

# **Low-Income Energy Security in Rhode Island: Long-Term Affordability and Arrearage Management Solutions**

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## DOCKET 3400 BACKGROUND AND COMPREHENSIVE ENERGY SECURITY PLANNING

After the Winter of 2000-2001, when high natural gas prices led to a record number of service terminations in low-income households, the Rhode Island Public Utilities Commission ordered that a docket be opened to examine the feasibility of implementing an electric and gas utility arrearage forgiveness plan. Over the past year, representatives from the State Energy Office, Rhode Island low-income advocates, Community Action Agencies that deliver low-income energy programs, investor-owned electric and natural gas utilities and the National Consumer Law Center have been involved in discussions before RIPUC staff geared toward dealing with the state's energy affordability crisis. After many meetings, compromises by various parties, and revisions to program design proposals, we are pleased to offer the following program proposal.

This plan is comprehensive in nature, and is intended to provide long-term low-income energy security by addressing both current utility arrearages, and the need for sustained, meaningful payment assistance. Clearly, the option may exist to obtain funding to pay off outstanding low-income arrears on a one-time basis. However, without providing for long-term programming to make utility bills reasonably affordable for low-income households, new arrears will immediately begin to accrue after the existing slate is wiped clean. Accordingly, this plan includes proposals for the following:

- Write-down of existing low-income utility arrears,
- Affordable payments through the implementation targeted discounts calculated to achieve manageable energy burden levels according to a household's income consumption levels, and
- Reliable funding sufficient to achieve long-term affordability goals.

### ESSENTIAL NATURE OF BASIC UTILITY SERVICE

Courts, regulatory and legislative bodies have repeatedly acknowledged the necessity nature of basic utility service. The hardships and tragedies that occur as a result of loss of service are well known. The impossibility in low-income households of remaining debt-free, paying for basic utility service while making all other ends meet on a monthly basis is a matter of arithmetic fact. Adding to this impossibility, energy and utility industry changes have brought about high and volatile pricing from which low-income households cannot escape.

Most U.S. states have adopted a regulatory consumer protection framework that is intended to provide assurance of access to a basic level of service. The component parts of this framework include limited termination prohibitions, termination notice requirements pertaining to timing, format, and delivery of notice. In addition, in recognition of both the monopoly and the essential nature of utility distribution service, commissions around the country have provided consumers with the right to dispute their bill. Finally, many commissions have required that utilities offer customers payment plans so that they may retain access to vital service.

In addition to regulatory requirements, several state legislatures have explicitly noted the essential nature of utility service. In New Hampshire, the legislature stated that “universal Service . . . electric service is essential and should be available to all customers.”<sup>1</sup> In Massachusetts, the General Court noted that “Electricity service is essential to the health and well-being of all residents of the commonwealth...Affordable electric service should be available to all consumers on reasonable terms and conditions.”<sup>2</sup> In Oklahoma, legislation stated that "mechanisms that enable . . . consumers with limited incomes to obtain affordable essential electric service" shall be ensured.”<sup>3</sup> Similarly, the Maine Legislature declared that “electricity is a basic necessity to which all residents of the State should have access.”<sup>4</sup> In order to assure access to essential service in Rhode Island new programmatic structures, such as those illustrated below are required to be developed and implemented.

#### UNIVERSAL SERVICE IDEAL – AN AFFORDABLE ENERGY BARGAIN FOR RHODE ISLAND

Prior to and during implementation of the national utility restructuring experiment, advocates successfully promoted a range of programmatic and regulatory structures intended to protect low-income utility customers against high bills and loss of service. These structures included state and federal payment assistance and energy efficiency programs, and regulatory provisions pertaining to termination of service and requirements to offer payment plans to customers facing termination. Indeed, over three billion federal and non-federal dollars were devoted to low-income energy programs in 2001. In addition, many states adopted temporary or permanent enhancements to the existing regulatory protection structure. Some states extended winter shutoff moratoria, and others required more reasonable payment plan terms. Despite this funding and regulatory protection, energy burdens remained high, and, as indicated below, large numbers of low-income customers have suffered interruptions in energy and utility service.

One of the lessons learned from the experience of 2001 was that the costs of high and volatile energy prices quickly overwhelmed the value of the benefits associated with energy payment assistance and efficiency programs. In light of the sweeping changes to energy and utility industries, new, and equally sweeping programmatic and regulatory structural changes are needed if low-income households are to retain long-term access to basic energy and utility services. What is needed is an “affordable energy bargain” where low-income households that make regular, affordable utility payments and participate in energy efficiency and education programs receive a basic block of service, reduce and eliminate arrearages, and are free from the threat of service termination. The goal of the Affordable Energy Bargain is long-term low-income energy security.

Numerous program features are required to achieve the Affordable Energy Bargain goal of long-term low-income energy security. A broad outline of program features follows:

- Affordable Payments – Targeted Discounts

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<sup>1</sup> N.H. Rev. Stat. C-374-F:3(v)

<sup>2</sup> Mass. St. 1997, C-164, " 1(a), 1(b), 1(j), 1(n).

<sup>3</sup> Okla. Stat. Tit.17'194.4.

<sup>4</sup> Maine Rev. Stat. Tit. 35-A, 3214(1)

Key to the Affordable Energy Bargain is a payment structure that makes sense for the individual customer. In this context, “affordability” for low-income households refers to regular monthly utility payments that result in an energy burden - the proportion of disposable income that is devoted to household energy costs – that is deemed to be affordable. We propose to achieve affordable payments by structuring rate discounts geared toward target total household energy burdens of 7% for natural gas heat customers and 6% for electric heat customers, all of whom participate in the federal Low Income Home Energy Assistance Program. The proposed targeted discount program is described in further detail below.

- *Secure Funding*

Assuredly, there is monetary cost associated with implementation of the Fair Energy Bargain.<sup>5</sup> In 2002, about \$18 million were devoted to low-income payment assistance and energy efficiency in Rhode Island. However, this expenditure did not result in the realization of the universal service ideal. Most low-income households carried excessive energy burdens and many suffered loss of service. The inability 2002 to deliver universal service despite the resources devoted to programs was due in part to insufficient funding and in part to effectiveness gaps in existing program designs and structures.

Ideally, funding the investment in universal service should continue to come from both federal and non-federal sources. Funding needs to be *sufficient and dependable*. Sufficiency in this context refers to the number of program dollars needed to fund the Fair Energy Bargain. Dependability requires that program funding come from secure, reliable sources. Non-bypassable, volumetric millage charges on utility bills of all customer classes could be considered a secure, dependable funding source. Voluntary contributions, vital as they are in reducing low-income energy burdens and supplementing volumetric utility bill assessments, do not represent a dependable, long-term funding source.

- *Efficient Program Delivery and Administration*

Success of the Fair Energy Bargain is largely contingent upon the support of a sophisticated program delivery network, and of a well-planned administrative structure free of redundancies and inefficiencies. Fortunately, the state agencies, Community Action network and utility companies that administer and deliver payment assistance and energy efficiency resources to low-income households across Rhode Island have the tools and the expertise to provide local administration of the Fair Energy Bargain. However, the expanded scope of the Fair Energy Bargain will require a fresh look at local, state and utility administrative budgets, systems and procedures. New skill sets, to deal with issues such as determination of household discount benefit levels will also be required. Finally, effective,

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<sup>5</sup> It is important to consider the costs associated with assuring energy affordability on a net cost basis. Indeed, the energy, energy system and non-energy benefits that accrue over time through investments in low-income efficiency and affordability programs can exceed program costs. (See, e.g., Howat and Oppenheim, “Analysis Of Low-Income Benefits In Determining Cost-Effectiveness Of Energy Efficiency Programs”, <http://www.nclc.org>, 1999.)

comprehensive low-income energy programs require clear channels of communication between utilities, governmental agencies, and program delivery agencies.

NEEDS ANALYSIS

High, volatile energy and utility prices, which appear to be permanent features of the restructured energy landscape, cause tremendous disruption in low income households, and impact general utility ratepayers as well. High prices bring with them excessive low income energy burdens that run 3-4 times higher than those of the median income households.

Despite the economic boom of the 1990s, poverty in Rhode Island remains a persistent problem. As indicated in the table below, nearly 27% of the state's total population remains eligible to receive energy assistance benefits.

**Poverty in Rhode Island**

	<u>Category Total</u>		<u>Cumulative Total</u>	
	Population	Percent of Total	Population	Percent of Total
Total:	1,010,000	100.0%		
Under .50	54,366	5.4%	54,366	5.4%
50 to .74	28,571	2.8%	82,937	8.2%
75 to .99	37,611	3.7%	120,548	11.9%
1.00 to 1.24	36,056	3.6%	156,604	15.5%
1.25 to 1.49	39,038	3.9%	195,642	19.4%
1.50 to 1.74	38,488	3.8%	234,130	23.2%
1.75 to 1.84	15,890	1.6%	250,020	24.8%
1.85 to 1.99	22,152	2.2%	272,172	26.9%
2.00 and over	737,828	73.1%	1,010,000	100.0%

U.S. Census Bureau  
 Census 2000 - Data Set: Census 2000 Summary File 3 (SF 3)

The following table illustrates the relationship between income level and energy burden energy burden. Please note that the expenditure levels reflected here are based on 1999 energy prices. Energy burdens during subsequent periods of higher prices have been considerably higher than those reflected here.

### Sample Rhode Island Energy Burdens

<b>Household Type</b>	<b>Income</b>	<b>Energy Expenditure</b>	<b>Energy Burden</b>
1 person household, 75% FPL	\$6645	1139.25	17.1%
Full Time Minimum Wage	\$11,440	1519	13.3%
2-person household, 150% FPL	\$17,910	1519	8.5%
3-person household, 200% FPL	\$30,040	1519	5.1%
2-person, Median Income	\$42,090	1519	3.6%

Based on 1999 Expenditures, \$5.50 minimum wage, 1999 Median Household Income as reported by the US Census Bureau, and 2002 HHS Poverty Guidelines.

Current average gas heat burden for LIHEAP participants is about 12% of household income. Add to this the average LIHEAP household electric baseload burden of nearly 5%, and the resulting average energy burden is 17%! It is clear that without effective energy affordability and arrearage management programs, thousands of low income households in Rhode Island will be unable to pay their utility and fuel bills without forgoing other necessities. The energy and utility industries have fundamentally changed while the programmatic structure to protect vulnerable customers has not. What is needed is a new program structure that assures long-term low income energy security and reduces the utility system costs associated with unaffordable bills.

#### UNAFFORDABLE BILLS, ARREARAGES AND TERMINATIONS FOR NON-PAYMENT

It is well-documented that excessive low income energy burdens, high arrearages, and high rates of service terminations result in severe disruption of everyday life, and more importantly, often the loss of housing, increased mobility, and real threats to health and safety. At the same time, all utility system customers pay the costs associated with collection activities and bad debt write-offs. The gap between service terminations and restorations represents, at least in part, utility bad debt write-offs and loss of service in households that regularly face the impossibility of making ends meet each month.

#### 2001 PRICE SPIKE AND PERSISTENT CUSTOMER ARREARAGES

Despite the existing funding and skill of the delivery network, low income households in Rhode Island continued to face unmanageable energy burdens and high rates of service disconnections. As the chart below illustrates, high, volatile energy prices of 2000 and 2001<sup>6</sup> produced very high

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<sup>6</sup> New England prices at wholesale and retail for natural gas, electricity and fuel oil have fluctuated wildly over the past 4 years. For example, wholesale natural gas prices nearly quadrupled during the 2000-2001 heating season. While the purpose of this plan is not to critique 'restructuring' of the energy and utility industries, it is clear that increased price volatility has coincided with deregulation, and that it is likely to continue into the foreseeable future. The conditions that led to the gas price spikes of 2000-2001 (low natural gas inventories, harsh regional weather conditions, lack of robust competition in domestic energy production and transportation markets, unscrupulous

rates of disconnection, without commensurate increase in service restorations.

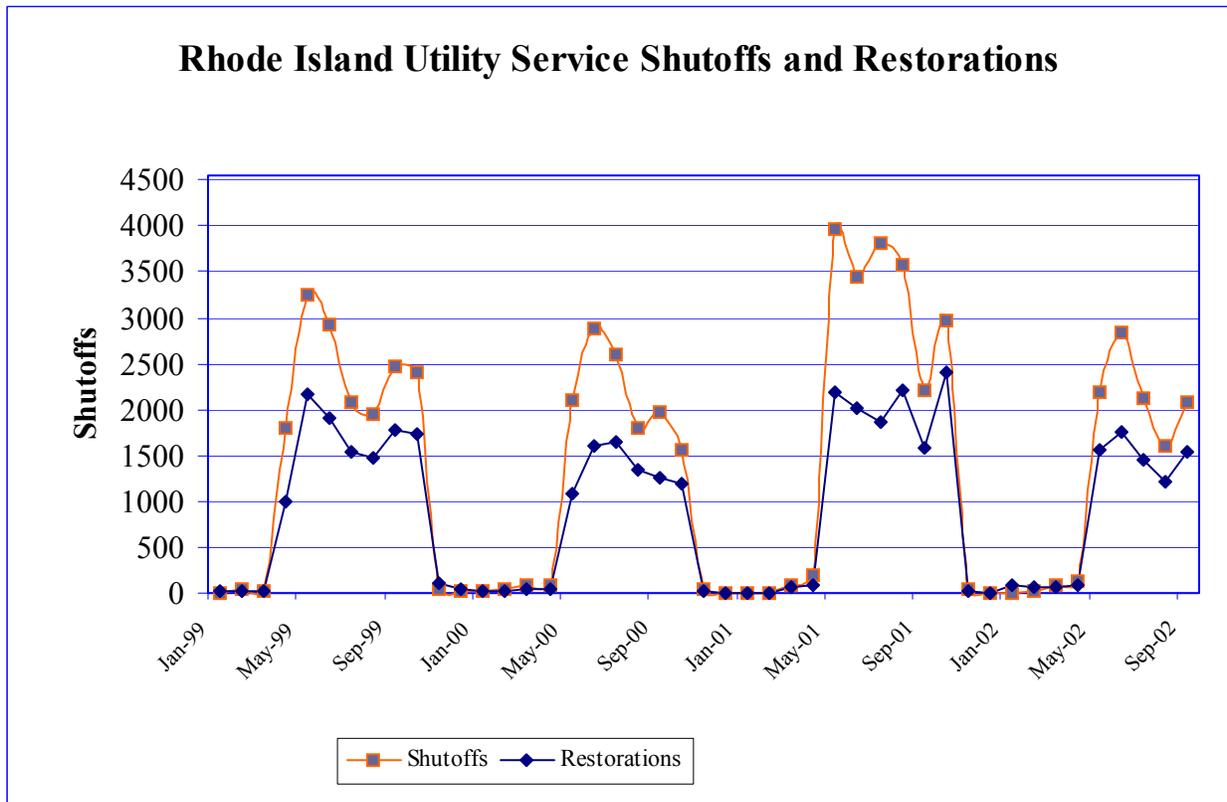


Figure 1

With the current run up in wholesale energy prices, coupled with the stagnant economic conditions that often lead to unemployment in low-income households, it is safe to assume that similar, high rates of service terminations may be expected to return with the expiration of the Winter shutoff moratorium in the Spring of 2003. Expeditious implementation of new programmatic structures is needed to avert disaster in low-income homes this year.

#### LONG-TERM AFFORDABILITY, ARREARAGE MANAGEMENT AND LOW-INCOME ENERGY SECURITY IN RHODE ISLAND

##### EXISTING PROGRAMS

A range of energy affordability and efficiency programs serving low-income customers are currently operative in Rhode Island. In 2002, Rhode Island received approximately \$11.5 million through the U.S. Department of Health and Human Services Low Income Home Energy Assistance Program (LIHEAP). This payment assistance program benefits households with incomes of up to 60% of the state median household income level. LIHEAP appropriations are

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trading practices, and uncertainty in international energy supply markets) are likely to converge time and again in the future to spike prices.

supplemented in Rhode Island by electric utility ratepayer funding of about \$2.5 million annually, and gas utility ratepayer funding of about \$1.7 million per year. This utility funding is used to discount the rate that is paid by participating LIHEAP-eligible customers. In addition, Rhode Island received approximately \$1.1 million in U.S. Department of Energy Weatherization Assistance program funding for FY 2002, which was supplemented by about \$1 million from electric company ratepayers and \$200,000 from gas utility ratepayers. Rhode Island program administrators operate payment assistance and energy efficiency programs in a coordinated manner. Administrators ensure that those who receive payment assistance are encouraged to obtain efficiency services as well.

### **2002 Low Income Energy Affordability Program Funding**

<b>Program</b>	<b>Source</b>	<b>Purpose</b>	<b>Funding (\$)</b>
Low Income Home Energy Assistance Program	US Dept. of H.H.S.	Energy Bill payment Assistance	11,539,000
Electric Utility Discount	Utility Ratepayers	Electric Bill Payment Assistance	2,500,000
Gas Utility Discount	Utility Ratepayers	Gas Bill payment Assistance	1,500,000
		Total	15,539,000

Many of the energy affordability programs have been in existence for nearly two decades. The program delivery network is highly skilled and experienced, and a good working relationship exists between utility companies, state administrators, and local delivery agencies. The existing program structure also provides a strong funding bas for new program designs that are better-suited to meeting energy security needs in the new utility industry environment.

#### **ARREARAGE MANAGEMENT PROPOSAL**

New England Gas Company recently updated information from a data request regarding outstanding low-income arrears. While the recent information reflects outstanding low-income arrears of about \$1.1 million, the Company indicated that it expects arrears to be over \$4 million later in 2003 after the expiration of the winter shutoff moratorium. We therefore recommend that, as part of a comprehensive energy security program, customers participating in the payment assistance discounts outlined below, be allowed to write down existing arrears over a three-year

period. The New England Gas write-down costs, that include a 9% annual carrying charge, are reflected in the summary table following the discussion of targeted discounts.

Narragansett Electric also provided arrearage information in response to a data request. During the Fall of 2002, the Company was carrying arrears of about \$2.2 million dollars. We recommend that, as part of a comprehensive energy security program, customers participating in the payment assistance discounts outlined below have all of their electric arrears forgiven at the outset of the program. Funding for this initiative is described below, and arrearage management costs are reflected in the Narragansett summary table following discussion of targeted discounts.

TARGETED DISCOUNTS

At the heart of our proposal is a targeted discount program that is designed to provide LIHEAP participants with the opportunity to lower energy burdens and achieve long-term energy security. Following is a table that describes the proposed natural gas discount.

**NATURAL GAS DISCOUNT SUMMARY**

**NATURAL GAS HEAT**

				Target Burden:	4.8%	Subsidy cost based on 13866 customers =		\$9,928,056
HH income	Annual Expenditure (Discounted)	Non-Disc. Annual Expenditure	Expend @ Target Burden	Gas Bill minus Target	Discount Required			
\$13,591	\$1,223	\$1,329	\$653	\$716	51%	Mean Average		
						9296	# of Records	

**\$9,928,056**

This table was developed using nearly 9,300 records provided by New England Gas Company and the State Energy Office. Records that contained incomplete data were deleted. Discounts under this program would be calculated by Community Action Agencies while conducting intake for LIHEAP. Customer discounts would be determined in the following manner:

1. A target gas heat burden would be established for all participants. In this illustration, the burden is set at 4.8% to reflect the pro rata share of an average combined gas heat/electric baseload bill that produces a total 7% household energy burden. The allocation is illustrated below.

## TARGET ENERGY BURDENS

Total Target Burden	7.0%
Target Gas Heat Burden	4.8%
Elec Non-Heat BurdenBurden	2.2%
Elec Heat + Non-Heat	6.0%

Avg. Elec Non-Heat Expend.	Average Gas Heat Expenditure	Total Elec+Gas	Proportion Gas	Proportion Elec
\$559	\$1,223	\$1,781	69%	31%

2. The target gas expenditure is determined by multiplying household income by the target burden percentage.
3. The target expenditure is then subtracted from the previous 12-month expenditure total.
4. The applicable discount rate is determined by dividing the difference from #3., above by the previous year's expenditure.

While each record yielded unique results, the average discount rate for all customers was 51%, and the average subsidy required to achieve the target burden was \$716. There were 13,866 gas heat LIHEAP customers in 2002. The product of all customers and the average subsidy yields a total annual subsidy cost of about \$9.9 million. The average figure reflects a minimum subsidy of \$200 and a maximum of \$2,000.

The electric discount calculations for baseload only and heat customers, respectively are shown below.

## ELECTRIC DISCOUNT SUMMARIES

### ELECTRIC BASELOAD

Target Baseload Burden: 3%				Subsidy cost based on 24000 customers = \$5,815,722		
HH income	Annual Expenditure (Discounted)	Non-Disc. Annual Expenditure	Expend @ Target Burden	Electric Bill minus Target	Discount Required	
\$14,242	\$474	\$584	\$427	\$242	39%	Mean Average
					9296	# of Records

### ELECTRIC HEAT

Target Electric Heat Burden: 6%				Subsidy cost based on 1000 customers = \$803,831		
HH income	Annual Expenditure (Discounted)	Non-Disc. Annual Expenditure	Expend @ Target Burden	Electric Bill minus Target	Discount Required	
\$13,295	\$1,096	\$1,205	\$399	\$804	63%	Mean Average
					483	# of Records

**\$6,619,553**

It can be seen that the electric discounts were calculated in the same manner as the gas discounts. The total subsidy required to provide targeted discounts to all electric LIHEAP customers would be about \$6.6 million. The average discount would be 39% for baseload customers, and 63% for electric heat customers. The floor and ceiling assumptions that apply to gas customers would apply to electric heat customers. Baseload customers, however, would be subject to a \$100 floor instead of the \$200 that applies to heating customers.

### FUNDING THE PROGRAMS

As indicated previously, funding the investment in universal service would continue to come from both federal and non-federal sources. In order to meet the funding challenge of the arrearage management and targeted discount programs, we recommend combining LIHEAP monies, 75% of the monies currently expended by the electric and gas companies for payment assistance, and a non-bypassable volumetric charge on electric and gas distribution

sales. The remaining 25% of the utility payment assistance monies would be reserved for eligible customers who do not participate in the programs described here.

### New England Gas Average Annual Millage Charge Bill Impacts by Rate Class

**\$0.0131 per CCF**  
**Total Program \$s Generated: \$4,471,438**

<b>Cumberland</b>			12 Mo Sales (CCF) 89,775,790	<b>Providence</b>			12 Mo Sales (CCF) 250,905,213
	Millage Assessment	Revenue Generated			Millage Assessment	Revenue Generated	
Revenues generated	\$ 0.01313	\$ 1,178,307		Revenues generated	\$ 0.01313	\$ 3,293,131	
	<b>Average CCF per Customer</b>	<b>Avg. Annual Program Cost per Customer</b>			<b>Average CCF per Customer</b>	<b>Avg. Annual Program Cost per Customer</b>	
Rate Class				Rate Class			
Residential Non-Heating	179	\$ 2.35		Residential - Small	209	\$ 2.75	
Residential Heating	831	\$ 10.91		Residential - Heating	972	\$ 12.76	
Comm/Ind Small	2,619	\$ 34.38		Commercial - Small	1,247	\$ 16.37	
Comm/Ind Medium Sales	11,956	\$ 156.93		Commercial - Medium	10,160	\$ 133.34	
Comm/Ind Large LI Sales	56,039	\$ 735.52		Commercial - Large - Low Load	50,654	\$ 664.83	
Comm/Ind Ex Lge LI Sales	200,322	\$ 2,629.22		Commercial - Large - High Load	48,024	\$ 630.32	
Ind Large HI Sales	78,669	\$ 1,032.52		Commercial - Extra Large - Low Load	161,729	\$ 2,122.69	
Ind Ex Lge HI Sales	220,945	\$ 2,899.91		Commercial - Extra Large - High Load	181,467	\$ 2,381.75	
		\$ -				\$ -	
Comm/Ind Medium Transp	217,935	\$ 2,860.39		Special Contracts	183,869	\$ 2,413.28	
Comm/Ind Large LI Transp	367,121	\$ 4,818.46		Natural Gas Vehicles	10,439	\$ 137.02	
Comm/Ind Ex Lge LI Transp	134,082	\$ 1,759.82				\$ -	
Ind Large HI Transp	180,124	\$ 2,364.13		Gas Lights	1,302	\$ 17.08	
Ind Ex Lge HI Transp	1,017,012	\$ 13,348.28				\$ -	
		\$ -		Narragansett Electric Interruptible	-	\$ -	
Seasonal Revenues		\$ -				\$ -	
Industrial	167,316	\$ 2,196.02		<b>Transportation FT2</b>		\$ -	
Dual Fuel	17,454	\$ 229.08		Medium FT-2	13,221	\$ 173.53	
		\$ -		Large - Low Load - FT2	60,527	\$ 794.41	
		\$ -		Large - High Load - FT2	32,728	\$ 429.55	
Non Firm Trans Sales (Pp,Osram)	2,801,558	\$ 36,770.45		Extra Large - Low Load - FT2		\$ -	
				Extra Large - High Load - FT2		\$ -	
						\$ -	
				<b>Transportation FT1</b>		\$ -	
				Medium FT1	19,652	\$ 257.94	
				Large - Low Load - FT1	63,385	\$ 831.93	
				Large - High Load - FT1	73,260	\$ 961.53	
				Extra Large - Low Load - FT1	313,116	\$ 4,109.65	
				Extra Large - High Load - FT1	419,877	\$ 5,510.89	

The table above illustrates the scope and impact of the gas funding proposal. The electric funding proposal is shown in the table below.

### **Narragansett Electric Annual Millage Charge Bill Impacts by Rate Class**

**\$0.00120 per KWH      \$8,260,487**  
**KWH Sales**

**Total Program \$s Generated:**

Rate Class	Average KWh per Customer*	Avg. Annual Program Cost per Customer	MWH Sales in 2001*
General Residential	6,149	\$7	6,883,739
Residential Water Heating	10,034	\$12	
General Business Service	11,582	\$14	
General Industrial	1,167,333	\$1,401	
Large Industrial	14,652,000	\$17,582	

*\*2001 FERC Form 1*

Summary tables that reflect gas and electric costs and funding follow.

## New England Gas Summary Costs

### Program Costs

Discounted Natural Gas Heat Subsidy Cost	\$9,928,056
Program Administration @ 7% Year One	\$694,964
Program Administration @ 3.5% Subsequent Years	\$347,482
Arrearage Management (Year One) *	\$1,777,746
Arrearage Management (Year Two) *	\$1,777,746
Arrearage Management (Year Three) *	\$1,777,746
Subtotal Year One	\$12,400,766
Subtotal Year Two	\$12,053,284
Subtotal Year Three	\$12,053,284
Subtotal Subsequent Years	\$10,275,538

### Offsets to Program Costs

Avoided Bad Debt Writeoffs, Collection and Disconnection Costs **	(\$628,184)
LIHEAP Allocation	(\$7,015,000)
75% Current Discount Expenditures	(\$1,097,633)
Subtotal	(\$8,740,817)

Net Cost Year One	\$3,659,949
Net Cost Year Two	\$3,312,467
Net Cost Year Three	\$3,312,467
Net Cost Subsequent Years	\$1,534,721

\* Low-Income arrearages assumed to be \$4.5 million by May 1, 2003; Carry Costs @ 9.03% annually

\*\* 10% of total 2001 Write-offs

## Narragansett Electric Summary Costs

### Program Costs

Discounted Baseload and Heat Subsidy Cost	\$6,619,553
Program Administration @ 10% Year One	\$661,955
Program Administration @ 5% Subsequent Years	\$330,978
Arrearage Management (Year One Only) *	\$2,236,251
Subtotal Year One	\$9,517,759
Subtotal Subsequent Years	\$6,950,531

### Offsets to Program Costs

Avoided Bad Debt Writeoffs, Collection and Disconnection Costs **	(\$684,600)
LIHEAP Allocation	(\$460,000)
75% Current Discount Expenditures	(\$1,875,000)
Subtotal	(\$3,019,600)

Net Cost Year 1	\$6,498,159
Net Cost Subsequent Years	\$3,930,931

\* Low-Income arrears at 9/2002

\*\* 10 % of 2001 Bad Debt Write-offs

The preceding tables are intended to broadly sketch out a program design that can provide long term utility affordability and security for LIHEAP participants. Detailed program design, as well as funding alternatives, may be addressed before legislators and Public Utility Commissioners in Rhode Island.

The following sections of this document detail costs associated with unaffordable utility bills, and provide a view of programs that are operative in other states.

#### LOW INCOME COSTS OF UNAFFORDABLE BILLS

There are many ways that unaffordable bills effect low-income household well-being. Two of such problems are discussed here.

##### TERMINATIONS AND HOMELESSNESS

Studies have demonstrated the clear link between homelessness and utility terminations. According to surveys conducted by the Energy Coordinating Agency of Philadelphia and Institute for Public Policy Studies of Temple University, there was an average of over 60,000 gas electric and water service terminations each year in the city during the years of 1984 through 1989. The study further found that, of homes where utility service was terminated, 32 percent of electric and 24 percent of gas cases led to abandonment within one year of the utility termination. Through a name match between Philadelphia Electric Company's list of termination notices and lists of homeless adults served by the City of Philadelphia, the study found a discernable relationship between utility termination and homelessness. In surveys of individuals living in emergency shelters, 7.9 percent of respondents cited utility terminations as the reason for their homelessness. (Higher percentages cited related causes, such as "eviction for non-payment" and lack of housing in the income range as the causal factors.) The study noted that of the many factors contributing to homelessness, mitigation of high energy costs is among those "most susceptible to remedy."<sup>7</sup> Similarly, a study of homelessness in Northern Kentucky indicates that utility shutoffs were among the primary causes of homelessness in that region.<sup>8</sup>

##### TERMINATIONS AND HEALTH

Older people living in poverty are more likely than their non-poor counterparts to experience rapidly declining health and to develop difficulties performing routine daily activities as they age. Thus, low-income individuals are at a much higher risk of requiring nursing home care as they age.<sup>9</sup> Further, among those most likely to develop hypothermia are the poor who cannot afford to pay for adequate home heating.<sup>10</sup> In addition, low-income households are at increased risk of fire and exposure to hazardous fumes due to use of unsafe heating sources because of

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<sup>7</sup> Liz Robinson, "An Examination of the Relationship between Utility Terminations, Housing Abandonments and Homelessness," pp. 1, 2 (Energy Coordinating Agency of Philadelphia, 1991).

<sup>8</sup> William K. Woods, *et al.*, "Homelessness and Low-Cost Housing in Northern Kentucky," p. 2 (Northern Kentucky Coalition for the Homeless and Applied Information Resources, 1990).

<sup>9</sup> Interview with Raymond Coward, Dean of the School of Health and Human Services, University of New Hampshire from "USA Today Magazine," April 1998, v 126 n2635 p. 5.

<sup>10</sup> Bonnie Guiton, "Special Report on Cold Stress and Heat Stress," p. 1 (U.S. Office of Consumer Affairs).

utility terminations.<sup>11</sup> Finally, high energy burdens cause low-income households to forego expenditures on preventive health measures and nutritional food items.<sup>12</sup> Energy affordability programs thus improve participants' health by preventing such dangers as hypothermia, carbon monoxide poisoning, and fires.

#### UTILITY SYSTEM COSTS OF UNAFFORDABLE BILLS

Utility companies incur a range of costs that may be avoided through implementation of effective payment assistance programs. Among the most quantifiable of these benefits are reductions in payment-related costs that utilities incur. In addition, effective programs can serve to retain customers who contribute to a utility company's fixed. These costs, while often difficult to quantify, include arrearage carrying costs, late payment costs, bad debt write-offs, credit and collection expenses, termination and reconnection costs, negotiation of payment plans, and regulatory expenses.

#### REDUCED COLLECTION COSTS

In a 1994 analysis, Roger Colton found that utility companies incur significant costs associated with collection activities, including telephone contacts and premise visits with customers. He further found that implementation of low-income assistance programs generates substantial utility collection-related expense savings.<sup>13</sup> In testimony before the Pennsylvania Public Utilities Commission, Columbia Gas Company reported the following costs associated with each instance of the various collections activities:<sup>14</sup>

<b>Activity</b>	<b>Cost</b>
Telephone Contact	\$ 1.28
Premise Visit	18.09

This table does not reflect the costs associated with collection and credit agency fees. Since these entities usually work on a commission basis, it may be assumed that the costs reflected in the above table would be higher were collection agency fees to be included.

#### REDUCED TERMINATION AND RECONNECTION COSTS

Another set of utility and ratepayer costs avoided through implementation of DSM programs is

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<sup>11</sup> Colton, 1993.

<sup>12</sup> Cambridge Systematics, Inc., "Hard to Quantify Benefits and costs Scoping Study," prepared for the New York Low-Income Evaluation Task Force. 1994

<sup>13</sup> Colton, "Identifying Savings Arising from Low-Income Programs," National Consumer Law Center, 1994, p. 16.

<sup>14</sup> *Id.* at 3.

the processing and distribution of shutoff notices, as well as the disconnection and reconnection of customer accounts. The table below is based on the Pennsylvania PUC testimony mentioned above, and reflects the costs associated with each instance of the reported activity.<sup>15</sup>

Activity	Cost
Shutoff Notice	\$ 0.75
Disconnection	21.92
Reconnection	43.84

REDUCED COSTS OF NEGOTIATION, ADMINISTRATION OF PAYMENT PLANS, COMPLAINT RESOLUTION AND TRACKING

The Columbia Gas Company reported that it incurs significant costs in negotiating payment plans with individual customers.<sup>16</sup> Accounting for time of customer service representatives and clerical worker along with associated overhead, Columbia Gas estimated that in 1989 it incurred a cost of \$14.64 for each individual payment plan negotiation.<sup>17</sup> To the extent effective utility payment assistance programs make bills more affordable, they simultaneously reduce the need for utility companies to incur costs associated with payment plan negotiation.

**MODEL PAYMENT ASSISTANCE AND ARREARAGE MANAGEMENT PROGRAMS**

ALABAMA

Since 1991, the major electric power company and two gas companies have waived the monthly customer service charge, about \$8 per month, for SSI, Medicaid and TANF recipients. Costs are recovered through residential ratepayers served by these utilities; estimated cost is between \$0.04 to \$0.06 per month per customer. About 33,000 households benefit from the waiver annually.

ARIZONA

Most of the state's major utilities offer rate discounts. The specifics of the programs varies by utility; however, they all offer a declining block discount structure, with the customer receiving smaller percentage discount as their monthly usage passes certain kWh thresholds. In addition to a general residential discount, called residential energy support, some utilities offer a low-income seniors' discount rate, and medical life support rate. The rate structure of the largest utility, Arizona Public Service, is typical: for monthly usage of 0-/400 kWh, the discount is 30 percent; 401-/800 kWh = 20 percent; 801-/1200 = 10 percent, 1201 kWh and up = \$10.00

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<sup>15</sup> Id.

<sup>16</sup> Colton at 7.

<sup>17</sup> Id.

1999 rate discounts from major electric and gas utilities were estimated at around \$5.8 million by the state's Low Income Issues Working Group.

#### CALIFORNIA

California Alternate Rates for Energy (CARE) began in 1989 as result of state legislation. A discount of 15 percent for low-income residential customers is required of all regulated utilities. Income eligibility is set at 150 percent or less of the federal poverty guidelines for all regulated utilities except one that sets eligibility at equal to or less than 130 percent. In 1995, 1.6 million participants received an annual average discount of \$75. The 2000 CARE budget, now incorporated into electric utility restructuring implementation, was \$125 million.

#### COLORADO

State-funded Property Tax, Rent and Heat Rebate, Department of Revenue, allows tax rebates for home heating payments to income-eligible residents at least 65 years old, surviving spouses at least 58 years old, and totally disabled regardless of age. Under legislation passed in 1998, the maximum heat rebate has risen from \$160 to \$192 and the income limit for single member households is now \$11,000, up from \$7,500. The higher rebates went go into effect in FY 2000. The heat portion of the rebate currently amounts to about \$2.9 million per year.

#### CONNECTICUT

All gas public service companies are required by statute to operate an arrearage forgiveness program for gas heating customers. One of the state's three gas utilities has extended the program to non-heating gas customers, as allowed by the statute.

A payment agreement is established which includes a customer's base monthly payment plus an affordable arrearage payment. There are two arrearage forgiveness program periods (November 1 to April 30 and May 1 to October 31) in conjunction with the state energy assistance program dates of operation. Participation in the winter month period does not require timely payments but all payments are due to the utility by April 30. However, failure to make a timely payment during the summer month period may result in termination of gas service until payments are made or the November 1 moratorium begins. For persons successfully completing a program period, arrearage forgiveness results in a reduction of the bill on the last period day equal to the total of customer payments plus energy assistance.

Both of Connecticut's investor-owned electric companies voluntarily operate arrearage forgiveness programs that are not mandated by statute or the DPUC. The Connecticut Light and Power Company NU START payment incentive program is designed to help low and fixed-income customers with incomes at or below 200% of the federal poverty level maintain year-round electric service, while reducing and eliminating past-due balances. NU START customers receive year-round electric service as long as they make

their budgeted payments on time each month. They have their past-due balance removed from their bill over time. With each month's budget payment, customers receive a credit toward the overdue amount of their bill. Eligible customers include those who have an energy assistance or agency payment of at least \$25 applied to their CL&P bill, a past-due balance of \$100 or more on a CL&P bill which is 60 or more days overdue, income at or below 200% of the federal poverty level, and who have not been dropped from NUSTART for nonpayment within a year.

The NU START program entails dividing the customer's outstanding arrearage balance by twelve, negotiation of a payment plan, delivery of energy education and budget counseling, and referral to the weatherization and utility energy efficiency program delivery network. Each timely monthly payment according to provisions of the agreed-upon plan results in a reduction of 1/12 of the outstanding arrearage balance. Similar to the strategic thinking at NIMo, CL&P officials have determined that the arrearage forgiveness/management approach is effective in retaining customers and obtaining some revenue from customers who would otherwise have been disconnected or only made sporadic payments.

#### DISTRICT OF COLUMBIA

Residential Aid Discount (R.A.D.) began in 1984 when the DC Public Service Commission mandated a 25-percent discount on the first 400 kWhs for low-income electric customers and a rate reduction for gas customers. The D.C. State Energy Office, the LIHEAP grantee, performs outreach, determines customer eligibility and refers potential clients to the utility.

#### GEORGIA

Since 1989, the PUC has mandated that major gas and electric utilities waive their monthly service charge for customers over age 65, who own their homes, and earn less than \$10,000 per year. The gas service charge is \$9 per month; the electric is \$7.50. About 69,000 customers receive the electric waiver and 30,000 receive the gas waiver at an annual cost of \$9,960,000. Outreach is performed through the utilities and Resource Service Ministries of Atlanta.

In October 2001 the Georgia Public Service Commission approved a two-part plan that would provide \$10 million from the Universal Service Fund (USF), created as part of the state's natural gas restructuring, to help low-income seniors pay their natural gas bills. An initial \$2 million grant will assist seniors who have had their natural gas service disconnected or who are subject to disconnection. Assistance will be a dollar for dollar matching fund program with no limit on the amount a consumer may receive. In addition, a \$50 monthly credit on natural gas bills of eligible seniors began November 2001 and will continue through March 2002. Seniors citizens who are 65 or over with an annual total household income of \$12,000 or less are eligible for assistance.

The Georgia Public Service Commission voted in December 2001 to earmark \$5 million from the state's Universal Service Fund to provide further assistance to low-income consumers with natural gas arrearages. The Department of Human Resources will disburse \$2 million to assist low-income seniors and \$3 million to assist low-income households meeting federal poverty guidelines. This action by the Commission brings a total of \$15 million for this fiscal year that has been distributed from the USF to assist low-income with natural gas bills.

## ILLINOIS

In Illinois, two utilities have arrearage forgiveness programs in conjunction with a state LIHEAP pilot program to reduce arrearages. The client, utility and state LIHEAP each pay 1/3 of arrearages.

Effective 1998, the Supplemental Low-Income Energy Assistance Fund was authorized through utility restructuring legislation. The law directed gas and electric utilities (participation by municipal utilities and electric cooperatives is optional) to assess a monthly charge of \$0.40 per month on each residential electric service account and \$0.40 per month on residential gas service accounts, plus higher amounts for commercial and industrial accounts. The utilities collect the charges from customers (about \$76 million yearly), and deposit them into a state fund, which the General Assembly then appropriates yearly to the state Department of Commerce and Community Affairs, the LIHEAP and weatherization grantee. About 80 percent of the fund, \$65 million annually, goes for low-income bill payment assistance, and 10 percent, about \$7.6 million annually, supplements the state's weatherization program.

## KENTUCKY

A major gas and electric utility has a percent of income payment plan that started in January 1993 and was extended for five more years in January 1997. The plan allows low-income households to pay 9 percent to 11 percent of their income towards bills depending on their income level in relation to federal poverty guidelines. Participants receive a fixed credit on their bills equal to a percentage of their annual income. Part of the fixed credit is applied to arrearages if a participant had arrearages when entering the program. Average annual subsidy for a successful participant is \$600; the average arrearage subsidy is \$154 per year.

One major utility has an Experimental Energy Conservation Rate for gas and electric customers who are LIHEAP recipients and who participate in formal conservation and energy education programs. Lower electric rates are available for the first 600 kWh of usage, a higher than standard rate is implemented if usage exceeds 600 kWh.

## MAINE

State legislation in 1991 ordered low-income rates or other programs from investor-owned utilities; they include a rate discount, a PIPP variation, and a bill credit program. The largest program, through Central Maine Power, allows participants to pay a fixed percentage of their income for energy; the percentage varies based on their level of poverty and electric usage. Programs are expected to continue with design changes aimed at statewide uniformity under restructuring.

## MARYLAND

Several utility companies provide credits, arrearage forgiveness and waivers of reconnection, deposit fees and service application charges to low-income households. In addition, the State Department of Human Resources, Office of Home Energy Programs, along with local program delivery agencies, administers the Electric Universal Service Program. The EUSP, funded through a millage charge on all bills, provides assistance for past due bills, as well as assistance for current charges. Eligibility is limited to electric customers at or below 150% of the FPL.

## MASSACHUSETTS

State and local agencies have negotiated low-income discounts with major gas and electric utilities as part of rate cases since 1980. In 1997 the Massachusetts legislature passed restructuring legislation that requires that distribution companies continue discounts to eligible low-income customers. The legislation also codified and expanded eligibility for existing utility discounts so that households earning up to 175 percent of poverty would be eligible. The law maintains the state's current low-income utility discounts, which amount to about \$36 million.

In addition to the low-income discount, NSTAR electric is currently operating a small pilot program on Cape Cod that combines arrearage forgiveness with budget counseling and energy education. The pilot is funded by proceeds from a regulatory settlement.

## MICHIGAN

In February 2002, the Michigan Public Service Commission (PSC) announced the release of \$27.4 million for energy payment assistance for low-income households in the state. The money will be distributed through the state LIHEAP office and seven community action and non-profit groups.

The money is part of the state's the low-income energy efficiency (LIEE) fund authorized by Michigan's electric restructuring legislation. The 2000 restructuring law created the LIEE fund as part of securitization -- bonds that customers pay off on their bills, allowing the state's two largest electric utilities, Detroit Edison and Consumers Energy, to recover their stranded costs. Proceeds from securitization were first used to lower rates by five percent; any other revenues go into the LIEE fund. The fund, which will run for six years,

began collecting money in the spring of 2001 and totaled about \$20 million as of November 2001.

#### MINNESOTA

As a result of legislation passed in 1994, Minnesota requires that electric companies serving over 200,000 residential customers provide a 50 percent discount for low-income customers on the first 300 kilowatt hours consumed each month. The provision applies only to the state's largest utility, Xcel Energy. In 2001, approximately \$4.1 million in discounts were provided to 41,456 households.

#### MISSISSIPPI

Since the early 1990's the monthly service charge may be waived for eligible TANF and SSI recipients. Participating Mississippi Power customers save \$16.43 per month.

#### NEVADA

Two utilities use company funds to credit accounts that are in shut-off situations, two utilities provide arrearage forgiveness and waivers of deposit and reconnect fees, one utility contributes a 10% discount to low-income households with elderly or disabled members. In addition, the Nevada Legislature last year adopted a bill that calls for a new payment assistance program. Provisions of the new legislation require that eligible low-income customers pay an amount such that their total home energy burden does not exceed that of a median-income household.

#### NEW JERSEY

The New Jersey Board of Public Utilities (BPU) this year approved an interim Universal Service Fund (USF) program worth \$15 million to assist low-income consumers with the payment of their electric and natural gas heating bills through a \$200 fixed credit. Investor-owned gas and electric companies.

The program calls for rate assistance in the form of fixed bill credits and arrearage forgiveness to income-eligible households. The fixed credit would bring participating households' energy bills down to an 'affordable' percentage of their household income. In determining the amount of the fixed credit, any assistance that customers receive from other programs such as LIHEAP and Lifeline would be taken into account.

#### NEW YORK

Several New York State investor-owned utilities offer affordable payment programs that involve maximum affordable payment plans and/or arrearage forgiveness. Niagara Mohawk (NIMo), for example, offers a comprehensive low-income service and

affordability program known as LICAP. Niagara Mohawk, a National Grid company affiliated with National Grid and Narragansett Electric Company, provides electric service to approximately 1.5 million customers and natural gas to approximately 540,000 customers in upstate New York. LICAP, a low-income energy affordability program that offers a comprehensive array of payment assistance, arrearage forgiveness, energy education and efficiency services, was designed to help low-income customers who are unable to pay their full energy costs to retain service. At the same time, the program is intended to enable the company to continue serving payment-troubled customers while reducing arrearages and uncollectibles.

As part of a targeted, comprehensive approach to energy affordability, LICAP includes a negotiated maximum partial bill payment percentage which the participating customer must make each month. The company assumed in designing this payment structure that the annual total of these partial payments would be greater than the total of the larger but sporadic payments made prior to program participation. In addition, the Company agrees to maintain service and forgive 50% of arrears up to a maximum of \$250/year for customers who keep current on their payments.

Extensive evaluation of the LICAP program has demonstrated an increase in participant dollars flowing to the utility despite a decrease in the amount of any single payment. There were also decreased arrears and uncollectibles, lower customer usage and bills, and higher rate of retention of service. Seventy-seven percent of customers who began a pilot program stayed current on their bills. Total net revenues from LICAP participants were projected to be 16% higher than revenues from similar customers under traditional collection procedures.<sup>18</sup>

## OHIO

This state has operated a Percentage of Income Payment Plan (PIPP) since 1983. Arrearage crediting has long been a component of this program. For customers who participate, contributions toward the utility bill are credited against any outstanding arrearages that existed prior to the customer's participation in the program. So long as the customer makes the required percentage of income payment contribution (10% of income for primary heat customers; 5% for non-heat customers), s/he retains utility service while reducing arrears until the balance is paid off.

In addition to the arrearage crediting that is associated with Ohio's PIPP, the Legislature adopted a one-time arrearage forgiveness provision that applies specifically to elderly and disabled customers who are current in their PIPP payments. Under this provision, all outstanding arrears are immediately forgiven for the eligible population.

## PENNSYLVANIA

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<sup>18</sup> Ziegler, John, "Utility Low-Income Programs in the Changing World of Deregulation," Affordable Comfort, 2000.

Customer Assistance Programs, in place with most major gas and electric utilities for over a decade, usually provide a percentage of bill plan or a percentage of income payment plan along with arrearage forgiveness. The percentage of income paid is determined both by level of income and heating fuel. Programs offered by Columbia Gas and Dusquesne Light operate in this manner -- the lower the customer's ratio of income to the federal poverty level, the lower the percentage of income that is required to retain service. In addition, Columbia Gas forgives one-quarter of outstanding arrearage balances over 12 months of regular, timely payments (4-year payoff), and Dusquesne reduces the balance by 1/12 every three months (3-year payoff).

#### RHODE ISLAND

Utility companies offer low-income customers discounted rates. Reductions amounted to about \$3 million in 2001. In addition, two companies match 30% - 35% of LIHEAP grants.

#### WISCONSIN

The State of Wisconsin under Wis. Stat. Chapter 49 directs General Assistance funds to households without assets or means of support to provide a minimum of life's necessities including the cost of home heating. Also, state and local sales tax is suspended for LIHEAP eligible households for the costs of home heating to direct additional funds to those households to relieve the costs of home heating. In addition, Housing Cost Reduction Initiative Utility Payment Program funds are distributed for payment of uncollectible utility arrearages. Assistance is provided to households whose housing cost is more than 35 percent of their total income and who have exhausted other sources of assistance. The Legislature appropriated about \$21 million in 2001 for these purposes.