State Report – Maryland

This Appendix furnishes detailed information for Maryland, including:

- Statistical Overview – Key characteristics for Maryland households and housing units.
- Needs Assessment – Statistics for Maryland low-income households and estimates of the need for energy affordability and energy efficiency programs.
- Legal and Regulatory Framework – A description of the legal and regulatory framework for low-income programs and identification of any legal or regulatory barriers to program design enhancements.
- Low-Income Affordability Programs – Information on Maryland's existing publicly funded affordability programs, the ratepayer-funded affordability programs targeted by this study, and an assessment of the share of need currently being met.
- Affordability Program Evaluation – A summary of the available evaluation findings regarding the performance of Maryland's ratepayer-funded affordability programs.
- Energy Efficiency Programs – Information on Maryland's publicly funded energy efficiency programs and the ratepayer-funded energy efficiency programs targeted by this study.
- Energy Efficiency Program Evaluation – A summary of the available evaluation findings regarding the performance of Maryland's energy efficiency programs.

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I. Statistical Overview

Maryland is the 19th largest state in terms of population. It is relatively wealthy (3rd in median family income in 2005) and has a relatively low poverty rate (50th in individuals below poverty). An important challenge for low-income households in Maryland is the high cost of living. In 2005, the median housing value was $280,200 and the median rent was $891.

Most housing units (82%) in Maryland are heated with regulated fuels, predominantly natural gas (46%). Gas prices are relatively high, 15% above the national average. In 2005, electric prices were 11% below the national average. However, recent changes have significantly process in the state. The weather is slightly cooler than the national average in both the winter (4,848 heating degree days compared to the national average of 4,524) and summer (1,026 cooling degree days compared to the national average of 1,242). Households are most at risk from the cold during the months of November through March, and are most at risk from the heat during the months of June to August.

The following population and housing statistics were developed using data from the 2005 American Community Survey (ACS).

Population Profile

Total Population	5.5 million
Individuals 65 and Over	0.6 million (11%)
Individuals Under 18	1.4 million (25%)
Individuals 5 & Over Who Speak a Language Other than English at Home	0.7 million (13%)
Individuals Below Poverty	8% (50th nationally)

Household Profile

Total Households	2.1 million
Median Household Income	$61,592 (2nd nationally)
Homeowners	
Total Homeowners	1.4 million (69%)
Median Value	$280,200 (8th nationally)
Median Housing Burden	21%
Renters	
Total Renters	0.6 million (31%)
Median Rent	$891
Median Rental Burden	28%

The following energy statistics were derived from a number of sources, including the 2005 American Community Survey (ACS), the Energy Information Administration's (EIA) supplier data collection, and NOAA's National Climatic Data Center (NCDC).

Energy Profile

Home Heating Fuel (Source: 2005 ACS)	
Utility gas	46%
Electricity	36%
Fuel Oil	14%
Other	5%
2005 Energy Prices (Source: EIA)	
Natural gas, per ccf	$1.480
Electricity, per kWh	$0.0844
Fuel oil, per gallon	$1.906
Weather (Source: NCDC)	
Heating Degree Days	4,848
Months of Winter (i.e., average temperature below 50°)	5
Cooling Degree Days	1,026
Months of Summer (i.e., average temperature above 70°)	3
Days with Temperatures Over 90°	30

[Note: Updates are available for energy prices and weather for 2006. Population statistics updates for 2006 will be available in August 2007.]

II. Profile of Low Income Households

Maryland policymakers have chosen to target the publicly funded and ratepayer-funded low income programs at households with incomes at or below 175% of the HHS Poverty Guideline. For 2005, the income standard for a one-person household was about $16,750 and the income standard for a four-person household was about $33,863. For the analysis of low-income households in Maryland, we will focus on households with incomes at or below 175% of the HHS Poverty Guideline.

Table 1 furnishes information on the number of Maryland households with incomes that qualify them for the LIHEAP program and the ratepayer-funded programs. About 14% of Maryland households are income-eligible for these programs.

Table 1
Eligibility for Ratepayer Programs (2005)

Poverty Group	Number of Households	Percent of Households
Income at or below 150%	286,187	14%
Income above 150%	1,800,307	86%
ALL HOUSEHOLDS	2,086,494	100%

Source: 2005 ACS

Tables 2A and 2B furnish information on main heating fuels and housing unit type for Maryland low-income households. Table 2 shows that about 45% of low-income households use natural gas as their main heating fuel. Table 3 shows that 38% of low-income households are in buildings with 5 or more units. Many multiunit buildings use electric space heating rather than natural gas or fuel oil. About 52% of low-income households live in single family homes, while 8% live in buildings with 2-4 units. Very few households (2%) live in mobile homes.

Table 2A
Main Heating Fuel for Low-Income Households (2005)

Main Heating Fuel	Number of Households	Percent of Households
Electricity	108,555	38%
Fuel Oil	37,737	13%
No fuel used	924	0%
Other Fuels	11,420	4%
Utility Gas	127,551	45%
ALL LOW INCOME	286,187	100%

Source: 2005 ACS

Table 2B
Housing Unit Type for Low-Income Households (2005)

Housing Unit Type	Number of Households	Percent of Households
Boat, RV, Van, etc	61	0%
Building with 2-4 units	23,390	8%
Building with 5+ units	108,107	38%
Mobile Home	6,584	2%
Single Family	148,045	52%
ALL LOW INCOME	286,187	100%

Source: 2005 ACS

About 286,000 Maryland households are categorized as low-income. However, only those households that directly pay an electric bill or a gas bill are eligible for the Maryland ratepayer-funded programs. Table 2C shows that about 84% of low-income households directly pay an electric bill and that about 46% of low-income households directly pay a gas bill.

Table 2C
Low-Income Households
Direct Payment for Electric and/or Gas Bill (2005)

Poverty Group	Number of Households	Percent of Households
Electric Bill – Direct Payment	241,503	84%
Gas Bill – Direct Payment	131,259	46%
ALL INCOME ELIGIBLE	286,187	100%

Source: 2005 ACS

Tables 3A and 3B show the distribution of electric bills and burden for low-income households that do not heat with electricity and reported electric expenditures separately from gas expenditures.[1] Table 3A shows the distribution of electric expenditures for households that do not have electricity as their main heating fuel and Table 3B shows the electric energy burden.[2] Among these households, about 56% have electric bill that is less than $1,000 per year while about 24% have an annual electric bill of $1,500 or more. Electric energy burden is less than 5% of income for about 27% of these households, while it is greater than 15% of income for 29% of households.[3]

[1] The ACS allows respondents who have a combined electric and gas bill from one utility to report the total for both fuels. Those households are not included in these tables.
[2] Electric energy burden is defined as the household's annual electric bill divided by the household's annual income.
[3] About 13% of households have their electric usage included in their rent. These households have a nonzero electric energy burden, since part of their rent is used to pay the electric bill. However, since there is no way to measure the share of rent that is used to pay the electric bill, electric energy burden is unknown for these households.

Table 3A
Electric Bills for Low-Income Households without Electric Heat (2005)

Electric Bill	Number of Households	Percent of Households
$1 to less than $500	31,822	24%
$500 to less than $1,000	43,162	32%
$1,000 to less than $1,500	25,597	19%
$1,500 or more	32,327	24%
TOTAL	132,908	100%

Source: 2005 ACS

Table 3B
Electric Burden for Low-Income Households without Electric Heat (2005)

Electric Burden	Number of Households	Percent of Households
0% to less than 5%	35,329	27%
5% to less than 10%	40,261	30%
10% to less than 15%	19,105	14%
15% or more	38,213	29%
TOTAL	132,908	100%

Source: 2005 ACS

Tables 4A and 4B show the distribution of electric bills and burden for low-income households that heat with electricity. Table 4A shows the distribution of electric expenditures and Table 4B shows the electric energy burden. Among these households, about 46% have an electric bill that is less than $1,000 per year while about 32% have an annual electric bill of $1,500 or more. Electric energy burden is less than 5% of income for about 19% of these households, while it is greater than 15% of income for 37%.

Table 4A
Electric Bills for Low-Income Households with Electric Heat (2005)

Electric Bill	Number of Households	Percent of Households
$1 to less than $500	14,561	17%
$500 to less than $1,000	24,224	29%
$1,000 to less than $1,500	17,723	21%
$1,500 or more	27,067	32%
TOTAL	83,575	100%

Source: 2005 ACS

Table 4B
Electric Burden for Low-Income Households with Electric Heat (2005)

Electric Burden	Number of Households	Percent of Households
0% to less than 5%	15,470	19%
5% to less than 10%	23,087	28%
10% to less than 15%	13,982	17%
15% or more	31,036	37%
TOTAL	83,575	100%

Source: 2005 ACS

Tables 5A and 5B show the distribution of gas bills and burden for low-income households that heat with gas and report their gas bills separately from their electric bills. Table 5A shows the distribution of gas expenditures and Table 5B shows the gas energy burden. Among these households, about 57% have a gas bill that is less than $1,000 per year while about 25% have an annual gas bill of $1,500 or more. Gas energy burden is less than 5% of income for about 32% of these households, while it is greater than 31% of income for 26%.

Table 5A
Gas Bills for Low-Income Households (2005)

Gas Bill	Number of Households	Percent of Households
$1 to less than $500	32,114	30%
$500 to less than $1,000	28,564	27%
$1,000 to less than $1,500	18,776	18%
$1,500 or more	26,785	25%
TOTAL	106,239	100%

Source: 2005 ACS

Table 5B
Gas Burden for Low-Income Households (2005)

Gas Burden	Number of Households	Percent of Households
0% to less than 5%	34,436	32%
5% to less than 10%	28,025	26%
10% to less than 15%	11,357	11%
15% or more	32,421	31%
TOTAL	106,239	100%

Source: 2005 ACS

Tables 6A and 6B show the distribution of total electric and gas expenditures for low-income households that pay bills directly to a utility company. Table 6A shows the distribution of electric and gas expenditures and Table 6B shows the electric and gas energy burden. About 85% of households have an electric bill, a gas bill, or both. Almost three in ten low-income households have a total electric and gas bill that is less than $1,000 per year, while close to one in five have an annual bill of $2,500 or more. Electric and gas energy burden is less than 5% of income for 12% of low-income households, while it is greater than 25% of income for just under one-fourth of low income households.

Table 6A
Electric and Gas Bills for Low-Income Households (2005)

Electric and Gas Bill	Number of Households	Percent of Households
$1 to less than $500	28,183	10%
$500 to less than $1,000	55,117	19%
$1,000 to less than $1,500	48,404	17%
$1,500 to less than $2,000	32,734	11%
$2,000 to less than $2,500	25,278	9%
$2,500 or more	54,653	19%
No Bill	41,818	15%
ALL INCOME ELIGIBLE	286,187	100%

Source: 2005 ACS

Table 6B
Electric and Gas Burden for Low-Income Households (2005)

Electric and Gas Burden	Number of Households	Percent of Households
0% to less than 5%	33,897	12%
5% to less than 10%	60,065	21%
10% to less than 15%	43,420	15%
15% to less than 20%	25,827	9%
20% to less than 25%	15,188	5%
25% or more	65,972	23%
No Bill	41,818	15%
ALL Income Eligible	286,187	100%

Source: 2005 ACS

We have developed a series of demographic tables for households that pay an electric or gas bill. Table 7 furnishes information on the presence of vulnerable members in the household and illustrates what share of the population might be particularly susceptible to energy-related health risks. Table 8 shows the household structure for these households, and Table 9 presents statistics on the language spoken at home by these households.

Nearly one-third of low-income households with utility bills are elderly; another third of low-income households do not have any vulnerable household members. Some programs choose to target vulnerable households with outreach procedures and may offer priority to these households.

Table 7
Vulnerability Status for Low-Income Households with Utility Bills (2005)

Vulnerability Status	Number of Households	Percent of Households
Disabled	46,353	19%
Elderly	74,731	31%
No Vulnerable	77,462	32%
Young Child	45,823	19%
Total	244,369	100%

Source: 2005 ACS

More than one in three low-income households have children, while just under three in ten are headed by a person 65 or older. Over one third are other household types. Single parent families with children represent just under one-fourth of low-income households with utility bills.

Table 8
Household Type for Low-Income Households with Utility Bills (2005)

Household Type	Number of Households	Percent of Households
Married with Children	26,649	11%
Other	87,702	36%
Senior Head of Household	71,571	29%
Single with Children	58,447	24%
TOTAL	244,369	100%

Source: 2005 ACS

Six percent of low income households speak Spanish and about 4% speak an Indo-European language (e.g., Russian, Polish). In total, program managers might find that about one out of seven eligible households speak a language other than English at home.

Table 9
Language Spoken at Home by Low-Income Households with Utility Bills (2005)

Language Spoken	Number of Households	Percent of Households
English	208,012	85%
Spanish	14,487	6%
Indo-European	10,904	4%
Other	10,966	4%
TOTAL	244,369	100%

Source: 2005 ACS

III. Legal and Regulatory Framework

Maryland's Electric Universal Service Program (EUSP) is a creature of statute.[4] Mandated by the statute directing the state to move to retail choice,[5] the EUSP was statutorily established to deliver bill payment assistance,[6] low-income weatherization, and arrearage retirement to low-income[7] customers.[8] The statute generally provides that the Maryland state utility commission: (1) shall order a universal service program to be made available on a statewide basis to benefit low-income customers;[9] (2) shall establish a universal service program;[10] and (3) shall have oversight responsibility for the universal service program.[11] In addition, the commission, after the third year of the program, is charged with recommending to the legislature the total amount of funding to be used for the universal service program.[12]

In contrast, the state Department of Human Resources, which is the state agency that administers the federal Low-Income Home Energy Assistance Program (LIHEAP) (also known as the Maryland Energy Assistance Program—MEAP), was statutorily charged with the responsibility for administering the EUSP[13] along with disbursing EUSP funds (with oversight by the Commission).[14]

A. Overarching Principles for the Electric Universal Service Program (EUSP)

The design of the specific program components of the EUSP was assigned to a "Universal Service Working Group" (USWG) by the Maryland public service commission.[15] In delegating the responsibility to develop a program design, the Maryland commission articulated several minimum considerations for the Working Group to take into account. The Working Group was charged with assuming the continuation of existing customer protections; assuming the continuing availability of federal LIHEAP funds; and assuming the availability of low-income weatherization programs. In addition, the commission said, the design of the EUSP should include a continuation of restrictions on winter terminations as well as a continuation of the state's Utility Service Protection Program (USPP).[16]

The Working Group could not reach consensus on how the electric rate affordability program should operate. In response, the Maryland commission allowed individual parties to advance implementation proposals through a hearing process. The primary constraints, the commission said, were that non-utility proposals "must demonstrate reasonable efforts by the proponents to work with the utilities' billing systems." Moreover, any utility proposal "must demonstrate

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[4] MD Code, Public Utility Companies, §7-512.
[5] This statute was known as the Electric Customer Choice and Competition Act of 1999, enacted in April 1999.
[6] The statute provided that bill payment assistance was to be set, at a minimum, at 50 percent of the "determined need." MD Code, Public Utility Companies, §7-512.1(a).
[7] Low-income was statutorily defined to include customers at or below 150% of the Federal Poverty Level. MD Code, Public Utility Companies, §7-512.1(A)(1).
[8] MD Code, Public Utility Companies, §7-512.1(A)(5).
[9] MD Code, Public Utility Companies, §7-505(B)(2).
[10] MD Code, Public Utility Companies, §7-512.1(A)(1).
[11] MD Code, Public Utility Companies, §7-512-1.1(A)(4).
[12] MD Code, Public Utility Companies, §7-512.1(C).
[13] MD Code, Public Utility Companies, §7-512.1(A)(2).
[14] MD Code, Public Utility Companies, §7-512.1(H)(4).
[15] The Working Group was comprised of representatives of the state LIHEAP office, the Office of Peoples Counsel, the state energy office, the commission Staff, the state association of Community Action Agencies, each electric utility, industrial and commercial customer groups, and various community-based organizations.
[16] The USPP is a payment program established by commission regulation. It allows MEAP eligible households to enter into a year-round even monthly payment program with their utility company. An equal monthly payment plan based on the estimated cost of the customer's average annual utility usage minus the MEAP benefit will be used to determine the even monthly payments for participation in the USPP. See, COMAR, §20.31.05 (2007).

reasonable efforts to modify existing systems to accommodate reasonable USP proposal objectives."[17]

In addition, the commission articulated ten principles that must be incorporated into the statutorily-prescribed EUSP. These principles included directives that the EUSP must, in addition to complying with the requirements of the statute:

- Encourage customers to conserve energy;
- Provide "integrated mechanisms" for bill assistance, weatherization, and arrearage retirement;
- Provide that bill assistance benefits be "graduated based on a participant's income level";
- Provide that EUSP participants "pay a portion of their own funds in order to remain eligible for bill assistance"; and
- Cap bill assistance "at an appropriate level to ensure fund availability."[18]

B. Specific EUSP Design Decisions

Early in the process of developing a specific program design through which to implement the statutory EUSP, the Maryland commission was faced with deciding the objectives of the program. The state LIHEAP agency proposed to incorporate into EUSP a series of services including conservation education, energy conservation through appliance replacement, and "teaching self-help strategies to encourage customers to promptly and regularly pay their electric bills."[19] The commission rejected these additional services as being beyond the scope of the statute.

> The program as proposed by [the state LIHEAP office] establishes a much broader and more comprehensive effort to assist low-income customers in their ability to pay their electric bills than is set forth in the Act. Conservation measures are worthwhile activities that the commission believes would be beneficial to low-income customers in managing their electric bills. Nevertheless, the commission believes it is paramount that the USP first accomplish the legislatively-mandated components of bill payment assistance, low-income weatherization, and retirement of arrearages.[20]

To that end, the commission held that "any ancillary activities of the USP should be directly related to the three components of the program."[21]

The Energy Efficiency Program Component

The Maryland commission decided that while the delivery of energy audits was an integral part of providing weatherization under the EUSP statute, the delivery of energy efficient appliances was not. The commission determined, for example, that "energy audits are undoubtedly within the scope of any weatherization programs. Indeed, the Commission views energy audits as critical to any weatherization program."[22] In contrast, "the commission does not view appliance replacement as within the scope of a weatherization program. The commission acknowledges that some measures defined as 'energy conservation' are appropriate in the context of a

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[17] In the Matter of the Commission's Inquiry into the Provision and Regulation of Electric Service (Universal Service), Case No. 8738, Order No. 75401, at 3 (August 3, 1999).
[18] Order No. 75401, at 4.
[19] In the Matter of the Commission's Inquiry into the Provision and Regulation of Electric Service (Universal Service), Case No. 8738, Order No.75935, at 8 (January 28, 2000).
[20] Order 75395, at 10.
[21] Id.
[22] Id., at 11.

weatherization program. The Commission's interpretation of the Act compels us to hold that the law did not envision appliance replacement as part of a weatherization program."[23]

The Commission noted that the statute creating the EUSP explicitly referred to funding "weatherization" as one of the three mandatory program components. "Weatherization," the commission held, was a defined term. "By definition, 'weatherization' is the 'systematic application of insulation materials to a structure to retard the loss of heated or cooled air within that structure.'[24] The Commission views low-income weatherization to include structural or shell repairs or upgrades."[25] The Commission then emphasized that its narrow construction was driven as much by resource constraints as by statutory constraints:

> The commission recognizes that there are other measures that also may reduce energy consumption but do not fall within the parameters of weatherization. Energy conservation. . .may come within the scope of 'universal service program,' as defined and may be desirable. However, [the statute] speaks to low-income weatherization and not the broader category of energy conservation.
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> The commission notes that the USP has finite resources. The Act requires arrearage retirement and bill payment assistance in addition to low-income weatherization. With the limited amount of money that can be directed toward weatherization at this time, it is appropriate that the measures undertaken meet the narrower parameters defined above. Nevertheless, as funds become available with arrearage retirement completion, it would be appropriate to consider a redistribution of funds to broader low-income energy conservation measures.[26]

Because of the benefits that arise from appliance replacements, the Commission said it would "revisit this issue when it is appropriate to do so."

The Arrearage Retirement Program Component

The Maryland commission devoted considerable thought to the design of an arrearage retirement program to be implemented as part of the EUSP. Arrearage retirement was one of the three statutorily-mandated program components to be included in EUSP. The discussion occurred within the context of how to allocate the statutorily-prescribed funding of $34 million amongst the three program components: (1) rate assistance; (2) arrearage retirement; and (3) weatherization. In deciding to fund arrearage retirement at $5.1 million of the $34 million program, the Commission reasoned that "one of the most critical elements for the success of the USP in the future is the arrearage retirement for those low-income customers who either have struggled in the past to maintain their electric service or lost such service altogether."[27]

Arrearage retirement was made broadly available under the EUSP. Having recognized the fundamental role that arrearage retirement plays in maintaining affordability need within EUSP, for example, the Commission held that the program would not "differentiate between on- and off-service customers with respect to arrearage retirement."[28] The commission held that "active electric customers, as well as applicants for electricity service, including persons who are off-service, are eligible to apply for and receive arrearage assistance from USP."[29]

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[23] Id.
[24] Citing Md. Ann. Code, Article 41, §6-402.
[25] In the Matter of the Commission's Inquiry into the Provision and Regulation of Electric Service (Universal Service), Case No. 8738, Order No. 76049, at 2 – 3 (April 4, 2000).
[26] Order 76049, at 3.
[27] Order No. 75395, at 14.
[28] Id., at 20.
[29] Id.

Even though broadly available, not every EUSP participant will be allowed complete forgiveness of their preprogram arrears. Two limits were placed on the retirement of arrears. First, the Commission established a cap on the amount of arrears that would be subject to retirement under EUSP for off-system customers. The commission said it would:

> adopt the [Baltimore Gas & Electric—BG&E] proposal, which establishes $2,000 as the cap for arrearage recovery. In this case, BG&E is willing to forego any recovery over and above that amount. While the Commission does not direct any utility at this time to adopt a similar level as full and complete payment, the fact that the utility with the greatest amount of arrears is willing to adopt this approach suggests that other utilities should be able to accomplish a similar outcome on a voluntary basis. The Commission encourages them to do so.[30]

The commission rejected, however, a proposal to limit the arrears subject to collection (and thus to forgiveness through the EUSP) to those incurred within the three years immediately preceding a customer's entry into the program.[31]

Second, the commission initially determined that the arrearage retirement program should not offer to pay, in all circumstances, the entire preprogram arrears for program participants. "Despite the objections of some parties," the commission determined, "the commission also believes that in certain circumstances, a customer payment contribution toward arrears retirement is both warranted and appropriate."

> Financial participation by customers in the retirement of their arrearages will encourage fiscal responsibility while also maximizing the use of funds available under the program. Accordingly, the Commission directs [the state LIHEAP agency] to develop a customer payment plan that requires on-service and off-service customers above 100% of the federal poverty level to contribute toward their arrearage retirement. The amount of contribution should be set within affordability limits and be based on a sliding scale, so that the amount of required contribution correspondingly increases with the level of an individual's income.[32]

The commission subsequently, however, reversed this decision. Noting that it had not changed its mind about the validity of the principle, the commission simply noted that a detailed review by the stakeholders in seeking to implement the decision found its complexity outweighed its benefits.[33]

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[30] Id., at 21.
[31] The existing "statute of limitations" on the collectability of arrears was seven years.
[32] Id., at 21.
[33] In the Matter of the Commission's Inquiry into the Provision and Regulation of Electric Service (Universal Service), Case No. 8738, Order 76139, at 5 (May 8, 2000). (". . . these parties have participated in extended review and discussion of the implementation of our directive in work sessions convened since the issuance of Order No. 75395. While these parties still support the general reasonableness and efficacy of this approach, the parties nonetheless now view the administrative complexity and burden for the Department of Human Resources, local administering agencies, and/or the utilities in implementing this requirement as possibly outweighing potential benefits of the requirement and impeding the legislative goals in establishing the arrearage retirement component of the USP. For these reasons, the parties now request the commission to eliminate the customer payment contribution toward arrearage retirement as a design requirement of the program. The Commission is reluctant to eliminate the customer payment contributions toward arrearage retirement. . .However, since numerous parties, including the original advocates for customer payment contributions, now find that requiring customer payment contributions toward arrearage retirement would be administratively burdensome, as well as a possible impediment to customer participation in the Universal Service Program, the commission modifies its previous determination and therefore will not require such design requirement at this time."

Delivery of Rate Assistance Benefits

The commission determined that customers participating in the Maryland EUSP would be required to take service under a levelized budget billing payment plan in order to receive EUSP benefits.[34] This use of budget billing was subsequently reconsidered by the USWG. The recommendation was that the use of budget billing continue for several reasons.[35] First, the USWG decided that, given how new the EUSP was in Maryland, the program design should not change so quickly. Such changes would be confusing not only to customers, but to "enrollment personnel," both of whom are "critical stakeholders." Second, making such a change would require computer programming time and expense not only by the utilities, but by the program administrator as well. Finally, the USWG decided that the average payment plan process worked best for the most customers:

> Although a few customers may prefer another option, the program should be implemented in a manner that is best for the overall population. The average payment plan meets the overall goal of the EUSP, to make payments by low-income customers affordable. It averages their payments over the year and is especially helpful to customers with fixed incomes. Customers know their monthly payment and are able to fit it into their overall budget process.[36]

The recommendation was accompanied with a disclaimer that the recommendation "is not intended to preclude a utility from voluntarily using a method by which 1/12th of the annual benefit is applied each month for 12 months against actual bills." Continuing until the present, low-income customers must agree to be placed on budget billing in order to participate in and receive benefits through the EUSP.

Statewide Nature of Program

The Maryland commission focused on the creation of a statewide program. This focus manifested itself in several ways. First, the allocation of arrearage assistance funds should be statewide. "A customer's location should neither assure coverage nor prove a detriment to coverage," the commission said. "This [arrearage retirement] program shall apply Statewide with no geographic allocation and be available on a first-come, first-served basis."[37]

In addition, the commission mandated that the cost recovery mechanism should be uniform statewide. The statute provided not only a fixed program budget for the first three years of the EUSP,[38] but that a fixed contribution toward that budget be obtained from each customer class.[39] The residential charge was set at a uniform, statewide monthly fee, of $4.97 to $5.00 annually ($0.41 to $0.42 monthly).[40] A multi-step charge was established for commercial and industrial customers.[41] The commission explained, however, that it sought:

> . . .a funding methodology that results in sets of uniform Statewide fees for commercial and industrial customers that apply irrespective of the service

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[34] In the Matter of the Commission's Inquiry into the Provision and Regulation of Electric Service (Universal Service), Case No. 8738, Order 76595, at 2 – 3 (November 30, 2000).
[35] In the Matter of the Commission's Inquiry into the Provision and Regulation of Electric Service (Universal Service), Case No. 8738, Report of the Universal Service Working Group on Supplemental Issues, at 2, note 2 (March 14, 2001). (hereafter USWG Supplemental Report).
[36] USWG Supplemental Report, at 2 – 3.
[37] Order No. 75935, at 22.
[38] §7-512.1(d)(1) provided that the universal service fund by $34 million in each of the program's first three years.
[39] §7-512.1(d)(2) provided that $9.6 million of the budget should be obtained from residential customers. §7-512.1(d)(1) provided that $24.4 million be collected from commercial and industrial customers.
[40] Order No. 75935, at 23.
[41] Known as the 23-step fee structure, the commercial and industrial universal service charge impose a fixed monthly fee ranging from a $3 per month ($36 per year) fee, to a $3,500 per month ($42,000 per year) fee.

> territory in which the customers are located. The use of Statewide fees should not preclude the differentiation of charges by customer size or electric usage, as long as the methodology proposed includes an appropriate cap. . .The commission's primary interest in a proposal of this type is (i) to have flat fees that do not vary each month, thereby avoiding customer confusion, and (ii) to ensure that similarly-situated customer that happen to be located in different service territories pay the same charge, thereby avoiding any questions of competitive advantage.[42]

The statute prohibited collecting the universal service charges on a per kilowatthour basis.[43] In adopting a fixed monthly fee, the commission agreed with the argument by the commercial and industrial representatives that the universal service charge "is similar to a utility 'customer charge,' which is traditionally designed and intended to recover a cost that bears no relationship to a customer's consumption."[44]

C. The Regulatory Treatment of Non-Statutory Affordability Programs

Despite the statutorily-prescribed Electric Universal Service Program, the Maryland state utility commission has been inconsistent in its holdings with respect to natural gas low-income affordability programs. While approving a program offered by Baltimore Gas & Electric Company (BG&E) in the 1990s, the commission more recently disapproved a similar program advanced by Washington Gas Light Company.

The BG&E Limited Income Maintenance Program

The Maryland state utility commission approved a low-income affordability program proposed by Baltimore Gas & Electric Company (BG&E) in 1994. The Customer Assistance Maintenance Program (CAMP)[45] was again reviewed and approved by the Commission in 1997.[46] Under CAMP, low-income customers making current bill payments will receive CAMP credits toward future bills. A program participant can qualify to earn monthly bill credits ranging from $7 to $12 depending upon the customer's annual income.

In reviewing CAMP within the context of the proposed merger of BG&E with Constellation, the commission noted that its approval of the program was based on its ability to generate positive impacts for nonparticipating ratepayers. ". . .CAMP was approved in part due to a showing that the financial assistance to low income customers provided by the program could lead to reductions in uncollectibles."[47]

Because of these benefits, the state Office of Peoples Counsel (OPC) argued, the normal statutory language prohibiting undue preferences did not apply. According to the OPC:

> People's Counsel concludes that low income programs address real needs. In response to some parties' contentions that it is inappropriate to use ratepayer funds for charitable-type purposes, OPC stresses the programs being proposed can be cost-effective. In particular, OPC asserts that CAMP is cost-effective. OPC stresses that the Commission approved CAMP in 1994 based on findings that the program will operate to reduce uncollectibles from low income customers, thereby providing a net benefit to other ratepayers. Thus, while OPC argues that the Commission possesses the authority to engage in income

[42] Order 75401, at 5.
[43] Maryland Code, Public Utility Companies, §7-512.1(b).
[44] Order 75935, at 28.
[45] CAMP was originally known as the Limited Income Customer Incentive Plan.
[46] Re. Baltimore Gas & Electric Company, 88 Md.PSC 47 (1997).
[47] 88 Md.PSC at 91.

> redistributive ratemaking, it contends that that authority is unnecessary to deal with the proposed low income programs.[48]

The Commission agreed that "the financial assistance to low income customers provided by the program could lead to reductions in uncollectibles." Accordingly, the commission continued, "these benefits redound to all customers, thereby making ratepayer funding of at least a portion of the costs of these programs appropriate."[49]

The fact that the CAMP program was not "self-supporting" was not fatal to the regulatory approval of the program. Instead, the fact that the program would still have some costs was relevant to the manner in which the programs costs were allocated. The commission held:

> we disagree with the Joint Applicants' proposal for 100 percent funding of these programs by customers. The Joint Applicants did not show that the low income programs. . .are self-supporting. Thus, while all customers will benefit from the programs, it has not been shown that they will benefit to the extent of the costs that they would bear. Moreover, shareholders also benefit from the operation of these programs, so it is seemly that shareholders pay some of the costs. Therefore, under these circumstances, we find that it is appropriate to direct ratepayer funding of the proposed expense levels for the low income programs. . .at the 50 percent level.

Finally, the commission noted that the source of funding was appropriate to take into account. "Flowing through a portion of the merger savings directly to the low income programs," the commission held, "ensures that low income customers receive some tangible benefits from the merger."[50]

The Washington Gas Residential Essential Services Rate (RESRate)

Washington Gas Light Company operates a natural gas rate affordability program in the state of Maryland.[51] Approved in 2004, the Residential Essential Services Rate (ResRate) program has since been twice extended, for one year in October 2005[52] and again for two more years in September 2006.[53]

The ResRate program provides a credit of 17.7 cents per therm of usage (up to a maximum level of therms/credits specified for each month) for a total maximum credit of $135 per heating season. To be eligible for the credit, customers must be eligible for federal fuel assistance and be current on their bill. Other firm service customers pay for the program.

In recommending approval of the continuation of the ResRate program in August 2006, the staff of the Maryland commission noted the program's impact on reducing arrearages.[54] In recommending approval, the Commission staff noted:

> Company data for the 2005-2006 heating season as compared to the 2004-2005 heating season indicated that commodity costs associated with gas have

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[48] 88 Md.PSC at 90.
[49] Id., at 91.
[50] Id.
[51] After the program *<u>dis</u>*approval discussed further below, the Company filed (Mail Log #91662) a proposal to initiate a pilot ResRate program (submitted February 26, 2004). That proposal was adopted without discussion by the commission.
[52] Maryland Public Service Commission, Mail Log (ML) #98963, October 19, 2005) (approving extension of ResRate through 2005/2006 heating season and directing company to file report with the Commission by June 30, 2006).
[53] Maryland Public Service Commission, Mail Log (ML) #102219, September 6, 2006 (extending ResRate for two years and directing company to continue providing annual reports).
[54] Mail Log #102219 (August 15, 2006).

> increased between 42 and 65%. Although this is a substantial increase in costs to all firm service customers, the number of RES customers in arrearage decreased by 29% or 281 customers. The Company believes that this further illustrates the effectiveness of the program.
>
> * * *
>
> Staff has had the opportunity to thoroughly review this filing and discuss all components of this filing with Washington Gas. Staff noticed that the average arrearage for RES eligible customers increased by over $400, and the total number of RES customers in arrearages decreased significantly. There is a correlation between an increase in customer arrearage and an increase in commodity gas prices. The decrease in number of RES program participants in arrearage shows that the program is effective and is actually reaching it goals of keeping low-income customers on service and promoting positive payment patterns which in turn trickles to other firm customers by lowering collection costs and other costs associated with charge-offs and slow-payment patterns.[55]

The company continues to file annual reports with the Maryland commission documenting the impacts of the ResRate program.[56]

The Original ResRate Program Proposal

The ResRate program followed a difficult path to approval by Maryland regulators. Holding that it lacks statutory authority to approve low-income programs, the Maryland commission <u>*dis*</u>approved the natural gas rate affordability proposal first advanced Washington Gas Light Company. The Commission's refusal to approve the Residential Essential Services Rate (ResRate) proposed by Washington Gas provides insights into Commission policy on low-income assistance.

In 2003, Washington Gas Light proposed a winter discount directed toward low-income customers. Modeled after a nearly identical program that the company had proposed and had approved in its Washington D.C. service territory, the program would have provided a per therm discount, up to prescribed monthly usage caps, for income eligible customers during the winter months.

Moreover, according to Washington Gas Light, "the 'current' payment requirement now being added to Washington Gas' program is designed to capture similar benefits to those identified by the commission when the BGE program was adopted."

The Commission disapproved the program, holding that it "may not satisfy the requirements" of Section 4-503(b) of the Maryland Public Utilities Code. In order to satisfy the statutory requirement, the commission held, "any program must have a legitimate, non-discriminatory primary objective that provides a concrete benefit to ratepayers rather than an abstract assertion of benefit, and evidence of this benefit must be in the record."[57]

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[55] Id., at 2 – 3.
[56] See, e.g., 2006 ResRate Annual Report, Mail Log #102219 (June 30, 2006); 2005 ResRate Annual Report, Mail Log #98693 (September 29, 2005).
[57] In the Matter of the Application of Washington Gas Light Company for Authority to Increase Existing Rates and Charges for Gas Service and to Implement an Incentive Rate Plan, Case No. 8959, Order No. 78757, at 17 – 18 (October 31, 2003).

The First Revised ResRate Program Proposal

The commission's decision not to approve the ResRate proposal was made without prejudice to the company filing an amended proposal. Indeed, the commission docketed a new proceeding to consider a revised proposal outside the context of the company's rate case, and directed the company to file a revised ResRate proposal.[58]

Washington Gas Light submitted its revised proposal, seeking to respond to the commission's critique that the original filing did not deliver benefits to nonparticipating ratepayers. The company urged in its revised filing:

> This program proposal includes a notable modification designed to address the primary criticism of the Order –the benefits of the program would only flow to customers that are "current" on their bills. This modification will benefit all customers by potentially avoiding the incurrence of future incremental collection expenses. As modified, the purpose of the program will be to direct assistance to qualifying customers with the goal of avoiding the incremental collection costs that would ultimately be borne by other customers. The benefit to the non-participating customers occurs through reduced pressure on cost elements that would drive the need for future rate relief.[59]

Under the company's revised program, "RES-eligible customers must be current on their utility payments in order to receive applicable monthly distribution rate credits. Specifically, RES-eligible customers who are not in arrears more than 45 days on either their normal bill or their alternative payment plan will be considered for RES credits. Violation of the arrearage criteria will result in the customer being deemed as not being current and the RES credit will not be provided until the criteria is met."[60]

The company urged that "the RES program, as revised, addresses the Commission's discrimination concerns, provides tangible benefits for non-RES eligible ratepayers, and permits the initiation of an assistance program for qualifying customers in time for the 2003-2004 winter heating season." The company noted that, as designed, the "initial assessment of potentially avoided collection costs for each participating customer is estimated at approximately $185."[61] The program generates such benefits because "RES benefits will not support or subsidize delinquent customers. Instead, RES benefits will go to eligible customers who make the effort and succeed in remaining current with the company. The goal would be to provide assistance to a set of customers in order to avoid the incurrence of the collection costs associated with delinquent accounts."[62]

The proposed ResRate program, the company urged, is statutorily authorized by Maryland law that charged the state utility commission with promoting the "adequate, economical and efficient delivery" of service.[63] According to the company:

> Washington Gas believes that "efficient" service is indeed promoted by its revised RES proposal. Improved efficiency can be accomplished through improved payment practices and lower overall collection-related expenses. This

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[58] In the Matter of Washington Gas Light Company's Residential Essential Services Program, Case No. 8982. The October 31, 2003 commission decision (Order No. 78757) directed the company to file a revised proposal by November 21, 2003. Order No. 78757, at 18.
[59] In the Matter of Washington Gas Light Company's Residential Essential Services Program, Case No. 8982, Residential Essential Services Program Proposal of Washington Gas Light Company, at 1 (November 21, 2003).
[60] Id., at 3.
[61] Id., at 4.
[62] Id., at 4.
[63] Section 2-113(a)(I)2.

> goal of improved "efficiency" is the cornerstone of the cost-effective discussion by Washington Gas.[64]

Despite the changes to the ResRate program, the commission still did not approve the company proposal. In dismissing the program proposal, the commission reported that "the commission was unable to reach consensus on a variety of aspects of the revised RES Program proposal. A majority of the commission is not persuaded that the revised proposal, as currently constituted, provides clear benefits to ratepayers in order to overcome the statutory provision against rate discrimination contained in PUC §4-503(b)."[65]

In relying on Section 4-503(b) as a basis to disapprove the ResRate program, the commission relied on its previous rejection of electric Lifeline rates under the federal Public Utility Regulatory Policies Act (PURPA). In its Lifeline proceeding,[66] the Maryland commission refused to approve electric Lifeline rates, holding that "discrimination and undue preference do occur if a special rate is applied to a customer class that is determined *solely* on the basis of personal circumstances which are completely unrelated to the type of service which is provided."[67]

D. Summary and Conclusions

The Maryland Electric Universal Service Program (EUSP) is a creature of statute. In authorizing the state's move to a retail choice electric industry, the Maryland legislature directed the state utility commission to create the EUSP. The program was required by the legislature to have three primary components: (1) a rate affordability component; (2) an arrearage retirement component; and (3) a weatherization component.

Oversight of the new electric affordability program was placed with the state utility commission, while administration of the program was placed with the state LIHEAP office. After a "working group" failed to reach agreement on a negotiated program, the development of the electric affordability program occurred through an extensive hearing process. In inviting each stakeholder to advance the program design, the commission indicated that proposals would be required to take into account existing utility billing processes and existing energy assistance program processes.

Several basic "principles" were articulated to govern the development of the electric rate affordability program. The EUSP should provide "integrated mechanisms" for bill assistance, weatherization, and arrearage retirement, the commission said. Moreover, the program should provide bill assistance benefits "graduated based on a participant's income level." Finally, the program should require EUSP participants to "pay a portion of their own funds in order to remain eligible for bill assistance."

By statute, the EUSP is to be funded through payments by all customer classes. While the legislation banned a per-kWh charge as the mechanism to generate EUSP funds, the funding mechanism was largely left to the discretion of the commission. The commission adopted a multi-step fixed monthly charge differentiated by size and type of customer.

The Maryland EUSP operates on limited funds, with the legislature directing that the program operate on a $34 million budget for its first three years, and assigning the state utility commission the duty to recommend an appropriate budget to the legislature in ensuing years. Given this budget, the commission approved a number of cost-cutting measures to limit program expenditures. Arrearage forgiveness credits, for example, were capped at $2,000 per

[64] Case No. 8982, Reply Brief of Washington Gas Light Company, at 3 (February 4, 2004).
[65] In the Matter of Washington Gas Light Company's Residential Essential Services Program, Case No. 8982, Order No. 78951 (February 13, 2004).
[66] 73 Md.PSC 702 (1982).
[67] 73 Md.PSC at 705-706 (emphasis in original).

customer, with one utility offering to absorb any preprogram arrears exceeding that cap. (The commission encouraged, but did not direct, other utilities to match this offer.) In addition, citing limited funding, the commission decided that appliance replacements did not fall within the statutory directive to include "weatherization" as an EUSP program component.

Even though the Maryland legislature mandated the creation of an electric universal service program, the Maryland state utility commission has issued conflicting opinions about its authority and willingness to approve a broadscale natural gas counterpart.

On the one hand, in disapproving the proposed Residential Essential Services Rate (ResRate), a natural gas affordability program proposal advanced by Washington Gas Light –the proposal mirrors the gas affordability program the company approved for implementation in its Washington D.C. service territory—the commission cited the state statute prohibiting the grant of unreasonable preferences. To meet the restrictions of the statute, the commission said, "any program must have a legitimate, non-discriminatory primary objective that provides a concrete benefit to ratepayers. . ."

On the other hand, the commission did approve a natural gas rate affordability program advanced by Baltimore Gas & Electric Company. Known as the Customer Assistance Maintenance Program (CAMP), the BG&E program offers credits toward current bills when low-income customers make a full and timely payment toward their current bill. The BG&E CAMP program has been in operation and delivering benefits to low-income customers for nearly 15 years.

IV. Low-Income Affordability Programs

The two major affordability programs available to low-income households in Maryland are the LIHEAP Program and the Electric Universal Service Program.

- LIHEAP Program – In 2005, the Maryland LIHEAP program received about $34.2 million in funding from the Federal government.[68] Since about 83% of low-income households use natural gas or electricity for their home heating fuel, we will estimate that about $28.4 million was made available to gas and electric customers for LIHEAP benefits.

- Electric Universal Service Program – In 2005, the Electric Universal Service Program furnished about $29.6 million in electric and gas benefits to eligible households.[69]

- Other Affordability Programs - In 2005, the LIHEAP Clearinghouse reports that other rate-based affordability programs delivered benefits of about $3.6 million to low-income customers.

In total, about $62 million was available to help pay the electric and gas bills for low-income households. Using the ACS data, we estimated the following statistics regarding the aggregate electric and gas bills for low-income households in Maryland.

- Aggregate Electric and Gas Bill – The total electric and gas bill paid directly by low-income households is estimated to be about $423 million. The available funding of $62 million in benefits would cover about 15% of the total bill for low-income households.

- 5% Need Standard – Some analysts suggest that 5% of income is an affordable amount for low-income households to pay for the energy needs. The aggregate value of electric and gas bills that exceeds 5% of income is estimated to be about $291 million. The

[68] Source: LIHEAP Clearinghouse
[69] Source: LIHEAP Clearinghouse

available funding of $62 million in benefits could cover about 21% of the unaffordable amount for low-income households. [Note: If benefits from either of these two programs are allocated to households with an energy burden less than 5% of income, the program would not cover 20% of the estimated need.]

- 15% Need Standard – Some analysts suggest that 15% of income is an affordable amount for low-income households to pay for the energy needs. The aggregate value of electric and gas bills that exceeds 15% of income is estimated to be about $144 million. The available funding of $62 million in benefits could cover about 43% of the unaffordable amount for low-income households if it were targeted to only those households with energy bills greater than 15% of income.

- 25% Need Standard – Many low-income households pay more than 25% of income for energy service. Among the ratepayer-funded low-income programs that have used a percent-of-income guideline in their benefit determination process, none have been as high as 25% of income for combined use of electric and gas. The aggregate value of electric and gas bills that exceeds 25% of income is estimated to be about $93 million. The available funding of $62 million in benefits could cover about 67% of the unaffordable amount for low-income households if it were targeted to households with energy bills greater than 25% of income.

These statistics demonstrate that the Maryland programs cover a significant share of the total low-income need, but do not meet the entire need from the three need standards examined. In addition, since we know that the LIHEAP Program does not require households to exceed these need thresholds to receive benefits, some of the funding is being allocated to households that do not exceed these need standards.

The Maryland Electric Universal Service Program (EUSP) is the program targeted for analysis by this study. The program was authorized by utility restructuring legislation, the Electric Customer Choice and Competition Act of 1999. While a Working Group was initially charged with developing the program design, the design ultimately was selected by the Commission based on proposals put forth by various parties.

Some important features of the administration of the EUSP include:

- Commission Oversight – The MD Public Service Commission maintains overall responsibility for making policy decisions with respect to the program.

- LIHEAP Office Operations – The State LIHEAP Office is responsible for operation of the program, including the development of systems for program intake, benefit determination, and financial reporting.

Some important features in the design and implementation of the EUSP program include:

- Bill Payment Percentage – The program targets payment of a certain percentage of the client's projected bill: 75%, 60%, and 50%, for households with incomes at or below 75% of poverty, 110% of poverty, and 150% of poverty, respectively.

- Arrearage Payment – The program makes an arrearage payment of up to $2,000 to retire preprogram arrears.

- 12-Month Fixed Credit – The EUSP benefit is distributed to the customer as a 12-month fixed credit benefit. The customer continues to receive the benefit as long as he/she is making payments on his/her bills.

- Budget Billing – One condition for participation is that the client must be on budget billing.

The following table furnishes detailed information on the EUSP program.

Program State	Maryland
Program Name	Electric Universal Service Program (EUSP)
Utility Company (If Applicable)	N/A
Program Goals	Assist eligible low-income electric customers with their electric bills by providing them help to pay current electric bills, help to pay past due electric bills that have a minimum balance of $100, and help with energy efficiency measures to reduce future electric bills.
Funding Source (SBC or Rates)	SBC of $0.37 per month for residential customers. Other customer classes, from small commercial to large industrial are allocated charges by scale based upon historical usage.
Annual Program Funds – Allocated (2006)	2006: $34,000,000 – Total $31,500,000 – Bill Assistance $1,500,000 – Arrearage Retirement $1,000,000 – Weatherization 2007: $43, 000,000 – Total $34,500,000 – Bill Assistance $1,500,000 – Arrearage Retirement $1,000,000 – Weatherization $6,000,000 – One-time additional grant of $6,000,000 from a Corporate Tax (this amount will not be included in the 2008 Program Year)
Annual Program Funds – Expended (2006)	$34,378,301
# of Households Served (2006)	83,853
Participation Limit (Maximum # of Enrollees)	None. Participation depends on the available funds.
Eligibility – % of Poverty Level	150% of poverty (2006 Program Year) 175% of poverty (as of the 2006 Legislative Session of the General Assembly)
Eligibility – Other Criteria	Participants must have or be able to start an electric service account in their name. Participants are required to participate in their utility's budget billing or payment plan program.
Targeted Groups	Persons living in subsidized housing, elderly persons, and households with young children.
Benefit Calculation Type (% of Income, Benefit Matrix, etc.)	Benefit Matrix (consumption-based)
Benefit Calculation (Document Formula)	o The income group at the level 0-75% of poverty received a benefit equal to 75% of their estimated annual bill. o Applicants at 76-110% of poverty received a benefit equal to approximately 60% of their estimated annual bill. o Applicants at 111-150% of poverty received a benefit equal to approximately 50% of their estimated annual bill. o Households living in subsidized housing received a benefit that is 14.5%of the estimated annual electricity cost (non-electric heating customers). Subsidized housing MEAP recipients (electric heating customers) received an additional 15% of their estimated annual bill. MEAP recipients received an additional benefit equal to 15% of their estimated annual electric bill. Note: The percentage of bill paid may change annually depending on funding.
Benefit Amount (Mean Subsidy)	$410 – Bill Assistance (2006) $435 – Arrearage Retirement (2006)
Benefit Limit	The amount of bill paid does not increase once a household uses 14,000 kWh annually. The dollar amount associated with this energy usage cap varies by utility but Delmarva Power currently has the highest dollar maximum of $1488.
% of Program Dollars Spent on Administrative Costs	10.5%

Benefit Distribution (Fixed Payment, Fixed Payment with a Limit, Fixed Credit, Fixed Credit with Budget Billing, etc.)	Fixed credit with budget billing.
Arrearage Forgiveness Plan – Y/N	No - the utilities do not provide an arrearage forgiveness plan to Program participants. The EUSP provides a one-time payment to the utility that is applied to the household's arrearage.
Amount Eligible for Forgiveness (Dollars, %, or Unlimited)	The amount of the arrearage payment is a minimum of $100 and a maximum of $2,000.
Forgiveness Requirement (Payments, On-Time Payments)	N/A
Forgiveness Period (One-Time, 12 months, 24 months, etc.)	N/A
Program Manager (PUC, State, Utility)	Maryland Department of Human Resources Office of Home Energy Programs
Data Manager (PUC, State, Utility, Other)	Maryland Department of Human Resources Office of Home Energy Programs
Enrollment Responsibility (Utility, CAP, etc.)	20 Local Administering Agencies- non-profit community action agencies and local Departments of Social Services.
Application Method (Mail, In-Person, Phone)	1) Online (pilot program) 2) Local Administering Agencies (File an application by mail, fax, other electronic means, in-person)
Joint Application	Yes. The EUSP application is also used for LIHEAP (MEAP). The EUSP application is also used for the Utility Service Protection Program. The USPP is a non-monetary program run by the utilities and the Public Service Commission that protects against winter shutoff for participants who pay their budget billing amount.
Recertification Required – Y/N	Clients must reapply every year for the benefit.
Recertification Frequency	Annually.
Recertification Method (Agency, Automatic Enrollment, Self-Certification)	1) Online 2) Local Administering Agencies (File an application by mail, fax, other electronic means, in-person)
Recertification Procedures	Re-submit an application for the Program
Removal Reasons	o If clients stop paying their bills o If clients move. However, if a client notifies the Program of an in-state move, the Program will apply any remaining benefit to their new account.
Other Communications	Participants receive a benefit notice and may receive referrals to relevant social assistance programs from the local administering agency.
Budget Counseling	Local agencies provide varying levels of budget counseling. However, budget counseling is not a required component of the program.
Evaluation Frequency	MD EUSP submits an annual report to the MD Public Service Commission. MD EUSP recently underwent a process and impact evaluation in 2006. Statute does not require a regular evaluation but it does require a legislative audit every three years.
Coordination with LIHEAP	The EUSP application allows households to simultaneously apply for LIHEAP (MEAP).
Coordination with WAP	The EUSP application may be used to refer participants to weatherization services. The EUSP program provides $1,000,000 to the Federally funded WAP. These weatherization funds are applied in conjunction with the Federal WAP funds.
Coordination with Other Energy Efficiency Programs	Energy efficiency programs are incorporated into the WAP office.
Coordination with Other Energy Affordability Programs	Local administering agencies may provide referrals to fuel funds if client arrearages are over $2000. Many of the participating community action agencies administer these fuel fund dollars. Local administering agencies may provide referrals to Baltimore Community Foundation energy assistance grants and the local department of social services emergency funds for families with children.

V. Affordability Program Evaluation Findings

Maryland's Public Service Commission contracted with PA Consulting Group to conduct a process and impact evaluation of the Electric Universal Service Program from July 2004 through June 2006.[70] This section summarizes the findings from this evaluation report.

The key evaluation findings are summarized below.

- There were approximately 83,000 program participants in 2006, as compared to 56,000 in 2001.
- About two-thirds of program participants reapply for the program each year. This is a higher rate than seen in some other programs that were studied.
- Program participants reduce their electric bill coverage from 83.6 percent in the year prior to enrollment to 73.2 percent in the year following enrollment.
- Second and third year participants have coverage rates of approximately 74 percent.

The decline in coverage rates could be attributable to the way that the analysis results are presented. A large percentage of program participants are served by a utility that provides both electric and gas service. A decision was made whereby all customer payments would first be credited to cover the full gas portion of the bill, and the remainder would be credited to the electric portion of the bill. If the analysis shown in the report examines only the electric part of the bill and payments credited to the electric portion of the bill, even for this joint service utility, this result would be expected. A smaller percentage of the electric bill would appear to be covered by the customer, as all payments are first credited to the gas portion of the bill. An analysis of the total coverage rate of both the electric and gas bill or and/or a separate analysis of this utility from the other utilities is needed to fully understand what is happening to customers' bill payment.

The customer survey showed that the program did have positive impacts for the participants.

- While 38 percent reported that they had electric arrearages prior to EUSP participation, 23 percent reported that they had arrearages after program participation.
- While 17 percent reported that their service was disconnected for lack of payment prior to EUSP participation, 3 percent reported that they had their service disconnected after EUSP participation.

Key recommendations from these analyses included:

- Explore ways to increase program retention.
- Continue to review the benefit formula to make sure that benefits are distributed in accordance with program goals.
- Explore greater coordination with other assistance programs.

[70] Electric Unviersal Service Program Evaluation, PA Consulting Group, October 2006.

VI. Low-Income Energy Efficiency Programs

The three major sources of funding for energy efficiency programs available to low-income households in Maryland are the DOE Weatherization Assistance Program (WAP), the LIHEAP Program, and the Maryland Electric Universal Service Program's Weatherization Component.

- DOE WAP Program – In 2005, Maryland received about $3.0 million in funding for the Weatherization Program. These funds were distributed to local agencies to deliver weatherization services to low-income households.[71]

- LIHEAP Program – In 2005, Maryland elected to use $0.8 million (2%) of its LIHEAP funding for weatherization.

- Maryland Electric Universal Service Program's Weatherization Component – In 2005, the Maryland Electric Universal Service Program's Weatherization Component was funded at a level of about $1.6 million.[72]

In total, about $5.4 million was available to help furnish energy efficiency services to low income households in Maryland.

It is a little more challenging to estimate the need for energy efficiency programs. In general, we would suggest that energy efficiency programs should be used in place of affordability programs when the energy efficiency programs result in cost-effective savings to the household. The literature on energy efficiency programs demonstrates that programs that target high users achieve the highest savings levels and are the most-effective. For electric baseload, programs that target households that use 8,000 kWh or more are most cost-effective. For electric heating, programs that target households that use 16,000 or more kWh are most cost-effective. For gas heating, programs that target households that use 1,200 or more therms are most cost-effective.

Our primary state-level data source, the ACS, does not ask respondents to report on the amount of electricity or natural gas that they use. However, we can develop a proxy for usage based on the respondent's estimate of the household's electric and gas bill. [Note: kWh price = 8.44 cents, therm price = 1.480].

Using the ACS data, we developed estimates of the number of households that would be eligible for energy efficiency programs using the cost-effectiveness targets. Table 10 shows that 64% of households could be targeted for high baseload bills, 36% could be targeted for high electric heat bills, and 18% could be target for high gas usage.

Table 10
Need for Energy Efficiency Programs for Low-Income Households (2005)

Group	Number of Households with Bills	Number of Households with High Bills	Percent of Households with High Bills
Electric Baseload Services[73]	153,345	98,086	64%
Electric Heating Services	83,575	29,918	36%
Gas Heating Services	97,965	17,406	18%

Source: 2005 ACS

[71] Source: LIHEAP Clearinghouse
[72] Source: LIHEAP Clearinghouse
[73] For households that report electric and natural gas expenditures as one bill, we allocated half of the cost to electricity and half of the cost to natural gas.

In general, low-income weatherization programs spend about $3,000 per unit, including all costs for administration and service delivery. With the available funds, Maryland could serve about 1,800 households, or about 4% of the high usage homes needing weatherization assistance, and 2% of the high usage homes needing electric baseload services each year. Longer-term efforts to reduce the energy usage for the homes that represent the best targets would require significantly more funding.

The Weatherization Component of the EUSP was authorized at the same time as the EUSP program. Some important features of the program include:

- WAP Integration – The EUSP funds are used in conjunction with the WAP funds.
- Electric Efficiency – The EUSP funds are used for electric efficiency measures.

The following table furnishes detailed information on the EUSP program.

Program State	Maryland
Program Name	Electric Universal Service Program (EUSP) – Weatherization Component
Utility Company (If Applicable)	N/A
Program Goals	Assist eligible low-income electric customers with their electric bills by providing them help to pay current electric bills, help to pay past due electric bills that have a minimum balance of $100, and help with energy efficiency measures to reduce future electric bills.
Funding Source (SBC or Rates)	SBC of $0.37 per month for residential customers. Other customer classes, from small commercial to large industrial are allocated charges by scale based upon historical usage.
Annual Program Funds – Allocated (2006)	2006: $1,000,000 – Weatherization 2007 $1,000,000 – Weatherization EUSP funds are used in conjunction with state and federal Weatherization funds to supplement the Weatherization Assistance Program.
Annual Program Funds – Expended (2006)	$1,000,000
# of Households Served (2006)	639 homes served with EUSP funds.
Participation Limit	None. Participation depends on the amount of available funds.
Eligibility – % of Poverty Level	175% of FPL.
Eligibility – Home Type	No restrictions.
Eligibility – Energy Usage	Not specified.
Eligibility – Participation in Energy Assistance	Participants must receive bill payment assistance from the EUSP.
Eligibility – Other Criteria	Not specified.
Targeted Groups	High energy users.
Measure Determination	Energy audit inspection: based on the National Energy Audit Tool (NEAT).
Mean Costs per Home (2006)	$1565
Targeted Average Cost (2006)	Not specified.
Cost Limit	None.

Landlord Contribution	Yes. Landlords are required to pay 25% of the cost of the changes. Additionally, landlords have to agree to maintain the home for income-eligible households for up to three years.
% of Program Dollars Spent on Administrative Costs	0%
Efficiency Measures	EUSP funds are used for electric energy efficiency measures.
Customer Education – Y/N	Yes.
Education as Part of Service Delivery – Y/N	Providers currently leave energy saver tip pamphlets in the home. The Program is developing a handout to give customers that would describe the completed measures and provide energy conservation tips.
Education Separate from Service Delivery – Y/N	N/A
Follow-Up with Customers – Y/N	No.
Program Manager (PUC, State, Utility)	EUSP funds are managed by the State WAP office which is in the Department of Housing and Community Development.
Data Manager (PUC, State, Utility, Other)	EUSP data is managed by the State WAP office and the Program Providers.
Enrollment Responsibility (Utility, CAP, etc.)	EUSP Energy Assistance Office by referral to WAP office.
Number of Provider Agencies and/or Contractors	6 Community Action Agencies. One CAA contracts out the weatherization services, but the other five have their own weatherization teams. 8 local jurisdictions contract the work out to for-profit contractors. One non-profit organization covers several other jurisdictions.
Type of Provider (For-Profit, CAA, etc.)	Community Action Agencies; for-profit; non-profit
Application Method (Mail, In-Person, Telephone)	In-person; mail; telephone
Joint Application	No.
Reasons for Service Denial	o Homes that are beyond the scope of weatherization (unsafe, structurally unsound, homes with mold/mildew, homes with wet-damp basements) o Landlord refuses contribution
Type of Follow-Up	None.
Quality Control (Inspections?, etc.)	Each local agency is required to have an independent quality control inspector. The state also performs quality control inspections on at least 20% of the completed units.
Evaluation Frequency	The U.S. Department of Energy evaluates/monitors the State Weatherization Assistance Program every two years. The department sends data to the legislature on the program each year on how the EUSP funds were used.
Coordination with LIHEAP	MEAP (LIHEAP) recipients, if interested, are forwarded to the weatherization program. They are eligible for services if they haven't received them before.
Coordination with WAP	EUSP funds are used in conjunction with Federal and State WAP funds.
Coordination with Energy Affordability Programs	The WAP receives a large number of its referrals from energy assistance programs.
Coordination with Other Energy Efficiency Programs	No.

VII. Energy Efficiency Program Evaluation Findings

No evaluation reports were identified for the EUSP weatherization component.