envelope so that it reaches us by February 26 and your tax deductible donation will be sent to CEAF. You have the option of donating all or a part of your refund amount.

In addition to PSCO's support, CEAF sought to publicize the donation program through local print and broadcast media. Moreover, local churches were asked to solicit donations through their congregation's newsletters or weekly bulletins.

The Colorado initiative recovered $1,126,638 of the $29,657,910 refunds owed to "active" PSCO customers, or about 3.8% of the total refund. While the refund averaged about $35 per customer, the refund donations received averaged about $25 per refund. Nearly one-in-ten of the total number of customers eligible to receive refunds donated ***some***thing through the program. According to CEAF, the refunds were considered to be "found money," thus making it easier for customers to make the requested donation.

Recommendation

Implementing an initiative that would ask Co-op members to donate all or part of their annual patronage capital credits to the local customer contribution fund would generate a substantial fund that could be made available for low-income payment-troubled customers of RECs.

The impact would be statewide. Using a three percent (3%) return on solicitations (which is somewhat less than PSCO received in reality), and using the average capital credit reported by the Iowa Association of Electric Cooperatives (IAEC) in its analysis of the economic impact that RECs have on local communities ($60/member),[218] asking Idaho Co-op customers to donate all or part of their patronage capital credits to the local customer contribution fund, would generate nearly $130,000 in new funds each year.

Idaho should propose that the state's RECs pursue an initiative asking Co-op members to donate all or part of their annual patronage capital refunds to the local customer contribution fund. These donations would be used to make grants to low-income payment-troubled Co-op

[218] The Iowa Co-ops reported that the average patronage capital refund was $67.32 each year. That figure has been rounded down to $60. Similar data is not available for Idaho co-ops.

customers or for weatherization purposes. Adopting such an initiative would be in the best traditions of the seventh Cooperative Principle, to demonstrate concern for the community, and to promote the sustainable development of the community. This initiative would also be in the best traditions of the fourth Cooperative Principle, to operate as a self-help institution.[219]

The Potential Role of Financial Institutions

Public utilities are not the only sector of the Idaho economy that would benefit from low-income weatherization. In particular, financial institutions such as depository institutions and insurance companies could play an important role. Each of these is discussed below.

Depository Institutions

Banks and similar depository financial institutions would benefit not only the community, but themselves, by supporting energy efficiency investments in low-income housing through a customer check-off process similar to utility check-offs. A bank check-off could take one of two primary forms: (1) a voluntary check-off fee attached to each monthly financial statement; or (2) a voluntary check-off fee attached to each monthly mortgage payment received.[220]

Check-off revenue could be used either to supplement weatherization funding in the state of Idaho or to supplement crisis fuel funds to help prevent the termination of service for nonpayment. At an average investment of $3,500 per weatherized housing unit, every $200,000 in check-off revenue would weatherize about 60 low-income homes. The use of bank check-off funds for low-income weatherization would not only help make energy more affordable, but would generate substantive benefits for the banks themselves.

- **Preventing mortgage defaults:** A bank-based check-off program for weatherization would help low-income consumers stay in their homes once those homes have been purchased. Affordable energy directly affects the ability of homebuyers to avoid crisis situations involving unpaid bills. One federal study found, for example, that high energy prices increase the default on home mortgages. This study, performed for the U.S. Federal Energy Administration, found that in 1974 and 1975, 2.5 percent of HUD mortgages failed because of high energy prices.[221] This impact is of particular importance today. Natural gas, fuel oil and propane energy prices are at historic highs.

- **Building home value:** A bank-based check-off program would help low-income homebuyers derive additional value from their home, thus providing added protection for home loans. The U.S. Environmental Protection Agency found in 1998 that energy-efficient homes have a higher market (or resale) value regardless of how long a consumer owns the home. According to the EPA study, home value increases $20

[219] To prevent the need to devote an inordinate proportion of the new funds to administration of multiple tiny local hardship funds, these funds could be distributed through existing community-based organizations.
220 In either case, this fee would be similar to a utility check-off fee attached to the monthly utility bill.
[221] Metrostudy Corporation (1976). *An Analysis of the Contribution of Energy Price Changes to HUD-Insured Mortgage Failures*, Federal Energy Administration: Washington D.C.

for every $1 reduction in average annual utility bill. An energy efficiency audit that reduces average annual home energy bills by $420 a year, EPA found, will add $8,400 to the market value of the home.[222]

- **Increasing the purchasing power for affordable housing:** A bank-based check-off program would increase the market for affordable housing. A 2003 study by Fisher, Sheehan & Colton (FSC) found that energy costs in Colorado substantively reduce the purchasing power for housing. According to the FSC analysis, "the reduction in purchasing power is substantial. While a retail sales person could afford a $464 monthly mortgage payment without utilities, that sales person could afford only $354 with utilities being taken into account (a reduction of 24% in purchasing power). The elementary school teacher could afford a monthly home mortgage payment of $766 without considering utilities, but could afford only $669 with utilities (a reduction of 13%)."[223]

- **Increasing the market for homeownership:** A bank-based check-off program would expand the ability of low-income households to access credit. The impact of energy efficiency mortgages, for example, has long been recognized as a way to expand first time homebuyership. In 1985, Harvard and MIT's Joint Center for Urban Studies found that the use of home energy ratings would enable a minimum of 11% more first-time home buyers to be able to afford mortgage loans. The Center's study was based on data collected from Hartford (CT); Houston (TX); Portland (OR); Chicago (IL); and Seattle (WA).[224] Similarly, the FSC Colorado study found that "taking home utility bills into account reduces the availability of affordable units in Colorado by nearly 20%."

- **Increasing the affordability of homeownership:** A bank-based check-off program would improve the affordability of homeownership. Reducing costs through the installation of weatherization measures has the same effective impact as reducing interest rates. In its Colorado study, FSC quantified what interest rate reduction on the underlying mortgage would be necessary to provide the same dollar savings to the consumer as energy efficiency measures. FSC reported that over a 15-year period, "in order to achieve the same savings as generated by the proposed energy efficiency partnership, consumers would need to have interest rate reductions of between 22 and 45 basis points. For the household buying a low cost home with an average utility bill, the efficiency investments would have the same effect as reducing interest rates by 0.31%."

[222] Nevin and Watson (October 1998). "Evidence of Rational Market Valuation for Home Energy Efficiency," *The Appraiser Journal*, 401-409 (forty-five regression analyses of American Housing Survey data shows that residential real estate markets assign an incremental value that reflects the discounted value of annual fuel savings).
[223] Colton (2003). *Energy Efficiency as an Affordable Housing Tool in Colorado*, Fisher, Sheehan & Colton: Belmont (MA).
[224] Residential Energy Services Network (2004). *Home Energy Ratings: A Primer*, at Chapter 4, available at: http://www.natresnet.org/herseems/HERSPrimer/HERSPrimer.htm (April 2004).

A bank check-off fee could generate substantial funds. Check-offs can be expected to generate the participation of no less than two percent of the customer base.[225] Moreover, contributions can reasonably be expected to reach $10 per year per check-off participant. Every 100,000 mortgage holders could thus generate $20,000 in check-off funding.

The Potential Role of Insurance Institutions

Idaho's insurance institutions would benefit not only the community, but themselves, by supporting energy efficiency investments in low-income housing through a customer check-off process similar to utility check-offs. An insurance company check-off could take the same form as a utility check-off. It would involve a voluntary fee attached to each periodic statement.

Check-off revenue could be used either to supplement weatherization funding in the state of Idaho or to supplement crisis fuel funds to help prevent the termination of service for nonpayment. At an average investment of $3,500 per weatherized housing unit, every $200,000 in check-off revenue would weatherize about 60 low-income homes. The use of insurance check-off funds for low-income weatherization would not only help make energy more affordable, but would generate substantive benefits for the insurance industry itself.

An insurance check-off fee could generate substantial funds. A check-off could be expected to generate the participation of two percent of the customer base. Moreover, contributions could reasonably be expected to reach $10 per year per check-off participant. Every 100,000 insurance customers could thus generate $20,000 in check-off funding.

The interest of the insurance industry in weatherizing low-income homes is akin to the industry's interest in other risk management strategies. Energy efficiency serves the same function as technologies such as seat belts/air bags, smoke alarms, and preventive medicine.[226] The insurance benefits from weatherization arise from the full range of weatherization measures:

- **Insulation, air sealing, and duct sealing:** Using the installation of insulation, air sealing, and duct sealing to prevent heat losses through the roofs of homes will help prevent the formation of ice dams on roof eaves. Ice dams cause damage not only to the roof, but also to the structure of the home. "Ice dams form because of preventable heat leaks caused by air leakage, insufficient insulation levels, or leaky heating ducts."[227]

- **Energy efficient windows:** The installation of energy efficient windows is an effective fire loss prevention technique. Energy efficient windows are less subject to breakage during a fire. According to Lawrence Berkeley National Laboratory (LBL),

[225] Colton (1996). *Funding Fuel Assistance: State and Local Strategies to Help Pay Low-Income Home Energy Bills*, at 8 – 27 Fisher, Sheehan & Colton: Belmont (MA).
[226] Mills (2003). "The insurance and risk management industries: new players in the delivery of energy-efficient and renewable energy products and services," 31 *Energy Policy* 1257 (hereafter, *New Players*).
[227] Mills and Knoepfel (1997). *Energy Efficiency Options for Insurance Loss Prevention*, at 8, Lawrence Berkeley National Laboratory: Berkeley (CA) (hereafter, *Insurance Loss Prevention*).

"during a fire, heat-stressed windows can shatter as a result of differential expansion near the frames."[228] The broken windows then feed a fresh supply of air to the fire, thus contributing to the spread of the fire and toxic fumes. LBL reports that "efficient windows reduce the likelihood that fire will cause breakage."[229]

- **Pipe insulation:** The installation of pipe insulation (or insulation of cold spaces where pipes run) reduces the likelihood of freeze damage. Lawrence Berkeley Laboratory reports that "cold winters correlate to significant reductions in the profitability of pipe insurance providers." [230]

- **Duct sealing:** Ensuring that ducts for combustion appliances such as water heaters and furnaces are properly sealed provides substantial health and property benefits to low-income households. According to Lawrence Berkeley Laboratory, duct sealing "can help avoid dangerous pressure imbalances in a building, which can lead to fires or health and life risks from carbon monoxide back-drafting of combustion appliances."[231]

The losses that weatherization can help prevent are substantial:

- The insurance industry paid out $450 million per year in insured losses from frozen pipes over one ten year period in just 17 Southeastern states.

- The property insurance industry in Connecticut paid out over 15,000 claims, averaging $2,000 per claim, because of just one snow storm in 1995.

- There are 72,000 structural fires per year caused by heating equipment, 385 fire-related deaths, 2,142 injuries, and $551 million in fire-related losses. Residential buildings carry 80% of the insured losses and nearly all of the fires, deaths and injuries.

- There are 85,000 structural fires per year caused by electrical equipment and appliances, 360 fire-related deaths, 3,500 injuries, and $1.2 billion fire-related losses. Residential buildings carry two-thirds of the insured losses, and a "considerably higher" share of the fires, deaths and injuries.[232]

In sum, efficiency measures can reduce losses from fire, ice, wind and water damages in addition to reducing health risks and generating other benefits to the insurance industry. Even where efficiency cannot eliminate the risk, efficiency measures *reduce* insured losses. According to Lawrence Berkeley Laboratory, "the short-term loss prevention benefits of these energy efficiency measures would have distinct value to insurers and their customers. . ."

---

[228] *New Players*, supra, at 1258.
[229] Id., at 1258.
[230] Id., at 1258.
[231] *Insurance Loss Prevention*, supra, at 3.
[232] *Insurance Loss Prevention*, supra, at 10; see also, Mills, Deering and Vine (March 1998). "Energy Efficiency: Proactive Strategies for Risk Managers," *Risk Management Magazine*, at 12 – 16.

The insurance industry should be involved with generating funding for low-income energy efficiency investments in Idaho.

Recommendation

The statute requiring the implementation of a "customer contribution fund" on the part of local utilities should extend to depository institutions and insurance companies as well. While not requiring industry contributions, such a statute would require each business to make available a customer check-off process.

PUBLIC HOUSING AUTHORITY UTILITY ALLOWANCE OBLIGATIONS

The U.S. Department of Housing and Urban Development (HUD) provides energy assistance to tenants of public and assisted housing. "Public housing" refers to housing *owned* by local public housing authorities (PHAs). "Assisted housing" refers primarily to what is called Section 8 housing.[233] In addition, private housing developed with the assistance of the federal Low-Income Housing Tax Credit (LIHTC) program is governed by utility allowances promulgated by local housing authorities.

HUD's energy assistance comes in the form of what is called a "utility allowance." Under federal law, a utility allowance is supposed to be sufficient to pay a tenant's entire utility bill (electricity *and* space heating/cooling).[234] Separate utility allowances are calculated for each fuel used by a tenant (and sometimes for each end use). Unlike LIHEAP, the allowance is not paid in cash to the tenant (or directly vendored to the tenant's utility service provider). Instead, the amount of the allowance is provided as an offset to the tenant's rent.[235] The effect, however, is to put additional cash in the pocket of the tenant so that the tenant can pay his or her utility bills as they come due.[236]

[233] While other miscellaneous types of assisted housing exist, as well, to which this analysis applies, the bulk of "assisted housing" is Section 8 housing.
[234] Under the law, a tenant's shelter costs (including rent plus all utilities other than telephone) is not to exceed 30% of income. Rent is set equal to 30% of income. Accordingly, to comply with the law, utility costs must be covered in their entirety to keep total shelter costs at 30%.
[235] If the tenant has a rent of $250 and a utility allowance of $150, the rent is reduced to $100.
[236] If the utility allowance exceeds what the tenant would pay out-of-pocket for rent, the excess is paid to the tenant as a cash benefit.

Enforcing Federal Regulatory Requirements

A utility allowance is set by the local Public Housing Authority. Pursuant to federal regulations, each PHA is, at a minimum, supposed to review (and revise where appropriate) its utility allowance on an *annual* basis.[237] In addition, under federal law, each PHA is supposed to adjust its utility allowance whenever there is a rate change of 10% or more.[238] Local Public Housing Authorities however, all too frequently fail to comply with these "requirements," and low-income tenants simply do not have the resources to constantly challenge PHA inaction.

The law does not require that the entire bill of a tenant be paid. Instead, the legal test is whether the utility allowance will be sufficient to cover the utility bill of an "energy conservative household of modest means."[239] Much can be written about what that phrase means. The basic message, however, is that while there is no guarantee that the entire bill will be paid, PHA discretion is not absolute. If the tenant uses more energy than is paid by the utility allowance, that energy consumption must be *more* than what would be used by an "energy conservative household of modest means." In addition, federal law provides that a utility allowance is to cover all energy consumption that is not within the ability of the tenant to control.

Despite the legal constraints identified above, local Public Housing Authorities often set utility allowances so as to substantially *under*pay tenants of public and assisted housing.

This failure of local Public Housing Authorities to comply with federal law imposes substantial costs on the public utilities charged with serving these low-income customers. As a result of inadequate utility allowances, these tenants are required to pay much of what is supposed to be covered by a utility allowance out of their own pocket. These utility costs can be devastating to a tenant of public and assisted housing. An analysis by the U.S. General Accounting Office (GAO) reported that public and assisted housing tenants, on average, live with incomes of *below* 50% of Poverty Level, a finding consistent with the incomes of Idaho's Section 8 and public housing tenants reported above.[240] Accordingly, public utilities experience higher collection costs, increased working capital expenses, and escalated bad debt over what they would have experienced had utility allowances been properly set.

---

[237] 24 C.F.R. § 965.507(a) (2006) ("The PHA shall review at least annually the basis on which utility allowances have been established and, if reasonably required in order to continue adherence to the standards stated in §965.505, shall establish revised allowances.")

[238] 24 C.F.R. §965.507(b) (2006). ("The PHA may revise its allowances for resident-purchased utilities between annual reviews if there is a rate change (including fuel adjustments) and shall be required to do so if such change, by itself or together with prior rate changes not adjusted for, results in a change of 10 percent or more from the rates on which such allowances were based. Adjustments to resident payments as a result of such changes shall be retroactive to the first day of the month following the month in which the last rate change taken into account in such revision became effective.")

[239] 24 C.F.R. §965.505 (2006). ("The objective of a PHA in designing methods of establishing utility allowances for each dwelling unit category and unit size shall be to approximate a reasonable consumption of utilities by an energy-conservative household of modest circumstances consistent with the requirements of a safe, sanitary, and healthful living environment.")

[240] General Accounting Office (March 1991). *Assisted Housing: Utility Allowances Often Fall Short of Actual Utility Expenses: Volume I*, General Accounting Office: Washington D.C. General Accounting Office (March 1991). *Assisted Housing: Utility Allowances Often Fall Short of Actual Utility Expenses: Volume II*, General Accounting Office: Washington D.C.

It is not clear why HUD utility allowances receive so little attention by persons interested in seeing that the government programs designed to help low-income customers pay their home energy bills are adequately funded and appropriately administered. Consider that:

- Unlike LIHEAP, utility allowances are not seasonal benefits, but are year-round;

- Unlike LIHEAP, utility allowances are intended to cover total energy consumption, including electricity, hot water and space heating, not simply home heating (or cooling);[241]

- Unlike LIHEAP, utility allowances are not limited by the amount of a block grant allocation to the state.

Recommendation

The State of Idaho should take an active role in ensuring that its local Public Housing Authorities comply with federal regulatory requirements regarding the promulgation of utility allowances. Housing Authorities are, after all, creatures of state law. While they are independent local authorities, it is nonetheless appropriate for the State to take an active role in enforcing compliance with requirements that adequate and appropriate energy assistance be provided, both to ensure the affordability of housing and to ensure the affordability of home energy.

The State, through either regulatory or legislative action, should adopt the following procedures:

- Each natural gas, electric and water/sewer utility shall, whenever it implements a retail residential rate change, including any rate change attributable to fuel costs or purchased gas costs, notify all Public Housing Authorities within their service territory of the rate change.

- Each PHA shall, by September 1 of each year, submit to the State each schedule of utility allowances to be in effect for the immediately upcoming year. Each PHA filing shall document the adjustments to be made for changes in home energy (and water/sewer) prices, including adjustments for rate changes of 10% or more retroactive to the first month in which the rate change became effective.

- If a PHA fails to make its annual filing, or fails to adjust its utility allowances to reflect rate changes during the year, including adjustments for rate changes of 10% or more retroactive to the first month in which the rate change became effective, the State shall promulgate utility allowances for the PHA and shall mandate their implementation effective October 1 of the filing year and retroactive, if appropriate, to the first month after a rate change of 10% or more became effective.

[241] Other "utilities" included in HUD utility allowances include water/sewer and trash, but not telephone service.

- Any tenant adversely affected by the failure of a PHA to promulgate or revise a utility allowance may, upon complaint to the State, seek review of whether a PHA has complied with requirements that utility allowances be adequately promulgated and updated.

Enforcing Individualized Relief Requirements

Idaho utilities should take a more active role in helping their low-income customers seek additional utility assistance from the housing authorities. Often overlooked in discussions regarding public housing utility allowances is the provision for "individual relief" provided by HUD regulations.[242] HUD regulations provide that under the HUD-funded public housing:

> Requests for relief. . .from payment of utility supplier billing in excess of the allowances for resident-purchased utilities, may be granted by the PHA on reasonable grounds, such as special needs of elderly, ill or disabled residents, or special factors affecting utility usage not within the control of the resident, as the PHA shall deem appropriate. The PHA's criteria for granting such relief, and procedures for requesting such relief, shall be adopted at the time the PHA adopts the methods and procedures for determining utility allowances.[243]

Several important observations arise from this regulation:

- It is important to note the disjunctive nature of the availability of relief set forth in the federal regulations. There need not be "special needs" *and* "special factors," but rather only one "or" the other.

- A PHA does not have the discretion to decide *not* to provide "individual relief" pursuant to these regulations. HUD regulations state that: "The PHA's criteria for granting such relief, and procedures for requesting such relief, *shall be adopted* at the time the PHA adopts the methods and procedures for determining utility allowances." (emphasis added).

- The individualized relief extends to relief "from payment of utility supplier billings in excess of the allowance." This "relief" is to be provided by the Housing Authority in the form of additional benefit dollars, not by the utility supplying the service.

Recommendation

In this respect, Idaho utilities can play three important roles with regard to individualized relief for recipients of utility allowances.

- First, each utility should direct payment-troubled public and assisted housing tenants in the company's various low-income programs[244] to the individualized relief provisions.

[242] 24 C.F.R. § 965.508 (2009).
[243] 24 C.F.R. § 965.508 (2009).
[244] Such programs might involve the winter payment plan program, LIHEAP, a deferred payment arrangement, or one of the programs recommended in this paper.

Just as LIHEAP "crisis grants" are a source of home energy benefits for low-income households, so, too, should the individualized relief benefits be a means by which unaffordable home energy bills can be redressed. Public housing units can be identified and flagged on a utility system.[245] Utility staff, therefore, could direct payment-troubled customers to their respective PHA to apply for individual relief as established by the local PHA.

- Second, each utility should play an active role as a primary stakeholder in enforcing the obligation of their respective PHAs in their service territory to establish reasonable standards under which to grant individualized relief. PHAs have a regulatory obligation to adopt "criteria for granting such relief." Under the federal regulations, the Housing Authorities are to grant "individualized relief" where specified factors give rise to "utility usage not within the control of the resident." The local utility should be able to offer unique expertise in assessing the extent to which such usage "not within the control of the tenant" exists.

- Finally, each utility should promote an aggressive definition of both the "special needs" and the "special factors" criteria which are to be applied to determine the availability of individualized relief. The individualized relief provisions, in other words, provide no relief either to a low-income household, or to the utility serving that low-income household, if eligibility for the relief is so narrowly drawn as to make it virtually non-existent. Utility involvement in the criteria-setting process is important.

In sum**,** low-income households who face unaffordable utility bills notwithstanding their receipt of federal subsidies through utility allowances for public and assisted housing may have an additional source of benefits available to them. Through the "individualized relief" provisions of public housing programs, participating tenants are entitled to "relief from. . .payment of utility supplier billings in excess of the allowances for tenant-purchased utilities."

Pursuing Direct Vendor Payments of Utility Allowances

Despite the utility allowance benefits provided to tenants of public and assisted housing, these dollars of benefits to pay utility bills are often used for non-utility purposes. The problem arises because of the way in which the utility allowances are distributed.

The crux of the public and assisted housing programs is the provision of a housing subsidy that reduces the shelter costs of such households to 30 percent of the household's income. The shelter subsidy is paid directly to landlords. The payment of utility allowances is wrapped into this payment of the larger shelter assistance.

The process of utility allowances was described briefly above. Utility allowances are generally "paid" to the tenants of public and assisted housing in the form of a rent credit. If, for example, a tenant has an out-of-pocket rental payment of $350 and a "utility allowance" of $150, the utility

[245] Public housing references the housing unit, not the tenant. If, for example, 123 Main Street is a public housing unit, it will be a public housing unit irrespective of who the tenant might be at any given time.

allowance is provided as a rent credit to reduce the out of pocket rent to $200 ($350 rent - $150 utility allowance = $200 rent).[246] In this fashion, the assumption is simply that the reduction in out-of-pocket rent frees up the $150 to allow the tenant sufficient funds to make his or her utility bill payment.

As can be seen, this process of paying the utility allowance transfers the risk of nonpayment from the landlord to the utility company. The landlord receives the direct payment of cash from the federal government. Direct vendor payments of utility allowances are not generally made. A "direct vendor payment" is a payment of the utility subsidy directly to the utility company.[247]

Why Idaho Utilities should be Concerned

This process of distributing utility allowances in the form of rent credits rather than as direct vendor payments to the utility harms the utility in several different ways. To the extent that a tenant chooses to use the money that is "freed up" by the rent credit to purchase other household necessities, the process effectively has transferred money intended to pay home energy bills to the payment of rent instead. As a result, Idaho utilities experience increased costs attributable to lost revenues, working capital expenses, credit and collection expenses, bad debt and the like.

Given the extremely low-incomes as discussed above (significantly below the Federal Poverty Level), the likelihood of this diversion of utility allowances to other purposes is high. This will occur even in those situations where annual utility bills exactly equal annual utility allowances. Given the seasonal nature of utility bills, for example, it is unlikely that a household will pay more than the billed amount for utility service in any given month.[248]

Instead, the household will likely divert the excess allowance to non-utility uses in those months the monthly allowance exceeds the currently monthly bill. Hence, if there is a current bill of $75, and rent credit attributable to the utility allowance frees up $100, the household quite reasonably will pay the current bill and use the "extra" $25 for other household necessities such as food and clothing. This scenario would seem to be the "best case" from the perspective of the utility. The scenario assumes that the household diverts no more of its utility allowance to non-utility uses than the excess of the monthly allowance over the monthly bill.

The costs of the mismatch between monthly utility allowances and monthly utility bills are two-fold: (1) an absolute revenue loss to the utility that is unlikely ever to be made up; and (2) the costs of carrying the arrears of the public and assisted housing tenants. In addition, of course, the utility will incur whatever costs are associated with the credit and collection activities directed toward the unpaid bill.

[246] The utility allowance is then paid to the landlord as a cash payment from HUD to make up for the reduced out-of-pocket rent received from the tenant.
[247] LIHEAP payments, for example, are "directly vendored" to utility companies.
[248] Hence, for example, in a month where the current month utility bill is $75 without arrears, and the utility allowance is $100, the household is assumed to pay only the $75 rather than to make a $100 payment thus creating a bill credit.

Recommendation

Idaho's utilities should work with the local housing authorities in their respective service territories to identify the Section 8 and public housing tenants in their territory. For these tenants, the utility should solicit direct vendor payments of utility allowances. Through such direct vendor payment agreements, utility allowances would be paid directly to the utility by the local Public Housing Authority (PHA).[249] As a result of such payment, the utility will capture the full annual utility allowance to be credited against the annual utility bill.[250]

Each utility should offer the incentives necessary to gain the participation of public and assisted housing tenants in a direct vendor payment program. Under federal regulations, direct vendor payments of the utility allowance are allowed *only* if both the utility company and the tenant agree to such payments.

Incentives would be necessary since a refusal to enter into a direct vendor program would retain for the tenant the greatest discretion and control over its entire month-to-month allocation of household resources. Without such participation, in other words, the household retains the discretion to divert its utility allowance to uses such as food and clothing. Even in situations where the annual utility allowance equals the annual bill, a public or assisted housing tenant could divert "excess" utility allowances over monthly bills in low-bill months to other household necessities.

The incentive to be paid by the utility to gain participation in a direct-vendor program should involve a credit paid against the current bill. A payment set equal to $8 per month would provide a total annual credit of roughly $100. The payment is not a "discount." It is instead a payment for value received. In this sense, the credit is no different from the bill reduction paid to customers taking service under an interruptible service tariff. Similarly, the credit is akin to credits paid by many electric utilities to customers agreeing to the direct control of load that is likely to be in use at the time of peak demand (e.g., cooling, hot water).

In general, the following reasons support a decision to provide an $8/month payment as an incentive to gain the participation of assisted and public housing tenants in a direct vendor payment program.

- To the extent that unaffordable bills are charged to public and assisted housing tenants, the utility would likely incur credit and collection costs to collect the excess. To provide a bill credit for direct vendor payments will help avoid those credit and collection expenses.

- Direct vendor payments will provide cash flow and working capital advantages to the utility. Not only will credit and collection expenses be eliminated, but given that the

[249]Federal regulations provide that: "if the Family and the utility company consent, a PHA or Owner may pay the Utility reimbursement jointly to the Family and the utility company, or directly to the utility company." See, e.g., 24 CFR §236.735; 24 CFR §290.9; 24 CFR §881.501, 24 CFR §891.560 (2009).
[250] Capturing the utility allowance as a direct vendor payment would have the added advantage of allowing a direct observation of whether the utility allowance is sufficient or insufficient to cover the entire utility bill.

direct vendor payment can be timed to automatically be paid on the billing "due date," costs associated with carrying bills past the due date will be eliminated as well.

- The automatic payment of direct vendor utility allowances will eliminate any bad debt or other write-offs associated with the bills covered by those payments.

Idaho utilities should seek to ensure that federal monies intended to be provided for utility assistance is, in fact, captured as energy assistance. Pursuing the direct vendor payment of utility allowances would advance that objective. As described above, the dollars of energy assistance involved are substantial.

Summary

Tenants of public and assisted housing in Idaho have some of the lowest incomes in the state. Tenants of both public and assisted housing have incomes that place them below the Federal Poverty Level, sometimes substantially so. As tenants experience such low incomes, they are more likely to experience utility bill payment troubles as well.

These bill payment troubles occur despite the fact that specific federal financial assistance is provided to tenants of public and assisted housing to pay utility bills in their entirety. It makes sense for Idaho utilities to convert as many public and assisted housing tenants as possible to direct vendor payment agreements to receive such assistance. Moreover, Idaho's utilities would be justified in offering incentives for public and assisted housing tenants to enter into agreements through which their respective utility allowances are directly vendored to the utility.

Aside from capturing this ongoing utility assistance, HUD's public housing program provides for "individualized relief" when specified factors give rise to utility bills outside the ability of the tenant to control. Local housing authorities are required to specify both the circumstances under which individualized relief will be granted and type of relief that will be provided. Clearly, this individualized relief benefits not only the tenants that receive such relief, but the utilities whose bills would be paid through such relief. Idaho utilities should take specific action steps to ensure that individualized relief is available where appropriate, that it is of appropriate magnitude, and that the procedures for accessing are reasonable and adequate.

AN ENERGY EFFICIENT UTILITY ALLOWANCE FOR PUBLIC AND ASSISTED HOUSING

As described immediately above, one primary source of low-income energy assistance in Idaho involves the utility allowances provided to tenants of public and assisted housing units. While the number of households receiving such assistance may well be lower than the number of households receiving LIHEAP, the dollar value of such assistance in Idaho is considerable. This is true because HUD utility allowances are not simply heating/cooling benefits, but are instead designed to pay all component of the annual home utility bill of a HUD tenant (e.g., electricity, hot water, heating, water/sewer, trash). In addition to HUD utility allowances, utility allowances provided for privately-developed housing, such as housing developed using Low-Income Housing Tax Credits, also represent a significant source of home energy assistance.

As described in detail above, the delivery of energy efficiency to rental housing faces substantial impediments that are not common to other types of housing. While renters have little incentive to spend money to improve their landlord's property, landlords, too, have little incentive to spend money to reduce their tenant's utility bill. Moreover, tenants almost never have the authority to make decisions as to improving the energy efficiency of major household systems (e.g., heating, cooling, hot water), and frequently lack the authority to make decisions on whether to replace major household appliances (such as refrigerators).

Despite the real problem posed by split incentives in rental housing, Idaho could work with local utilities, and local housing providers, to identify a significant population where that split incentive could be remedied. These utility efforts would focus on Section 8 housing units with tenant-paid utility bills.

Section 8 is a federal housing program under which low-income tenants are provided subsidies to live in private rental housing. As described above, the assistance provided to Section 8 tenants is designed to subsidize two different shelter costs. On the one hand, the Section 8 subsidy includes a "utility allowance." The utility allowance is, by federal law, intended to cover all component of a he utility bill by the tenant. On the other hand, the Section 8 payment includes a benefit that subsidizes a tenant's contract rent. The "contract rent" is that amount of money that a landlord can charge for the housing unit.

An "energy efficient utility allowance" is based on the interdependence of these two components. The combined level of the utility allowance and the contract rent for any given jurisdiction may not exceed a federally-prescribed maximum, called the Fair Market Rent (FMR). So, given that maximum, if the contract rent is higher, the utility allowance must be lower; if the utility allowance is higher, the contract rent must be lower.

The Outline of an Energy Efficient Utility Allowance

An energy efficient utility allowance involves offering a lower utility subsidy paid to Section 8 tenants to reflect the lower utility costs incurred subsequent to the installation of energy efficiency measures. Through California's "Designed for Comfort" Efficient Affordable Housing Program, the California Public Utilities Commission (CPUC) sought to promote the adoption of EEUA's as an energy efficiency strategy directed toward both public and assisted housing.[251]

> The DfC Program tries to encourage energy efficiency by introducing the [energy efficiency-based utility allowance]. The EEBUA can be used in buildings that are significantly more energy efficient than average. If their local public housing authority adopts the EEBUA, owners or developers who achieve certain levels of energy efficiency in their new or existing affordable multifamily properties can collect higher rents. These higher rents are possible because the EEBUA has reduced the tenant's utility allowance to correspond with the reduction in utility

[251] "Public" housing involves housing owned and operated by local public housing authorities. "Assisted" housing involves housing that, while privately-owned, is nonetheless subsidized through a public program such as Section 8.

costs that have been achieved by the energy-efficiency measures installed in the property.[252]

Despite unanticipated challenges in the implementation of the energy efficient utility allowances, discussed further below, the CPUC's Designed for Comfort program met or exceeded its goals in the adoption of such utility allowances. According to the 2006 program evaluation, while the objective was to generate the approval of energy efficient utility allowances by ten (10) local housing authorities, through 2005, nine housing authorities had done so, and two more had committed to adopting the energy efficient utility allowance in 2006.[253] Efforts to promote the adoption of EEUAs continue in California.

Operation of the Energy Efficient Utility Allowance Program

According to one assessment of the CPUC program,[254] implementation of the EEUAs, along with energy efficiency measures, in an illustrative 53 unit development would generate benefits for both the property owner and the tenants over a fifteen-year period. The analysis compared rental income on a project with 40 two-bedroom units and 12 three-bedroom units (and one manager unit). All but one of the units were designed to be affordable to low- and very-low income households.

The result of the EEUA was to generate more than $11,000 each year in additional return to the property owner without increasing the shelter burden to the tenant. This revenue impact is set forth in Table 61.

[252] KEMA, Inc. (November 2006). *Evaluation of the 2004-2005 Designed for Comfort: Efficient Affordable Housing Program: Final Report*, at 2-1, KEMA, Inc.: Oakland (CA). (hereafter, *DfC Evaluation*).
[253] San Diego Housing and Community Development Commission (2004); San Diego Housing Commission (2004); Monterey Housing Authority (2004); Contra Costa Housing Authority (2004); Yolo Housing Authority (20040; Marin County Housing Authority (2005); Community Development Commission of City of Long Beach (2005); San Joaquin County Housing Authority (2006); San Francisco Housing Authority (2006); Glendale Housing Authority (2006-2007); and City of LA Housing Authority (2006-2007).
[254] Brown and Benfield (July/August 2004). "The Role of Local Governments in Promoting Housing Affordability through Energy Efficiency," *Currents: An Energy Newsletter for Local Governments*.

Table 61. Illustrative Annual Revenue Impact to Property Owner from Implementation of Energy Efficient Utility Allowance: California Designed for Comfort Efficient Affordable Housing Program (Riverside CA)

Standard Utility Allowance Schedule						
Unit Type	Bedrooms	No. of Units	Total Cost of Hsg Unit	Monthly Utility Allowance	Monthly Net Rent per Unit	Yearly Gross: All Units
2-bedroom	2	40	$482	$169	$313	$150,470
3-bedroom	3	12	$482	$201	$281	$40,533
Total rent per year						$191,003
Energy Efficient Utility Allowance for New Construction						
Unit Type	Bedrooms	No. of Units	Total Cost of Hsg Unit	Monthly Utility Allowance	Monthly Net Rent per Unit	Yearly Gross: All Units
2-bedroom	2	40	$482	$152	$330	$158,630
3-bedroom	3	12	$482	$181	$301	$43,408
Total rent per year						$202,038
Difference						$11,035

According to the California assessment, "even with a larger debt service payment for the initial four years (more than enough to cover the additional cost of measures even *without* a utility program incentive), the cumulative residual cash by the 7th year is about $75,866 greater and approximately $181,009 after 15 years."[255]

The County of Riverside (CA) explained how it developed its EEUA in implementing the CPUC's *Designed for Comfort* (DfC) program. Riverside relied on software certified by the California Energy Commission to provide an energy "budget" for three categories of energy use: heating, cooling and hot water.[256] That software allowed a comparison between a "standard" building and an energy efficient building. Since CPUC efficiency programs generate 15% reductions in energy use compared to the minimum requirements of existing energy standards, "this would mean that the energy cost estimates for residential properties qualifying for the energy efficient utility allowance could be reduced by 15%." In fact, Riverside reduced its utility allowances by an average of 11.25% "to (a) provide a safe and prudent margin based on using estimation tools, and (b) so that part of the direct benefit of the energy efficiency improvements would flow to the tenants rather than giving the landlords all of the economic benefits."[257]

In contrast to this Riverside approach was the approach taken in Ventura County (CA). Under the *Designed for Comfort* program, the CPUC program provided the owner $100 per unit toward a $125 per unit efficiency investment. The Energy Efficient Utility Allowance then allowed the

[255] Id.
[256] Razzo (2002). *Establishing and Implementing the Energy Efficiency Utility Allowance Schedule: Housing Authority of the County of Riverside.*
[257] Id.

owner to recapture 75% of the value of the energy savings. "Allowing the owner to recapture 75% of the value of the energy savings, and allowing the owner a 15% return on investment, the entire investment and interest is earned in three and one half years. A 20% ROI can be earned in just less than four years."[258]

Under the Ventura approach, the alternative utility allowance can be in force for four years. "After that, the rents would drop back down to the level they would have been with the standard utility allowance. . .the tenant receives ¼ of the economic benefit for the first four years and all of it for the remainder of the contract. . .The developer receives 75% of the economic benefit for the first four years, usually earning 15-20% on his/her money."[259]

Barriers to Adoption of the Energy Efficient Utility Allowance

Despite meeting or exceeding the goal for EEUA adoption by California housing authorities, the CPUC's *Designed for Comfort* (DfC) program identified a number of substantial barriers "that made it difficult for the PHAs to adopt" the energy efficient allowance. The barriers that were identified included, but were not limited to:

- "PHAs were too busy or understaffed to even become familiar with the EEBUA concept." According to the DfC evaluation, "one of the program's biggest challenges was simply getting the attention of the PHA so that the educational process could begin."[260]

- "Limits on the applicability of the EEBUA concept." As the DfC evaluation found, "there are many types of affordable housing that either cannot benefit from the EEBUA or where benefits would be minimal." Housing units without tenant-paid utilities, or units where rents are limited by other than the total percentage of income, are two such circumstances. In addition, some California localities experience weather too moderate for the change in utility allowances to make a significant difference.[261]

- The lack of an explicit HUD endorsement of energy efficient utility allowances. While HUD publications list the promulgation of energy efficient utility allowances

[258] Heschong Mahone Group (May 20020. *A Two-Tiered Utility Allowance: Encouraging Energy Efficient Low-Income Housing Construction*, submitted to Area Housing Authority of Ventura County and Southern California Edison Company (CPUC Designed for Comfort Program).
[259] *DfC Evaluation*, at 2-1.
[260] The DfC evaluation found, however, that the promotion of the energy efficient utility allowances was occurring at a time when Congress was slashing overall Section 8 budgets. As a result, the DfC program was competing for the attention of housing authority administrators at precisely the time those administrators were laying off staff and reducing services due to budget reductions. The program evaluation quoted one DfC staffperson as saying "All their competing issues were very real and they made our EEBUA look like a luxury item when there were just trying to keep people in homes"; another DfC staffer acknowledged, "it was the center of our universe but not theirs."
[261] Id., at 4-1.

as a "best practice" by local housing authorities,[262] no formal directive explicitly approving such allowances has been issued. According to the DfC evaluation, "PHAs are subject to periodic audits from HUD and some are cautious about adopting unendorsed policies for this reason. . .They look to HUD to put it in writing."[263]

Finally, one major concern with the concept of the energy efficient utility allowance in California was that the program failed to sufficiently explain how it would benefit the Housing Authority as a Housing Authority. The program placed "too much emphasis on how the program would benefit the developers and did not make the case for benefits to the PHA and its tenants. 'I don't care how it is going to benefit some private developer,' one PHA official remarked."[264]

The energy efficient utility allowance is an important tool to help bring the benefits of energy efficiency to a large segment of Idaho's low-income rental housing market. While the introduction of energy efficient utility allowances might be easier in Idaho than it was in California, the lessons of the CPUC's *Designed for Comfort* program must not be lost. In particular, the promotion of how an Idaho energy efficient utility allowance benefits the housing authority in addition to benefiting the Section 8 property owner and tenant, would be an important component to an Idaho program modeled after the California initiative.

Recommendation

Idaho utilities should pursue a model for the delivery of low-income efficiency measures involving energy efficient utility allowances. This recommendation involves a combination of several efforts. It involves:

- Marketing and technical assistance to Idaho's local public housing authorities encouraging them to adopt energy efficient utility allowances;

- Marketing and direct partial subsidies to Section 8 property owners to implement sufficient energy efficiency measures to qualify to use the energy efficient utility allowance;

- The subsidy of the use of Home Energy Raters sufficient to determine a building's qualification for an energy efficient utility allowance.

This three-part initiative, largely modeled on California's Designed for Comfort Energy Efficiency-Based Utility Allowance (EEBUA) program, will leverage utility-provided efficiency dollars with property-owner dollars and funding provided through the EEUA. It will not only present a strategy to reach some of the state's lowest income household, it presents a specific strategy to do so by leveraging the benefits of utility expenditures beyond that which might otherwise be generated through a 100% funded, direct install utility program.

[262] See, e.g., *Public Housing Energy Conservation Clearinghouse News,* "Housing Authority of the City of Riverside (California): A new energy efficient utility allowance schedule takes energy efficient buildings into account." (March-April 2004). Published by HUD's Public Housing Energy Conservation Clearinghouse (PHECC).
[263] Id., at 4-2.
[264] Id., at 4-10.

DEVELOPING ALTERNATIVES TO CASH SECURITY DEPOSITS

Idaho utilities could make significant resources available to retire low-income arrears by revisiting the manner and extent to which they impose cash security deposits on low-income customers. Whether or not in literal compliance with the regulations of the Idaho Public Utilities Commission (PUC) regarding the imposition of cash security deposits, little question exists but that the State's utilities over-secure themselves through the security deposit process. While data is not available for the state's natural gas utilities, the state's electric utilities report their security deposit holdings to the Federal Energy Regulatory Commission (FERC) in their annual FERC "Form 1s." According to their year-end 2010 Form 1s, the three major investor-owned electric utilities in Idaho held over $40 million in customer deposits, while writing off only $20 million in bad debt, a security-to-write-off ratio of 2:1.[265] Avista is particularly over-secured, with deposit-to-uncollectible ratios in the 2007 through 2010 time period ranging from 3:1 (2009) to 4.8:1 (2010). PacifiCorp, too, had security higher than required, with deposit-to-uncollectible ratios ranging from 1.5:1 (2008) to 2.6:1 (2009).

Table 62. Cash Security Deposits and Uncollectible Accounts (2008 -2010) (Idaho IOUs)

Deposits by Utility	2007	2008	2009	2010
Avista	$6,331,722	$6,979,171	$8,140,853	$7,958,557
PacifiCorp	$1,159,231	$311,092	$464,233	NA
Idaho Power	$21,686,771	$21,919,032	$31,895,824	NA
Uncollectibles by Utility	**2007**	**2008**	**2009**	**2010**
Avista	$1,635,521	$1,927,667	$2,735,983	$1,674,638
PacifiCorp	$2,009,863	$3,681,954	$5,268,902	NA
Idaho Power	$8,551,037	$14,674,714	$12,175,795	NA

SOURCE: FERC Form 1 (calendar years 2008, 2009 and 2010).

Clearly, not all deposits held by an electric utility in Idaho are posted by residential customers generally, or by low-income residential customers in particular. Nor are all write-offs associated with low-income residential accounts. Experience counsels, however, that the overwhelming majority of deposits are posted by residential customers and that a disproportionate share of those deposits, as well as a disproportionate share of write-offs, is associated with low-income customers.

[265] The utilities do not report data on a state-by-state basis. Accordingly, PacifiCorp and Avista data is presented in a total-company basis. Idaho Power and PacifiCorp data was not available for 2010.

Low-income customers often find themselves with such high arrears that their available household cash simply is not sufficient to retire the arrears while also paying required cash security deposits and all fees. Substituting guarantees for cash security deposits would allow available household cash to be devoted to retiring existing arrears while at the same time providing Idaho utilities with the same level of security against the loss of revenue due to bad debt. Accepting guarantee letters from nonprofit organizations or community-based organizations would also allow those institutions to stretch scarce energy assistance dollars, that would otherwise have to be used to pay deposits on a dollar-for-dollar basis.

Recommendation

Idaho utilities need not substantially modify their decision rules on when to impose cash security deposits in order to see the potential of cash security deposits as a resource to help retire low-income arrears. Rather than forgoing cash security deposits altogether for low-income customers, several options are available:

- Idaho utilities should seek to systematically substitute letters of guarantee (or sureties) for cash deposits. The dollars of *cash* deposit can then be used to help retire arrears. In substituting guarantees for cash deposits, no utility forfeits its ability to protect against the loss of revenue due to nonpayment. A guarantee provides the same protection against bad debt as does a cash security deposit. Through such a process, non-profit community-based organizations, whose funds are limited with which to begin, can leverage the dollars devoted to providing cash security by capitalizing a guarantee fund rather than by paying each deposit on a dollar-for-dollar basis.[266]

- Idaho utilities should seek to substitute customer behavior in lieu of cash deposits. The Philadelphia Gas Works (PGW), for example, has agreed to allow customers to substitute entry into a levelized budget-billing plan in lieu of a cash security deposit. Substituting certified completion of a financial literacy or family budget counseling course could also serve as a satisfactory substitute for a cash security deposit.

ACCESSING NON-TRADITIONAL SOURCES OF UTILITY FUNDING

The pursuit of low-income energy efficiency and arrearage retirement programs support multiple regulatory and business-oriented objectives for a public utility. Nonetheless, it is frequently difficult to find a stream of utility dollars that can be used to fund low-income efficiency investments or arrearage retirement credits. Idaho can, however, access a stream of revenue "belonging" to neither ratepayers nor investors. These funds, or some substantial portion thereof, can legitimately be captured and used to benefit both low-income customers and the utility industry (on behalf of both investors and ratepayers).

[266] A guarantee fund need not be capitalized on a dollar-for-dollar basis of the amount guaranteed. The value of the fund can be less than the sum of the guaranteed bills.

Natural gas utilities occasionally receive funding through federal regulation that would be passed through to ratepayers without really "belonging" to either ratepayers or investors. Sources of money for natural gas companies include:

- Discounts obtained off of their transportation gas rates.
- Dollars representing unauthorized usage charges from transportation customers.
- Pipeline refunds generated at the federal level.

Pipeline refunds to distribution utilities may, but do not generally, represent substantial annual dollar figures. PECO Energy, a natural gas utility serving suburban Philadelphia with roughly 450,000 residential customers,[267] received $180,000 in refunds in 2009 and $290,000 in 2010. PECO, however, received $6.7 million in pipeline refunds in 2008. If PECO had adopted a 20% set-aside such as was done for PSCO in Colorado, the utility would have devoted more than $1.4 million to low-income assistance from funding that did not "belong" to any particular stakeholder group.

Since these streams of revenue do not represent entitlements for any particular customer (or class of customers), it is not unreasonable to set aside a portion of those funds to invest in a low-income energy affordability trust fund. The proceeds of the fund should be used to support efficiency investments or arrearage retirement programs as determined to be in the best interests of the State of Idaho at the time.

While not all utility proposals to use these alternative revenue streams have been approved by state regulators, the discussion below presents illustrations of creative proposals to use streams of revenue that have not historically been viewed as potential sources of low-income energy assistance.

Colorado's Distribution of Ad Valorem Tax Refunds

Colorado's treatment of the Kansas *ad valorem* tax refunds made available to utilities throughout much of the Midwest in the early 2000s provides one illustration of how a state might access federally-ordered pipeline refunds for purposes of providing low-income energy assistance. In 1999, Public Service Company of Colorado (PSCO) was faced with refunding certain federal ad valorem tax dollars collected by pipelines between October 1983 and June 1988.

The Colorado utility commission approved a proposal by the local distribution utility to set-aside a portion of this federal refund for low-income assistance. As the commission noted, "developing and processing a refund on this test period would be virtually impossible and, at the very least, would not be a cost-effective way to process the Kansas ad valorem tax refunds received." The Commission approved a set-aside of $3.3 million to be paid directly to the Colorado fuel fund at the beginning of the refund.

[267] In contrast, Idaho has a total of roughly 300,000 residential natural gas customers.

The decision of the Colorado commission was based, in part, on the specifics of the refund agreement at the federal level. Since part of the purpose of that federal settlement with the pipeline, PSCO had told the Commission, was to have "refunds paid to Public Service and the other distribution companies so that they could be used to help offset customers' high winter heating bills resulting from high gas prices," to force the Colorado fuel fund to wait for the amount of undistributed funds to be determined would be to unreasonably delay these funds.

Another factor was the length of time that had elapsed since the underlying events giving rise to the refund had first occurred. "An attempt to identify. . .customers from the 1980s would not only be costly, it would take many months to accomplish." To facilitate getting funds in the hands of the Colorado fuel fund, PSCO proposed, and the Commission approved "carving out. . .a portion of the [pipeline] refund to be donated directly to [the fuel fund]."

Laclede Gas Catch-up/Keep-up Tariff

While a similar (though not identical) proposal by a Missouri utility did not receive the same favorable treatment, the decision of the Missouri commission was based on factors unique to the specific proposal. In September 2002, Laclede Gas Company filed a proposed arrearage forgiveness program with the Missouri Public Service Commission. Under the proposed "Catch-up/Keep-up Plan," the company would use discounts obtained off of its transportation gas rates, in part, to fund the reduction of arrears for low-income customers. According to the Missouri PSC, rather than flowing 100% of its pipeline discount back as refunds to all customers, the company would flow 70% of the discounts back as refunds and use the remaining 30% to fund an arrearage forgiveness program called the Catch-up/Keep-up tariff.[268]

Under Laclede's proposed program, as qualifying customers made payments toward three months of their current bills (billed on a levelized monthly budget billing basis), one-fourth of the outstanding arrearages for such customers (or $375, whichever was less) would be forgiven.[269] As those arrearages were forgiven, funds would flow from the escrow account holding the pipeline discount into Laclede's accounts receivables.

Unfortunately, the Missouri Commission identified what it termed "numerous problems with the design" of the proposed Catch-up/Keep-up program. The program, for example, was "not properly designed to address the low-income consumer needs for rate affordability and usage reduction." Even though "the success of the Program is dependent on the modification of the behavior of the low-income customer," the Commission said, "the expectation that low-income customers in the Program will become better able to pay their bills may be unrealistic." One problem noted by staff, according to the Commission, was that the proposed arrearage forgiveness program "does not provide any means to assist participants with payment of *current* gas bills. . ."[270]

---

[268] In the Matter of the Tariff Filing of Laclede Gas Company to Implement an Experimental Low-Income Assistance Program Called Catch-up/Keep-up, Case No. GT-2003-0117, Report and Order, at 4 (January 16, 2003). (hereafter, 2003 Laclede Order).

[269] Accordingly, the total arrears would be forgiven over a 12-month period.

[270] Id., at 5 (emphasis added). The Program proposal required eligible customers to apply for assistance "from available sources." Id.

Missouri Gas Fuel Fund Contribution

The Missouri Public Service Commission also disapproved a proposal by Missouri Gas Energy (MGE) to devote a portion of the company's federal "unauthorized use charges" to fund low-income energy assistance. In 2001, MGE asked the Missouri PSC to allow the company to assign certain federal refunds and unauthorized use charges to the Mid-America Assistance Coalition (MAAC) to assist low-income MGE customers who were having difficulty paying their bills.[271]

MGE's tariffs provide that revenues received from unauthorized use charges recovered through federal proceedings would be returned to ratepayers as a reduction in its gas cost recovery proceedings. MGE initiated the 2001 proceedings because it anticipated recovering approximately $356,715 from its transportation customers pursuant to bills issued in January 2001, for unauthorized usage by transportation customers in December 2000. In addition, the company had received a pipeline refund of roughly $620,000 by order of the Federal Energy Regulatory Commission (FERC).

The company committed to matching the use of these federal refunds with a contribution of $250,000 of its own funds. The company argued that distribution of the $976,000 "to all customers through a reduction in [purchase gas recovery] rates would have a de minimis impact on the prospective rate of all sales customers."

The Commission denied MGE's request. Missouri statutes, the Commission said, forbid a utility from rebating any part of a collected rate "when such a rebate results in a lesser compensation by one person for the same service than is paid by another person for a like and contemporary service under the same or substantially similar circumstances." MGE's proposal, the PSC said, would give low-income customers an "indirect rebate" by transferring the funds at issue to MAAC.

Recommendation

While the Missouri commission disapproved both of these specific proposals to use federal funds for purposes of low-income energy assistance,[272] several important lessons can be gleaned from the efforts. First and foremost, the use of federal funding (e.g., pipeline refunds, unauthorized use charges) may well be a possible source of funding for temporary or short-term low-income assistance programs. The proposed uses advanced by Laclede Gas and MGE are ideal examples of how such funding might be used. The funds might be transferred to a fuel fund (such as the Mid-American Action Coalition in Kansas City or Energy Outreach Colorado in Denver) for crisis assistance in a particular year. The funds might be used for short-term arrearage forgiveness such as Laclede's Catch-up/Keep-up program. In addition, the use of such funds for purposes of a weatherization supplement would be particularly appropriate.

[271] In the Matter of Missouri Gas energy's Application for Variance from Sheet Nos. 24.18 and 61.4 to Permit the Use of Certain Federal Refunds and Unauthorized Use Charge Collections for the Benefit of Low-Income Customers in the Company's Service Area, Case No. GE-2001-393.

[272] It should be noted that, both for Laclede and for Missouri Gas Energy, the Missouri PSC subsequently *did* approve a low-income program using other sources of funding.

Second, to the extent that such funds are generated at the federal level, the treatment of the funds should perhaps be determined at the federal level as well. One reason the Colorado commission agreed to the earmark of the refunds to the statewide fuel fund was because of the agreement at the federal level that the refunds were intended for use to help customers address high natural gas prices in the current heating season. Given that these funding streams are frequently the subject of express agreements between parties at the federal level, articulating the proposed use of the funds in that agreement would more narrowly constrain the ability of state regulators to disapprove what is part of the terms of settlement at the federal level.

ADDRESSING THE NEEDS OF BULK FUEL USERS

One area of ongoing concern for service providers in the low-income energy field involves the difficulties in generating price support and consumer protections for users of bulk fuels. Bulk fuels include fuels such as propane, fuel oil, liquefied natural gas (LNG), and the like. Vendors of bulk fuels are not subject to comprehensive regulation by any state oversight body. Moreover, given the multiplicity of bulk fuel vendors, it is difficult to negotiate "voluntary" agreements that are sufficiently wide-spread to reach a majority of low-income users. Despite these difficulties, there are specific strategies that could be pursued in Idaho to ensure that the issue of affordable home energy is not limited simply to regulated utilities.

The Propane Education and Research Council (PERC)

Providing assistance to low-income customers in Idaho using propane (LPG) is of particular importance to the state. Overall, without accounting for Poverty Level, the state has more than 30,000 households who use propane as their primary heating fuel. More than twice as many household use propane as use fuel oil and/or kerosene for their primary heating source.

In 1996, Congress authorized establishment of the Propane Education and Research Council.[273] The purpose of PERC was to provide for programs for propane research and development, safety and training, and consumer education. In Fiscal Year 2009, PERC had an annual budget of $46.501 million, of which $9.210 million was provided in grants to the states. In 2010, the PERC budget was $38.328 million, of which $7.666 million was provided in grants to the states.

PERC is funded through an assessment on each gallon of odorized propane gas. This assessment is not to be passed on to consumers. In 2010, the assessment was 0.4 cents ($0.004) per gallon. According to the federal General Accounting Office (GAO), "by operation of the law" and the rules adopted by PERC, 20 percent of the assessment collections is rebated to state propane councils or similar entities. This is accomplished by channeling 20% of the PERC assessment collected in a state back to the state council, if the state has a propane council (or similar entity).

[273] Propane Education and Research Act of 1996, October 11, 1996 (15 U.S.C. 6401).

Policy Basis

In 2003, the GAO found that it was appropriate to use PERC funding to address the unaffordability of propane prices to low-income households.[274] GAO reported that "more than 35 percent of the households using propane to heat their homes are eligible for low-income government financial assistance in meeting energy needs."

According to the GAO:

> Propane prices can be as volatile and as unpredictable as the weather that drives residential consumers' demand for propane. While prices can move sharply up and down, it is the drastic price spikes upward that grab the attention of consumers, particularly those low-income consumers who represent a significant portion of residential propane users and are the most vulnerable to price increases. Compounding this problem is the fact that prices typically spike when more propane is needed to combat cold weather.

GAO continued:

> While price stabilization options exist to cope with price fluctuations, many consumers may not have opportunities to participate in these programs. This presents a challenge to government programs designed to inform consumers and those that assist low-income consumers with energy needs. Efforts that increase propane market information and make price stabilization options more available to consumers, particularly low-income households, may help mitigate the impact of sudden price spikes to some degree.

Recommendations

Idaho should pursue PERC funding to promote consumer education among low-income users of propane regarding energy efficiency (including water conservation that has energy implications). The objective of such a program would be to ensure that low-income households living in housing units using propane as a primary heating source take all reasonably available opportunities to moderate their usage in order to reduce overall home energy bills and to protect themselves against volatility in the price of this home heating fuel.

The Community Action Partnership Association of Idaho (CAPAI) should develop a proposal to submit to the Rocky Mountain Propane Association, for submittal to PERC, regarding the development and dissemination of information to low-income propane customers regarding energy efficiency. This information and education should include, in addition to energy efficiency education, education with respect to the following:

[274] General Accounting Office (2003). *Causes of Price Volatility, Potential Consumer Options, and Opportunities to Improve Consumer Information and Federal Oversight,* GAO report #GAO-03-762, Government Printing Office: Washington D.C.

- The use of price stability programs such as those identified in the 2003 GAO report on price volatility (e.g., off-season purchases; budget-billing);

- Weatherization problems uniquely (or disproportionately) experienced by propane users; and

- Consumer protection problems uniquely (or disproportionately) experienced by propane users.

Through this propane energy efficiency education program, CAPAI could reach a population of customers that historically has been difficult to reach with weatherization services. While, unquestionably, natural gas and electricity are the primary heating fuels in Idaho, propane is the third most-common heating fuel in the state.

Bulk Fuel Consumer Protections to Improve Affordability

"Fuel assistance" for low-income users of bulk fuels need not necessarily take the form of financial assistance. At least two states have adopted proposals that certain winter practices by vendors who sell bulk fuels to residential customers be prohibited pursuant to state consumer protection statutes. Administrative regulations adopted in both Vermont and Maine prohibit the denial of service during cold weather months, during which months such denial may pose a threat to the health, safety and life of the customer.

Vermont Fair Trade Regulations for Propane

Regulations adopted by the Vermont Attorney General's Office, pursuant to the state's Unfair and Deceptive Acts and Practices Statute (UDAP), provide a reasonably comprehensive framework of consumer protections for consumers of liquefied petroleum gas ("propane" or "LPG").[275] The Attorney General declared it to be an "unfair and deceptive trade act and practice" for a retail distributor of propane to fail to provide specified protections. Amongst those protections are:

- No propane dealer may involuntarily disconnect service without providing notice of not less than 14 days, no more than twenty days, prior to the disconnection. A "disconnection" of service for a propane dealer is defined as "the deliberate refusal to deliver gas or an interruption or disconnection of service to a consumer previously receiving service from the company."

- A consumer in arrears to a propane dealer must be given an opportunity to enter into a reasonable payment agreement. The reasonableness of such an agreement is to consider the amount of the delinquency, the consumer's ability-to-pay, and the reason the account became delinquent.

- No disconnection may occur if the delinquency to the dealer is less than $30 and less than 60 days past due, so long as the customer uses propane as a primary source of heat.

[275] Code of Vermont Rules, 06-031 CVR 011.01, et seq. (2008).

- If a dealer wishes to disconnect service to a customer using propane gas as the primary source of heat during the heating season, the dealer must, in addition to providing written notice of the disconnection, also provide oral notice. This oral notice may be by telephone, but if telephone contact cannot be accomplished, a personal visit to the residence must be made.

- A propane dealer may not require a customer to make a minimum purchase of more than 100 gallons at a time, or more than the total capacity of the customer's existing tank, whichever is less.[276]

- A propane dealer may not refuse to sell gas if the consumer is ready, willing and able to pay by cash, certified or cashier's check, commercial money order, or their equivalent. In addition, a propane dealer may not refusal to sell gas if a governmental or private agency has made an unconditional commitment to pay for the delivery.

Other consumer protections apply to propane dealers in Vermont under the Attorney General regulations.

Maine's Fair Trade Practices Regulations for Fuel Oil

Similar to Vermont's propane regulations, the Maine Attorney General has promulgated fair trade practice regulations governing the sale of residential heating oil.[277] The Maine regulations apply to the sale of number 2 fuel oil, as well as to the sale of kerosene, used to heat the interior of a person's primary residence. The Maine regulations govern all retail oil dealers.

The Maine Unfair Trade Practices Act Regulations on "Sale of Residential Heating Oil" apply to heating sales from October 15 through April 30 of each year. Under these regulations, dealers must sell fuel within their service areas to anyone who pays cash, even if the customer has not paid for a previous delivery, or is not an established customer. Likewise, fuel must be delivered if a government agency (or a fuel assistance sub-grantee) guarantees payment.

In addition, once a Maine household has become an "established customer" of a particular dealer – defined as having made two cash purchases in a row from the dealer—the customer is entitled to certain consumer protections. One such protection, for example, is that a dealer may not discriminate amongst established customers on providing such services as requests for immediate service or unscheduled deliveries. Nor may a dealer discriminate amongst established consumers as to additional charges for deliveries of less than a minimum delivery requirement. In essence, the regulation provides for equal service for all established customers.

Moreover, the Maine regulations provide that a heating oil dealer must sell heating oil to a customer willing to pay cash for the oil, even if the customer is not an established customer and even if the

[276] If a consumer has a tank larger than 100 gallons, the gas company may require larger minimum purchases in accord with a prescribed schedule, but must offer the customer an opportunity to enter into a reasonable payment plan or reasonable budget billing plan.
[277] Code of Maine Rules, 26-239, Ch. 100, §1, et seq. (2008).

customer has a past-due bill for a previous delivery. As in Vermont, a "cash" payment is defined broadly to include payment by a certified or cashier's check, a commercial money order, or their equivalent. It also includes situations where a government or community action agency has guaranteed to pay on behalf of the person the cost of the fuel oil sale.

The Maine regulations finally require a fuel oil dealer to make scheduled deliveries of 20 gallons or more. Dealers may, under the regulations, however, add a "penalty" of not to exceed $5 for deliveries of less than 50% of the customer's tank, or 100 gallons, whichever is less. No other "penalty" is permitted under the regulations.[278]

Recommendation

In sum, to the extent that Idaho might wish to extend certain consumer protections to households using bulk fuels for home heating, there is ample precedent for the state to do so through its state Attorney General's office.

Idaho consumer groups, or low-income service providers, should petition the Attorney General's office to adopt regulations, promulgated under the state's Unfair and Deceptive Acts and Practices (UDAP) statute, to be used not only to provide winter protections, but to provide more fundamental protections as well.

UTILITY CUSTOMER SERVICE ACTIONS TO FACILITATE PAYMENT

The first obligation of any utility customer to his or her supplier is to pay the bills rendered for service in a full and timely fashion. Having said that, there are legitimate impediments that can interfere with a customer fully meeting his or her responsibility. Persons living on the edge of financial difficulties frequently face not only the lack of household funds, but face the lack of financial flexibility as well. One form of "energy assistance" that can be made available to Idaho customers, therefore, involves sensitivity to this lack of customer financial flexibility. The state's utilities, in other words, should have far greater capacity to be flexible in those circumstances where the customer lacks such financial capacity.

Levelized Monthly Budget Billing and Pre-Existing Arrears

Levelized monthly budget billing provides the opportunity for customers with marginal incomes to pay their annual home energy bills in equal monthly billing amounts over the course of the year irrespective of the actual monthly bills the customer incurs. Levelized budget billing offers three advantages to the economically marginal consumer.

- First, a levelized bill helps take the peak off seasonal weather-sensitive usage. High monthly bills that might present a problem in any particular severe weather month –that month can reflect either cooling needs or heating needs—are instead spread over several months.

[278] Other consumer protections are specified in the Maine regulations.

- Second, a levelized bill helps provide certainty to the customer regarding what his/her payment responsibility will be. Rather than trying to "fit" an unexpectedly high summer cooling bill into a warm weather budget that is already strained because of the loss of the children's participation in the free and reduced school lunch/school breakfast program, a customer will know at the beginning of the summer cooling season what level of utility bill to expect each month.

- Finally, a levelized monthly budget billing plan represents a type of "forced savings" for economically marginal households. Rather than needing to set aside an estimated portion of the cold weather natural gas bills, in anticipation of accessing those savings to pay heating bills in cold weather months, the levelized monthly budget billing creates an obligation to pay the time-shifted winter bill when those bills are rendered a little at a time during the lower-usage months. The "overpayment" is accrued by the utility as a bill credit and applied to the higher-cost months as appropriate.

Part of the efficiency of using a Budget Billing plan to improve the seasonal affordability of home energy involves the extent to which such plans are available to those customers who would most benefit from them. If Budget Billing is made available only to persons who have the capacity to pay their bills irrespective of the time-shifting inherent in the levelized payment, the plan, while perhaps a sound money management tool, offers no "energy assistance" benefit for improving affordability.

It would be unreasonable to expect a utility to promulgate billing regulations that explicitly make levelized Budget Billing unavailable to low-income customers who might most benefit from it. Public utilities do, however, often tend to promulgate procedural guidelines that have the effect of excluding the poor from taking advantage of levelized Budget Bills. One such availability criterion stands out in particular.

Idaho utilities require customers to be free of arrears in order to enter into levelized Budget Billing plans.[279] These tariff provisions would appear to conflict with Idaho PUC regulations, which provide that "payment arrangements may be in the form of a Level Pay Plan that will equalize monthly payments of all arrears, if any, and anticipated future bill amounts over a period of not less than one (1) year."[280] It would appear, in other words, that the Idaho PUC's regulations specifically contemplate allowing a customer to enter into a levelized budget billing plan while in arrears.

Other states have demonstrated that the use of levelized budget billing is not only consistent with reducing arrears, but is an important tool to use in reducing arrears. For example, in 2005, the Tennessee state utility regulatory commission faced circumstances of substantially increased arrears as a result of spiraling natural gas prices. In response to this problem, the Tennessee Regulatory Authority

[279] Idaho Power's tariff, for example, states explicitly that "In order to be eligible for the Budget Pay Plan, the Customer's account must not be in arrears." (Rule I, IPUC No. 29, Tariff 101). The Avista Idaho tariff reads: "A Customer with an unpaid balance may join the Comfort-Level Billing Plan. Any unpaid balance will typically be paid off through a payment plan. Upon completion of that payment plan, the customer will begin their Comfort-Level Billing Plan." IPUC No. 28, para. 15.1 ("personalized billing plans").
[280] Idaho PUC Regulation 313.06 (2010).

"approved a budget billing plan under which a natural gas customer who cannot pay his or her monthly bill in total will be enrolled automatically in an equal payment plan."[281]

Based on the customer's historical usage, Tennessee utilities divided the customer's bill into 12 equal monthly payments; the payments were then trued up annually with the actual bill received by the customer.[282] The Tennessee program succeeded in reducing service disconnections without imposing undue risk on the state's utilities. Indeed, the program was extended due to its success.

Recommendation

A policy encouraging customers in arrears to enter into budget billing plans in Idaho would be reasonable. Unfortunately, it is the presence of arrears that may well be the indicator of a need for Budget Billing. Those customers who have a marginal ability-to-pay, but simply cannot afford the higher winter bills associated with heating load, can be expected to exhibit particular payment patterns. Rather than excluding customers with arrears from Budget Billing, Idaho's utilities would be well-served to seek out those customers who have seasonal arrears combined with a documented willingness to pay something during the winter heating months, even if that "something" is less than full payment.[283]

Extended Due Date Alternatives

A second type of bill-shifting authorized for Idaho utilities allows a customer to choose the billing date on which to receive his or her monthly bill for service. The Idaho PUC regulations provide that "When a residential customer certifies in writing to the utility that payment by the ordinary due date creates a hardship due to the particular date when the customer receives funds, the due date shall be extended up to an additional fifteen (15) days or at the option of the utility the customer shall be billed in a cycle that corresponds to the customer's receipt of funds."[284]

Such a billing selection alternative does not appear in the customer service tariffs of Idaho's public utilities. No effort is made to notify customers of this extended due date option.

The payment problem faced by some customers is often one more of timing rather than one involving an absolute mismatch between household income and expenses. Households on a limited, fixed income whose utility bill due date falls late in the month, can find themselves consistently late in paying their bill, even though they regularly are able to pay their bill in full. Under such circumstances, even though the bill is paid in full each month, the customer is routinely charged a late payment fee that they likely can ill afford to pay.

The problem arises when the bill due date and the date on which income is received are on significantly different cycles. Problems arise, in particular, for aging households whose Social

[281] Historically, a customer was allowed to enter into a levelized budget billing plan only during the warm weather months, in order to pre-pay some portion of the expected heating bills for the forthcoming winter.
[282] "Winter Heating Bills," 3747 PUR Util. Reg. News 6 (December 9, 2005). TRA Docket 05-00281 (Order issued October 17, 2005).
[283] The Winter Payment Plans contained in the Idaho PUC's regulations is an excellent example of this policy of accepting something, even if that something is less than full payment of the bill.
[284] Idaho PUC Regulation 202 (2010) ("due date of bills—delinquent bills").

Security checks arrive on a particular date each month; for households on public assistance whose benefits arrive on a particular day each month; and for other households receiving similar fixed-date/fixed-amount incomes.

Offering extended due date options is not uncommon for public utilities. For example, Indianapolis Power & Light Company ("IPL") offers what it calls its "Due Date Deferral Plan" for these customers. IPL makes its alternative billing plan available to any customer "who either receives a social agency, Social Security, or pension check, and who is not engaged in any fulltime employment, including self-employment." IPL's process applies when the due date of a bill falls between the 21st of one month and the 4th of the immediately following month (e.g., between March 21st and April 4th). Under such circumstances, IPL allows the customer to defer the bill payment due date to the 5th of the month (e.g., from August 22nd to September 5th; from September 2nd to September 5th). If the bill due date is extended in such a fashion, the customer is not charged a late fee during the deferral period. If, however, a customer misses two deferred due dates in a calendar year, the customer is removed from the program and subjected to a one-year stay-out period.

Duke Power also offers an "Adjusted Due Date" billing option. Duke's optional billing date is available to the same population as IPL's. In addition, however, Duke extends its "Adjusted Due Date" program to a member of the Reserves or National Guard on active duty, as well as to a customer who "has special circumstances as determined at the discretion of a Customer Service Representative." According to Duke, a participating customer can defer his or her payment due date "a maximum of ten billing cycles—about two (2) weeks."

No Idaho utility has adopted a due date deferral program that is quite as extensive as available for some utilities in other parts of the country. One utility serving the Mid-South region (Arkansas, Louisiana, Mississippi, and some parts of Texas), for example, offers what it calls its "Pick-a-Date" program. Under Pick-a-Date, a customer may select the day of the month on which he or she wishes her due date to fall. In this fashion, the customer can eliminate any mismatch between the timing of income and the timing of the utility bill payment date. Similarly, New Jersey's Public Service Electric and Gas (PSE&G) allows customers entering into deferred payment plans to retire arrears to select their bill payment date.

Recommendation

Entering into an extended due date billing option should be at the choice of the customer. These programs, which appear to be authorized by PUC Rule 202, should be codified in utility tariffs and should allow a customer to select the billing date that makes it least likely that the customer will be unable to comply with billing due dates not because of an absolute inability-to-pay, but rather because of a mismatch between the receipt of income and the issuance of monthly bills.

UTILITY CUSTOMER SERVICE ACTIONS IN RESPONSE TO NONPAYMENT

Aside from the treatment of current bill payment, the manner in which utilities treat the payment of arrears can provide important "energy assistance" benefits to low-income customers. The affordability of a monthly bill to a low-income customer, of course, is dictated by the *total*

payment obligation, not merely the current bill payment obligation. Accordingly, the manner in which a utility treats the retirement of arrears can affect not only the ongoing affordability of a monthly bill, but can also affect whether a low-income customer is capable of retaining service.

This section of the discussion of basic consumer protections examines utility actions that are taken in response to customer nonpayment. The actions that are identified below not only are not productive from the perspective of the utility's effort to collect revenue, but have been found to be *counter*-productive. Three specific collection practices are examined and proposals made with respect to each:

- The imposition of late payment fees;
- The issuance of notices of the disconnection of service for nonpayment; and
- The negotiation of deferred payment plans for arrears.

Late Payment Charges

Idaho's investor-owned utilities all impose a late payment fee. These fees lack any cost basis. Moreover, these late fees disproportionately and adversely affect low-income customers. Not only do higher proportions of low-income customers (compared to all customers) incur arrears (against which a late fee will be charged), but the level of arrears incurred by low-income customers is higher as well. These arrears are largely due to an inability-to-pay rather than to conscious choices to pay other bills prior to paying local utility bills. Increased bills attributable to high prices are associated with increases in low-income payment troubles.

Late Fees Relative to Collection Costs

The primary purpose of a utility late payment charge is to compensate the utility for expenses associated with delinquent payments. A customer's delinquent payment of her utility bill can result in two types of expenses to the company. The utility may first experience out-of-pocket collection expenses. A second expense involves the carrying charge associated with delinquent payments. A utility is entitled to compensation for each.

Late payments by utility customers can create out-of-pocket collection expenses for the utility. These expenses might include, for example, the postage associated with delivering reminder notices or shutoff notices, the costs of telephone calls to make "personal contact" prior to a shutoff, and the cost of fuel used in making a premise visit to disconnect service. Idaho utilities, however, overcharge their late payment charges by imposing such charges prematurely. Given the fact that late payment charges are intended only to compensate for out-of-pocket expenses, the imposition of such a charge must be triggered by some event that also triggers the incurrence of the expenses.

Idaho utilities set their past due date a prescribed number of days after a bill is rendered, with a penalty and interest charge levied for all unpaid amounts outstanding after that date. With each utility, however, no collection activity begins at the time the bill first becomes overdue.

Customers making payments during that interim period (between the time a bill becomes past due and the time collection activities begin) are paying compensation for collection expenses that were never incurred.

This realization --that payments must be overdue by some time before the utility begins its collection process and thus before the utility begins to incur expenses --is particularly important to ensure that households who pay late, but who do not have collection activities directed against them, are not discriminated against. Discrimination would exist if a late payment fee were imposed on the day after the due date, failing to recognize that collection activity is not initiated until some later date.

In addition to timing, Idaho utilities operate using a minimum arrears below which they will not begin any collection activity. Local utility officials generally begin their collection process with the largest bills first. The smaller bills are not made subject to collection interventions. In such an instance, charging the penalty and interest charges immediately after the bill payment due date charges the customer for expenses the local utility has not yet incurred.

Late Fees Relative to Carrying Costs

A second cost component that a utility is entitled to collect through its late payment fee is the carrying cost of money. The maximum carrying cost of money for a utility will be the short-term borrowing rate incurred by the utility. Utilities do not incur long-term debt to cover unpaid bills by home energy customers. A long-term interest rate would thus be an inappropriate measure for an interest charge.

The annual cost of short-term borrowing is likely to range between 2.0 % and 3.0% in today's environment. The addition of a reasonable premium (calculated in terms of basis points) would provide adequate compensation for out-of-pocket credit and collection expenses. Local utility annual late payment charges above 6% (0.5% per month) are excessive under these circumstances.

The Disproportionate Late Fee Impact on Low-Income Customers

The late payment fees charged by Idaho utilities disproportionately and adversely affect low-income customers. The basis for reaching this conclusion was presented in detail earlier in this narrative. As discussed above, recent studies based both on the U.S. Department of Energy's Residential Energy Consumption Survey (RECS) and on the U.S. Census Bureau's Survey of Income and Program Participation (SIPP) have found that payment-troubles and income are positively related.

Moreover, late payment fees disproportionately affect low-income customers in that these customers do not gain the incentive provided through high fees. The argument often posited in support of high late payment fees is that such fees are necessary to serve as a disincentive for customers paying their credit card bills prior to paying their utility bills. Even accepting this incentive function as a legitimate policy reason to impose non-cost-based late payment fees, the incentive function bears little relationship to the finances of low-income customers.

In January 2003, staff of the Federal Reserve Board (FRB) published its analysis of consumer finances based on the FRB's 2001 Survey of Consumer Finances.[285] According to this FRB staff analysis, few low-income customers have credit cards and fewer still carry credit card balances. The FRB reports that while 44.4% of all households hold a credit card balance, only 30.3% of households in the bottom 20% of income (the bottom quintile) do. This stands in sharp contrast to the proportion of households in the second through fourth quintiles of income (between 50% and 60% of whom hold credit card debt). This data simply cannot be reconciled with the impact of late fees on low-income customers. These low-income customers are charged a non-cost-based late fee to have those fees be competitive with credit card debt that they do not hold on credit cards that they do not own.

Recommendation

The Idaho Public Utilities Commission should adopt certain guidelines regarding the imposition of residential late payment charges:

- Late fees should be waived for identified low-income customers.
- Late fees should be limited to a utility's short-term cost of borrowing plus two percent (2%).
- Late fees should be imposed only when a bill exceeds 60-days in arrears.
- Late fees should not be imposed when there are regulatory constraints on collection activity, including on balances subject to a deferred payment plan on which the customer's payments are current.

Disconnect Notices

As with any other business, Idaho's public utilities have the right to expect the bills rendered for their services to be paid. However, also as with any other business, these utilities must operate under limits on how they can seek to collect their unpaid bills. Designated credit and collection practices, because of their unfair and/or deceptive nature, have been found to constitute inappropriate collection practices. Placing limits on these practices does not deny either the existence or the legitimacy of the underlying debt. It merely recognizes that the interest of the vendor in collecting its bills is outweighed by the interest of the customer in being free of unfair and deceptive collection tactics.

For Idaho's utilities, the disconnection of service for nonpayment, along with the issuance of notices associated with such service terminations, should be governed by these same principles. The following recommendations flow from this discussion.

[285] Aizcorbe, et al. (January 2003). "Recent Changes in U.S. Family Finances: Evidence from the 1998 and 2001 Survey of Consumer Finances," *Federal Reserve Bulletin* (January 2003).

Notices with no Present Intent to Disconnect

Idaho utilities should not threaten to terminate service when they have no present intent to terminate service or when actual termination is prohibited. Notice of the intent to terminate shall be used only as a warning that service will in fact be terminated in accordance with the procedures set forth in utility regulations, unless the ratepayer or occupant remedies the situation which gave rise to the enforcement efforts of the utility.

It is common for Idaho utilities to distribute shutoff notices when they have no present intent to terminate service. Either the utility does not have the staff to effectuate a service discontinuance for each customer receiving a notice of discontinuance or the utility finds that it is not cost-effective to discontinue service for customers with arrears that are either less than some internally established "treatment amount" or younger than some internally-prescribed threshold.

Aside from the unlawful nature of threatening collection activities when no present intent exists to engage in those activities, the provision of a notice of a service discontinuance when there is no present intent to engage in the discontinuance is counterproductive to the entire purpose of notice with which to begin. One purpose of a notice is to provide a clear and believable warning that a service termination is about to occur. In response to such a notice, the customer must either take the steps necessary to prevent the service termination or take those steps needed to protect himself or herself against the dangers to life, health and property that might result from the loss of service.

It can hardly be argued that providing notice of a pending discontinuance of service, when in fact such discontinuance is not imminent or intended, can be destructive to a customer's life, health and property. This is particularly true for low-income consumers. One study by the Iowa Department of Human Rights, for example, found that, with energy bills, Iowa energy assistance recipients go to extraordinary lengths to pay unaffordable bills.[286] The Iowa study found, for example, that:

- More than 12% of the more than 3,000 Iowa survey respondents reported going without food for at least one meal a week to try to save enough money to pay their utility bills.

- More than 20% reported going without medical care, by either not filling prescriptions, taking prescription medicines in lower than prescribed doses, or by skipping or postponing doctor's appointments in order to save money to pay for utility bills.

The presence of these responses to threatened loss of service was confirmed by research with respect to Missouri low-income households,[287] as well as by national research completed for the

[286] Mercier, Mercier and Collins (June 2000). *Iowa's Cold Winters: LIHEAP Recipients' Perspective*, Iowa Department of Human Rights: Des Moines (IA).
[287] Colton (June 2004). *Paid but Unaffordable: The Consequences of Energy Poverty in Missouri*, National Low-Income Energy Consortium: Washington D.C.

National Energy Assistance Directors Association (NEADA).[288] Low-income customers should not be forced into making these decisions by threats of non-existent collection actions.

The Business Cost of "Over-Noticing" Shutoffs.

Aside from the social cost of empty collection threats, there is a business cost as well. A study by the New York Public Service Commission staff, for example, reported that:

> The effectiveness of Final Termination Notices as a means to encourage payments or to make payment arrangements prior to field action has deteriorated. The rate of customer non-responses to Final Termination Notices has increased from 33% in 1983 to 46% in 1987. This may result in part from customer perception that utilities threaten to terminate service, but rarely do. In 1983, 16% of the customers who did not make arrangements on their arrears in response to a termination notice had their service terminated; in 1987, only 9% of those customers had their service terminated.[289]

While some utilities take it as an article of faith that shutoffs, and thus shutoff notices, are necessary to control any growth in bad debt, that assumption is not supported by any empirical data. Indeed, the evidence is to the contrary.

Consider, for example, that in 2004, the Pennsylvania legislature enacted the "Responsible Utility Consumer Protection Act." That statute, amongst other things, facilitated a utility's authority to disconnect service to nonpaying customers. The statute required the Pennsylvania PUC to report on the implementation of, and outcomes generated by, the statute every two years. The PUC filed reports in 2006 and 2008.[290] The implementation of the Pennsylvania statute resulted in an increase in electric disconnections for nonpayment by more than 60%. It resulted in an increase in natural gas disconnections for nonpayment by more than 50% for companies other than Philadelphia Gas Works (PGW). PGW reported a decrease in service disconnections of 21%. According to the PUC's 2008 biannual report, both the level of electric disconnections and the level of non-PGW natural gas disconnections were "record levels."

The Pennsylvania PUC reported that despite an increase of more than 60% in the number of disconnections for nonpayment, "the overall collection performance for the electric industry has shown some deterioration since the passage of Chapter 14, offsetting the improvements shown in the pre-Chapter 14 period from 2002-04." The Pennsylvania Commission reported that "it does not appear that the electric industry's strategy of terminating a record high number of customers since the passage of Chapter 14 has been successful."

---

[288] Apprise, Inc. *National Energy Assistance Survey: Final Report*, National Energy Assistance Directors Association: Washington D.C. (surveys completed in 2003, 2005, 2008 and 2009).
[289] Sawyer and Teumin, *Gas and Power Utility Uncollectibles and Collection Activity*, A Report by the consumers Services Division of the New York State Public Service Commission.
[290] See e.g., Pennsylvania Public Utilities Commission (2008). *The Second Biennial Report to the General Assembly and the Governor Pursuant to Section 1415: Implementation of Chapter 14*, Pennsylvania PUC: Harrisburg (PA).

In addition, the Commission reported that while the "overall collections performance for the gas industry improved from 2004-07. . .this improvement reflects the continuation of a trend that had already begun in the pre-Chapter 14 period from 2002-04." Finally, the Commission reported that for PGW, which was the only utility to decrease the number of disconnections: "The analysis of the various collections data shows a dramatic pattern of improvement for PGW since the passage of Chapter 14. PGW has outperformed its peer companies in terms of the magnitude of this improvement. . .Significantly, PGW stands out for decreasing the number of terminations by 21.1% while improving collections performance since the passage of Chapter 14, including a 27.0% decrease in its gross residential write-offs ratio."

The experience of the Pennsylvania utilities is consistent with research done by Wisconsin Public Service. In its study of payment-troubled customers, Wisconsin Public Service found that the disconnection of service would be an effective collection tool for only 15% of its residential customers.[291] In addition, a study of payment-troubled customers performed for Tacoma Public Utilities (TPU) found that extending the terms of deferred payment plans resulted in greater revenue and reduced bad debt as compared to its existing process of service disconnections.[292]

For both these business and social reasons, as well as because it is in violation of consumer credit law in any event, Idaho regulators should make clear that sending a notice of a pending service termination when there is no present intent to undertake that termination is prohibited.

Recommendation

Idaho's utilities should not make a practice of delivering more than two consecutive notices of discontinuance for past due bills without engaging in the collection identified in the notice. Through a shutoff notice, a consumer should be provided with the information she needs to quickly and intelligently take available steps to prevent the threatened termination of service. The notice should meet sufficiently stringent standards so as to protect all customers, given that customers are of various levels of education, experience and resources. The notice should be made at a meaningful time and in a meaningful manner. It should present truthful information. To fulfill the notion that the notice be "meaningful," it should give a clear and believable warning that termination is about to occur.

The issuance of notices must be read in light of the purpose of a notice. To meet the requirement that the notice be "meaningful," it must give a clear and believable warning that termination is about to occur. The key word in this formulation is that the notice be "believable." One can, for example, consider the United States federal district court case of *Palmer v. Columbia Gas Co.*, where the utility's notice was invalidated when that utility sent out 120,000 to 140,000 shutoff notices each year while actually disconnecting only 6,000 households.[293]

[291] Gross (1997). *Win-Win Alternatives for Credit & Collections*. Wisconsin Public Service Corporation: Green Bay (WI).
[292] Colton (June 2009). *An Outcome Planning Approach to Serving TPU Low-Income Customers*, prepared for Tacoma Public Utilities: Tacoma (WA).
[293] 342 F.Supp. 241, 242 - 243 (N.D.Ohio 1972)

Like Columbia Gas, Idaho's public utilities, by sending repeated disconnect notices, with no collection follow-up, destroy the message contained by the notice. The recommendation above seeks to prevent this situation.

Deferred Payment Plans

Idaho utilities provide a form of "energy assistance" to payment-troubled customers when they offer such customers an opportunity to defer payments toward arrears over an extended period of time. Under such circumstances, the utility requires a customer in arrears to make a downpayment toward the unpaid bill, with monthly payments toward the remaining balance along with a payment of each current monthly bill as it becomes due.

Formalized Payment Plan Processes in Filed Tariffs

Idaho's investor-owned utilities have not formalized their deferred payment plan procedures as filed tariffs. As a result, guidance on deferred payment plan policies can be garnered only from the regulations of the Idaho PUC. According to those agency rules, "when a customer cannot pay a bill in full, the utility shall continue to serve the customer if the customer and the utility agree on a reasonable portion of the outstanding bill to be paid immediately, and the manner in which the balance of the outstanding bill shall be paid."[294] The PUC regulation provides that "in deciding on the reasonableness of a particular agreement, the utility will take into account the customer's ability-to-pay, the size of the unpaid balance, the customer's payment history, and the amount of time and reasons why the debt is outstanding.[295]

The residential tariffs of Idaho's utilities do not set forth their policies on deferred payment plans. No public guidance is given as to the amount of downpayment required, or limitations, if any, on the length of the plan. Guidance on what the PUC has deemed to be reasonable, however, can be derived from PUC Regulation 313.06, providing that "payment arrangements may be in the form of a Level Pay Plan that will equalize monthly payments of all arrears, if any, and anticipated future bill amounts over a period of *not less than one (1) year.*" (emphasis added). Under such a regulation, a practice by one or more of Idaho's utilities to offer payment plans of *less* than one year, or to offer uniform payment plans of *exactly* one year, would be in violation of this regulation.

Recommendation

Idaho utilities should undertake several actions to ensure the efficacy of their deferred payment plan processes. Idaho utilities should:

- Formalize their payment plan processes in filed tariffs, including a documentation of the downpayment requirements for residential payment plans;
- Formalize their recognition that payment plans must be a *minimum* of one year in length.

[294] Idaho PUC Regulation 313.01 (2010).
[295] Idaho PUC Regulation 313.02 (2010).

Second Payment Plans

The Idaho PUC should modify its regulations governing the offer of "second" payment plans. Under current regulations, the PUC provides that "if a customer fails to make the payment agreed upon by the date that it is due, the utility may, but is not obligated to, enter into a second such agreement."[296] Clearly, under this regulation, a utility is authorized, but not obligated, to offer a second payment plan when a customer has defaulted on the first payment plan.

This PUC regulation fails to take into account the potential instability of income amongst the working poor as one aspect of ability-to-pay. Income for the working poor, in particular, can be erratic and unpredictable. A working poor customer may not *know* in April what his or her income is going to be in July or August, let alone in the following December or January. Periods of unstable wages may make payments that were reasonable in April unreasonable at a later date.

Recommendation

Three recommendations are advanced with respect to the renegotiation of deferred payment agreements with low-income customers in the event of a default on the plan.

- If a customer's economic or financial circumstances change during the effective period of a deferred payment agreement, and not more than 14 days have elapsed since the customer defaulted on the deferred payment agreement, the utility shall be obliged if the customer so requests, to renegotiate the terms and conditions of the deferred payment agreement, taking into consideration the changed economic and financial circumstances substantiated by the customer. The reinstatement of a previously defaulted deferred payment agreement shall not prevent the renegotiation of a deferred payment agreement.

- If a customer defaults on a deferred payment agreement but has not yet had service discontinued by the utility, the utility shall permit such customer to be reinstated on the deferred payment agreement if the customer pays in full the amounts which should have been paid up to that date pursuant to the original payment agreement (including any amounts for current usage which have become past due).

- If a customer defaults on a deferred payment agreement, the utility shall offer a second payment agreement under prescribed circumstances.

These proposals prevent a local utility from falling into the classic error of equating the term "ability-to-pay" of a customer with the "income" of a customer. The need to avoid this error was explained in a study performed for the National Fuel Funds Network (NFFN) in 2002.[297] That study examined reasonable payment plan practices for working poor households in particular.

[296] Idaho PUC Regulation 313.04 (2010).
[297] Colton (March 2002). *A Fragile Income: Deferred Payment Plans and the Ability to Pay of Working Poor Utility Customers*, National Fuel Funds Network: Washington D.C.

That NFFN study reported that standard regulations adopted by utility regulators provide that a utility shall take into account designated factors in deciding what payment plans are "reasonable." These factors include, but are not limited to, "ability-to-pay." The phrase "ability-to-pay," however, is often treated as being synonymous with "level of income." If a household's income is sufficiently high, the reasoning goes, the household is deemed to have an ability-to-pay its home energy bills.

Taking into account the "ability-to-pay" of the working poor should involve *more* than simply taking into account income level. The *stability* of income is one additional aspect of the ability-to-pay of the working poor. The negotiation of a deferred payment plan for utility arrears should take into account the potential instability of income amongst the working poor as one aspect of ability-to-pay.

Working poor families tend to find themselves in lower quality hourly wage jobs, often marked by considerable income fluctuations due to the number of hours they are called upon to work. The Urban Institute quantified the types of occupations which characterize the working poor. Even aside from the level of wages, the presence of hourly wages and unpredictable hours mark occupations that are the province of the working poor.[298]

The NFFN study finally reported that families in the bottom quartile of income are significantly less likely to have access to paid sick leave, paid vacation leave, or flexible work schedules than families with higher incomes. More than three fourths (76 percent) of workers that are in the bottom quartile of family income lack regular sick leave; more than half (58 percent) do not have consistent vacation leave. Families in the bottom income quartile are more likely than other workers to lack *both* sick leave *and* vacation leave.

The lack of paid leave time may directly affect the ability of a working poor customer to maintain payments on a deferred payment arrangement. A person working 35 hours a week on hourly wages may lose three days of work simply due to a sick child missing school and requiring care. If no leave time exists for that employee, the sick child translates into permanently lost wages. Personal illness, too, results in permanently lost wages, whether illness keeps a worker away from his or her job for a day, for two days, or for a week.

One of the primary recommendations of the NFFN report was to avoid the one-strike-you're-out approach to payment plan compliance.

The Iowa Utilities Board (IUB) has promulgated one of the nation's premier regulations regarding the offer of payment plans to residential customers. Under this Iowa approach, the Idaho PUC would adopt a regulation substantially providing that:

[298] Acs, Ross-Phillips and McKenzie (May 2000). *Playing by the Rules but Losing the Game*, at 10 – 11, Urban Institute: Washington D.C.

A. If a customer defaults on a deferred payment agreement but has not yet had service discontinued by the utility, the utility shall permit such customer to be reinstated on the deferred payment agreement if the customer pays in full the amounts which should have been paid up to that date pursuant to the original payment agreement (including any amounts for current usage which have become past due).[299] The reinstatement of a previously defaulted deferred payment agreement shall not prevent the renegotiation of a deferred payment agreement.

B. A utility shall offer a second payment agreement to a customer who is in default of a first payment agreement if the customer has made at least two consecutive full payments[300] under the first payment agreement. The second payment agreement shall be for the same term as or longer than the term of the first payment agreement. The customer shall be required to pay for current service in addition to the monthly payments under the second payment agreement and may be required to make the first payment up-front as a condition of entering into the second payment agreement. The utility may also require the customer to enter into a level payment plan to pay the current bill. The utility may offer additional payment agreements to the customer. Nothing in this section shall preclude a utility and a residential customer from renegotiating the terms of an installment agreement in circumstances other than those referenced above.

The language recommended above distinguishes between two situations. In the first instance, the language permits a customer to cure his or her payment plan default so long as the customer does so prior to the disconnection of service. If done before a disconnection, the customer may pay in full the amounts that should have been paid to that date and the original installment payment agreement will be reinstated. The payment agreement that is reinstated is the plan originally agreed to. The customer makes good the previously missed payments and continues with future payment as originally agreed to. Should the customer proceed to a service termination, however, that customer loses the right to cure his or her missed installment payment plan payments.

In the second instance, the language provides a customer with the right to enter into a new ("second") installment payment agreement. In order to have this right, the customer must have made at least two consecutive full payments under the first agreement. A customer may not, in other words, enter into an installment plan, fail to make any payments, and then request a new plan. The language allowing for a second payment plan mirrors the language adopted by the Iowa Utilities Board and found to successfully work by Iowa's natural gas and electric utilities.

[299] The customer can "cure" a payment plan. But, if the customer needs to do so, they must arrange that cure before they get disconnected. There must be ***some*** consequences associated with waiting until the utility disconnects your service.

[300] The Iowa utilities at first argued that this rule meant that the two consecutive payments had to come out of customer resources (and could not include a LIHEAP payment). Not only was this in violation of the federal LIHEAP statute, but the utilities eventually conceded that they had no way to know whether a payment came from the customer's resources, the customer's in-laws, the customer's church, a Community Action Agency, a fuel fund, or somewhere else. So, this just means "two consecutive payments" toward a customer's account. Moreover, under the Iowa regulations regarding second payment plans, if a LIHEAP payment creates a credit on a bill that is the equivalent of two (or more) months of payment, that single LIHEAP payment meets the terms of this section.

TEN IMPORTANT FINDINGS

1. Despite the resources that the State of Idaho devotes to low-income energy assistance today, the state is nonetheless still leaving a considerable amount of resources untapped that could be used to help low-income residents pay their home energy bills.

2. Some of those resources involve existing public programs. Optimizing the extent to which customers claim the Earned Income Tax Credit (EITC), as well as enforcing federal regulations on how, when and to what degree local housing authorities update utility allowances to reflect increases in home energy prices involve programs that do not require adjustment in order to increase federal funding to Idaho. Ensuring updates to the Standard Utility Allowance used for calculating the Excess Shelter Deduction for Food Stamps could generate significant low-income benefits.

3. Other sources of dollars involve making relatively minor changes that could result in significant dollars of benefits to low-income households. Capturing abandoned utility deposits and rate refunds for use as energy assistance, including weatherization, has the advantage of using those dollars for the benefit of the customers, or for the group of customers, who likely paid them in the first place. Providing an opportunity for utility customers to make voluntary check-off contributions does not involve major changes in the respective systems of the affected utilities.

4. Some potential sources of funding simply involve stakeholders expanding activities that they currently pursue in any event. Encouraging REC customers to make voluntary contributions of patronage capital credits involves the solicitation of "found" money.

5. Some potential sources of dollars involve enlisting the support of stakeholders who, while they have an interest in low-income energy unaffordability, have not previously been provided the opportunity or the mechanism to act upon that interest. Involving Section 8 landlords in efficiency programs, as well as soliciting the involvement of the financial services industry (banking, insurance) in providing voluntary check-offs represent significant new initiatives.

6. It is important not to focus exclusively on the needs of public utility customers. Promulgating basic consumer protections for customers of bulk fuels involve regulatory responses that, while not cash oriented, can nonetheless deliver substantive financial benefits to low-income households. Seeking funds for a propane education initiative would involve an existing program.

7. While much of the inability-to-pay by low-income households can be attributed to an absolute mismatch between household expenses and the resources available to pay those expenses, not all can be. In many instances, the inability-to-pay is attributed to a timing problem. In other instances, the inability-to-pay involves a temporary (rather than chronic) financial problem. In such circumstances, the best "energy assistance" might involve a redistribution of the timing responsibility for the bill payment rather than a cash

subsidy. Perhaps, the best "energy assistance" is simply a forbearance, whether that forbearance is of collection activity or the imposition of additional financial obligations. Perhaps, the best "energy assistance" is the exercise of allowed discretion *not* to take some action or *not* to impose some fee.

8. Not all "energy assistance" in Idaho is provided in the form of cash grants. Idaho utilities provide various bill payment options that allow customers who are marginally able to pay their bills, but only marginally able, to take specific actions to provide flexibility in bill payment in order to maintain utility service. The primary bill payment alternative involves the use of levelized monthly Budget Billing, under which customers may time-shift payment responsibility to take the spike off of high winter heating bills (or summer cooling bills). It would benefit low-income customers to eliminate artificial and unnecessary barriers to budget billing. Extended due date programs address the needs of a particular finite population.

9. The treatment of past-due bills is another form of energy assistance that can be provided by Idaho utilities. Under PUC regulations, Idaho utilities need not offer reasonable responses to the inability to maintain a "first" payment plan. Procedures requiring the opportunity to "cure" payment plans, to renegotiate payment plans, and to enter into subsequent payment plans under prescribed circumstances, are reasonable.

10. Finally, energy assistance can be, but is not commonly, provided by Idaho utilities through their acceptance of non-cash alternatives to the posting of security deposits. Utilities should be required to allow customers to post a guarantee or surety in lieu of a cash security deposit.

NOTES

PART 8:
SUMMARY OF RECOMMENDATIONS FOR IDAHO

The information and discussion presented above supports the following recommendations for Idaho. Each of these recommendations was discussed in more detail above:

1. Idaho should establish a home energy affordability program directed toward households with income at or below 185% of the Federal Poverty Level. This program should consist of the following components:

   - A rate affordability component
   - An arrearage management component
   - A crisis intervention component

   Idaho should implement a rate assistance program using a Fixed Credit model. The affordability program should include a specific component directed toward arrearage management, designed to retire pre-existing arrears over no more than a three year period. The State should impose a customer copayment of $5 per month in support of the arrearage management program.

   The affordability program should also include a crisis intervention component. The crisis intervention program should not be income-tested, but should instead be administered by local community-based organizations responsive to individual needs of company customers.

2. The State should promote the Earned Income Tax Credit. In particular, given the objective of seeking out EITC benefits as a supplemental source of "energy assistance," Idaho's utilities should take specific action-steps, including pursuing EITC outreach toward payment-troubled customers, funding "gap-filling" outreach campaigns, and promoting free tax preparation (VITA) clinics. In addition, the utilities, not in their role as utilities but rather as major players in the Idaho economy, should convene a business roundtable to consider EITC outreach. (Narrative, at page 147).

3. Idaho should enact legislation mirroring Iowa's "customer contribution fund" statute, which provides that each natural gas and electric utility should establish a fund to receive customer contributions to supplement low-income weatherization and crisis assistance. (Narrative, at page 150).

4. The Idaho PUC, in collaboration with CAPAI and the state's utilities, should convene an immediate proceeding to design and certify a statewide crisis intervention program that could receive abandoned utility deposits that would otherwise escheat to the state. (Narrative, at page 152).

5. The Idaho LIHEAP office, in collaboration with CAPAI, should implement an initiative that would ask Co-op members to donate all or part of their annual patronage capital credits to the statewide crisis intervention fund (to be used locally for weatherization or crisis assistance). (Narrative, at page 153).

6. Idaho should include, in its legislation establishing "customer contribution funds," the participation of depository institutions and insurance companies. (Narrative, at page 158).

7. Idaho should promulgate a state administrative process to ensure enforcement of the utility allowance obligations of local Public Housing Authorities. This administrative process should provide for state promulgation of utility allowances when PHAs are found to have defaulted on their obligations. It should provide for an administrative procedure for receiving tenant complaints about the failure to promulgate timely utility allowance updates. (Narrative, at 160).

8. Idaho utilities should become more aware of, and involved with, the promulgation of "individualized relief" procedures for tenants of public housing. Payment-troubled households living in public housing should routinely be referred to their local PHA for individualized relief. Utilities should participate in the promulgation of individualized relief criteria. (Narrative, at 161).

9. Idaho utilities should work with the local PHAs in their respective service territories to identify public housing and Section 8 tenants. Utilities should seek to implement "direct vendor payment" programs for Section 8 and public housing utility allowances that mirror the direct vendor payment of LIHEAP. (Narrative, at 164).

10. Idaho utilities should pursue a model for the delivery of low-income energy efficiency involving energy efficient utility allowances (EEUAs) for public and assisted housing. The model should mirror the EEUA program successfully pursued through California's Designed for Comfort (DfC) program. (Narrative, at 170).

11. Idaho utilities should systematically substitute letters of credit (and guarantees) for cash deposits. The dollars of cash deposit should then be used to retire pre-existing arrears. Letters of guarantee should be accepted from nonprofit and community-based organizations in lieu of cash deposits. Moreover, Idaho utilities should accept participation in customer financial literacy training programs as a substitute for cash security deposits. (Narrative, at 172).

12. Missouri utilities, particularly natural gas utilities, should devote substantial portions of federal funding (e.g., gas refunds, unauthorized usage charges) for temporary or short-term low-income financial assistance programs. Utilities should consider making the determination of the use of such funds at the federal level in federal settlement documents. (Narrative, at 175).

13. The Community Action Partnership Association of Idaho (CAPAI) should develop a proposal to submit to the Rocky Mountain Propane Association, for submittal to the Propane Education and Research Council (PERC), regarding the development and dissemination of information to low-income propane customers regarding energy efficiency, budget billing and other price stabilization programs (e.g., off-season purchases). (Narrative, at 177).

14. Idaho consumer groups, and/or low-income service providers, should petition the Idaho Attorney General's office to promulgate regulations pursuant to the state's Unfair and Deceptive Acts and Practices (UDAP) statute to provide winter protections, and other fundamental consumer protections, for customers of bulk fuel users. (Narrative, at 180).

15. The Idaho PUC should, on its own motion or on the motion of interested stakeholders, consider regulations removing artificial barriers to the entrance of payment-troubled customers into levelized budget billing plans. (Narrative, at 182).

16. The Idaho PUC should, on its own motion or on the motion of interested stakeholders, adopt regulations allowing fixed-income customers to enter into an 'extended due date" program at his or her discretion. (Narrative, at 183).

17. The Idaho PUC should adopt guidelines regarding the imposition of residential late payment charges. Late fees should be waived for low-income customers. Late fees should be limited to a utility's short-term cost of borrowing plus two percent. Late fees should be imposed only when a bill exceeds 60-days in arrears.

Finally, late fees should not be imposed when there are regulatory constraints on collection activity, including on balances subject to a deferred payment plan on which the customer's payment is current or on arrears subject to a winter payment plan. (Narrative, at 186).

18. Idaho utilities should be prohibited from delivering more than two consecutive notices of disconnection for past-due bills without engaging in the collection identified in the notice. No disconnection notice should be issued without a present intent to disconnect service. Disconnect notices should be required to provide a clear and believable warning that a termination is about to occur at a meaningful time and in a meaningful manner. (Narrative, at 189).

19. Idaho utilities should undertake several actions to ensure the efficacy of their deferred payment plan processes. The utilities should formalize their payment plan processes in filed tariffs, including a documentation of the downpayment requirements for payment plans. Idaho utilities should further formalize their recognition that residential payment plans must be for a minimum of one year in length. (Narrative, at 190).

20. The Idaho PUC should adopt a "second payment plan" regulation that mirrors the Iowa Utilities Board (IUB) second payment plan regulation. This regulation should provide that customers may cure defaulted payment plans in the prescribed manner; may renegotiate the terms and conditions of payment plans when circumstances change; should they default on a "first" payment plan, shall have the right to enter into a "second" payment plan provide that they had made a good faith payment effort on the first plan. (Narrative, at 191).

BIBLIOGRAPHY

Apprise, Inc. (November 2011). LIHEAP Home Energy Notebook for FY 2009: SIPP Study of Energy Affordability, prepared for U.S. Department of Health and Human Services, Administration for Children and Families, Office of Community Services, Division of Energy Assistance: Washington D.C.

Apprise, Inc. (February 2010). LIHEAP Special Study of the 2005 Residential Energy Consumption Survey: Dimensions of Energy Insecurity for Low Income Households, prepared for U.S. Department of Health and Human Services, Administration for Children and Families, Office of Community Services, Division of Energy Assistance: Washington D.C.

Colton (2010). Interim Report on Xcel Energy's Pilot Energy Assistance Program (PEAP): 2010 Interim Evaluation, Xcel Energy: Denver (CO).

Cromwell, Colton, Rubin and Herrick. (2010). Best Practices in Customer Payment Assistance Programs, Water Research Foundation (WRF): Denver (CO).

McEachern and Vivian (April 2010). Conserving the Planet without Hurting Low-Income Families: Options for Fair Energy Efficiency Programs for Low-Income Households, A Report for the Energy Poverty Initiative of the Climate Justice Project, University of Victoria Environmental Law Centre.

Military Leadership Diversity Commission (2010). Business-Case Arguments for Diversity and Diversity Programs and Their Impact in the Workplace, Issue Paper #14, Military Leadership Diversity Commission: Arlington (VA).

Colton (2009). An Outcome Evaluation of Indiana's Low-Income Rate Affordability Programs: 2008 – 2009.

Apprise, Inc. (2008). PPL Electric Utilities Universal Service Programs: Final Evaluation Report.

Human Resources and Skills Development Canada, Social and Economic Impact of Labor Standards (March 2008).

Carroll, Colton & Berger (2007). Ratepayer-Funded Low-Income Programs: Performance and Possibilities, Apprise, Inc.: Princeton (NJ).

Bates (May 2007). A Social Responsibility? The energywatch consultation on the nature of social tariffs in the energy market, energywatch: London (England).

Colton (2007). Best Practices: Low-Income Affordability Programs, Articulating and Applying Rating Criteria.

Colton (2007). An Outcome Evaluation of Indiana's Low-Income Rate Affordability Programs.

European Fuel Poverty and Energy Efficiency (2007). Detailed Report on the different actors involved in Fuel Poverty issues, European Fuel Poverty and Energy Efficiency Project: Brussels (Belgium).

European Fuel Poverty and Energy Efficiency (2007). Detailed Report on the different types of existing mechanisms to tackle Fuel Poverty, European Fuel Poverty and Energy Efficiency Project: Brussels (Belgium).

European Fuel Poverty and Energy Efficiency (2007). Diagnosis of the causes and consequences of fuel poverty in Belgium, France, Italy, Spain and United Kingdom, European Fuel Poverty and Energy Efficiency Project: Brussels (Belgium).

Kelly (March 2007). Affordable Energy – Diversifying DSM Programs in BC: A Discussion Paper, consultant report prepared for the British Columbia Ministry of Energy, Mines and Petroleum Resources.

Pindus et al. (2007). Place Matters: Employers, Low-Income Workers and Regional Economic Development, The Urban Institute: Washington D.C.

PA Consulting Group (2007). Electric Universal Service Program Evaluation: Final Evaluation Report.

Taylor, et al. (2006). A Cost-Benefit Analysis of Universally-Accessible Pre-Kindergarten Education in Texas, Bush School of Government and Public Service, Texas A&M University: College Station (TX).

Colton (2006). Experimental Low-Income Program (ELIP): Empire District Electric Company, Final Program Evaluation.

Apprise, Inc. (2006). Impact Evaluation and Concurrent Process Evaluation of the New Jersey Universal Service Fund.

Apprise, Inc. (2006). PECO Energy Customer Assistance Program For Customers Below 50 Percent of Poverty Final Evaluation Report.

Apprise, Inc. (2006). PECO Energy Universal Services Program Final Evaluation Report.

Apprise Inc. (2006). PG Energy Universal Services & Energy Conservation Programs Evaluation: Final Report.

H. Gil Peach and Associates (2006). State Fiscal Year 2005 Evaluation of the NRS 701 Energy Assistance Program and Weatherization Assistance Program.

Apprise, Inc. (2006). PPL Electric Utilities Winter Relief Assistance Program: Final Evaluation Report (2006).

Colton (2006). Georgia REACH Project Energize: Final Impact Evaluation, Georgia Department of Human Services: Atlanta (GA).

Apprise, Inc. (2005). Philadelphia Gas Works Customer Responsibility Program: Final Evaluation Report.

Canadian Housing and Rental Association (February 2005). Affordable & Efficient: Towards a National Energy Efficiency Strategy for Low-Income Canadians.

Colton (2005). Impact Evaluation of NIPSCO Winter Warmth Program.

Committee of Inquiry into the Financial Hardship of Energy Consumers (September 2005). Committee of Inquiry into the Financial Hardship of Energy Consumers: Main Report, Melbourne (AU).

Quantec, llc (2005). Utah HELP: Program Evaluation (HELP: Home Energy Lifeline Program).

Rochlin and Googins (2005). The Value Proposition for Corporate Citizenship, Center for Corporate Citizenship: Boston College, Chestnut Hill (MA).

Triad Research Group (2005). Focus Groups with PIPP Participants (PIPP: Percentage of Income Payment Program, Ohio).

Apprise, Inc. (2004). Niagara Mohawk Power Corporation LICAP Program Evaluation: Final Report.

Burstein (2004). Developing the Business Case for Multiculturalism, Outreach and Promotion Directorate, Multiculturalism and Human Rights Branch, Department of Canadian Heritage: Ottawa (ONT).

Quantec, llc (2004). Oregon Energy Assistance Program Final Evaluation.

Quercia et al (February 2004). The Cost-Effectiveness of Community-Based Foreclosure Prevention, Joint Center for Housing Studies, Harvard University: Cambridge (MA).

Colton (2003). The Impact of Missouri Gas Energy's Experimental Low-Income Rate (ELIR) On Utility Bill Payments by Low-Income Customers: Preliminary Assessment.

Colton (2003). The Economic Development Impacts of Home Energy Assistance: The Entergy States. Entergy Services Corp: Little Rock (AR).

Fairfax (2003). The bottom line on board diversity: A cost-benefit analysis of the business rationales for diversity on corporate boards, 2005 Wisconsin Law Review 795, 829 (2005).

Quantec, llc (2003). Washington Low-Income Bill Assistance Program: Phase II Impact Analysis.

Apprise, Inc. (2002). Niagara Mohawk Power Corporation LICAP Program Evaluation: Final Report.

Apprise, Inc. (2002). Niagara Mohawk Power Corporation Low Income Customer Assistance Program: Impacts on Payments and Arrearages.

Harter et al. (2002). Business-Unit-Level relationship between employee satisfaction, employee engagement, and business outcomes, Journal of Applied Psychology, 87, 268 – 274.

Quantec, llc (2002). Oregon REACH Final Evaluation.

Belgian Federal Ministry for Economic Affairs, Energy Department (September 2001). Right of Access to Energy, Environmental Protection and Opening of Electricity and Gas Markets, proceedings of an Energy Conference, September 27 – 28, 2001, Brussels (Belgium).

Gandz (2001). A Business Case for Diversity, Richard Ivey School of Business, University of Western Ontario.

Quantec, llc (2001). Final Findings: Indiana REACH Evaluation.

Boland and Whittington (2000). The Political Economy of Water Tariff Design in Developing Countries: Increasing Block Tariffs versus Uniform Price with Rebate, in, Dinar (2000). The Political Economy of Water Pricing Reforms, Oxford University Press: New York (NY).

Green (July 2000). Regulators and the Poor: Lessons from the United Kingdom, World Bank Institute on Governance, Regulation and Finance: Washington D.C.

Rochlin (2000). Making the Business Case: Determining the Value of Corporate Community Involvement, Center for Corporate Citizenship at Boston College: Chestnut Hill (MA).

Duboff and Heaton (Jan/Feb. 1999). Employee Loyalty: A Key Link to Value Growth, Planning Review 27(1).

Improving the Competitiveness and Standard of Living of Canadians: Common Position of Provincial and Territorial Finance Ministers (December 1999).

Roman at al. (1999). The Relationship Between Social and Financial Performance. Business and Society 38(1).

Fombrun (1998). Corporate reputation: An exploration of its measures, drivers, and impacts as a non-tangible business asset, Corporate Public Affairs 8(2).

Waddock and Graves (1997). The Corporate Social Performance-Financial Performance Link, Strategic Management Journal 18(4). 303-319.

Waddock and Graves (March 1996). Good Management and Good Stakeholder Relations; Are They Synonymous, presented at the Annual IAMBS Annual Meeting.

Colton (revised 1995). Models of Low-Income Utility Rates.

Moreno (1995). Cost Effectiveness of Mortgage Foreclosure Prevention, Summary of Findings, Family Housing Fund: Minneapolis (MN).

Taylor (1995). Building a Business Case for Diversity, Canadian Business Review, 22(1):12-14.

The Conference Board of Canada (1995). Dimensions of Diversity in Canadian Business: Building a Business Case for Valuing Ethnocultural Diversity, The Conference Board of Canada: Ottawa (ONT).

Bureau of Consumer Services (Pennsylvania Public Utility Commission) (1992). Final Report on Investigation of Uncollectible Balances. (First and second reports).

Jackson et al. (1991). Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions and turnover, Journal of Applied Psychology, 76, 675-689.

Colton (1990). Nonparticipation in Public Benefit Programs: Lessons for Fuel Assistance.

Colton (1990). Why Customers Don't Pay: The Need for Flexible Collection Techniques.

Blocker (1985). Reforming Electricity Rates: Benefits to Low-Income Households, 4 Population Research and Policy Review 67 (1985).

Hennessy (1984). The Evaluation of Lifeline Electricity Rates: Methods and Myths, 8 Evaluation Review 327.

Acton (1980). Electricity Prices and the Poor: What are the Effects and What Can We Do?, Rand Corporation: Santa Monica (CA).

APPENDIX A: COLORADO AFFORDABILITY PROGRAM REGULATIONS (2011)

COLORADO DEPARTMENT OF REGULATORY AGENCIES

Public Utilities Commission

4 *CODE OF COLORADO REGULATIONS* (CCR) 723-3

PART 3
RULES REGULATING ELECTRIC UTILITIES

BASIS, PURPOSE, AND STATUTORY AUTHORITY.

The basis and purpose of these rules is to describe the electric service to be provided by jurisdictional utilities and master meter operators to their customers; to designate the manner of regulation over such utilities and master meter operators; and to describe the services these utilities and master meter operators shall provide. In addition, these rules identify the specific provisions applicable to public utilities or other persons over which the Commission has limited jurisdiction. These rules address a wide variety of subject areas including, but not limited to, service interruption, meter testing and accuracy, safety, customer information, customer deposits, rate schedules and tariffs, discontinuance of service, master meter operations, flexible regulation, procedures for administering the Low-Income Energy Assistance Act, electric service low-income program, cost allocation between regulated and unregulated operations, recovery of costs, the acquisition of renewable energy, small power producers and cogeneration facilities, and appeals regarding local government land use decisions. The statutory authority for these rules can be found at §§ 29-20-108, 40-1-103.5, 40-2-108, 40-2-124(2), 40-3-102, 40-3-103, 40-3-104.3, 40-3-106, 40-3-111, 40-3-114, 40-4-101, 40-4-106, 40-4-108, 40-4-109, 40-5-103, 40-7-113.5, 40-7-116.5, 40-8.7-105(5), and 40-9.5-107(5), C.R.S.

* * * * *

[indicates omission of unaffected rules]

BILLING AND SERVICE

3400. Applicability.

Rules 3400 through 3412 apply to residential customers, small commercial customers and agricultural customers served pursuant to a utility's rates or tariffs. In its tariffs, a utility shall define "residential," "small commercial" and "agricultural" customers to which these rules apply. The utility may elect to apply the same or different terms and conditions of service to other customers.

* * * * *

[indicates omission of unaffected rules]

[new rules]

3412. Electric Service Low-Income Program.

(a) Scope and Applicability.

(I) Electric utilities with Colorado retail customers shall file with the Commission a proposal to provide low-income energy assistance by offering rates, charges, and services that grant a reasonable preference or advantage to residential low-income customers, as permitted by § 40-3-106, C.R.S.

(II) Rule 3412 is applicable to investor-owned electric utilities subject to rate regulation by the Public Utilities Commission of Colorado.

(b) Definitions. The following definitions apply only in the context of rule 3412. In the event of a conflict between these definitions and a statutory definition, the statutory definition shall apply.

(I) "Eligible low-income customer" means a residential utility customer who meets the household income thresholds computed annually by the Staff of the Commission pursuant to subparagraph 3412(c)(II)(A).

(II) "Non-participant" means a utility customer who is not receiving low-income assistance under rule 3412.

(III) "Participant" means an eligible low-income residential utility customer who is granted the reasonable preference or advantage through participation in an electric service low-income program.

(IV) "Program" means an electric service low-income program approved under rule 3412.

(V) "Percentage-of-income plan thresholds" means household income levels for different numbers of persons adjusted by the federal poverty levels specified in subparagraphs (1) and (2) of subparagraph 3412(h)(II)(B)(i) as calculated annually by the Staff of the Commission.

(VI) "Arrearage" means the past-due amount appearing, as of the date on which a participant newly enters the program, on the then most recent prior bill rendered to a participant for which they received the benefit of service.

(VII) "Fixed credit" means an annual bill credit established at the beginning of a participant's participation in a program each year delivered as a monthly credit on each participant's bill. The fixed credit is the participant's full annual bill minus the participant's affordable percentage of income payment obligation on the full annual bill.

(VIII) "Full annual bill" means the current consumption of a participant billed at standard residential rates. The full annual bill of a participant is comprised of two parts: (1) that portion of the bill that is equal to the affordable percentage of income payment; and (2) that portion of the bill that exceeds the affordable percentage of income payment.

(IX) "LEAP" means Low Energy Assistance Program, a county-run, federally-funded, program supervised by the Colorado Department of Human Services, Division of Low-Income Energy Assistance.

(X) "LEAP participant" means a utility customer who at the time of applying to participate in a program has been determined to be eligible for LEAP benefits by the Department during either (1) the Department's current six-month (November 1 – April 30) LEAP application period, if that period is open at the time the customer applies for program participation; or (2) the Department's most recently closed six-month (November 1 – April 30) LEAP application period, if that period is closed at the time the customer applies to participate in the program and the Department's next six-month (November 1 – April 30) LEAP application period has not yet opened, provided, however, that in order to retain status as a LEAP participant under part (2) of this definition, the utility customer must apply to the Department during the Department's next six-month (November 1 – April 30) LEAP benefit application period and be determined eligible for such benefits.

(c) Program requirements.

(I) Program components. A utility's proposed program, required by this rule, shall address the following four aspects of energy assistance.

(A) How it integrates with existing energy efficiency or DSM programs offered by the utility or other entity;

(B) How it integrates with existing weatherization programs offered by the state of Colorado or other entities;

(C) How it integrates with LEAP or other existing low-income energy assistance programs; and

(D) Consideration of arrearage forgiveness for participants who enter the program. Arrearage credits shall be sufficient to reduce the pre-existing arrearage to $0.00 over twenty-four months.

(II) Participant eligibility phase-in.

(A) On or before March 1 of each year, the Staff of the Commission shall compute household income levels for households containing different numbers of persons for Phase I, II and III eligibility under subparagraph 3412(c)(II)(B), below. For this purpose the Staff shall obtain the most recent federal poverty level for households of different sizes from the federal poverty guidelines updated periodically in the Federal Register by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2). For each size household, these federal poverty level incomes shall be multiplied by the federal poverty level percentages in subparagraph 3412(c)(II)(B), below. On or before April 1 of each year, the Commission shall send a letter to each utility subject to these rules stating the resulting subparagraph 3412(c)(II)(B) Phase I, II and III income eligibility thresholds for households of different sizes as computed by Staff. Annually following receipt of the Commission's letter, each utility shall file an advice letter or application, as appropriate, revising its tariffs effective on or before July 1 to show the same current Phase I, II and III income eligibility thresholds.

(B) A utility's plan shall phase in the eligibility requirements over three years in accordance with the following schedule:

(i) Phase I: Eligible participants are limited to those with a household income at or below one hundred twenty-five percent of the current federal poverty level during the first year of operation of the program.

(ii) Phase II: Eligible participants are limited to those with a household income at or below one hundred fifty percent of the current federal poverty level during the second year of operation of the program.

(iii) Phase III: Eligible participants are limited to those with a household income at or below one hundred eighty-five percent of the current federal poverty level during the third and subsequent years of operation of the program.

(C) Utilities that have implemented a low-income electric service pilot program prior to January 1, 2011 may continue to provide benefits to pilot program participants that are enrolled in the pilot program at the time of filing under subparagraph 3412(d)(I), regardless of the customer's level of poverty, so long as the customer's household income is at or below 185 percent of Federal Poverty Limits.

(III) Maximum impact on non-participant.

(A) The utility shall quantify the anticipated impact of its program on non-participants, for each phase identified in subparagraph 3412(c)(II)(B), as required by § 40-3-106(d)(III), C.R.S.

(B) If program cost recovery is a fixed fee, then the program's maximum cost impact on residential non-participants are:

(i) Phase I: No more than $0.25 per month;

(ii) Phase II: No more than $0.28 per month; and

(iii) Phase III: No more than $0.315 per month.

(C) If program cost recovery is usage-based, then the program's maximum cost impact on non-participant's volumetric rates are:

(i) Phase I: No more than $0.0004 per kWh;

(ii) Phase II: No more than $0.00045 per kWh; and

(iii) Phase III: No more than $0.0005 per kWh.

(d) Program implementation.

(I) Each utility shall file tariffs containing its proposed program no later than March 19, 2012.

(II) At a minimum, the utility's filing shall include the following information:

(A) A tariff containing the rules that govern the operation of the program, including all of the requirements of paragraph 3412(c).

(B) A narrative description of the proposed program, including:

(i) An explanation of the manner and the extent to which the program operates in an integrated manner with other components of utility billing, credit and collection policies and programs, and usage reduction processes of the utility to accomplish the program goals.

(ii) A needs assessment identifying an estimate of the total number of low-income participants; the number of identified low-income participant accounts; and the projected program enrollment.

(C) A hard budget cap for each year the plan is in operation, including program administrative costs.

(D) The number of participants currently receiving low-income energy assistance from the utility; the average amount of base consumption that occurs in low-income homes; and the potential impact of energy efficiency/DSM upon average low-income consumption.

(E) Other information necessary to adequately support its proposal to the Commission.

(e) Cost recovery.

(I) Each utility shall address in its filing how costs of the program will be recovered.

(II) Each utility shall provide information regarding impacts on the various participant classes and on participants within a class.

(III) The following costs are eligible for recovery by a utility as program costs:

(A) Program credits or discounts applied against bills for current usage.

(B) Program credits applied against pre-existing arrearages.

(C) Program administrative costs.

(D) Other reasonable costs that the utility is able to demonstrate are attributable to its program.

(IV) The utility shall apply, as an offset to cost recovery, all program expense reductions attributable to the program. Program expense reductions include decreases in utility operating costs; decreases in the return requirement on cash working capital for carrying arrearages; decreases in the cost of credit and collection activities for dealing with low-income participants; and decreases in uncollectable account costs for these participants. The utility shall begin providing the offset to cost recovery expense reductions data by Phase III of program implementation pursuant to the timeline in subparagraph 3412(c)(II)(B)(iii).

(f) Energy assistance grants

(I) The utility shall apply energy assistance grants to the dollar value of credits granted to individual Program participants.

(II) A utility providing a program as a percentage of income plan shall apply any energy assistance grant to that portion of the program participant's full annual bill that exceeds the participant's affordable percentage of income payment.

(A) If the dollar value of the energy assistance grant is greater than the dollar value of the difference between the program participant's full annual bill and the participant's affordable percentage of income payment, the dollar amount by which the energy assistance grant exceeds the difference will be applied:

(i) First, to any pre-existing arrearages that at the time of the energy assistance grant continues to be outstanding.

(ii) Second, to the account of the program participant as a benefit to the participant.

(B) No portion of an energy assistance grant provided to a program participant may be applied to the account of a participant other than the participant to whom the energy assistance grant was rendered.

(g) Annual report.

(I) No later than May 31 each year, each utility shall file an annual report, based on the previous 12 month period ending March 31, containing the following information:

(A) Monthly information on the program including number of participants, amount of benefit disbursement, type of benefit disbursement, and revenue collection;

(B) The number of applicants for the program;

(C) The number of applicants qualified for the program;

(D) The number of participants;

(E) The average assistance provided, both mean and median;

(F) The maximum assistance provided to an individual participant;

(G) The minimum assistance provided to an individual participant;

(H) Total cost of the program and the average rate impact on non-participants by rate class, including impact based on typical monthly consumption of both its residential and small business customers;

(I) The number of participants that had service discontinued as a result of late payment or non-payment, and the amount of uncollectable revenue from participants;

(J) An estimate of utility savings as a result of the implementation of the program (e.g., reduction in trips related to discontinuance of service, reduction in uncollectable revenue, etc.); and

(K) Recommended program modifications based on report findings.

(h) Safe harbor program option.

Paragraph (h) describes an option that each utility may propose as a low-income energy assistance program. The program detailed in this paragraph may be adopted by a utility in satisfaction of the requirements of this rule 3412 and, as such, constitutes a safe harbor for compliance. Each utility electing the safe harbor program option shall file a notice describing the safe harbor program pursuant to rules 1206 and 1210 of the Commission's rules of Practice and Procedure applicable to tariff filings. If, after review, the Commission verifies the program is in compliance with this paragraph (h), the Commission will deem the filing in compliance and approve the safe harbor program without setting it for evidentiary hearing or otherwise subjecting the tariff filing to any further adjudicatory process.

(I) Customer eligibility for the safe harbor program shall be phased in as provided in subparagraph 3412(c)(II)(B).

(II) Safe harbor design requirements. The following design requirements shall be included in the safe harbor tariff filing of a utility.

(A) Safe harbor enrollment shall be limited to the utility's LEAP participants based on the three-year phase-in schedule contained in subparagraph 3412(c)(II)(B).

(B) Payment plan proposal. Participant payments for electric bills rendered to safe harbor participants shall not exceed a percentage of the participant's annual income.

(i) Percentage of income plan. The total payment for all electric home energy under a percentage of income plan is determined based upon a percentage of the participant's annual gross household income. On or before March 1 of each year, the Staff of the Commission shall compute percentage-of-income plan thresholds for each percentage of the Federal Poverty Level indicated in subparts (1) and (2) of this suparagraph 3412(h)(III)(B)(i). For this purpose the Staff shall obtain the most recent federal poverty level for households of different sizes from the Federal Poverty Guidelines updated periodically in the Federal Register by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2). On or before April 1 of each year, the Commission shall send a letter to each utility subject to these rules that sets forth the resulting current percentage-of-income plan thresholds for subparts (1)~~,~~ and (2) of this subparagraph 3412(h)(III)(B)(i). Annually following receipt of the Commission's letter, each utility shall file an advice letter revising its tariffs to be effective on or before July 1 to show the same new percentage-of-income plan thresholds.

(1) For electric accounts for which electricity is the primary heating fuel, maximum participant payments shall be set at the following percentage of income burdens:

(a) Household income at or below 75 percent of Federal Poverty Level: four percent of income.

(b) Household income exceeding 75 percent but at or below 125 percent of Federal Poverty Level: five percent of income.

(c) Household income exceeding 125 percent but at or below 185 percent of Federal Poverty Level: six percent of income.

(2) For electric accounts for which electricity is not the primary heating fuel, maximum customer payments shall be set at the following percentage of income burdens:

(a) Household income at or below 75 percent of the Federal Poverty Level: two percent of income;

(b) Household income exceeding 75 percent but at or below 125 percent of the Federal Poverty Level: two and one-half percent of income; and

(c) Household income exceeding 125 percent but at or below 185 percent of the Federal Poverty Level: three percent of income.

(3) Notwithstanding the percentage of income limits established in subparagraphs 3412(h)(III)(B)(i) (1) and (2), a utility may establish minimum monthly payment amounts for participants with household income of $0, provided that:

(a) The participant's minimum payment for an electric heating account shall be no more than $20 a month.

(b) The participant's minimum payment for an electric non-heating account shall be no more than $10 a month.

(ii) In the event that a primary heating fuel for any particular safe harbor participant has been identified by LEAP, that determination shall be final.

(C) Full annual bill calculation. The utility shall be responsible for estimating a safe harbor participant's full annual bill for the purpose of determining the participant's fixed credit.

(D) Fixed credit benefit delivery.

(i) A utility shall, unless infeasible, deliver safe harbor benefits as a percentage of income-based fixed credit on a participant's bill.

(ii) Fixed credits shall be adjusted during a program year in the event that standard residential rates, including commodity or fuel charges, change to the extent that the full annual bill at the new rates would differ from the full annual bill upon which the fixed credits are currently based by 25 percent or more.

(iii) If a utility demonstrates that it is infeasible to deliver safe harbor benefits as a percentage of income-based fixed credits on a participant's bill, a participant's annual payment each year shall be calculated as a percentage of household income and converted to a percentage of the participant's full annual bill. A participant will pay that percentage of the total bill irrespective of the level of the full annual bill.

(E) Levelized budget billing participation. A utility shall, unless infeasible, enroll safe harbor participants in its levelized budget billing program as a condition of participation in safe harbor. Should a safe harbor participant fail to meet monthly bill obligations and be placed by a utility in its regular delinquent collection cycle,

the utility may remove the participant from levelized budget billing in accordance with the utility's levelized budget billing tariff.

(F) Arrearage credits.

(i) Arrearage credits shall be applied to pre-existing arrearages.

(ii) Arrearage credits shall be sufficient to reduce, when combined with participant copayments, if any, the pre-existing arrearages to $0.00 over twenty-four months.

(iii) Application of an arrearage credit to a safe harbor account may be conditioned by the utility on one or more of the following:

(1) The receipt of regular participant payments toward safe harbor bills for current usage; or

(2) The payment of a participant copayment toward the arrearages so long as the participant copayment does not exceed one percent of gross household income.

(iv) Pre-existing arrears under this subparagraph shall not serve as the basis for the termination of service for nonpayment or as the basis for any other utility collection activity while the customer is participating in the safe harbor program.

(v) A participant may receive arrearage credits under this section even if that participant does not receive a credit toward current bills, if the participant enters into and maintains a levelized budget billing plan.

(G) Cost recovery.

(i) Each utility shall include as part of its safe harbor the cost recovery requirements listed in paragraph 3412(e).

(ii) Safe harbor program costs shall be allocated to each retail rate based on each rate class's share of the test year revenue requirement. Cost recovery shall also be based on a fixed fee.

(iii) Each utility shall include as part of its safe harbor a hard budget cap for each year the program is in operation, including program administrative costs, that complies with subparagraph 3412(c)(III).

(H) Energy assistance grants. The utility shall apply energy assistance grants to the dollar value of credits granted to the individual program participants as set forth in paragraph 3412(f).

(I) Cost control features.

(i) A utility shall refer safe harbor participants who historically use 150 percent or more of the median use of its residential class participants to public or private usage reduction programs, including the utility's own demand-side management programs and the usage reduction programs of local weatherization agencies that provide free

energy efficiency upgrades to income-qualified consumers based on availability of funding.

(ii) Households approved to receive a safe harbor benefit must agree to have their dwelling weatherized if contacted by a state-authorized weatherization agency. Failure to permit or complete weatherization may result in the denial of safe harbor benefits for the following year, subject to the following exceptions:

(1) Households containing a member(s) whose mental or physical health could be jeopardized because of weatherization shall be exempt from this requirement. Such participants must provide a certificate of medical hardship which shall be in writing sent to the utility from the office of a licensed physician, and show clearly the name of the participant or individual whose health is at issue; the Colorado medical identification number, phone number, name, and signature of the physician or health care practitioner acting under a physician's authority certifying the medical hardship.

(2) A household whose landlord refuses to allow weatherization shall not have benefits denied.

(3) A household shall not have benefits denied for failure to provide matching funds for weatherization.

(J) Targeted outreach. Within its residential customer base, a utility shall make special efforts to target safe harbor outreach to payment-troubled customers.

(K) Portability of benefits. A safe harbor participant may continue to participate without reapplication should the participant change service addresses, but remain within the service territory of the utility providing the benefit, provided that the utility may make necessary adjustments in the levelized budget billing amount to reflect the changed circumstances. A safe harbor participant who changes service addresses and does not remain within the service territory of the utility providing the benefit must reapply to become a participant at the participant's new service address.

(L) Maximum cost impact on non-participants. The maximum cost impact to non-participants shall be no more than the limits established in subparagraph 3412(c)(III)(B).

(M) Program requirements conflict. In the event there is a conflict between participant benefits in subparagraphs 3412(h)(II)(B) and (F) and non-participant impacts in subparagraph 3412(h)(II)(L), the non-participant impact limits shall not be exceeded.

(N) Administrative program components. The safe harbor program administration shall include:

(i) A written explanation of safe harbor provided to participants.

(ii) Consumer education programs that shall include information on the benefits of energy conservation, and that may include referrals to other appropriate weatherization and income supplement programs.

(iii) An annual process that verifies a participant's continuing income eligibility for benefits, provided that:

(1) A process through which a participant may reapply on a less frequent basis may be implemented for categories of participants that are not likely to experience annual fluctuations in income; and

(2) A process through which a participant must verify income on a more frequent basis may be implemented for participants for whom the calculation of benefits is based on a $0 income.

(3) A utility shall notify the participant for whom the benefit is based on a $0 income of the frequency with which income must be verified.

(4) A utility must provide an income verification process for a participant for whom the benefit is based on a $0 income.

(5) A participant whose benefit is based on a $0 income who fails to timely verify income shall be removed from safe harbor.

(O) Payment default provisions. Failure of a participant to make his or her monthly bill payments will result in a utility placing the participant in its regular collection cycle. A single missed, partial or late payment shall not result in the automatic removal of a participant from safe harbor.

3413. – 3499. [Reserved].

* * * * *

[indicates omission of unaffected rules]