

HOME ENERGY AFFORDABILITY IN MARYLAND:

Necessary Regulatory and Legislative Actions

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PART 1:

HOME ENERGY AFFORDABILITY IN MARYLAND

The State of Maryland has a large and growing Home Energy Affordability Gap facing its low-income households. Available resources are grossly insufficient to address this affordability gap. The discussion below documents the Home Energy Affordability Gap in Maryland. It discusses how the Gap is growing, not only in dollar terms, but also in terms of the number of more moderate-income populations increasingly affected.

TOTAL HOME ENERGY AFFORDABILITY GAP

Energy prices place a substantial burden on low-income households in Maryland today. Current home heating, cooling and electric bills in Maryland 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 over \$1,000 per household. The aggregate Home Energy Affordability Gap in Maryland for 2005 reaches nearly \$392 *million* statewide.¹

This Affordability Gap is rapidly increasing. Spiraling home energy prices have increased the per-household Affordability Gap by \$240 since 2002. Compared to the average Affordability Gap of \$796 given 2002 fuel prices in Maryland, the average Affordability Gap for 2005 reached \$1,036.

While the Home Energy Affordability Gap varies somewhat based on geography, the Affordability Gap is clearly a statewide phenomenon. Of Maryland's 23 counties, only three (Kent, Queen Anne's, Talbot) have an aggregate Affordability Gap of less than \$3.0 million. In contrast, the counties with the *largest* Affordability Gaps include Anne Arundel (\$10.3 million), Baltimore (\$24.9 million), Montgomery (\$44.4 million), and Prince George's (\$50.4 million). Baltimore City has an Affordability Gap, standing alone, of \$105 million.

¹ Energy assistance programs, such as the federal Low-Income Home Energy Assistance Program (LIHEAP) and the Maryland Electric Universal Service Program (EUSP), are not considered to *reduce* the Affordability Gap. Rather, they are considered resources to help fill the Gap.

**Total Home Energy Affordability Gap by County
(Maryland--2005)**

County	Aggregate Shortfall	Percentage of Statewide Shortfall
Allegany	\$10,271,121	2.6%
Anne Arundel	\$24,866,157	6.3%
Baltimore	\$46,260,757	11.8%
Calvert	\$3,188,718	0.8%
Caroline	\$3,657,412	0.9%
Carroll	\$7,143,604	1.8%
Cecil	\$7,594,068	1.9%
Charles	\$5,970,242	1.5%
Dorchester	\$4,077,383	1.0%
Frederick	\$9,011,189	2.3%
Garrett	\$5,822,070	1.5%
Harford	\$11,084,989	2.8%
Howard	\$9,508,856	2.4%
Kent	\$2,586,289	0.7%
Montgomery	\$44,380,574	11.3%
Prince George's	\$50,394,859	12.9%
Queen Anne's	\$2,527,754	0.6%
St. Mary's	\$5,893,489	1.5%
Somerset	\$3,769,883	1.0%
Talbot	\$2,824,834	0.7%
Washington	\$12,795,164	3.3%
Wicomico	\$9,334,582	2.4%
Worcester	\$4,141,182	1.1%
Baltimore City	\$104,994,274	26.8%
State Total	\$392,099,451	100%

IMPACT OF PRICE INCREASES ON ENERGY ASSISTANCE

Home energy prices have been increasing substantially in Maryland in recent years. Natural gas prices have risen from \$0.998 per therm in January 2002 to \$1.898 per therm in January 2006. Electricity prices have increased from \$0.093 per kWh in July 2002 to \$0.112 in July 2006.² These increasing energy prices have placed a clear and substantial burden on low-income

² Both the natural gas and electric prices reported here are from the U.S. Department of Labor, Bureau of Labor Statistics, "Average Price Data" for metropolitan areas for the Washington/Baltimore metropolitan area. BLS is the preparer of the Consumer Price Index, the measure of the rate of inflation in the United States.

households, as reflected in the Home Energy Affordability Gap facing those households each year. The discussion below separately considers two periods of price increases: (1) the natural gas and fuel oil price increases between 2003 and 2005; and (2) the 2006 electric price increases.

Price Increases from 2003 through 2005

Much of the burden for the Home Energy Affordability Gap facing Maryland will fall on the private sector (should resources be there to address the problem). Funding for the federal Low-Income Home Energy Assistance Program (LIHEAP) has been grossly insufficient to meet the Affordability Gap, and is decreasing in its ability keep up with rapidly increasing energy prices. As shown by the data presented in the table below:

- While LIHEAP covered 8.9% of the Affordability Gap in 2003, LIHEAP covered only 7.6% of the Affordability Gap in 2005.³
- While the Home Energy Affordability Gap increased by roughly \$91 *million* in Maryland from 2003 to 2005, Maryland’s LIHEAP allocation increased by only \$3.0 million.

These figures do not include data from the 2005/2006 winter heating season and its dramatic spike in natural gas prices due to Katrina-related gas supply problems.

LIHEAP and Maryland’s Home Energy Affordability Gap (2005)			
Affordability Gap Year	Affordability Gap	LIHEAP Allocation	LIHEAP Coverage
2003 /a/	\$301,170,053	\$26,834,125	8.9%
2005 /b/	\$392,099,451	\$29,803,216	7.6%
Increase	\$90,929,398	\$2,969,091	

NOTES:

/a/ The annual Home Energy Affordability Gap looks at the immediately preceding year (so that actual prices as reported by DOE can be used). Accordingly, the 2003 Home Energy Affordability Gap was released in April 2004.

/b/ The annual Home Energy Affordability Gap for 2005 was released in May 2006.

Maryland’s 2006 Electric Price Increases

The Home Energy Affordability Gap in Maryland will be significantly exacerbated by the 2006 electric price increases experienced in the state. Electric bills (including cooling) comprise the largest portion of the Home Energy Affordability Gap. In recognition of the substantial electricity price increases experienced in Maryland in 2006, special supplemental Home Energy

³ A 2006 LIHEAP coverage ratio cannot yet be calculated since final figures are not yet available for the 2006 Program Year.

Affordability Gap analyses have been prepared to determine the impact of differing rates of electric price escalation.

Electric prices increases imposed on Maryland consumers as a result of the expiration of price caps in 2006 will have a substantial impact on the Home Energy Affordability Gap in 2006. The Home Energy Affordability Gap in Maryland reached \$392 million in 2005. This Affordability Gap pre-dates Katrina-related increases in natural gas prices during the 2005/2006 winter heating season. A 15% increase in electric prices alone will cause the total Home Energy Affordability Gap in Maryland to increase by nearly \$63 million. A 30% increase results in an increased Home Energy Affordability Gap of more than \$125 million, to a total of nearly one-half *billion* dollars.

Impact of 2006 Electric Price Increases on Home Energy Affordability Gap (Maryland)							
	Range of Federal Poverty Level						
	Less than 50%	50 - 74%	75 - 99%	101 - 124%	125 - 149%	150 - 185%	Total
Base case (2005)	\$143,408,896	\$55,082,008	\$54,688,515	\$51,054,179	\$44,148,336	\$43,717,516	\$392,099,451
15% increase	\$157,266,376	\$61,658,366	\$62,453,753	\$59,983,835	\$54,202,176	\$59,206,685	\$454,771,192
30% increase	\$171,123,856	\$68,234,725	\$70,218,991	\$68,913,491	\$64,256,016	\$74,695,854	\$517,442,933
60% increase	\$198,838,815	\$81,387,443	\$85,749,466	\$86,772,803	\$84,363,696	\$105,674,192	\$642,786,415

As with the increase in Affordability Gap documented by the annual Home Energy Affordability Gap analysis released each spring, the increases resulting from the 2006 electric price spikes do not uniformly affect the Affordability Gap by range of Poverty Level. While a 30% increase in electric prices results in a 19% increase in the Affordability Gap faced by households with income at or below 50% of the Federal Poverty Level, it results in a 71% increase in the Affordability Gap faced by households with income between 150% and 185% of Poverty Level.

Future documentation of Maryland's Home Energy Affordability Gap will find an even higher increase in the Gap, as higher natural gas and fuel oil prices are taken into account as well. The increases above result only from expected increases in *electric* prices alone.

HOME ENERGY AFFORDABILITY GAP REACHES INTO MODERATE INCOME

One cause for particular concern in Maryland is not simply the total Home Energy Affordability Gap, nor even the immense Affordability Gap facing the lowest income households in Maryland (those living with income at or below 50% of the Federal Poverty Level). It is the fact that the Affordability Gap is reaching increasingly into what historically were considered to be more moderate income households. An analysis of the total Affordability Gap by county found that the home energy burden (bills as a percent of income) exceeded the affordable 6% level for households with income between 150% and 185% of the Federal Poverty Level in every Maryland county in 2006.⁴

The 2005 Affordability Gap analysis (released in April 2006) further found that for households with income between 125% and 150% of the Federal Poverty Level, home energy burdens exceeded 10% in 13 of Maryland's 24 counties. In eight additional counties, the home energy burden exceeded 9.5%. In all counties, the home energy burden for these households exceeded 9.0%.

Increase in Home Energy Affordability Gap by Federal Poverty Level (Maryland)						
	Ratio of Income to Federal Poverty Level					
	Below 50%	50 - 74%	75 - 99%	100 - 124%	125 - 149%	150 - 185%
2003 (released April 2004)	\$123,435,787	\$46,476,650	\$44,907,022	\$40,638,338	\$32,906,776	\$27,731,531
2005 (released April 2006)	\$143,408,896	\$55,082,008	\$54,688,515	\$51,054,179	\$44,148,336	\$43,717,516
Growth in Gap	\$19,973,109	\$8,605,358	\$9,781,493	\$10,415,841	\$11,241,560	\$15,985,985
Percentage growth	16.2%	18.5%	21.8%	25.6%	34.2%	57.6%

The table above documents the growth in Maryland's Home Energy Affordability Gap since 2003. Note that while the dollar growth in the total Home Energy Affordability Gap is not necessarily higher in the top income tier (150-185% of Federal Poverty Level), the percentage growth in the top tier is much higher. The reason is that spiraling energy prices are finally pushing 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 2005 prices, they are unaffordable and thus contribute to the Gap in a very substantial way.

⁴ References in this section to Maryland "counties" include Baltimore City standing alone.

LOW-INCOME POPULATION

The number of households facing these energy burdens is staggering. As the table below shows:

- More than 85,000 Maryland households live with income at or below 50% of the Federal Poverty Level and thus face a home energy burden of 50% or more.
- 40,000 additional Maryland households live with incomes between 50% and 74% of Poverty (with a burden of more than 20%).
- 28,000 *more* Maryland households live with incomes between 75% and 99% of the Federal Poverty Level (with a burden of more than 15%).

In addition, more than 90,000 Maryland households live in the newly-vulnerable population above 150% of the Federal Poverty Level.

Poverty Households in Maryland (2000 Census) and their Home Energy Burdens /a/		
Poverty Level	No. of Households	Home Energy Burden
Below 50%	85,019	52.2%
50 – 74%	40,248	21.0%
75 – 99%	47,164	15.1%
100 – 124%	53,849	11.7%
125 – 149%	60,288	9.6%
150% - 185%	91,865	7.9%

NOTES:

/a/ Home energy burdens are bills as a percentage of income.

SUMMARY

Recent increases in natural gas and electric prices have pushed the Home Energy Affordability Gap in Maryland to historically high levels. Not only is the aggregate Affordability Gap higher than it has ever previously been, but also the Affordability Gap is now increasingly reaching into what has historically been viewed as more moderate income populations. Accordingly, the State of Maryland should take aggressive steps to promote home energy affordability through a combination of energy assistance, rate affordability assistance, energy efficiency, and consumer

protections. Before turning to these recommended remedies, however, the next section briefly considers the consequences of a *failure* of the state to address the pending Home Energy Affordability Gap crisis.

NOTES

PART 2:

THE CONSEQUENCES OF UNAFFORDABLE HOME ENERGY IN MARYLAND

As a result of the mismatch between energy bills and the resources needed to pay them in Maryland, 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 Maryland. 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. These consequences generate adverse impacts not only for low-income customers and the utilities that serve them, but they also generate adverse impacts on the competitiveness of business and industry that are members of the broader Maryland community. The discussion below considers this range of consequences arising from unaffordable home energy.

UTILITY BILL PAYMENTS

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 as well.

While the notion that payment-troubled customers are disproportionately low-income is commonly accepted conventional wisdom,⁵ remarkably little empirical data has been collected to verify or to challenge that conventional wisdom. National data reported by the U.S. Census Bureau indicates that the proportion of households in arrears at any given point in time is substantially higher for the low-income population than for the population as a whole. One 1995 census study, for example, reported that while 9.8% of non-poor families could not pay their utility bills in full, 32.4% of poor families could not do so. According to the Census Bureau, 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.⁶ Unfortunately, systematic information on the arrears of low-income customers is not collected on a state level basis.⁷

⁵ This is not to say that all low-income customers are payment-troubled, nor that all payment-troubled customers are low-income. It is merely to say that low-income customers are disproportionately payment-troubled.

⁶ U.S. Census Bureau, *Extended Measures of Well-Being: 1992*, P70-50RV (November 1995).

⁷ There is sporadic corroborative information from the states. One 1998 Illinois report, for example, indicated that while 44.5% of LIHEAP-assisted natural gas customers were in arrears, only 28.9% of “general households” were. Department of Energy and Community Affairs, *Residential Energy Costs and Assistance in Illinois: The 1997 – 98*

This Census data is supported by more recent data on a national level, documenting how low-income home energy assistance recipients frequently face the loss of utility service due to their inability to pay. According to a Congressionally-funded survey by the National Energy Assistance Directors Association (NEADA), between 8% and 11% of households with children age 18 or younger faced the loss of electric service in both 2003 and 2005. Roughly 1-of-6 low-income households with children under age 18 (16%) had *either* natural gas *or* electricity (or both) disconnected due to nonpayment in 2005. Not surprisingly, this loss of service was most heavily concentrated in the lowest income bucket.

The loss of access to home heating fuels clearly leads to the corresponding loss of a householder's ability to heat his or her home. According to the 2005 NEADA study, nearly 1-in-7 households (14%) were unable to use the main source of heating for their homes because a utility had disconnected natural gas or electric service.

The conventional wisdom discussed above appears to have a solid empirical basis. The disproportionate loss of utility service by low-income households in Maryland is a phenomenon that should be reasonably expected. This loss of service presents distinct a business problem to the utilities seeking to serve Maryland's low-income households.

SOCIAL IMPACTS

The findings of the unaffordability of home energy in Maryland are sobering from a social perspective as well. The unaffordability of energy manifests itself in more than simply unpaid bills. According to the recent National Energy Assistance (NEA) survey published by the National Energy Assistance Directors Association (NEADA),⁸ “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.”

- 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.
- 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.

Winter, at 6, Springfield (IL). So, too, has an analysis by the staff of the New Hampshire Public Utilities Commission estimated that roughly 35% of the low-income *electric* customers entering the Electric Assistance Program (EAP) entered the program with arrears. As a general rule, estimates place the average number of customers in arrears at any given point in time at around 12% of the total customer base.

⁸ Apprise, Inc. (April 2004). *National Energy Assistance Survey Report*, National Energy Assistance Directors Association: Washington D.C.

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 low-income households with children. The impact of such service disconnections on the public's health and safety can hardly be debated in light of recent research. According to the 2005 NEADA survey discussed above, the loss (and threatened loss) of home heating service has significant health consequences to these 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. In both 2003 and 2005, 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 may 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. 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 with which to begin, 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.

This impact is felt disproportionately at the lowest income levels. Between roughly 30% and 40% of energy assistance recipients with incomes at or below 50% of the Federal Poverty Level reported to NEADA that they kept their homes at "unsafe or unhealthy temperatures" because they could not afford to pay their home heating bills.

PUBLIC SAFETY IMPLICATIONS

In addition to these public *health* issues, the disconnection of home heating service represents a distinct public *safety* threat as well. The NEADA survey, for example, reports significant safety-related problems associated with the loss of home heating service. According to NEADA, nearly 30% of energy assistance households with children, and nearly 40% of energy assistance households with income at or below 50% of the Federal Poverty Level, were forced to use their

kitchen stove or oven to provide heating due to the household's inability to afford their primary heating fuel.

The loss of *electric* service (not merely heating service) poses an immediate threat to the health and safety of low-income Maryland households with children as well. NEADA reports that 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, that had children under the age of 18, reported that a member of the household used medical equipment that requires electricity. (NEADA 2005, at 15). A full 6% of all energy assistance recipients surveyed by NEADA reported that the equipment using electricity was used to treat asthma. (NEADA 2005, at 18). Nearly as many (4%) said that someone in the household was taking medication that required refrigeration. (NEADA 2005, at 18).

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,⁹ it remains *one* of the leading factors contributing to fires, as well as to fire-related injuries and deaths. In particular, according to the National Fire Protection Association (NFPA), portable and fixed space heaters present a risk of harm.¹⁰ 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.¹¹ 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.

Low-income households face a particular risk of not only experiencing a home heating fire, but of facing injury and/or death as a result. Poverty, the residential fire rate, and the residential fire death rate, are all significantly associated. The Johns Hopkins School of Medicine has documented the fact that public health and safety fire hazards are strongly associated with the termination of service due to nonpayment. In the spring of 2005, Johns Hopkins undertook an analysis of the safety impacts of "power terminations" on households with children.¹² According to Johns Hopkins, over an 18-month period from 2003 - 2004, there were 34 flame injuries admitted to Johns Hopkins Hospital. Of these 34, seven (7) (21%) died. Five (5) of the 34 fires (15%) were associated with power termination. At least one additional person associated with a power termination died before reaching the hospital.

⁹ The term "homes" refers to one- and two-family dwellings (which includes manufactured homes) and apartments. . . . The share of fires involving heating equipment, 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.

¹⁰ According to the NFPA, "The causes of fires involving portable or fixed space heaters are dominated by human errors, such as placing them too close to combustibles and lack of maintenance." Id.

¹¹ Marty 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).

¹² Johns Hopkins School of Medicine (April 11, 2005). *Burn Injuries and Deaths of Children Associated with Power Shut-offs*, at 5, PowerPoint presentation to Maryland Public Service Commission, Baltimore: MD.

According to Johns Hopkins, three-fifths (60%) of the “power-termination” burn admissions ultimately died. Johns Hopkins reached two significant conclusions based on its data:

- Power termination is associated with a significant subset of fires involving children; and
- If power termination leads to a burn, it has a high probability of being fatal.

On a broader scale, the National Fire Protection Association (NFPA) reports data confirming the Johns Hopkins 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.”¹³

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:

Why the under-use of public benefits is a problem. When most people hear about the idea of marketing public benefits through employers, their initial reaction is “why would a company want to get involved with a social service program?”

In fact, employers 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.¹⁴

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.

¹³ “Burning Issues,” *NFPA Journal*, at 104 (January/February 1996).

¹⁴ Geri 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.

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

Clearly, it is in the employers' self-interest to help low-income workers overcome such problems.¹⁵

These results are confirmed by research in Indiana as well. 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." Among the findings made by that Indiana Department of Commerce report were as follows:

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 impacts of globalization, such as fragmenting markets and global competitors, and *income inequality from unequal earnings*.¹⁶

The *Indiana Competitive Assessment* finally 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

¹⁵ "Private Employers and Public Benefits," at 5.

¹⁶ *Indiana Competitive Assessment*, at 8 (emphasis added).

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). Referring back to the affordability of living “for people of all income levels,” the report did not view this as a barrier to competitiveness, but instead concluded by stating that “participants felt very strongly about this *economic asset* of the State.” (emphasis added).

The *Competitive Assessment* was completed in January 2002, and thus predated the major concerns about natural gas prices. It is instructive, however, how the Department of Commerce’s *Competitive Assessment* addressed the issue of universal service within the context of telecommunications. It noted that “there is frequent public discussion about the gap between rural and urban America in terms of advanced technologies and telecommunications. While the gap is lessening almost daily, the reality is that those areas that are being left behind will eventually not be able to ‘catch up.’” The report then noted:

In relation to the State’s overall competitiveness and business climate, these issues may seem minor since many of the under-served areas are not, and will not become, competitive markets. The question becomes, though, whether these areas will be “left behind” completely, keeping 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.”

SUMMARY

The unaffordability of home energy facing low-income Maryland residents has severe social, economic, and business consequences that ramify throughout all sectors of the state. From a social perspective, unaffordable home energy not only threatens the ability of low-income 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 Maryland. Paying an unaffordable home energy bill means that low-income Maryland residents will go without food, medical care, and other life necessities.

In addition to the impacts on individual low-income households, the unaffordability of home energy has substantial adverse financial and economic impacts on the State of Maryland. The public utilities charged with serving these low-income customers who cannot afford to pay their bills incur the expenses associated with non-payment, including collection expenses, working capital, and uncollectibles. In addition, recent 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 Maryland utilities and on the Maryland economy generally.

NOTES

PART 3:

A UNIVERSAL SERVICE PROGRAM FOR MARYLAND

In response to the affordability problems documented above, and the broad range of utility, social, and competitiveness impacts arising because of these problems, this report outlines the essential components comprising an effective and efficient Universal Service Program for Maryland utilities. These components include:

- A rate affordability component
- An arrearage management component
- A crisis intervention component

THE RATE AFFORDABILITY COMPONENT

The first critical component of a Universal Service Program is a rate affordability program. Through the rate affordability program component, the price of home energy¹⁷ is set at a level that will generate the greatest ability of low-income customers to make actual payments.

An Overview and Summary.

Building a rate affordability program consists of six basic steps:

1. **Eligibility:** Defining the eligibility for the universal service program should allow the program to be *open to enrollment* by any low-income consumer.¹⁸ For purposes of this program, a "low-income consumer" is any consumer with gross household income at or below 150% of the Federal Poverty Level.¹⁹ In addition, it is appropriate to allow the Universal Service Program to set aside a reasonable amount of crisis funding to serve customers who are only moderately low-income. In this instance, "need" would not be defined by income alone, but by a fact-specific inquiry into individual circumstances.

¹⁷ This includes either electricity or natural gas or both. It does *not* include bulk fuels.

¹⁸ Defining eligibility and targeting outreach are two distinctly different tasks. The utility may define eligibility so that all low-income customers may participate, but nonetheless seek to target *outreach* to specific payment-troubled customers. Targeting places special emphasis on enrolling a particular class of customers from among those classes that are eligible.

¹⁹ 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 2005 Poverty Level for a two-person household was \$12,830. A two-person household with an income of \$6,415 would thus be living at 50% of Poverty.

2. **Outreach:** Informing low-income customers of the availability of the Universal Service 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 utility universal service programs have been found to involve the use of community-based organizations as well as organizations that deliver benefits to the same households that are eligible to receive universal service 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 Universal Service 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. 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 another social assistance program.²⁰
4. **Benefits:** Distributing rate assistance benefits should be on a fixed credit basis. The fixed credit benefits are delivered to the program participant as part of a levelized monthly billing plan. The levelized bill under the rate assistance program will represent the annual bill, minus the annual fixed credit, divided into twelve²¹ equal monthly installments.
5. **Collections:** Enforcing customer payment obligations after a customer receives a Universal Service Program benefit should occur through the same credit and collection activities directed toward any residential customer. If a customer receiving a universal service benefit 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 universal service participants.
6. **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 state or federal 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.

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

²⁰ This direct application process, however, is generally a relatively minor source of program participation.

²¹ If a utility offers only an eleven month levelized billing plan, there is no problem. There is no “magic” to a 12-month levelized budget-billing plan.

Proposed Structure for a Maryland Rate Affordability Program.

Rate affordability assistance should be tied to the most recently available Federal Poverty Level. The proposal here is to set eligibility equal to 150% of Poverty Level. For a household with three persons, the maximum eligibility under this guideline would be \$32,139. As energy prices continue to escalate, or should current prices stabilize at their current high levels, Maryland should consider expanding program eligibility from 150% of Poverty Level to 175% of Poverty Level.

2006 Federal Poverty Levels by Household Size (48 contiguous states)		
Family Size	100% FPL /a/	150% FPL
1	\$14,000	\$21,000
2	\$17,429	\$26,144
3	\$21,426	\$32,139
4	\$26,015	\$39,023
5	\$29,505	\$44,258
6	\$33,278	\$49,917
NOTES:		
/a/ For each additional household member, add \$3,400.		

It should be recognized that under a Universal Service 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 to be "affordable" and the local utility will collect the entire fully-embedded rate. 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 *un*affordable and the Universal Service Program rate is offered to reduce the burden to an affordable level.²²

Rate affordability assistance in Maryland 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 affordability resources. This can be demonstrated by comparing an across-the-board 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, an across-the-board discount does not. Using an across-the-board discount, the universal service

²² 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 ($\$25,000 \times .06 = \$1,500$). Hence, this customer would decide *not* to participate in the income-based rate, since her fully-embedded bill is *less* than the bill rendered under the Universal Service Program.

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 affordability component of the Universal Service Program on a percentage of income targeting mechanism.

The Fixed Credit Percentage of Income Payment Plan

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* eligibility criteria: (1) that the household income is at or below 150% of the Federal Poverty Level; *and* (2) that the household energy burden exceeds the burden deemed to be affordable.²³

The fixed credit approach next 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. This is determined as follows: $\$8,000 \times 6\% = \480 .

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. Some programs impose a tiered burden-based payment, with households having lower incomes being required to pay a smaller percentage of their income for their home energy.

The energy burden represented by a combined heating and non-heating energy bill should not generally exceed six percent (6%) of income. 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%). 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%

²³ A customer may still participate in the arrearage management program component even if he or she does not participate in the rate affordability component.

or as 8% (or some other figure) is a policy decision. New Hampshire and New Jersey both have adopted a 6% affordability target for home energy burdens.

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 (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 bring the annual bill down 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).

In addition to various administrative benefits from use of a fixed credit, the fixed credit offers the advantage of providing a strong conservation incentive to the low-income customer. Under the fixed credit model, the local utility provides a \$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 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. At no time, can the maximum financial exposure exceed the budgeted program revenues. Systems can be easily designed to track funds that are obligated and expended to ensure that the budget is not exceeded.

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.²⁴ 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.

Intake should be automated to the extent possible. This conclusion is based in both policy and operational considerations. An "automated intake" process involves entering into an agreement with the state human services agency to certify whether customers are income eligible for Universal Service Program payments.

²⁴ The fixed credit is, in essence, booked as a "payment" on the account.

The Universal Service Program can be automated to a high degree. Many state telephone universal service programs in the United States rely on an automated intake procedure for enrolling participants. In addition:

- Virtually all participants in the New Jersey electric/gas Universal Service Program (USP) are certified by the state's energy assistance agency.
- Pennsylvania's gas and electric CAP programs²⁵ also rely largely on income verification through the Pennsylvania Department of Public Welfare and the Pennsylvania Department of Revenue.
- The rate discounts offered by Massachusetts gas and electric investor-owned utilities primarily enroll customers through an automated intake procedure. These gas and electric utilities provide electronic tapes of their residential customer base to the Department of Transitional Assistance (DTA), which then matches the tapes to participants in various public assistance programs. DTA then informs the utility of which customers are eligible for the utility rate discounts.²⁶

The impact of this automated approach is that utility companies do not need to devote substantial stafftime to enrollment or income verification. The Pennsylvania Public Utility Commission (PUC) has specifically said that "we have found that automatic referrals to CAP when a customer calls to make a payment arrangement and intake certification by government agencies are simple to administer and cost-effective."

In sum, four critical components of the proposed rate affordability component of a Universal Service Program are proposed above:

- Eligibility is set at 150% of the Federal Poverty Level;
- Enrollment should be, to the maximum extent feasible, implemented through an automated data exchange with social assistance agencies;
- Rate affordability 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 natural gas space heating (3%). An all electric household should pay the full 6%.

²⁵ CAP is Pennsylvania's universal service program (the Customer Assistance Program).

²⁶ The agency need not identify precisely which program the household is participating in when it confirms household eligibility. The utility need not know, in other words, *why* the household is eligible so long as it knows that the household is eligible.

A “Tiered Discount” Alternative.

One alternative to a “fixed credit” percentage of income-based 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 are simply 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 Universal Service Program in Maryland is to promote the supply of affordable electric service to low-income customers. As described above, energy burdens are the generally-accepted mechanism by which to measure “affordability.” Maryland should establish, by policy, that an affordable burden is three percent (3%) of income for base load electric use and six percent (6%) of income for electric space heating use. 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.

Calculation of a Tiered Discount Alternative

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. While the New Hampshire Public Utilities Commission originally tied its tiered discount to income buckets, in 2006, the NHPUC decided to tie the discount to buckets reflecting different ranges of the Federal Poverty Level instead.

Using the mid-point of each income bucket,²⁷ an affordable bill can be calculated by applying the electric burden determined to be “affordable.” In the bottom bucket, for example (less than \$2,000), the mid-point (\$1,000) is multiplied by the affordable burden to calculate an affordable bill of \$40 ($\$1,000 \times 0.04 = \40). This process yields affordable bills as follows:

²⁷ When the NHPUC tied its buckets to Poverty Level, it established income ranges by using the average household size of its universal service program.

Annual Income	Mid-point	Affordable Burden	Affordable Bill
Less than \$2,000	\$1,000	.04	\$40
\$2,000 - \$3,999	\$3,000	.04	\$120
\$4,000 - \$5,999	\$5,000	.04	\$200
\$6,000 - \$7,999	\$7,000	.04	\$280
\$8,000 - \$9,999	\$9,000	.04	\$360
\$10,000 - \$11,999	\$11,000	.04	\$440
\$12,000 - \$15,000	\$13,500	.04	\$540
Over \$15,000	\$15,000	.04	\$600

Clearly, by taking the mid-point of each bucket, the affordable burden is accurate only for those persons exactly at that mid-point. Customers with incomes in the half of each bucket below the mid-point will pay more than an affordable burden, while customers with incomes in the half of the bucket above each mid-point will pay somewhat less than an affordable burden.

Households in each income bucket are next assigned the average annual expenditure for electricity for the company providing electricity (or natural gas as appropriate). For example, and purely for illustration, all customers, at whatever income level, are assigned the average residential base load electric bill, irrespective of income. While an ideal world would allow bills to be varied based on income level, the data to allow for that refinement does not currently exist.

The *difference* between this average bill and the affordable bill is determined. For example, the amount by which the actual average bill exceeds the affordable bill for a household in the \$4,000 - \$5,999 income bucket (mid-point of \$5,000) is \$600 (actual bill (\$800) – affordable bill (\$200) = difference (\$600)).

Annual Income	Mid-point	Affordable Burden	Affordable Bill	Average Bill	Difference
Less than \$2,000	\$1,000	.04	\$40	\$800	\$760
\$2,000 - \$3,999	\$3,000	.04	\$120	\$800	\$680
\$4,000 - \$5,999	\$5,000	.04	\$200	\$800	\$600
\$6,000 - \$7,999	\$7,000	.04	\$280	\$800	\$520
\$8,000 - \$9,999	\$9,000	.04	\$360	\$800	\$440
\$10,000 - \$11,999	\$11,000	.04	\$440	\$800	\$360
\$12,000 - \$15,000	\$13,500	.04	\$540	\$800	\$260
Over \$15,000	\$15,000	.04	\$600	\$800	\$200

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 following:

Annual Income	Average Bill	Difference between Affordable and Average Bill	Discount Needed (col 2 / col 1)	Affordable Bill (col 1 * (1 – col 3))
Less than \$2,000	\$800	\$760	95%	\$40
\$2,000 - \$3,999	\$800	\$680	85%	\$120
\$4,000 - \$5,999	\$800	\$600	75%	\$200
\$6,000 - \$7,999	\$800	\$520	65%	\$280
\$8,000 - \$9,999	\$800	\$440	55%	\$360
\$10,000 - \$11,999	\$800	\$360	45%	\$440
\$12,000 - \$15,000	\$800	\$260	32.5%	\$540
Over \$15,000	\$800	\$200	25%	\$600

The above table demonstrates that a four percent (4%) energy burden is achieved for a household with an annual income at the mid-point between \$6,000 and \$7,999 (\$7,000) by providing a 65% discount to an \$800 home energy bill. If the bill is more than \$800, the 65% discount will be too little (and the burden will exceed 4%). If the bill is less than \$800, the 65% discount will be too much (the burden will be less than 4%).

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. However, the more number of tiers, the more complex the program becomes and the more difficult it becomes to set up and administer. Regulators need to determine, by policy, how many tiers they wish in their tiered discount program. A discount with three to four tiers is recommended.

In all matters other than benefit level, a tiered discount Universal Service Program should have the same program components (e.g., arrearage management, crisis assistance, energy efficiency) that a fixed credit Universal Service Program does.

The Issues Raised by a Fixed Credit Program vs. a Tiered Discount Program

A decision to implement a tiered discount alternative for Maryland utilities presents two primary 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. Under a fixed credit program, benefits are targeted at the individual customer. In contrast, under tiered discount program, 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 bucket for which the discount is established, a tiered discount will give the customer either “too much” or “too little.”

The tables below show how the tiered discount program would operate for electricity in Maryland. The first table shows the discounts required to reduce bills to an affordable percentage of income at average consumption using actual Maryland demographic and electric price information. As can be seen, a household with income at or below 75% of the Federal Poverty Level would require a discount of 75%, while a household with income between 125% and 150% of Poverty Level would require a discount of only 35% in order to reach affordable bill burdens (on average).

Tiered Discount Need to Reach Affordable Electric Bill Burdens (Maryland)						
Electric Baseload						
Percent of Average Bill						
Poverty Range	0-50%	51-75%	76-100%	101-125%	126-150%	151%+
Under 75%	75%	75%	75%	75%	75%	75%
75% - 100%	60%	60%	60%	60%	60%	60%
100% - 125%	50%	50%	50%	50%	50%	50%
125% - 150%	35%	35%	35%	35%	35%	35%
Electric Space Heating						
Percent of Average Bill						
Poverty Range	0-50%	51-75%	76-100%	101-125%	126-150%	151%+
Under 75%	75%	75%	75%	75%	75%	75%
75% - 100%	60%	60%	60%	60%	60%	60%
100% - 125%	50%	50%	50%	50%	50%	50%
125% - 150%	35%	35%	35%	35%	35%	35%

The next table shows the actual impact on home energy burdens derived from applying these tiered discounts. The table shows the targeted ranges of Poverty Level down the left hand side of the table. Across the top are ranges of bills based on a percentage of the median bill in Maryland. The range of 76-100%, for example, indicates a bill between 76% and 100% of the median. The range of 101 - 125% indicates a bill between 101% and 125% of the median. By application of the actual bill (as determined through application of the tiered discount) to the income level in each Poverty Range (assuming an average household size), it is possible to determine the home energy burden for each cell. Not surprisingly, the households with bills between 76% and 125% of the median bill are closely aligned with the percentage of income home energy burden deemed to be “affordable” (3% for electricity; 6% for total energy).

Households with smaller bills have burdens that are lower than that needed to be affordable. Households with larger bills have home energy burdens that are somewhat higher than that deemed to be affordable.

Electric Burdens by Poverty Range and Percent of Median Income Under a Tiered Discount Program (Maryland)						
Electric Baseload						
	Percent of Average Bill					
Poverty Range	0-50%	51-75%	76-100%	101-125%	126-150%	151%+
Under 75%	2%	2%	3%	4%	5%	6%
75% - 100%	2%	2%	3%	4%	5%	5%
100% - 125%	2%	2%	3%	4%	5%	5%
125% - 150%	2%	2%	3%	4%	5%	6%
Electric Space Heating						
	Percent of Average Bill					
Poverty Range	0-50%	51-75%	76-100%	101-125%	126-150%	151%+
Under 75%	3%	4%	5%	7%	8%	9%
75% - 100%	3%	3%	5%	6%	8%	8%
100% - 125%	3%	3%	5%	6%	7%	8%
125% - 150%	3%	4%	5%	6%	8%	9%

The next table thus determines, on an annual per-customer basis, the extent of the “underpayment” (the dollar amount by which the discount falls short of reducing the bill to an affordable burden) and “overpayment” (the dollar amount by which the discounts exceeds making the bill an affordable burden). While the dollar amounts are close to \$0 as bills cluster around the median, the per-customer overpayment or underpayments become considerable with the customers with bills that differ sharply from the median.²⁸

Table title						
Electric Baseload						
	Percent of Average Bill					
Poverty Range	0-50%	51-75%	76-100%	101-125%	126-150%	151%+
Under 75%	152.86	114.70	38.39	(37.93)	(114.24)	(152.40)
75% - 100%	290.39	229.34	107.24	(14.86)	(136.96)	(198.01)
100% - 125%	305.25	305.77	153.14	0.52	(152.11)	(228.42)
125% - 150%	213.68	267.09	145.63	(52.79)	(251.20)	(350.41)
Electric Space Heating						
	Percent of Average Bill					
Poverty Range	0-50%	51-75%	76-100%	101-125%	126-150%	151%+
Under 75%	226.35	168.38	52.44	(63.50)	(179.44)	(237.41)
75% - 100%	430.89	338.14	152.64	(32.87)	(218.37)	(311.12)
100% - 125%	463.75	451.31	219.43	(12.44)	(244.32)	(360.26)
125% - 150%	324.63	405.78	205.07	(96.36)	(397.80)	(548.52)

While the underpayment and/or overpayments may seem considerable at times, in fact, there is a reasonable policy question as to whether accepting such underpayments or overpayments is “reasonable” or not. Targeting energy efficiency investments at the customers with the highest bills, of course, can always reduce underpayments. Moreover, in no case does the actual bill burden differ from the affordable bill burden by more than 2% to 3%.

Moreover, one legitimate response to the presence of substantial underpayments is that, setting aside whether the tiered discount is *exactly* correct in its reduction of energy burdens to an affordable burden, 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 four percent (4%), paying six percent (6%) with the discount leaves the customer much better off than paying 40% without the discount.

²⁸ Similar tables have been prepared for natural gas bills in Maryland. They document similar results.

The fixed credit 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 much 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, for whatever reason,²⁹ the customer has a lower bill, he or she pockets the difference. If the customer has a higher bill,³⁰ 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 is established at the time a customer enters the program. Changes in weather or price will not result in increased program costs. 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.

Summary: Outside of these two major issues, the tiered discount should operate in much the same fashion as the fixed credit. No inherent differences exist. The tiered discount and the fixed credit are simply alternative ways of delivering benefits. The program remains basically constant.

As with the fixed credit, the tiered discount should be established as a tariffed rate. It should operate as any other tariffed rate. The significance of this is that credit and collection should be identical to any other residential tariff. The tiered discount is not a “program” which low-income customers can go “on” and “off.” If the low-income customer pays his or her tariffed rate under the tiered discount, they remain out of the collection cycle. In contrast, if the low-income customer does *not* pay his or her bill under the tiered discount, he or she goes into the same collection cycle as any other residential customer. The question of whether the mismatching of costs and benefits associated with the tiered discount program is “worth” the reduced administrative effort involved with individually determined fixed credits presents a quintessential policy question.

THE ARREARAGE MANAGEMENT COMPONENT.

The second critical component to a Universal Service 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

²⁹ Reasons might include warmer than normal weather that reduces heating bills, price decreases (e.g., commodity cost of natural gas), or energy conservation behavior by the customer.

³⁰ Reasons might include colder than normal weather that increases heating bills, price increases, or increases in energy consumption.

the customer remains on the Universal Service Program. 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 household is subject to service termination for *past due* bills incurred before the program began (known as preprogram arrears). In addition, it makes no sense to have current bills be affordable if the total bill is unaffordable due to payment obligations required to retire past arrears.

The recent (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") was necessary to help USF program participants successfully comply with the payment terms of USF bills. 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 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. As the Evaluation noted, "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 an effective coverage rate 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.

Distribution of Effective Coverage Rate by Net Energy Burden New Jersey Universal Service Program				
Net Energy Burden	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 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 31.1% 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 Universal Service Program. As percentage of income payment responsibilities increase, payment compliance decreases.

The Operation of an Arrearage Management Program Component

While some utilities simply forgive all arrears brought into a Universal Service 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.³¹ The program design in this report recommends an arrearage management period of three years. Arrearage credits are earned on a monthly basis.³²

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,³³ 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.

Second, from a policy perspective, program administrators have learned that the best “incentive” for making full and timely payments is to have customers taking service pursuant to the Universal Service Program be subject to the same credit and collection processes as all other customers. In addition, creating layer upon layer of “incentives” for payments clouds the fundamental underlying proposition. 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 Universal Service 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 Universal Service Program 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 mere suspension from the program. Nor does it

³¹ 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.

³² 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.

³³ When universal service programs were first designed, there was a tendency to think of credits toward preprogram arrearages as an “incentive” for low-income customers to make their current bill payments on a full and timely basis. That belief has since been largely abandoned.

result in mere loss of arrearage management credits. Nonpayment under the Universal Service Program will place the program participant in the collection process.

This program proposal recommends that Universal Service Program participants should make a monthly 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, universal service customers will bear some responsibility for their preprogram debt.³⁴

The requirement of a customer copayment toward a preprogram arrears, however, should not interfere with the underlying affordability goals of the Universal Service Program. Accordingly, rather than setting a customer copayment at some arbitrary dollar level, this proposal recommends setting the customer copayment level equal to a percentage of income. In this fashion, the payments toward preprogram arrears are explicitly tied to affordability considerations.

The proposed preprogram arrears customer copayment for this program is set equal to one percent (1%) of household income. The operation of such an approach, given assumed different levels of preprogram arrears is demonstrated in the table below. A household with an income of \$10,000 would make a 1% copayment over a two-year period ($\$10,000 \times 0.01 = \$100/\text{year} \times 2 \text{ years} = \200). Accordingly, if that customer had a pre-program arrears of \$600, the customer would receive an arrearage management credit of \$400 (\$600 arrears - \$200 copayment). A customer with an income of \$25,000 would make a copayment of \$500 over a two-year period. Accordingly, if that customer had a pre-program arrears of *less than* \$500, he or she would receive no arrearage management credit. If that customer had a pre-program arrears of \$600, the customer would receive an arrearage management credit of \$100 (\$600 arrears - \$500 copayment).

Operation of a Burden-Based Arrearage Management Customer Copayment							
Income	Copayment			Arrearage Management Credits by Level of Pre-Program Arrears /b/			
	Years of Copayment	Income Pct	Dollar Amt /a/	\$150	\$300	\$600	\$1,200
\$5,000	2	1%	\$100	\$50	\$200	\$500	\$1,100
\$10,000	2	1%	\$200	\$0	\$100	\$400	\$1,000
\$15,000	2	1%	\$300	\$0	\$0	\$300	\$900
\$20,000	2	1%	\$400	\$0	\$0	\$200	\$800
\$25,000	2	1%	\$500	\$0	\$0	\$100	\$700
\$30,000	2	1%	\$600	\$0	\$0	\$0	\$600

NOTES:

/a/ Years of payment x {income x income percent}.

/b/ Level of preprogram arrears minus dollar amount of copayment.

³⁴ 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.

In sum, five critical components of the proposed arrearage management component of a Universal Service Program are proposed above:

- Arrears are to be retired over a two-year period;
- Customers are to make copayments toward their arrears;
- Copayments are to be set equal to an affordable percentage of income (1% 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 Universal Service 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, for example, 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 customers taking service under the universal service 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.³⁵
- 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.

³⁵ For a general discussion of these income attributes, see, the discussion below concerning deferred payment plans.

Given these attributes of the target population, the crisis component of the Universal Service Program provides a budget to provide crisis intervention assistance on an as-needed basis.

Crisis intervention assistance should not be based on income eligibility such as that established for the rate affordability assistance. Crisis intervention is as frequently triggered by unusual expenses as 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.

In sum, four critical components of the crisis intervention component of a Universal Service 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 state crisis intervention programs.

COST RECOVERY

Two basic approaches can be used to collect funds for a Universal Service Program in Maryland:

- Collection on a volumetric basis; or
- Collection on a fixed fee basis.

The difference between the two approaches is easy to conceptualize. A volumetric approach imposes a charge that varies for each customer based upon the magnitude of the customer's consumption and bill. There can be variations within this volumetric approach: a per unit of energy (e.g., therm, kWh) charge and a percent of revenue charge are the two most common. At their heart, however, these charges are the same. They begin with the amount of funds needed to be collected and allocate that amount amongst customers based upon the amount of energy consumed. A residential customer using 14,000 kWh a year pays *more* than a residential customer using 8,000 kWh a year.

In contrast to the volumetric approach is a fixed fee structure. This approach 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 14,000 kWh annually pays the same fee that a residential customer using 8,000 kWh annually pays.

A Volumetric Cost Recovery

Maryland's electric customer classes and their respective consumption were as follows for 2004 (the last year for which data is available):

Electric Customers and Consumption by Customer Class		
Customer Class	No. Customers	kWh Usage
Residential	2,085,906	27,952,000,000
Commercial	224,292	17,264,000,000
Industrial	15,673	21,195,000,000
Total	xxx	66,411,000,000

Allocating the estimated cost of an electric Universal Service Program (\$99.3 million) over this usage base yields a per kWh charge of 1.494 mils per kWh.

Volumetric Allocation of Class Responsibility for Electric Universal Service Program (Maryland)			
Customer Class	Average Usage	Volumetric Rate	Average Annual Cost
Residential	1,352,326	\$0.001494	\$20
Commercial	76,971	\$0.001494	\$115
Industrial	13,400	\$0.001494	\$2,021

A similar process can be performed for a Maryland natural gas universal service program. The process yields a cost per therm of \$0.003495. The cost distribution by customer class is set forth in the following table.

Volumetric Allocation of Class Responsibility for Natural Gas Universal Service Program (Maryland)				
Customer Class	Average Usage	Volumetric Rate	Annual Cost	Monthly Cost
Residential	858	\$0.03495	\$30.00	\$2.50
Commercial	9,769	\$0.03495	\$341	\$28.45
Industrial	174,017	\$0.03495	\$6,082	\$507

While the average cost is as presented in this table, however, the actual cost per customer within any given customer class will vary based on the consumption unique to that customer. This would have

a particular impact on large industrial customers that rely heavily on electricity in their production processes.

A Meters Charge

The way to address that intra-class burden is to collect the class customer contributions through a fixed monthly meters charge rather than on a volumetric basis.³⁶ 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 120 CCF each month pays the same fee that a residential customer using 40 CCF pays.

A meters charge is structured to obtain a customer class 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. Moreover, by assigning costs on a per-customer basis rather than on a volumetric basis, the bulk of the program costs remains with the residential class.

Distribution of Universal Service Charges through Meters Charge (Maryland)

	Number of Customers	Monthly Meters Charge	Months in Year	Annual Meters Charge	Total Revenue
Electricity					
Residential	2,085,906	\$1.50	12	\$18	\$37,546,308
Commercial	224,292	\$9.00	12	\$108	\$24,223,536
Industrial	15,673	\$200	12	\$2,400	\$37,615,200
Total revenue					\$99,385,044
Total program cost					\$99,226,152
Annual Excess/(Deficit)					\$158,892
Natural Gas					
Residential	1,000,159	\$2.50	12	\$30	\$30,004,770
Commercial	71,229	\$27	12	\$324	\$23,078,196
Industrial	1,307	\$600	12	\$7,200	\$9,410,400
Total revenue					\$62,493,366
Total program cost					\$62,269,372
Annual Excess/(Shortfall)					\$223,994

³⁶ Calling such a charge a "meters" charge is perhaps a misnomer. The intent is to collect on a fixed fee basis per customer. If one customer has several meters at a single facility, a single charge is imposed.

As the table above shows, a meters charge in Maryland has several implications. The per customer cost responsibility, on average, does not differ sharply between the volumetric and meters charge approaches. On the electric side, the residential (\$18 vs. \$20), commercial (\$108 vs. \$115) and industrial (\$2,400 vs. \$2,021) charges are virtually identical between the volumetric charge and meters charge. On the natural gas side, the meters charge for industrial customers (\$7,200) is somewhat higher than is the volumetric charge (\$6,082). The residential volumetric charge (\$30), however, is identical to the meters charge (\$30), while the commercial volumetric charge (\$341) is virtually identical (\$324).

The comparison shows that the meters charge is designed to protect the large user within each class. Under a meters charge, the large user and small user within each class make the same payment of Universal Service Program cost responsibilities. The meters charge would be pursued for intra-class rather than inter-class cost allocation purposes.³⁷

Summary of Cost Recovery

Two ways exist through which to collect the funds needed to operate an effective and efficient low-income rate affordability program. Perhaps the easiest way to collect such funding from an administrative level is through a volumetric charge. While this provides inter-class equity, it is sometimes subject to the criticism that it unfairly treats large volume users within each class. The way to address that intra-class burden is to collect the class customer contributions through a fixed monthly meters charge rather than on a volumetric basis. As can be seen, the meters charge and the volumetric charge can be structured to allow the same customer class contributions to be achieved, and virtually identical per-customer contributions on average, while at the same time protecting high use customers within any given class from bearing a disproportionate burden of the universal service program payments.

³⁷ In addition, the meters charge is non-bypassable. While a volumetric charge can be avoided by reducing energy consumption, or by moving to transportation energy, a meters charge would not be subject to bypass or avoidance in this respect.

NOTES

PART 4:

LOW-INCOME ENERGY EFFICIENCY FOR MARYLAND

In contrast to rate affordability assistance, a second component to low-income energy solutions involves energy efficiency programs targeted to the poor. Efficiency investments can be an effective tool to use in reducing low-income energy needs for many, but not all, households. In fact, the plight of many of the households most significantly in need can be addressed through increased efficiency in usage. It is generally recognized that efficiency investments are a more effective means of addressing low-income energy needs over the long term than the distribution of fuel assistance. Energy efficiency provides continuing benefits year-in and year-out. Investments in residential energy efficiency help deliver efficient end-uses to consumers.³⁸

Energy efficiency recognizes the truism that Maryland's low-income households do not seek to consume energy. Instead, what they seek is to have light, hot water and space heating. If these end uses can be delivered using less energy, the needs of Maryland's low-income consumers will have been satisfied.

Maryland's natural gas and electric utilities should fund the direct participation of low-income customers in energy efficiency programs in response to high and unaffordable home energy bills. This recommendation for funding is supported by two observations. First, unless specifically funded, low-income consumers are systematically excluded from having access to energy efficiency investments. Second, low-income energy efficiency programs reduce the overall expenses of public utilities. Accordingly, there should be a state-mandated minimum amount of energy efficiency funding directed toward low-income customers. Each of the reasons supporting this conclusion is reviewed below.

Low-income energy efficiency programs should deliver a full range of efficiency services. These services would include, but not be limited to energy audits and air sealing, weatherization, insulation, heating and cooling system replacement with high efficiency equipment, hot water heater replacement, and appliance upgrades.

Given the positive role that cost-effective energy efficiency can play in reducing utility costs, while at the same time helping to improve the affordability of home energy to low-income customers, the State of Maryland should require utility-funded efficiency programs as part of the state's response to unaffordable home energy.

³⁸ However, for many low-income customers, energy efficiency cannot deliver affordable home energy service. Even the most efficient usage yields a bill that is unaffordable.

LOW-INCOME PROGRAMS HELP PREVENT THE EXCLUSION OF LOW-INCOME CUSTOMERS.

Without specific utility-funded programs, energy efficiency measures tend to be unavailable to low-income households. Low-income customers are systematically excluded from being able to use energy efficiency as a mechanism to control their home energy bills because of market barriers that are unique to low-income households.

Market barrier issues are of particular importance to the low-income community. In addition to market barriers common to all residential ratepayers, low-income households have market barriers that are different from, and more extensive than, residential households in general. The result of these market barriers is to more severely restrict the accessibility of energy efficiency measures to low-income households than to residential households in general.

An identification of market barriers common to residential customers generally is set forth below in the table below. An identification of the further markets barriers common to low-income residential customers in particular is set forth in the next table. These market barriers make clear that energy efficiency is often not available to low-income customers, even if efficiency would be an effective and efficient mechanism to use in controlling costs. Many efficiency investments are beyond the financial ability of low-income customers to implement. Other market barriers prevent low-income customers from being able to pocket the bill reductions generated by energy efficiency.

Without utility-funded efficiency programs, a variety of “market barriers” prevent the implementation of cost-effective energy efficiency investments by low-income households. Three illustrative “market barriers” are discussed in more detail below:

- **Discount Rates:** Low-income households tend to have extremely high implicit discount rates (also sometimes known as hurdle rates or internal rates of return). In a report for the Electric Power Research Institute (EPRI), Cambridge Systematics found that the implicit discount rate for low-income households ranged up to the 80 - 90 percent level, an implied payback period of roughly one year. Few energy efficiency investments have payback periods of one year or less.
- **Liquidity:** Low-income households tend to have extremely low liquidity. The payback period for any particular energy efficiency measure becomes irrelevant if the household does not have the investment capital with which to begin. The importance of this, for example, might lie with appliance replacements. It is generally cost-effective for a consumer to spend somewhat more money for a more energy efficient new appliance. In such a purchase decision, if a less efficient refrigerator costs \$600 and the more efficient refrigerator costs \$800, it may well be cost-effective for the customer to pay the \$200 difference to purchase the more efficient appliance. A reliance on such purchase decisions, however, will by definition exclude households that are not in the market to purchase a new refrigerator with which to begin. It is axiomatic to note that not many low-income households recently spent \$600 for a new refrigerator.

Market Barriers for Residential Customers Generally

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

Market Barriers Specific to Low-Income Consumers

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

- **Tenancy:** Low-income households tend to live in rental dwellings. This finding has significance in two respects for the design of accessible energy efficiency programs. 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, low-income tenants tend to be more mobile. Census data demonstrates quite clearly that, compared to the roughly twelve percent of the total population that changes residences each year, nearly one-quarter of the low-income population moves. As a result, even in those instances where a tenant may wish to invest in an energy efficiency measure, and assuming a financial ability (*e.g.*, sufficient liquidity) to do so, the payback period required to justify such an investment would need to match the household's tenure. A low-income household, in other words, will not invest in a measure with a two-year payback if that household intends to move to a different dwelling in 12 months.

The information and analysis presented above lead to the conclusion that the State of Maryland should require the implementation of energy efficiency programs directed specifically toward low-income customers. The State should require utility programs that will make energy efficiency measures available to low-income customers.

LOW-INCOME EFFICIENCY PROGRAMS HELP REDUCE OVERALL UTILITY EXPENSES.

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 systemwide 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.

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.

The existence of direct financial benefits to utilities arising from energy efficiency programs targeted specifically to low-income households has been recognized for nearly 20 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 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.³⁹

In this 1987 article, “bad debt” was a defined term, 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.

In sum, funding for low-income energy efficiency programs should be made available in the amount needed to make efficiency investments fully accessible to low-income residential customers. Where low-income consumers cannot access energy efficiency programs, Maryland’s utilities should spend additional funds to ensure that programs are fully accessible.

DETERMINING ELIGIBILITY FOR LOW-INCOME EFFICIENCY PROGRAMS

Determining the eligibility for participation in a low-income energy efficiency program has several components to it. On the one hand, eligibility should be determined based on income considerations. In addition, however, low-income efficiency programs should have a targeting component to them. A utility-funded efficiency program directed toward low-income customers should be explicitly targeted to help advance the resolution of payment troubles and improve the affordability of home energy in addition to simply reducing home energy usage.

Identifying Basic Income Eligibility.

Basic eligibility for low-income energy efficiency programs funded by Maryland’s electric and natural gas utilities should be set at 150% of the Federal Poverty Level. Use of the Federal Poverty Level for income eligibility purposes was discussed in detail above with respect to the rate affordability program.

Wherever an income eligibility line is drawn, however, there will be some households that have incomes marginally in excess of that line. It would be appropriate to set-aside a pre-determined proportion of low-income energy efficiency funding for households that have income marginally in excess of the income eligibility standard.

In addition to defining income eligibility, an equally important task is to define the population to which the low-income energy efficiency programs will be targeted even within the total eligible population.

³⁹ Roger Colton and Michael Sheehan (1987). “A New Basis for Conservation Programs for the Poor: Expanding the Concept of Avoided Costs,” 21 *Clearinghouse Review* 135, 139.

Targeting Based on Customer Characteristics.

Maximizing benefits to all utility customers, whether through reduced traditional avoided costs or through the reduction of costs associated with low-income payment troubles, is dependent upon an appropriate targeting of the low-income program. Two primary alternative decision rules exist to guide targeting a low-income efficiency program:

- To target those with the highest energy usage, believing that these households present the greatest potential for energy savings; or
- To target those with the greatest payment problems, believing: (a) that payment problems and high usage are positively associated; and (b) that these households present the greatest potential for improved energy affordability.

To a certain extent, the difference between the two principles is artificial if one accepts the premise that energy efficiency measures can not only generate traditional avoided costs, but can generate avoided costs associated with a reduction in payment troubles as well. It has become well-established over the years that payment-troubles are often associated with higher than average utility consumption. By targeting customers with payment troubles, in other words, a utility implicitly targets its high use customers as well.

The Pennsylvania Public Utility Commission (PUC) has explicitly considered this tie-in between high usage and payment-troubles and the use of each for implementation of the Pennsylvania Low-Income Usage Reduction Program (LIURP). The Pennsylvania PUC found as follows:

...we would like to clarify the distinction between LIURP eligibility criteria and the prioritization criteria for the receipt of program services. LIURP eligibility criteria has evolved into a two-part requirement. First, income must be at or below 150% of the federal poverty guidelines. There is an exception to this rule. Up to 20% of the LIURP budget may be spent on customers with an income level in the range 150% to 200% of the federal poverty level. Second, the LIURP experience over the past nine years has shown that high usage is the strongest predictor of high energy savings. Consequently, each of the major electric companies has established company specific minimum usage requirements for each of the three major job types for electric jobs: heating, water heating and baseload. The bottom line is that all income eligible customers do not have a usage profile that warrants the provision of LIURP services.

Prioritization for the receipt of program services is as follows. Most importantly, usage is the driver. Once again, we emphasize that in the actual delivery of LIURP services, each electric company has established minimum usage guidelines for each of the three electric job types. It is only after the usage requirement is met that the prioritization scheme is applied. The prioritization process follows two steps. First, among customers meeting the threshold for usage, participation is further prioritized from highest arrearage to no arrearage. Second, a further prioritization is

done to further delineate equal usage and equal arrearage candidates. This is done by prioritizing from lowest to highest income.

We have provided this explanation to illustrate that we do not need to specify negative ability-to-pay customers because ability to pay is neither an appropriate eligibility requirement nor a prioritization issue for LIURP. Instead, high usage is the most important eligibility requirement for customers who meet the income guidelines.

* * *

The primary goal of LIURP is to achieve bill reduction through usage reduction. We have elaborated above that high usage is the best indicator for achieving this primary goal of LIURP. Another LIURP goal states that the reduction in energy bills should decrease the incidence and risk of customer payment delinquencies and the attendant utility costs associated with uncollectible accounts expense, collection costs and arrearage carrying costs. In view of this program goal, arrearage prioritization has been appropriately listed as the first prioritization among the highest users.⁴⁰

The State of Maryland should use the above-quoted Pennsylvania PUC language to guide its pursuit of low-income energy efficiency. An identical two-step process (involving: (1) eligibility-setting; and (2) priority setting amongst eligible customers) should be adopted in Maryland.

- Basic income eligibility should be set at 150 percent of the Federal Poverty Level;
- Approval should be given for a modest set aside for customers with income marginally in excess of this income level;
- Prioritization should be directed toward the customers that are the highest users;
- Amongst equally-situated high users, if additional prioritization is necessary and appropriate, priority should be given to high users with the highest arrears. This second prioritization, however, should only be implemented given equally high usage.

⁴⁰ Pennsylvania Public Utility Commission, Re Guidelines for Universal Service and Energy Conservation Programs, No. M-00960890, 178 P.U.R.4 508 (July 11, 1997).

ESTABLISHING FUNDING TARGETS FOR LOW-INCOME ENERGY EFFICIENCY

One of the key questions, perhaps *the* key question that policymakers (legislators or regulators) must resolve in considering utility-funded energy efficiency programs is the proper funding of the low-income component. Conceptually, funding for low-income efficiency improvements should be the amount that is required to make energy efficiency programs fully accessible to low-income residential consumers. Where low-income consumers cannot access energy efficiency measures, the utilities should spend additional funds to ensure that programs are fully accessible.

Programs are fully accessible to the extent that the utility increases its low-income energy efficiency budget until the company exhausts its cost-effective measures, or until it exhausts the institutional capacity to deliver cost-effective measures, whichever comes first.

Increasing low-income energy efficiency funding until a utility exhausts its institutional capacity to deliver cost-effective measures is needed to ensure that there are no lost opportunities in any given year. Lost opportunities arise when the accomplishment of some given task precludes the future accomplishment of additional work at that same dwelling. One frequent source of lost opportunities involves the failure to exhaust the institutional capacity to deliver low-income energy efficiency measures. Assume, for example, that the institutional capacity of low-income service providers is 8,000 homes per year in a given utility service territory. These service providers might include local contractors, community-based organizations (CBOs) involved with delivering weatherization through the federal WAP program, and other for-profit or non-profit institutions. If the low-income energy efficiency budget can fund only 6,000 homes a year, there is a lost opportunity to increase the energy efficiency in 2,000 homes. By assumption, the maximum capacity is 8,000 homes per year. That capacity thus cannot be pushed to 10,000 for a year to “make up” the earlier lost opportunity.

As can be seen, one component of a utility low-income energy efficiency program is a periodic inventory of the institutional capacity to deliver low-income energy efficiency measures. The inventory should cover the planning period of the utility. If the utility files three-year energy efficiency plans with regulators, in other words, its inventory should include the existing and projected capacity to deliver low-income services over that three-year period. The budget for low-income energy efficiency should be sufficient to fund full utilization of the inventoried capacity. A periodic inventory is necessary because institutional capacity frequently mirrors the available resources. Institutional capacity to deliver cost-effective energy efficiency measures may, at the beginning of the program, be low because the resources have not previously been available to expand that capacity. If, however, a designated amount of resources is committed over a designated planning period, the capacity can be increased to allow full utilization of those resources.

While, in theory, a utility should continue to fund its energy efficiency programs until the programs’ marginal costs equal the marginal benefits, in reality, no such “full” funding is ever provided. States such as Pennsylvania have established a funding principle that low-income efficiency improvements should be capped at a certain level. The Pennsylvania cap of 0.20% of total company revenue for that state’s Low-Income Usage Reduction Program (LIURP) has

generated sufficient funding for low-income efficiency programs and should be adopted in Maryland.

In sum, the proposed decision rule is that funding for low-income energy efficiency improvements should be the amount that is required to make energy efficiency programs fully accessible to low-income residential consumers. Full accessibility is determined by whether utility funding is sufficient to ensure that there is no unused institutional capacity to deliver cost-effective low-income energy efficiency service over a reasonable program planning period. Stated another way, funding should be adequate such that no lost opportunities occur within the realm of cost-effective low-income energy efficiency. The local utility's low-income energy efficiency budget should increase until the company exhausts its cost-effective measures, or until it exhausts the institutional capacity to deliver cost-effective measures, whichever comes first. Pending the development of sufficient experience to determine what level of funding is needed to meet this "fully accessible" standard, Maryland should adopt the funding rule of its Pennsylvania neighbor, to set funding equal to 0.2% of total company revenues.

SUMMARY

In sum, the following critical components of the utility energy efficiency program are supported by the discussion above:

- Funding for low-income efficiency improvements should be the amount that is required to make energy efficiency programs accessible to low-income residential consumers. Where low-income consumers cannot access conservation techniques, the utilities need to spend additional funds to ensure that programs are fully accessible. "Accessibility" is to be determined by whether there are untapped cost-effective measures that can be implemented and whether the institutional capacity exists to deliver those cost-effective measures;
- Initial program funding should be set equal to 0.20% of total utility company revenues in Maryland. Experience over time will document the funding necessary to meet the full accessibility test.
- Efficiency investments should be targeted on the basis of high usage, but on the existence of payment troubles as well;
- A full range of energy efficiency services should be delivered, including but not limited to energy audits and air sealing, weatherization, heating and cooling systems, and appliance upgrades;
- Basic income eligibility should be set at 150 percent of the Federal Poverty Level. A designated proportion of total low-income funding should be set aside for households with incomes marginally exceeding the income eligibility guideline.

PART 5:

EFFICIENCY INVESTMENTS IN MARYLAND'S LOW-INCOME HOUSING PROGRAMS

While Maryland's public utilities should be required to help fund low-income energy efficiency programs --not only as a cost-effective supply-side option to providing utility service, but as an effective tool through which to address overall affordability problems-- the State's affordable housing programs should be required to play their role as well.

The days in which public funds --whether they be federal, state or local dollars-- are used to construct or substantially rehabilitate energy *inefficient* housing should be brought to a close in Maryland. Maryland policymakers, either legislative or regulatory, should require that housing units constructed or rehabilitated with public subsidies, including private dollars generated through the federal Low-Income Housing Tax Credit Program, be developed, at a minimum, to Energy Star standards.

HUD'S STRONG ENERGY EFFICIENCY POLICY

The U.S. Department of Housing and Urban Development (HUD) has a strong policy promoting an awareness of the impact that energy costs have on the affordability of housing and the need to take proactive steps to address unaffordable home energy bills. As HUD Deputy Secretary Alphonso Jackson testified before Congress, "with the announcement of the President's National Energy Policy we now have the necessary framework for promoting increased energy efficiency in housing. HUD is committed to giving this issue the priority it deserves to make sure we make significant progress in conserving energy in housing." Testimony to U.S. House of Representatives, Financial Services Committee, June 20, 2001.

HUD followed that policy statement with specific action-steps. In April 2002, HUD approved a Department-wide Action Plan with 21 items. Action Step 6 of the Energy Action Plan commits HUD to "provide technical assistance to encourage energy efficiency when using HOME and CDBG funds." HUD began to award Priority rating points for energy efficiency in the FY 2005 SuperNOFA. Energy was included in HUD's FY 2004-2005 Annual Performance Plans.

THE NEED FOR STATE OF MARYLAND ACTION

Even though there is a strong HUD *policy* favoring energy efficiency in affordable housing developments using federal funds, the need for *action* lies at the state level. Three action steps need to be taken at the state level.

- A consideration of energy affordability in the Consolidated Plans submitted to HUD by participating jurisdictions;

- A requirement that all housing units either constructed or substantially rehabilitated with state or federal dollars be, at a minimum, constructed to Energy Star standards; and
- A requirement that all housing units constructed with federal Low-Income Housing Tax Credits (LIHTC) be, at a minimum, constructed to Energy Star standards.

Energy Affordability and the HUD Consolidated Plan

State governments (and other jurisdictions receiving funding through HUD each year) are required to periodically submit a Consolidated Plan to HUD. This Consolidated Plan is charged with presenting a discussion of four different issues with respect to affordable housing with the participating jurisdiction:

- Identifying affordable housing needs within the jurisdiction;
- Discussing the housing market within the jurisdiction;
- Identifying barriers to affordable housing within the jurisdiction; and
- Identifying and ranking action steps.

The most recent Maryland Consolidated Plan submitted to HUD discussed the U.S. Department of Energy’s Weatherization Assistance Program (WAP) as an affordable housing strategy. Through the federal WAP program, dollars are made available to audit and retrofit existing low-income housing units. The Maryland Consolidated Plan reported that the State expected to receive roughly \$14.25 million over a five year period, and to treat roughly 7,400 housing units over that five year period, through the federal WAP program.

What the Consolidated Plan failed to address, however, was the efficiency of housing units newly constructed, or substantially rehabilitated, using state and/or federal affordable housing dollars.

Given the tremendous adverse impacts that unaffordable home energy has on the residents of affordable housing, the energy data presented throughout this report should be used as a direct input into the Consolidated Plan not only of the state, but of other participating jurisdictions as well.⁴¹ Information should include the following at a minimum:

1. **Price data:** Local price data should be reported for each participating jurisdiction. Price data should be reported for both major heating fuels (*e.g.*, natural gas, fuel oil, electricity) and electricity.

⁴¹ A “participating jurisdiction” might include local communities that receive direct funding from HUD as an “entitlement community.” Many local communities that are not large enough to receive “entitlement community” funding receive funding through “local consortiums.” Each participating jurisdiction must file a Consolidated Plan.

- **Heating fuel price data:** Each Consolidated Plan should include the January price of the major heating fuels in that jurisdiction⁴² for the past three years. The January price would provide a heating season price for the fuels. Obtaining a three-year trend would allow the Consolidated Plan to identify the extent to which, if at all, fuel prices have demonstrated a substantial fly-up. Prices should be reported on a per-unit-of-energy basis (kWh of electricity, therm of utility natural gas, gallon of LPG/fuel oil/kerosene).
 - **Electric price data:** Each Consolidated Plan should include the July price of electricity for the past three years. The July price would provide a cooling season price for the fuels. Obtaining a three-year trend would allow the Consolidated Plan to identify the extent to which, if at all, electric prices have demonstrated a substantial fly-up during the cooling season.
2. **Energy efficiency in affordable housing development:** Having set forth the price data within the jurisdiction, each Consolidated Plan should then seek to “operationalize” the connection between affordable energy and affordable housing through the Consolidated Plan. The Consolidated Plan should include two sets of data with respect to the energy efficiency characteristics of affordable housing development.
- **Energy Star in new/rehabbed homes:** The Consolidated Plan should report the number of affordable housing units, either newly constructed or substantially rehabbed within the past 36 months, using a local, state or federal subsidy source, that were Energy Star-rated. This information is intended to provide information on the extent to which new and rehabbed affordable housing units are being built to minimally acceptable energy efficiency standards.
 - **Units with “weatherization potential”:** The Consolidated Plan should finally report an estimate of the number of affordable housing units, currently supported with a local, state or federal subsidy source, that have “weatherization potential.” Such potential would arise based on the age and physical condition of a structure, as well as prior energy efficiency investments. A newly rehabbed home, produced to Energy Star standards, in other words, would presumably *not* be a unit with weatherization potential. A home that has been weatherized through the Department of Energy’s (DOE) Weatherization Assistance Program (WAP), or through a utility demand side management (DSM) program (or some combination thereof) would not be a home with weatherization potential. The Consolidated Plan discussion would be limited to units supported with some type of public subsidy source. It is not intended to be a discussion of all low-income housing units in a jurisdiction.

⁴² The penetration of heating fuels by housing tenure (i.e., homeownership, rental) is reported in the U.S. Census.

3. **Strategies to reduce energy consumption:** Finally, in addition to the data reports recommended above, the Consolidated Plan should include in its narrative strategic plan sections a narrative discussion of how the jurisdiction will address the issues surfaced through the data above. In particular, the Consolidated Plan should include a narrative discussion of the strategies that the jurisdiction intends to use to: (1) reduce energy consumption in affordable units subsidized with local, state or federal assistance; and (2) to protect residents of affordable units subsidized with local, state or federal assistance, from high, increasing, or volatile home energy prices as identified above. Each of these three characteristics (high, increasing, volatile) presents its own issues and thus needs separate discussion. Energy prices could exhibit any one (or more) of them.⁴³ Prices could be high but stable. Prices could be substantially increasing (e.g., utility natural gas prices, electric prices). Prices could be extremely volatile year-to-year (e.g., fuel oil, propane prices).

The discussion of energy issues recommended above is neither complex nor burdensome to participating jurisdictions. Requiring Consolidated Plan preparers to exhibit familiarity with energy prices and bills, as well as the consumption characteristics/efficiency potentials, within the affordable housing market subsidized by public funds, is not an unreasonable minimum burden to place upon these providers of housing.

Energy Star and Publicly-Supported Affordable Housing Units

Homeownership and rental units developed either as new construction or substantial rehab by grantees or participating jurisdictions (PJs) should be developed to Energy Star standards. Energy Star is a system for achieving and verifying a certain level of performance with respect to energy efficiency. An Energy Star home is at least 30% more energy efficient than a comparable home built to meet the 1993 Model Energy Code (MEC).⁴⁴

As HUD has noted, these savings will increase as the cost of energy continues to rise. HUD has recommended that all grantees and participating jurisdictions (PJs) incorporate the following language into any Request for Proposals (RFP) or procurement process: “All new buildings and gut rehab shall be designed to meet the National Energy Five Star efficiency performance standard of 86. All procedures used for this rating (86) shall comply with National Home Energy Rating System guidelines.”

Maryland should require that all future affordable housing RFPs or housing procurement, benefit distribution, or development processes in the State, using state or federal funds under the jurisdiction of the Maryland Department of Housing and Community Development, incorporate HUD’s recommended Energy Star language. The requirement should be placed not only into the

⁴³ These are different tasks. Reducing energy consumption occurs through building to an Energy Star rating, for example. In contrast, protecting households against high, increasing, or volatile prices might arise by including the first several years of utility bills in the financing of the home (or some variation on this theme).

⁴⁴ Each five percent increase in efficiency results in one point on the Energy Rating above 80. A home that is built to meet the 1993 MEC, in other words, has a rating of 80. A home that is five percent more efficient has a rating of 81. A home that is 30% more efficient has a rating of 86 and qualifies as an Energy Star home.

State Consolidated Plan, but also into the State Qualified Allocation Plan (QAP) for federal Low-Income Housing Tax Credits as well.

THE IMPACTS OF ENERGY EFFICIENCY IN AFFORDABLE HOUSING

The construction of affordable housing units to Energy Star standards will have positive impacts on both developers and residents of those housing units. If the affordable housing development is a rental community, the construction to Energy Star standards will not only protect renters against the volatility in energy bills, but will protect developers from having cash-flow diverted to the payment of higher energy prices. If the affordable housing development is a homeownership community, the construction to Energy Star standards will not only protect the homeowner against volatility in prices, but will also, even at constant prices, save the homeowner substantial money over the life of an energy efficiency measure.⁴⁵

The *affordability* impacts of energy efficiency measures, along with the impacts on public utilities as public utilities, have been discussed in more detail above. The impacts that energy efficiency in affordable housing programs might have on environmental degradation and global warming are beyond the scope of this discussion.

Impacts on the Production of Housing Units

Quite aside from the impact that increasing energy prices/bills/burdens have on low-income households in Iowa is the impact that those increasing energy prices/bills have on the affordable housing programs supported by HOME and/or CDBG funds. The increase in prices not only makes “affordable housing” less affordable, but it makes it less possible to produce affordable housing units with which to begin.

This comment is made in light of Maryland’s discussion of the “barriers to affordable housing” in the most recent state Consolidated Plan. Maryland’s DCHD stated:

A widely recognized, yet difficult to overcome barrier to affordable housing in Maryland is the lack of adequate financial resources. Although nationally recognized for its innovative and effective housing programs, DHCD still has inadequate resources to meet the need for affordable rental and homeownership housing. Like all state, the need for increasing revenue for housing has to compete with other legitimate public priorities, such as education, transportation, health and welfare.⁴⁶

⁴⁵ See, Roger Colton (April 2003). *Energy Efficiency as an Affordable Housing Tool in Colorado*, Colorado Energy Assistance Foundation: Denver (CO). (In order to generate the same dollar savings as would be generated by energy efficiency investments, consumers would need to have interest rate reductions of between 22 and 45 basis points. Energy efficiency yields positive cash flows—with the savings from reduced energy bills more than offsetting the cost of the efficiency investments-- beginning in Year 1.)

⁴⁶ *Maryland Consolidated Plan*, at 78, Maryland Department of Housing and Community Development (Annapolis, MD).

The sentiment expressed in this paragraph is appreciated. The increasing energy prices faced by residential consumers today, however, represent a direct threat to the ability of DHCD to produce affordable housing units even with its existing resources. Consider how one developer described the impacts of energy price increases in California:

Because publicly funded low-income housing operates with legal affordability restrictions, the combination of past and anticipated utility rate hikes is dramatically limiting borrowing capacity. * * * [W]ith increasing utility rates, either tenants can pay less rent or property owners have to pay higher energy costs. Either way, net operating income declines. As a consequence, developments can afford to support less debt financing, creating a gap in the development budget. * * * [O]n a statewide level [in California], this situation is increasing the amount of scarce public funding required per project, thereby reducing the total number of affordable units that can be built.⁴⁷

The statement made by Mr. Herald and Mr. Shoemaker is a truism, which is equally applicable to Maryland. “[W]ith increasing utility rates, either tenants can pay less rent or property owners have to pay higher energy costs. Either way, net operating income declines.” Accordingly, the total number of affordable units that can be built decreases.

Impacts on the Affordability of Housing Units

In addition to reducing the number of affordable housing units that can be produced each year in Maryland, increasing home energy prices affects the underlying affordability of housing programs as well. While data has not been developed specific to Maryland, information from Colorado looking specifically at this issue is instructive. Working with affordable housing data first provided by the Colorado Division of Housing, Department of Local Affairs, that Colorado analysis concluded that “it is evident, that on a statewide basis, the cost of utilities has a substantial detrimental impact on the provision of affordable housing.” After an extensive quantitative analysis of utility and housing data in Colorado, the Colorado study concluded that the:

. . . relationship between home energy bills and affordable housing payments will have four impacts on the housing market:

- It will reduce the “affordable sales price” of single family homes. As a result, fewer units of housing will be available to Colorado households with lower incomes (80% or 60% of median).
- It will freeze some lower income households out of the housing market altogether, because they have insufficient income to pay all homeowner cost components (principal, interest, taxes, insurance, utilities).

⁴⁷ Mike Herald and Doug Shoemaker, “How the Energy Crisis Affects Affordable Housing: An Overview of the Problem,” Property Compliance Report (July 2001).

- It will force lower income homebuyers into less expensive homes. These houses will be less desirable, even though more affordable, because they are smaller, or lower quality, or in less desirable locations.
- It will increase the risk of default by consumers. Payments based on tightly stretched incomes are more subject to disruption due to unexpected expenses (housing or otherwise) or temporary disruptions in income.⁴⁸

That 2003 analysis concluded:

In sum, while it may seem self-evident that considering utility costs reduces the affordability of housing in Colorado, and thus reduces the number of affordable housing units that would be available to low-income families, the *magnitude* of the impact is disturbing. Not only will some low-income households be frozen out of the market altogether because they cannot afford both the rent and mortgage payments, but those households who remain in the market for home buying opportunities will be chasing fewer affordable units.

Exactly the same observations and conclusions would be true in Maryland. Given the data presented above with respect to increasing energy prices in Maryland, the impacts of energy prices on frustrating affordable housing goals in Maryland are increasing rather than decreasing or staying the same.

SUMMARY OF RECOMMENDATIONS

The State of Maryland should bring an end to the era of condoning energy inefficiency in the construction and rehabilitation of affordable housing units in the state.

The lack of attention paid to energy efficiency in affordable housing development generates not only home energy affordability problems for the tenants and owners of such units, but has adverse impacts on the housing programs themselves. In an era of substantially increasing prices for both electricity and home heating fuels, the impacts on reducing the number of affordable housing units that are available as well as increasing payment troubles within the population of households living in these units, support the conclusion that the State should consider the relationship between housing and energy affordability and take affirmative steps to bring the two together.

The State of Maryland should mandate a documentation of the interaction between housing and energy costs in its state affordable housing planning documents. It should require that affordable housing units developed with public support, including private financing supported by federal Low-Income Housing Tax Credits, comply with energy efficiency standards.

⁴⁸ Roger Colton (2003). *Energy Efficiency as an Affordable Housing Tool in Colorado*, at 6, Colorado Energy Assistance Foundation (CEAF): Denver (CO).

NOTES

PART 6:

HELPING THE WORKING POOR: DEFERRED PAYMENT PLANS IN MARYLAND

As natural gas and electric prices experience substantial increases in Maryland, it is reasonable for state policymakers to consider the response of the state's utilities to consumers who find themselves in payment difficulties (whether or not there are specific low-income programs to address the underlying affordability of energy bills). While the sections above discuss the policy responses necessary for low-income households that simply cannot afford their home energy bills, state policymakers should consider, also, their responses to households that are often marginally able, but only marginally able, to pay their bills: the working poor.

Whatever the form of the winter protections, when those protections end with the arrival of spring, a multitude of marginally low-income customers face the prospect of paying off accrued arrears or losing their utility service altogether.⁴⁹ With high electric bills joining high natural gas bills and a sagging economy in Maryland, it is more critical than ever to develop appropriate policies to allow winter arrears to be paid by these households. A failure to do so not only places the dollars of arrears in jeopardy of non-collection, but it places the payment of future bills in jeopardy as well. One alternative to the springtime disconnection of service is for a customer to make a downpayment on his or her arrears and enter into a reasonable deferred payment plan.

Standard regulations adopted by Maryland 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" is, however, often treated as being synonymous with "level of income." If a household's income is sufficiently high,⁵⁰ 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, however, 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 discussion below considers how this facet of ability to pay might affect the administration of a deferred payment plan for utility arrears. The failure to address the specific needs of the working poor are likely to leave these customers, quite literally, out in the cold. These customers do not have income sufficiently high to ensure payment of their

⁴⁹ A study by the National Fuel Funds Network, and other national energy groups, found that at the end of the 2000/2001 winter heating season, at least 4.3 million low-income households were at risk of having their utility service cutoff because of an inability to pay their winter home energy bills. National Fuel Fund Network, et al. (June 2001). *The Cold Facts*, at 1, National Fuel Fund Network: Washington D.C.

⁵⁰ While the question of what income is "sufficiently high" is explicitly set aside for purposes of this discussion, the reader can gain guidance from the determination of what constitutes a "livable wage." *Working Hard—Earning Less*, National Priorities Project: Northampton: MA.

(<http://www.natprior.org/grassrootsfactbook/jobgrowth/jobgrowth.html>). Further guidance can be gained from a review of self-sufficiency budgets. A calculation of self-sufficiency standards for Maryland can be found at the World Wide Web site of Wider Opportunities for Women. <http://www.sixstrategies.org/resources/resources.cfm>

bills. They do not have income sufficiently low to qualify their households for rate affordability or energy efficiency assistance (nor do they need such assistance).⁵¹ As a result, the State of Maryland should ensure that these customers have a reasonable opportunity to retire winter arrears through appropriate payment plans.

INCOME STABILITY AND ABILITY TO PAY

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. 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.

This income attribute of working poor households has been recognized in a variety of contexts. The instability of income has been found to be a barrier to effective budget counseling. The evaluation of one asset-building program, for example, reported that “staff and participants thought the budgeting worksheet. . . became obsolete almost immediately because participants’ incomes were very unstable.”⁵² One major barrier to savings and asset accumulation by working poor households involves their “irregular incomes.”⁵³ One barrier to the long-term accumulation of assets has been found to be the “recurring crises,” such as unemployment, which force working poor households to deplete their savings.⁵⁴ Individuals have been found to view saving and systematic budget planning as not worthwhile because of the inability to predict income and labor-market conditions.⁵⁵

The fragility of income in working poor households is caused by several well-recognized, and just as well-documented, factors. Amongst these factors is the prevalence of lower quality, hourly-wage jobs with variable working hours. Another primary factor involves the absence of paid leave. Both of these factors are discussed in more detail below.

Reductions in Hours

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 that characterize the working poor. The table below shows the difference in occupations between working poor families and non-poor

⁵¹ This is not a function of where the eligibility line is drawn. Wherever the line demarcating maximum eligibility is drawn, there will be some number of households that are “just over” that line.

⁵² Dianne Lazear (September 1999). *Implementation and Outcomes of an Individual Development Account Project*, at 12, Center for Social Development, Washington University: Saint Louis (MO).

⁵³ See e.g., David Smyth (1993). *Toward a Theory of Savings*, in James Gapsinski (ed.). *The Economics of Savings*, at 47 – 92, Kluwer Academic Publishers: Boston; Franco Modigliani (1986). “Life cycle, individual thrift, and the wealth of nations,” *American Economic Review*, 76(3): 297-313.

⁵⁴ Cathleen Finn, et al. (1994). “Assets and Financial Management Among Poor Households in Extreme Poverty Neighborhoods,” *Journal of Sociology and Social Welfare*, 21(4):75-94.

⁵⁵ Arthur Kennickell, Martha Starr-McCluer, and Annika Sunden (1997). “Saving and Financial Planning: Some Findings from a Focus Group,” *Financial Counseling and Planning*, 8(1):1-8.

families in 1996.⁵⁶ Even aside from the level of wages,⁵⁷ the presence of hourly wages and unpredictable hours mark occupations that are the province of the working poor. Three times as many working poor families (as compared to non-poor families) are in service occupations (11.5% vs. 4.1%) and laborer occupations (11.5% vs. 4.1%), while nearly twice as many working poor (compared to non-poor) families have workers who are in operator/transportation occupations (18.9% vs. 11.1%).

Percent of Non-Elderly Persons by Occupation of Primary Earner		
	All Families: Poor	All Families: Non-Poor
Professional/managerial/technical	15.1%	43.3%
Sales	8.6%	10.2%
Clerical/administrative support	9.9%	8.5%
Service	20.1%	7.4%
Craft/repair	15.8%	15.4%
Operators/transportation	18.9%	11.1%
Laborers	11.5%	4.1%

Persons working in these occupations often face periods of lost wages. The U.S. Department of Labor refers to periods of lost wages caused by a reduction in hours as “involuntary part time employment.” Involuntary part time workers are persons who in at least one week of the year worked fewer than 35 hours because they could not find full-time work. A full 60% of these workers experienced their cutbacks in hours due to slack work or business conditions.

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 the nature of that work, to simply *assume* that the income of a working poor household at any given point in time will continue unabated to support payment plan payments is to ignore one major attribute of the ability to pay of a working poor household.

The Impact of Paid Leave Benefits

A second factor contributing to the instability of income of the working poor involves the paid leave benefits provided. The absence of paid vacation and sick leave can directly affect the ability of a household to maintain a deferred payment arrangement over time. One researcher for the Institute for Women’s Policy Research (IWPR) reports:⁵⁸

⁵⁶ Acs, Gregory, Katherin Ross Phillips and Daniel McKenzie (May 2000). *Playing by the Rules but Losing the Game*, at 10 – 11, Urban Institute: Washington D.C.

⁵⁷ The median hourly wage of primary earners in working poor families (\$7.55) is less than half the median wage of primary earners in families with incomes above 200% of poverty (\$16.67).

⁵⁸ The principal data sources for the IWPR research include primary and secondary data from the U.S. Department of Labor’s National Longitudinal Survey of Youth (NLSY), the Survey of Midlife in the United States, the Urban Working Families Study, and the National Daily Diaries Study.

Low-income workers often have few or no workforce benefits, like paid leave or flexible schedules that are essential if workers are to meet the needs of their family members. Paid leave would make it economically possible for workers to spend time away from work in order to address their family's needs. Flexibility would allow workers to meet with teachers, care for sick or disabled family members, and deal with emergencies without having to miss work or go without wages. . . Without flexibility in their work schedules or access to paid leave, workers have no choice but to take unpaid leave when family or medical emergencies occur.⁵⁹

The IWPR found 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 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. (emphasis in original).

Low-income families are also less likely to have flexible work schedules. Among low-income parents, 78 percent have jobs that offer no flexibility at all. The majority of workers beneath the median income level say they cannot choose or change their starting and quitting times, or take days off to care for their sick children.⁶⁰

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 the illness keeps a worker away from his or her job for a day, for two days, or for a week.

The lost wages attributable to the lack of paid leave for the working poor is not theoretical. Data from the U.S. Department of Labor shows that absence rates in occupations where the working poor tend to work are from 50% to 60% higher than the absence rates in occupations populated by their higher income counterparts.⁶¹ Absence rates for higher income occupations are lower because time missed from work covered by paid leave is not counted as an "absence."

⁵⁹ Jody Heymann (October 2001). *The Widening Gap: A New Book on the Struggle to Balance Work and Caregiving*, at 3, Institute for Women's Policy Research: Washington D.C.

⁶⁰ *Id.*

⁶¹ U.S. Department of Labor, Bureau of Labor Statistics, *January 2001 Employment and Earnings*, at Table 27, Department of Labor: Washington D.C.

IMPLICATIONS FOR “ONE-STRIKE-YOU’RE-OUT” PAYMENT PLAN POLICIES

In recognition of the fragility of the incomes by low-income households, Maryland should revise the state’s “one-strike-you’re-out” policy on deferred payment plans by which arrears may be retired. Maryland utilities have a policy providing that once a customer negotiates a deferred payment plan, the customer is not entitled to a second or renegotiated plan if the first one is breached. What this policy implicitly assumes is a constant, predictable, stream of income over time, some portion of which can be earmarked for the repayment of utility arrears. If, however, a customer is an hourly wage employee without leave, something as commonplace as a sick child requiring parental care can compromise the customer’s ability to make agreed-upon payments. In such a case, the one-strike policy fails to take into account the fragility of the working poor customer’s income stream.

Moreover, something as common as short-term periods of involuntary part time employment may threaten the ability of a customer to maintain agreed-upon payments. As the above discussion shows, these situations—lost wages due to family care responsibilities or involuntary part time employment—not only “may” happen to the working poor, but can reasonably be expected to happen. Strict application of a one-strike-you’re-out policy is unreasonable in light of this aspect of ability to pay.

SUMMARY OF RECOMMENDATIONS

In applying payment plan policies, Maryland’s utilities and their regulators should take into account the income fragility of hourly wage employees who face unstable incomes and who lack paid leave time and flexible work schedules. The failure to comply with agreed-upon deferred payment arrangements may frequently be due to this fragility rather than due to an unwillingness to maintain agreed-upon payments. As utilities face another round of winter-end arrears this spring, Maryland utilities and their regulators should adopt policies and procedures that will reasonably allow working poor families to communicate, and have considered, *all* aspects of their ability to pay in an effort to negotiate and successfully maintain deferred payment arrangements.

In particular, Maryland should abandon its strict one-strike-you’re-out policy on deferred payment plans. Maryland should instead adopt policies allowing for the negotiation of subsequent payment plans when good faith effort at compliance can be demonstrated.⁶²

⁶² The Iowa Utilities Board (IUB) regulations requiring subsequent payment plans are considered by many to be a model set of regulations. The IUB regulations provide for a second payment plan when a customer makes a good faith effort at payment on the initial payment plan. According to the IUB, “a customer who makes two consecutive full payments—a payment being the total of the monthly payment amount for the past due bill and the current month’s bill—on a first payment agreement has demonstrated a good faith effort to pay for utility service.”

NOTES

PART 7:

UTILITY LATE CHARGES IN MARYLAND

Given substantial increases in natural gas and electric prices today, it is time for the State of Maryland to assess the efficacy of late payment charges imposed on residential customers. The need for, and benefits from, late fees need to be clearly established for such fees to be continued.

Maryland natural gas and electric utilities impose late payment fees that disproportionately (and adversely) affect low-income customers throughout the state. Fees of 1.5% a month (18% a year) can no longer be justified, particularly given their adverse impact on low-income customers. With the recent fly-up in both natural gas and electric prices, not only do higher proportions of low-income 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 due to conscious choices to pay other bills prior to paying home energy bills, which choices will be affected by the utility late payment charge.

THE LEVEL OF THE LATE FEE RELATIVE TO ITS PURPOSE

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. A late fee imposed as a means to gain that compensation is appropriate for neither.

Out-of-Pocket Collection Expenses

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. Of those expenses that are not directly paid to the utility in specific service fees, ratepayers pick up the costs through their general rates.

Maryland utilities, however, tend to overcharge their late payment fees by imposing such charges prematurely. Given the fact that late payment charges are intended 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. Accordingly, if a utility has set a past due date of the 30th day after a bill is rendered, with a penalty and interest charge levied for all unpaid amounts outstanding after that date, 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.

In addition to timing, Maryland utilities operate under a minimum arrears below which the companies do not begin any collection activity. Under such circumstances, charging a late payment fee immediately after the bill payment due date charges the customer for expenses the utility has not yet incurred.

Nor are late charges appropriate in circumstances where collection activities have been suspended. Such circumstances might include when customers enter into payment plans through which to retire arrears, where a utility operates under a winter shutoff restriction (whether imposed by company policy or by state regulatory policy), where collections have been restricted due to the presence of medical emergencies, and the like. Given the fact that a late charge is designed to compensate the utility for out-of-pocket collection expenses, and given the fact utility regulations result in the suspension of collection activities, to charge a late fee would be to compensate the utility for expenses never incurred.

The Carrying Cost of Money

A second cost component that Maryland's utilities are entitled to collect through their late payment fees involves the carrying cost of money. Any effort to justify utility late payment charges as a mechanism through which to be compensated for the carrying costs of money faces an immediate fundamental flaw. To set an arbitrary date on which a utility will begin to impose a 1.5% per month carrying cost has no rational basis. The carrying costs of money do not begin on the day after a residential bill is due. A customer that pays one day "late" does not impose significantly higher carrying costs on a utility than a customer that pays one day "early."

Even if one accepts, solely *arguendo*, that uncompensated carrying costs begin on the day after a billing due date,⁶³ a monthly late payment charge of 1.5% is not necessary to compensate a utility for those carrying costs. A simple model shows the extent of the overcharge by utility late charges. The model assumes, for purposes of analysis, that a utility has 300 residential customers each of who has a monthly bill of \$100. The model further assumes that an equal number of customers make their monthly bill payments on each day of the month relative to the due date (*i.e.*, 1/30th of all the customers make a payment each day).

This model shows the amount of the overpayment collected by a utility's 1.5% late fee relative to the carrying costs the utility would actually experience. By Day 30 of that first month after the due date (*i.e.*, the month in which the late fee is first imposed), the late fee revenue will have reached \$45 while the cumulative carrying costs have reached only \$23.25. The utility, in other words, has collected nearly 200% of its carrying costs. If average bills are smaller, the ratio increases. In fact, however, the mismatch is even greater than is discussed above. As can be seen, allowing a utility to impose a late fee on residential customers is not needed to cover costs. Late fees instead represent a substantial profit center.

⁶³ Carrying costs, of course, are the result of a complex calculation of lead days and lag days. To assert that a late fee is needed to compensate the Company for carrying costs after the due date is to posit that no lag days occurring after the due date have been included in the most recent lead/lag study. That is a questionable proposition at best.

In sum, the late fees imposed by Maryland utilities cannot be justified as a mechanism to compensate those utilities for the carrying costs of late payment. The late fee bears no relationship to any carrying costs incurred by the state's utilities. Assuming that an equal number of customers pay each day, the late fees imposed by Maryland utilities generate roughly 200% of the carrying costs incurred by those companies (assuming that the embedded cost of capital is 1.5% per month).

The Level of the Late Fee Relative to Incentives

Utility late payment charges are often supported not as a means to gain compensation for expenses, but rather as a means to induce prompt payments on the part of customers. Since this rationale has been proffered, two inquiries should be pursued:

- Are utility late payment charges an effective inducement in the prevention of nonpayment; and
- Does the particular *level* of Maryland's late payment charges bear any relation to an acceleration in payment dates.

The conclusion that Maryland's late payment fees disproportionately and adversely affects low-income customers cannot reasonably be debated. The basis for reaching this conclusion largely rests with information generated in the energy utility industry. As discussed in detail above, national and state data supports the conclusion that payment-troubled customers are disproportionately low-income. National data reported by the U.S. Census Bureau indicates that the proportion of households in arrears at any given point in time is substantially higher for the low-income population than for the population as a whole. One 1995 census study, for example, reported that while 9.8% of non-poor families could not pay their utility bills in full, 32.4% of poor families could not do so. According to the Census Bureau, 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.⁶⁴ As described in detail above, this nonpayment occurs because of an inability to pay, not because of a choice to use utility bill nonpayment as a money management technique.

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.⁶⁵ According to this FRB staff

⁶⁴ U.S. Census Bureau, *Extended Measures of Well-Being: 1992*, P70-50RV (November 1995).

⁶⁵ Ana 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).

analysis, few low-income customers have credit cards and fewer still carry credit card balances. The FRB reports that only 30.3% of households in the bottom 20% of income (the bottom quintile) hold credit card balances. 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.

Using a late payment charge is effective when nonpayment occurs as a money management technique. Clearly, however, low-income households do not withhold payments toward their utility bills in order to gain a higher return by devoting their resources to alternative uses. Low-income households do not pay because they cannot afford to pay. Increasing their bill will thus provide no inducement to make prompt payments. Indeed, seeking to create an incentive to make prompt payments by making unaffordable bills even higher is not only ineffective, but also ultimately counterproductive. If nonpaying households do not pay because they cannot pay, it is no remedy to impose penalties that increase the bill even further.

SUMMARY OF LATE FEE RECOMMENDATIONS

Late payment charges do not have the same justification in today's high cost environment that they may have had at points in the past. Particularly when customers are struggling to pay unaffordable bills, it is inappropriate to respond to those struggles by imposing non-cost-based late charges that have little effect other than to increase the bill further. Accordingly, Maryland policymakers (either regulatory or legislative) should adopt the following modifications in Maryland's late charge policies:

- In situations where Maryland utilities operate under a winter moratorium or other similar winter protections, late charges should be suspended or reduced on a seasonal basis.
- Late charges should be suspended for any arrears made subject to a payment plan.
- Late charges should be suspended on any arrears subject to non-collection attributable to any regulatory process or regulation;
- Late charges should only apply to arrears greater than a minimum amount. That amount should be set equal to the level at which the utility begins to collect through the disconnect process.
- Late charges should only apply after an account becomes past due 60-days;
- Late fees should be waived for identified low-income customers. Low-income customers documenting their participation in any one of the following programs should be exempted from late charges: (a) the Low-Income Home

Energy Assistance Program (LIHEAP); (b) the telecommunications Lifeline program; (c) the federal free and reduced school breakfast/lunch program; (d) Temporary Assistance to Needy Families (TANF); (e) Medicaid; (f) Food Stamps; (g) Supplemental Security Income (SSI); (h) public or subsidized housing (e.g., Section 8); (i) Supplemental nutrition program for Women, Infants and Children (WIC); or (j) Pharmaceutical Assistance to the Aged and Disabled (PAAD).

NOTES

PART 8:

ADDITIONAL FUEL ASSISTANCE IN MARYLAND

As Maryland struggles to address the home energy affordability problems associated with increasing electric and natural gas prices, state policymakers should pay particular attention to avoid leaving potential resources on the table. The discussion below identifies two sets of resources that the State of Maryland should capture for low-income energy assistance.

- Escheated utility deposits;⁶⁶ and
- Federal utility allowances to tenants of public and assisted housing.

ESCHEATED DEPOSITS

The discussion below explains why Maryland should adopt a policy that directs unclaimed utility deposits into low-income crisis assistance and/or weatherization programs. The discussion documents how low-income households are more likely to post utility cash security deposits and to have those deposits held over time. It further documents how the mobility of low-income Maryland residents is substantially higher than that of Maryland residents generally, with the accompanying higher potential for abandoned and unclaimed deposits. The following discussion is broken into three separate sections:

- An exploration of how the application of typical utility creditworthiness criteria based on income yields an increased incidence of deposits within the low-income population;
- A documentation of the increased mobility of low-income households in Maryland, and by extension, an increased potential for the abandonment of a deposit;
- An introduction of the concept of *cy pres*, devoting unclaimed monies to a use which closely reflects, or which advances, the reason why the monies were collected in the first instance.

Posting Cash Security Deposits

Low-income households are less likely to meet the standards of creditworthiness adopted by Maryland utilities to govern whether to impose and hold a cash security deposit on new customers. Typical credit standards adopted by Maryland utilities setting forth how to establish “satisfactory credit,” include in general terms:

⁶⁶ While the discussion below examines escheated deposits, the same analysis would be applicable to utility rate refunds.

- Whether the customer owns his/her premise or is otherwise a property owner; or
- Whether the customer has other credit references from a commercial establishment; or
- Whether the customer has a satisfactory payment record from a reasonably recent prior customer relationship with the company.

In lieu of these credit standards, a customer may be required to post a cash security deposit.

Low-income households are less likely to be homeowners in Maryland. The relationship between homeownership and income has long been accepted. In Maryland, while the median income of a homeowner is \$64,860 (nearly 25% higher than the statewide median income of \$52,640), the median income of a renter is \$32,351, nearly 40% below the statewide median income.

The relationship between income and homeownership status is clearly demonstrated in the table below. While between 55% and 70% of all Maryland households with annual incomes less than \$15,000 are renters, fewer than 15% of Maryland households with incomes of \$75,000 or more are renters. As the table below shows, 67.5% of all Maryland households with annual incomes below \$5,000 are renters, while 67.3% of Maryland households with incomes between \$5,000 and \$10,000 are. In contrast, 92.3% of all Maryland households with income above \$150,000 are homeowners, while 89.7% of households with income between \$100,000 and \$150,000 are.

Table 1: Tenure by Income Level (Maryland)

Household Income	Owner	Renter	Total by Income	Owner	Renter
Less than \$5,000	19,326	40,123	59,449	32.5%	67.5%
\$5,000 - \$9,999	25,897	53,370	79,267	32.7%	67.3%
\$10,000 - \$14,999	36,378	47,732	84,110	43.3%	56.7%
\$15,000 - \$19,999	41,577	47,652	89,229	46.6%	53.4%
\$20,000 - \$24,999	48,841	50,892	99,733	49.0%	51.0%
\$25,000 - \$34,999	110,958	101,380	212,338	52.3%	47.7%
\$35,000 - \$49,999	190,962	114,710	305,672	62.5%	37.5%
\$50,000 - \$74,999	318,213	107,066	425,279	74.8%	25.2%
\$75,000 - \$99,999	224,279	42,754	267,033	84.0%	16.0%
\$100,000 - \$149,999	205,818	23,729	229,547	89.7%	10.3%
\$150,000 or more	118,985	9,857	128,842	92.3%	7.7%
Total	1,341,594	639,265	1,980,859	67.7%	32.3%

SOURCE: 2000 Census, Table HCT 11 (State of Maryland).

Low-income households are also more likely to have bad credit reports from merchants. One reason for this, however, is that low-income households are more likely to face non-credit problems with merchandise than their higher income counterparts. It has been found that low-income consumers frequently acquire poor credit ratings by refusing to complete payments on installment purchases of defective or shoddy merchandise. According to one study, 35 percent of the debtors in default who were studied "gave reasons for their default that implicated the creditor in varying degrees."⁶⁷

According to this study, "by far the largest category of credit-related reasons consists of allegations of fraud and deception. Nineteen percent mentioned such wrongdoing by the seller as part of the reason for their default, and for 14 percent of all debtors, it was the *primary* reason." (emphasis added).⁶⁸ Among the problems experienced by low-income households included defective merchandise coupled with breach of both express and implied warranties, the delivery of wrong or "used" merchandise, the failure to deliver all merchandise ordered, and deceptive pricing practices.⁶⁹ As can be seen, low-income Maryland residents are more likely to face "bad" credit reports not only because of their inability always to stretch limited incomes to pay for outstanding obligations, but also because of creditor-related reasons associated their poverty status.

Finally, low-income households tend to be disproportionately payment troubled. As discussed in detail in Part 1 of this report, the national data, along with the state data that is available (Maryland-specific data is not available), documents that low-income households are from two to three times more likely to be payment-troubled than the general population. As a result of these payment problems, not only will low-income customers more likely be required to post deposits with which to begin, but low-income customers will be less likely to have deposits refunded to them once they are posted.

The purpose of the discussion above is not to question the deposit-taking practices of Maryland utilities. Rather the purpose is simply to note that low-income households are likely to be disproportionately represented in the population of utility customers being required to post cash security deposits. By extension, therefore, it is likely that unclaimed utility deposits are disproportionately likely to originate from low-income Maryland utility customers.

Abandoned Cash Security Deposits

Maryland law requires utilities to treat unclaimed deposits as "unclaimed property" to escheat to the state after a statutorily prescribed waiting period. During that waiting period, the utility is charged with refunding the deposit to any person lawfully making a claim thereon. There is little question but that the mobility of households that lead to the abandonment of utility deposits is likely to be concentrated in the low-income community.

⁶⁷ David Caplovitz, *Consumers in Trouble: A Study of Debtors in Default*, at 91 (MacMillan Publishing: 1974).

⁶⁸ *Id.*

⁶⁹ *Id.*, at 92.

Low-income households, overall, have a much higher mobility than do households in general.⁷⁰ The median duration of residence for people overall is 5.2 years. This means that half of all persons have lived in their current home for a longer period and half have lived in their current home for a shorter period. There are, however, significant differences between various populations. People who rent their homes tend to live in their residence for a shorter time than homeowners--a median duration in their current residences of 2.1 years, compared with 8.2 years for people living in owner-occupied housing units.⁷¹ Indeed, nearly one-third of people living in renter-occupied housing units in March 2003 moved in the previous year (30.7%), while in contrast, only 1-in-14 people in owner-occupied housing moved during the same period (7.4%).⁷² Finally, as discussed above, low-income households are disproportionately renters.

Mobility directly relates to income. The most recent direct measurement of this by the Census Bureau uses 1996 data (published in 2002). That analysis reported:

Those with higher incomes tended to stay in one location longer than those with lower incomes. In 1996, the median duration of residence for those living in households with income of \$75,000 or more was 6.3 years, compared with 3.6 years for those living in households with income of less than \$25,000. Over 20 percent of those living in households with income less than \$25,000 lived in their current residence less than one year, compared with just 13 percent of those living in households with income of \$75,000 or more.⁷³

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 households more likely be called upon to post cash security deposits, but low-income households will also more likely be amongst those households that are likely to lose their deposits because of their mobility.

Statutory Escheats and the Cy Pres Doctrine

A legal doctrine referred to as the cy pres doctrine provides the state with the conceptual basis to earmark unclaimed utility deposits for low-income weatherization and crisis assistance programs. The cy pres doctrine is particularly used in those situations where the persons who are entitled to a distribution of damages change constantly as well as where the persons who are entitled to a distribution of damages are difficult to identify. In a situation where these factors exist, creation of a cy pres trust fund is appropriate. Utility refunds have been singled out as particularly appropriate for cy pres treatment.⁷⁴

⁷⁰ The annual Census reports based on the Current Population Survey document this conclusion. See, e.g., Current Population Survey (March 1999), Geographical Mobility: 2002 to 2003, Detailed Tables, at Tables 11, 12, 17.

⁷¹ Kristen Hansen (October 1998). Seasonality of Moves and Duration of Residence, Current Population Report P70-66, U.S. Department of Commerce, Economics and Statistics Administration: Washington D.C.

⁷² Jason Schacter (March 2004). Geographical Mobility: Population Characteristics, Current Population Report P20-549, U.S. Department of Commerce, Economics and Statistics Administration: Washington D.C.

⁷³ Jason Schacter and Jeffrey Kuenzi (December 2002). Seasonality of Moves and the Duration and Tenure of Residence: 1996, U.S. Census Bureau, Population Division: Washington D.C.

⁷⁴ 2 Newberg and Conte, Newberg on Class Actions, Section 10.17 at 10-44, 10-45, and Market Street Railway v. Railroad Commission, 171 P.2d 875, 881 (Cal. 1946), cert. denied, 329 U.S. 793 (1946).

Indeed, the Practising Law Institute writes about cy pres awards:

Respondents unanimously agreed that cy pres remedies are appropriate to ensure that undistributed residues are used to provide indirect benefit to absent members of the plaintiff class or to further the purposes of the statutes that formed the basis for the underlying litigation. This view is supported by the case law. *Bebchick v. Public Utilities Commission* (D.C. Cir.) (en banc) cert. denied 373 U.S. 913 (1963) approved use of the funds collected in an invalid fare increase for the benefit of those who paid it, that is, those who use that transit system. A fund was created in this non-class case to be used by the Commission to benefit transit users in any pending or future rate proceedings or to cover costs which might otherwise lead to an increase in fares, or aid in determining whether fares should be reduced.⁷⁵

While unclaimed utility deposits are clearly not “damages” in a class action litigation, the principle articulated in the cy pres cases remains applicable nonetheless. The policy is stated clearly as follows:

The cy pres doctrine arose in the law of trusts. The doctrine allows bequeathed monies to be applied to a next-best use in situations where the testator had a general charitable intent and a specific bequest cannot be effectuated.

Using a similar rationale under the fluid recovery procedure, the undistributed residue of a class action damages or settlement fund may be used to provide indirect benefit to members of the plaintiff class who are not available to receive their pro rata share. Fluid recovery provides a means of disgorging ill-gotten gains by such mechanisms as price rollbacks, cy pres awards, or other devices that put undistributed funds to a next best use for the benefit of the class.

Because class members in some appreciable numbers will die, will move during the pendency of a case, or otherwise cannot be found at the time of distribution, there will almost always be an undistributed residue of the damages or settlement fund.⁷⁶

Again, while unclaimed deposits are not the result of litigation, the applicability of the underlying doctrine to unclaimed utility deposits seems clear. Moreover, the use of unclaimed deposits for purposes of rate assistance is applicable as well. One commentator explains:

The method of cy pres or fluid recovery most appropriate in consumer class actions is the consumer trust fund. A consumer trust fund remedy operates either by endowing a new project or by funding an existing private program. A consumer trust fund 'achieves the cy pres purpose most closely' for several reasons. It can be structured to serve the purposes of the underlying litigation,

⁷⁵ Stephen Gardner, “National Association of Consumer Advocates Standards and Guidelines for Litigating and Settling Consumer Class Actions,” 772 *CLI/Comm* 441, 469 – 470 (1998).

⁷⁶ Patricia Sturdevant, “Using the Cy Pres Doctrine to Fund Consumer Advocacy,” 33 *NOV-Trial* 80 (1997).

thus avoiding the uncertainties of earmarked escheat or general escheat; it avoids the market disruption of price rollbacks; and most importantly, consumer trust funds can be structured to serve all the members of the class, regardless of their sophistication or socioeconomic status. The benefit takes the form of increased services to, or protection of rights of the entire class, which is preferable to limiting benefits only to those who successfully complete a claim.⁷⁷

In creating such a fund from unclaimed deposits, it would not be accurate to say that the cy pres fund proposed for the distribution of unclaimed utility deposits would go to benefit only low-income customers. Instead, the fund would be used as a supplemental source of revenue that would help low-income customers pay unaffordable bills and help Maryland utilities avoid the economic and business problems associated with the need to terminate service for nonpayment. In the absence of the fund, the costs associated with nonpayment would be allocated to all customers served by the utilities.⁷⁸

Summary of Recommendation

Section 17-303 of the Maryland Code should be amended to allow utility deposits and rate refunds to be captured for low-income energy assistance rather than have such funds escheat to the state. Section 17-303 currently states as follows:

The following funds held by any utility are presumed abandoned:

- (1) Any deposit made by a subscriber with a utility to secure payment for, or any sum paid in advance for, utility services to be furnished in the State, less any lawful deduction, that has remained unclaimed by the person who appears on the records of the utility as entitled to it for more than 3 years after the termination of the services for which the deposit or advance payment was made;
- (2) Any sum which a utility has been ordered to refund and which was received for utility services rendered in the State, together with any interest on it, less any lawful deduction, that has remained unclaimed by the person appearing on the records of the utility as entitled to it for more than 3 years after the date it became payable in accordance with the final determination or order providing for the refund; and
- (3) Any sum paid to a utility for a utility service, which service has not been rendered within 3 years of the payment.

For all the reasons discussed above, the funds now covered by Section 17-303 should be used for low-income energy assistance purposes.

⁷⁷ Gail Hillebrand and Daniel Torrence, "Claims Procedures in Large Consumer Class Actions and Equitable Distribution of Benefits," 28 Santa Clara Law Review 747, 766 (1988).

⁷⁸ While the discussion above relates to abandoned deposits, the rationale would apply equally to abandoned rate refunds as well.

ENFORCING 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.⁷⁹ In addition, private housing developed with the assistance of the federal Low-Income Housing Tax Credit (LIHTC) program is governed by the 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).⁸⁰ 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.⁸¹ 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.⁸²

Federal Regulatory Requirements

A utility allowance is set by the local Public Housing Authority. Pursuant to federal regulations, each PHA is supposed to review (and revise where appropriate) its utility allowance on an *annual* basis.⁸³ In addition, under federal law, each PHA is supposed to adjust its utility allowance whenever there is a rate change of 10% or more.⁸⁴ Local Public Housing Authorities however, frequently ignore these “requirements,” (and low-income tenants simply do not have the resources to constantly challenge PHA inaction).

⁷⁹ While other miscellaneous types of assisted housing exist, as well, to which this analysis applies, the bulk of “assisted housing” is Section 8 housing.

⁸⁰ 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%.

⁸¹ If the tenant has a rent of \$250 and a utility allowance of \$150 per month, the rent is reduced to \$100.

⁸² If the utility allowance exceeds what the tenant would pay in rent, the excess is, in fact, paid to the tenant in cash.

⁸³ 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.”)

⁸⁴ 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.”

A utility allowance is paid by a local Public Housing Authority. HUD then reimburses the PHA for these payments. While a local PHA is required to file its utility allowances with HUD, there is no formal HUD review and approval process.

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.”⁸⁵ 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.⁸⁶

Despite the legal constraints identified above, local Public Housing Authorities often set utility allowances so as to substantially *underpay* 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 the inadequate and outdated 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.⁸⁷ 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.

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 and space heating, not simply home heating (or cooling);
- Unlike LIHEAP, utility allowances are intended to pay the *entire* bill of a tenant, not merely some portion of it.

⁸⁵ 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.”

⁸⁶ *Dorsey v. Housing Authority of Baltimore City*, 984 F.2d 622, 629 (1993).

⁸⁷ 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.

The Proposed State Remedy

The State of Maryland 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.⁸⁸ While they are independent local authorities, it is not inappropriate 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 and electric 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 Maryland Department of Housing and Community Development (DHCD) 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 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 Department of Housing and Community Development 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.
- Any tenant affected by the failure of a PHA to promulgate or revise a utility allowance may, upon complaint to DHCD, seek DHCD review of whether a PHA has complied with requirements that utility allowances be adequately promulgated and updated. Upon finding that a PHA has not adequately promulgated and/or updated a utility allowance, DHCD shall promulgate utility allowances for the PHA effective immediately going forward as well as effective retroactive to the date on which such utility allowance should have been placed into effect.

⁸⁸ Maryland Code, Art. 44A, Sections 1-101, et seq. (2006).

REQUIRED UTILITY FUEL FUND CHECK-OFF

Private fuel funds can be an important source of energy assistance for Maryland'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 affordability assistance provided through a Universal Service Program, 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

Even with a fully-funded state Universal Service Program, low- and moderate-income households 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. For example, the "fragility" of household income was discussed in detail in other parts of this report. 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 include simple protections against month-to-month financial fluctuations such as a small savings account.

The recent Georgia REACH program⁸⁹ 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.⁹⁰

⁸⁹ The REACH program is a component of the federal LIHEAP office. REACH is the acronym for **R**esidential **E**nergy **A**ssistance **C**hallenge grant.

⁹⁰ Roger Colton (April 2006). *Georgia REACH Project Energize: Final Impact Evaluation*, at 19 - 20, Georgia Department of Human Services: Atlanta (GA).

One of the primary interventions by the case management approach funded in Georgia through the REACH programs involved “helping households create a savings plan, develop a money management plan, and apply for a Lifeline banking account in response to the lack of savings that would help in times of income or expense exigencies.”⁹¹

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 need 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 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:

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.⁹²

Fuel Fund Checkoff Programs by Public Utilities

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 \$2.6 million in the 2003/2004 program year. The natural gas programs assisted nearly 7,800 households. In addition, the Pennsylvania electric hardship fund programs generated disbursed more than \$3.2 million in 2003/2004 and helped nearly 11,900 households. Electric benefits distributed through the state’s hardship funds averaged \$270, while the average natural gas benefit reached nearly \$300.

⁹¹ Id., at 25.

⁹² Bureau of Consumer Services (2005). *2004 Report on Universal Service Programs & Collections Performance*, at 53, Pennsylvania Public Utility Commission: Harrisburg (PA).

Every natural gas and electric utility in Pennsylvania is required to operate a hardship fund.⁹³ So, too, are Iowa utilities required to solicit fuel fund contributions through a hardship fund. The Iowa statute, for example, provides in relevant as follows:⁹⁴

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.⁹⁵

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.”⁹⁶ The Iowa law has been reasonably successful at generating fuel fund contributions. In 2003, fuel fund contributions through these “customer contribution funds” assisted more than 4,400 households with nearly \$650,000 in benefits.⁹⁷

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,⁹⁸ evidence a company’s ability to bring outside resources to bear in helping resolve low-income customers’ payment troubles. The State of Maryland should adopt legislation akin to that adopted in Iowa. All Maryland utilities should engage in the solicitation and distribution of fuel fund contributions.

⁹³ 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.

⁹⁴ Additional language in the statute concerns the operation of the “customer contribution fund.”

⁹⁵ Iowa Code Annotated, Section 476.66 (2006).

⁹⁶ Section 476.66(7).

⁹⁷ Proposals have been made to centralize the solicitation of funding, and the distribution of benefits, through a single statewide entity for Iowa’s small utilities. Of the \$646,000 in fuel fund distribution in 2003, \$560,000 came through Iowa’s investor-owned utilities; \$61,000 came through Iowa’s municipal utilities; and \$26,000 came through Iowa’s Rural Electric Cooperatives. Of the 4,413 households receiving assistance, 3,527 were assisted through IOU fuel funds.

⁹⁸ Aggressive utility solicitation of fuel fund contributions involve not only seeking funds from utility customers, but also solicitation of fuel fund contributions from employees, investors, suppliers, vendors, and contractors providing goods and/or services to the company.

PART 9:

SUMMARY OF RECOMMENDATIONS FOR MARYLAND

The information and analysis discussed above leads to the following recommendations for the State of Maryland. Each of these recommendations was discussed in more detail above:

1. The State of Maryland should, through either regulatory or legislative action, should establish a natural gas and electric Universal Service Program directed toward households with income at or below 150% of the Federal Poverty Level. This program should consist of three components:
 - A rate affordability component
 - An arrearage management component
 - A crisis intervention component
2. The State of Maryland should, through either regulatory or legislative action, establish a low-income energy efficiency program. The program should be directed toward households with income at or below 150% of the Federal Poverty Level, with a set-aside for households between 150% and 200% of Poverty. The low-income energy efficiency program should deliver a full range of efficiency services, including, but not be limited to, energy audits and air sealing, weatherization, insulation, heating and cooling system replacement with high efficiency equipment, hot water heater replacement, and appliance upgrades. A minimum funding stream equal to 0.2% of revenue should be established.
3. The State of Maryland should require, through either regulatory or legislative action, that any participating jurisdiction submitting a Consolidated Plan to the U.S. Department of Housing and Urban Development (HUD) as part of its responsibilities under federal housing programs include designated discussions of energy affordability as part of that Consolidated Plan.
4. The State of Maryland should require that all affordable housing newly constructed, or substantially rehabbed, in whole or part with state or federal funds, including federal Low-Income Housing Tax Credits (LIHTC), should be constructed, at a minimum, to Energy Star standards.
5. Maryland should abandon its strict one-strike-you're-out policy on deferred payment plans. Maryland should adopt policies allowing for the negotiation of subsequent payment plans when good faith effort at compliance at the initial plan can be demonstrated.

6. The State of Maryland should, through either legislative or regulatory action, adopt the following modifications in Maryland's utility late charge policies:
 - In situations where Maryland utilities operate under a winter moratorium or other similar winter protections, late charges should be suspended or reduced on a seasonal basis.
 - Late charges should be suspended for any arrears made subject to a payment plan.
 - Late charges should be suspended on any arrears subject to non-collection attributable to any regulatory process or regulation;
 - Late charges should only apply to arrears greater than a minimum amount. That amount should be set equal to the level at which the utility begins to collect through the disconnect process.
 - Late charges should only apply after an account becomes past due for 60 days;
 - Late fees should be waived for identified low-income customers. Low-income customers documenting their participation in any one of specified low-income public assistance programs should be exempted from late charges.
7. The State of Maryland should, by legislation, commit unclaimed utility deposits and rate refunds now escheating to the State general fund pursuant to Section 17-303 of the Maryland Code to a Low-Income Energy Assistance Trust Fund rather than have such funds escheat to the general fund of the State. This Trust Fund should be used for energy efficiency and/or crisis intervention assistance.
8. The State of Maryland should, through either regulatory or legislative action, commit a designated percentage of utility rate case refunds to a Low-Income Energy Assistance Trust Fund rather than have those rate refunds returned to customers that may not have paid them in the first instance. A 20% set-aside of rate refunds is reasonable.
9. The State of Maryland should, through either regulatory or legislative action, take affirmative steps to ensure compliance with federal laws regarding the promulgation and/or updating of utility allowances to tenants of public and assisted housing.
 - The State of Maryland shall require public utilities placing rate changes into effect to give specific notice of such rate changes to all PHAs within their service territory, along with notice of the effective date of such rate change.

- The State of Maryland shall implement a state-level procedure that provides for annual state review of PHA compliance with federal requirements that utility allowances be promulgated and updated.
 - The State of Maryland shall provide a regulatory review process through which PHA tenants may, by complaint, seek to enforce federal regulatory requirements that utility allowances be promulgated and updated.
10. Maryland, through legislative action, should adopt statutory language mirroring language in Iowa, which mandates that all electric and natural gas utilities adopt a fuel fund contribution mechanism through which customers, residential and non-residential alike, may make voluntary contributions. This statutory language should require that Maryland utilities make periodic solicitations of these voluntary contributions.