

**NEW YORK ENERGY \$MART<sup>SM</sup> LOW-INCOME ENERGY AFFORDABILITY  
PROGRAM EVALUATION AND STATUS REPORT**

**SEPTEMBER 2002**

**APPENDIX**

APPENDIX A

*Low-Income Energy Affordability Efficiency Programs*

APPENDIX B

*New York State Residential Household Census Data*

APPENDIX C

*Residential Energy Statistics*

APPENDIX D

*Other Statewide Low-Income Program Summaries*

APPENDIX E

*Initial 3-Year New York Energy \$mart<sup>SM</sup>  
Low-Income Energy Affordability Program Logic Model*

## APPENDIX A

### LOW-INCOME ENERGY AFFORDABILITY EFFICIENCY PROGRAMS

This Appendix more fully outlines the roles and responsibilities of the myriad Low-Income Energy Affordability Programs.

#### Direct Installation Program

<i>Service:</i>	Introduce electric efficiency measures into housing being weatherized under the federal Weatherization Assistance Program (WAP) which at the time did not include electric efficiency measures.
<i>Implementation Contractor:</i>	Association for Energy Affordability, Inc. (AEA) 505 8 <sup>th</sup> Avenue, NY, NY
<i>Role:</i>	AEA developed protocols for electric efficiency measures, trained the WAP agencies to apply the protocols to the auditing, specification and installation of the project, and coordinated WAP agencies in delivering the service as value-added service of weatherization.
<i>Stakeholders:</i>	NYS Division of Housing and Community Renewal (DHCR), the State administrator for the federal Weatherization Assistance Program that is delivered by a Statewide network of community action agencies and other community-based organizations.
<i>Service Area:</i>	Con Edison, Orange and Rockland, Central Hudson
<i>Target Customers:</i>	Residential buildings receiving weatherization services
<i>Start/End Date:</i>	October 1998 to April 2002
<i>Program Budget:</i>	\$8.5 million
<i>Metrics:</i>	Electric efficiency measures were installed in 10,235 housing units saving more than 11.4 million kilowatts annually, and leveraging \$20.5 million in additional investment for a leveraging ratio of 2.9 to 1. The benefit-to-cost ratio is 2.2 to 1 (refer to Table 4-6 in Section 4 of this report for further detail).

## **Publicly Assisted Housing Program (PAHP)**

<i>Service:</i>	Comprehensive whole building approach to improving energy efficiency in publicly assisted multifamily housing. PAHP provides energy analysis, financial packaging services, gap funding that uses NYSERDA funding as last money in required to make the project work, and verification services to ensure implementation of the approved measures.
<i>Implementation Contractor:</i>	Hamilton, Rabinovitz & Alshuler, Inc (HR&A) 1790 Broadway, NY, NY
<i>Role:</i>	As the Program Implementor, HR&A markets whole building energy efficiency services to owners, managers, regulators, and financiers of low-income housing; manages, together with Community Environmental Center in Queens, a team of five engineering firms performing building-wide, systemic analyses of the energy usage in publicly assisted developments, utilizing software developed for NYSERDA; packages financing for implementation so as to maximize leverage of State monies (tapping local, federal, utility and private sources) -- thus far it has averaged more than \$2 in leveraged funds for every \$1 in NYSERDA support; coordinates directly with major housing regulatory agencies and housing lenders, helping to move the multi-family housing market toward greater efficiency; oversees, through Community Environmental Center, the installation of energy efficiency measures, and monitors energy usage for three years post-construction.
<i>Stakeholders:</i>	NYS Division of Housing and Community Renewal, NYC Housing Preservation and Development, U.S. Department of Housing and Urban Development
<i>Service Area:</i>	Initially Con Edison, Orange and Rockland, Central Hudson then extended to balance of investor-owned utilities with SBC2.
<i>Target Customers:</i>	Residential buildings larger than four units that satisfy eligibility criteria designed to target households with incomes up to 80% of SMI.
<i>Start/End Date:</i>	February 2000 to May 2002
<i>Program Budget:</i>	\$13.3 million
<i>Metrics:</i>	Through June 30, 2002, energy audits and financial packaging were completed for 10,220 units representing annual savings of more than 21.5 million kilowatt hours and 115,405 million BTUs for annual customer savings of \$520. These projects are leveraging an additional investment of over \$28.5 million for a leveraging ratio of 3.2 to 1. The benefit-to-cost ratio is 3.5 to 1 ( <i>refer to Table 4-14 in Section 4 of this report for further detail</i> ).

## **Assisted Multifamily Program**

<i>Service:</i>	AMP, the successor to PAHP, provides energy analysis, financial packaging services, and gap funding to low-income multifamily buildings.
<i>Implementation Contractor:</i>	Hamilton, Rabinovitz & Alshuler, Inc (HR&A) 1790 Broadway, NY, NY
<i>Role:</i>	Under AMP, HR&A is adding a variety of new elements to PAHP. Working with the Association for Energy Affordability, it will train and manage a team of Local Case Managers, who will provide local level outreach, program coordination and technical services in several cities throughout New York State. HR&A will also expand the program to delegate underwriting duties to HPD, DHCR, and HUD, and will include bulk purchasing of many energy efficiency items and offer an equipment-based analysis and incentive program for assisted buildings that do not require a whole-building audit.
<i>Stakeholders:</i>	NYS Division of Housing and Community Renewal (DHCR), NYC Housing Preservation and Development (HPD), U.S. Department of Housing and Urban Development (HUD)
<i>Service Area:</i>	All SBC participating distribution utilities
<i>Target Customers:</i>	Residential buildings larger than four units that satisfy eligibility criteria designed to target households with incomes up to 80% of SMI.
<i>Start/End Dates:</i>	May 2002 to June 2006
<i>Program Budget:</i>	\$58.4 million
<i>Metrics:</i>	Goal of serving 70,000 apartment units with continued leveraging at 3:1 or better.

## **Assisted Home Performance with Energy Star®**

*Service:* Energy audits, financing, and installation of identified energy efficiency measures in 1 to 4 family homes with household income below 80% of SMI.

*Implementation Contractors:* Conservation Services Group (CSG)  
126 State Street, Albany, NY

*Roles:* Conservation Services Group (CSG), with subcontractor support from the Wisconsin Energy Conservation Corporation (WECC), reviews all job proposals to ensure that the proposed measures are eligible for the program, screens applicants for eligibility, and appropriate subsidy and financing. CSG then notifies the contractor whether it may proceed with the proposed work for the customer. Upon job completion, CSG reviews the Certificate of Completion, including the results of key post-installation health and safety tests that the contractor is required to perform. If the information provided is in order, CSG authorizes payment to the contractor by NYSERDA. CSG is also responsible for program Quality Assurance.

Ten Regional Teams, comprised of Weatherization Assistance Program providers across the State, were brought together as the first step in developing a trained and certified infrastructure of energy service professionals for this under served market between 60% and 80% of SMI. SBC funding for community-based organization coordination is subsidizing the training, certification, and certain other start-up costs associated with launching this service. The teams will contract with customers on a fee-for-service basis.

*Stakeholders:* NYS Division of Housing and Community Renewal

*Service Area:* All SBC participating distribution utilities

*Target Customers:* Residential buildings with 1 to 4 units

*Start/End Date:* June 2002 to June 2006

*Program Budget:* \$16 million

*Metrics:* Goal of serving 3,200 units

## **Weatherization Network Initiative**

<i>Service:</i>	Energy audits to identify and then install electric efficiency measures in previously weatherized homes that are currently ineligible for additional WAP services.
<i>Implementation Contractors:</i>	Ten Regional Teams of Weatherization Assistance Program Providers
<i>Roles:</i>	Ten Regional Teams, comprised of Weatherization Assistance Program providers across the State, will return to previously weatherized units that were not served by the Direct Installation Program and are not now eligible for weatherization to install electric efficiency measures.
<i>Stakeholders:</i>	NYS Division of Housing and Community Renewal
<i>Service Area:</i>	All SBC participating distribution utilities
<i>Target Customers:</i>	Residential buildings with 1 to 4 units
<i>Start/End Date:</i>	June 2002 to June 2006/
<i>Program Budget:</i>	\$5.5 million
<i>Metrics:</i>	Goal of serving 5,500 units

## APPENDIX B

### NEW YORK STATE RESIDENTIAL HOUSEHOLD CENSUS DATA

This Appendix B contains Tables B-1 and B-2. Table B-1 identifies the total number of households in New York State, by County and by household type. Table B-2 identifies the total number of households in the State, by County, and that have income levels between 60% to 80% of State Median Income (SMI). As reported in Section 2 of this Low-Income Energy Affordability Program Evaluation and Status Report, the Low-Income Program, administered by NYSEERDA, focuses on low-income customers whose incomes lie below 80% SMI. Table B-2 is provided to show how many households, have incomes between 60% to 80% SMI, and are considered “working poor”, as defined in Section 2.

**Table B-1. Total Number of Households in New York State by County and by household type, 2000 U.S. Census**

NYS County	1-unit detached	1-unit attached	2 to 4 units	5 to 9 units	10 or more units	Mobile home, trailer, or other	Total
Albany County	59,290	4,680	34,841	7,819	13,729	3,896	124,255
Allegany County	14,624	166	2,042	505	251	4,363	21,951
Bronx County	23,729	20,203	60,803	14,030	313,291	8,899	440,955
Broome County	50,137	1,471	19,004	4,985	6,488	5,884	87,969
Cattaraugus County	23,931	705	4,776	846	813	5,768	36,839
Cayuga County	20,744	319	5,361	1,017	1,494	4,345	33,280
Chautauqua County	40,432	634	11,943	1,791	2,579	5,303	62,682
Chemung County	24,202	585	6,691	1,744	1,608	2,460	37,290
Chenango County	13,056	165	2,885	600	538	4,920	22,164
Clinton County	17,155	1,283	4,426	1,924	1,767	5,635	32,190
Columbia County	19,554	543	4,019	912	643	3,468	29,139
Cortland County	10,830	163	3,707	944	1,054	1,983	18,681
Delaware County	18,333	306	2,638	658	306	5,120	27,361
Dutchess County	61,132	3,337	13,395	5,581	8,243	5,944	97,632
Erie County	214,265	10,887	122,865	17,733	25,762	10,619	402,131
Essex County	15,719	273	1,997	559	379	2,566	21,493
Franklin County	15,201	169	2,151	884	800	2,757	21,962
Fulton County	16,368	146	5,551	550	647	2,998	26,260
Genesee County	15,166	230	3,807	724	859	1,810	22,596
Greene County	16,550	651	3,282	797	316	3,404	25,000
Hamilton County	6,155	72	195	17	40	1,755	8,234
Herkimer County	19,514	285	4,890	768	1,331	4,011	30,799
Jefferson County	26,744	1,462	9,103	2,266	2,163	8,781	50,519
Kings County	38,436	64,711	306,400	94,893	356,032	13,199	873,671
Lewis County	9,103	69	1,108	231	228	2,443	13,182
Livingston County	15,394	201	2,646	896	637	3,310	23,084
Madison County	18,136	243	3,393	779	918	3,172	26,641
Monroe County	174,952	14,137	44,389	20,931	25,754	5,361	285,524

**Table B-1. Total Number of Households in New York State by County and by household type, 2000 U.S. Census**

NYS County	1-unit detached	1-unit attached	2 to 4 units	5 to 9 units	10 or more units	Mobile home, trailer, or other	Total
Montgomery County	10,985	223	7,192	685	702	2,064	21,851
Nassau County	342,761	10,783	40,814	6,144	40,303	5,487	446,292
New York County	1,739	2,913	17,327	47,100	703,927	12,121	785,127
Niagara County	56,610	1,523	17,820	4,741	5,066	4,625	90,385
Oneida County	55,975	1,467	24,987	4,507	6,578	7,737	101,251
Onondaga County	112,707	5,598	30,852	13,187	23,788	4,746	190,878
Ontario County	25,282	1,340	4,323	1,704	1,824	4,474	38,947
Orange County	67,645	6,388	18,802	5,651	6,856	5,472	110,814
Orleans County	11,351	147	2,109	565	243	1,930	16,345
Oswego County	29,796	372	5,496	1,597	1,789	9,498	48,548
Otsego County	17,159	282	3,367	876	376	4,325	26,385
Putnam County	25,166	1,659	2,472	901	889	811	31,898
Queens County	146,057	66,103	216,684	42,228	268,074	13,544	752,690
Rensselaer County	33,211	1,349	16,619	3,488	4,246	3,678	62,591
Richmond County	48,054	27,190	40,431	3,159	17,520	3,372	139,726
Rockland County	54,859	5,396	11,184	5,702	8,940	2,183	88,264
Saratoga County	43,938	3,601	10,682	2,717	4,189	9,978	75,105
Schenectady County	36,779	615	16,701	2,937	4,262	1,475	62,769
Schoharie County	9,581	106	1,616	285	249	2,594	14,431
Schuyler County	5,783	47	670	107	88	1,777	8,472
Seneca County	9,737	137	1,580	417	265	2,178	14,314
St. Lawrence County	31,995	431	4,863	1,417	1,897	6,918	47,521
Steuben County	27,220	344	5,502	1,031	1,355	7,567	43,019
Suffolk County	389,825	15,903	33,290	7,980	23,531	10,788	481,317
Sullivan County	27,790	1,399	3,779	1,838	1,272	5,736	41,814
Tioga County	13,362	138	2,323	362	370	3,699	20,254
Tompkins County	16,710	856	6,299	3,036	4,138	4,299	35,338
Ulster County	48,188	1,575	9,213	3,306	2,515	6,919	71,716
Warren County	21,897	771	3,912	1,159	1,087	2,911	31,737
Washington County	17,127	183	3,607	564	274	2,461	24,216
Wayne County	24,360	433	4,035	1,045	941	4,374	35,188
Westchester County	147,014	14,244	60,381	18,389	91,420	5,279	336,727
Wyoming County	11,403	109	1,933	397	209	1,797	15,848
Yates County	8,415	73	900	252	221	1,768	11,629
<b>Total</b>	<b>2,929,333</b>	<b>301,794</b>	<b>1,320,073</b>	<b>374,858</b>	<b>1,998,074</b>	<b>302,759</b>	<b>7,226,891</b>

Table Source: U.S. Census Bureau. <http://factfinder.census.gov>.

**Table B-2. Total Number of Households in New York State by County, and Between 60% to 80% SMI, 2000 U.S. Census**

NYS County	1-4 Unit Households	Total Households	% 1-4 Unit Households	60%-80% Population*	60%-80% in 1-4 Unit Households**
Albany County	98,811	124,255	80%	19,051	15,150
Allegany County	16,832	21,951	77%	3,578	2,744
Bronx County	104,735	440,955	24%	73,093	17,361
Broome County	70,612	87,969	80%	14,947	11,998
Cattaraugus County	29,412	36,839	80%	7,102	5,670
Cayuga County	26,424	33,280	79%	5,772	4,583
Chautauqua County	53,009	62,682	85%	10,964	9,272
Chemung County	31,478	37,290	84%	7,088	5,983
Chenango County	16,106	22,164	73%	4,397	3,195
Clinton County	22,864	32,190	71%	5,901	4,191
Columbia County	24,116	29,139	83%	4,254	3,521
Cortland County	14,700	18,681	79%	3,477	2,736
Delaware County	21,277	27,361	78%	4,096	3,185
Dutchess County	77,864	97,632	80%	11,027	8,794
Erie County	348,017	402,131	87%	66,810	57,820
Essex County	17,989	21,493	84%	2,825	2,364
Franklin County	17,521	21,962	80%	3,532	2,818
Fulton County	22,065	26,260	84%	4,547	3,821
Genesee County	19,203	22,596	85%	4,043	3,436
Greene County	20,483	25,000	82%	3,039	2,490
Hamilton County	6,422	8,234	78%	609	475
Herkimer County	24,689	30,799	80%	5,401	4,330
Jefferson County	37,309	50,519	74%	8,217	6,068
Kings County	409,547	873,671	47%	137,608	64,506
Lewis County	10,280	13,182	78%	1,914	1,493
Livingston County	18,241	23,084	79%	3,971	3,138
Madison County	21,772	26,641	82%	4,604	3,763
Monroe County	233,478	285,524	82%	40,267	32,927
Montgomery County	18,400	21,851	84%	4,480	3,772
Nassau County	394,358	446,292	88%	37,824	33,423
New York County	21,979	785,127	3%	97,535	2,730
Niagara County	75,953	90,385	84%	15,508	13,032
Oneida County	82,429	101,251	81%	18,437	15,010
Onondaga County	149,157	190,878	78%	29,502	23,054
Ontario County	30,945	38,947	79%	5,965	4,739
Orange County	92,835	110,814	84%	13,284	11,129
Orleans County	13,607	16,345	83%	3,017	2,512
Oswego County	35,664	48,548	73%	7,685	5,646
Otsego County	20,808	26,385	79%	4,738	3,737
Putnam County	29,297	31,898	92%	1,809	1,661
Queens County	428,844	752,690	57%	106,915	60,915
Rensselaer County	51,179	62,591	82%	10,077	8,240
Richmond County	115,675	139,726	83%	13,827	11,447
Rockland County	71,439	88,264	81%	7,502	6,072
Saratoga County	58,221	75,105	78%	10,109	7,836

**Table B-2. Total Number of Households in New York State by County, and Between 60% to 80% SMI, 2000 U.S. Census**

NYS County	1-4 Unit Households	Total Households	% 1-4 Unit Households	60%-80% Population*	60%-80% in 1-4 Unit Households**
Schenectady County	54,095	62,769	86%	10,641	9,171
Schoharie County	11,303	14,431	78%	2,438	1,910
Schuyler County	6,500	8,472	77%	1,597	1,225
Seneca County	11,454	14,314	80%	2,403	1,923
St. Lawrence County	37,289	47,521	78%	7,668	6,017
Steuben County	33,066	43,019	77%	8,141	6,257
Suffolk County	439,018	481,317	91%	41,191	37,571
Sullivan County	32,968	41,814	79%	4,648	3,665
Tioga County	15,823	20,254	78%	3,364	2,628
Tompkins County	23,865	35,338	68%	6,037	4,077
Ulster County	58,976	71,716	82%	9,564	7,865
Warren County	26,580	31,737	84%	4,078	3,415
Washington County	20,917	24,216	86%	3,959	3,420
Wayne County	28,828	35,188	82%	5,358	4,390
Westchester County	221,639	336,727	66%	32,774	21,572
Wyoming County	13,445	15,848	85%	3,114	2,642
Yates County	13,445	15,848	85%	3,114	2,642
<b>Total</b>	<b>4,555,257</b>	<b>7,231,110</b>	<b>48</b>	<b>1,000,437</b>	<b>623,173</b>

Table Source: U.S. Census Bureau. <http://factfinder.census.gov>.

Table B-2 Notes:

\*60%-80% Population taken from Census Bureau category of \$15,000-\$24,999.

Actual 60%-80% range based on NYS median income of \$32,965 is \$19,779 to \$26,372.

\*\*60%-80% Population in 1-4 Unit Households assumes that income level is independent of building type a family chooses to live in. That is, the percentage of any income level category living in a given building size is equal to that building size's percentage of the entire number of households.

## APPENDIX C

### RESIDENTIAL ENERGY STATISTICS

This Appendix C contains additional residential and low-income household statistics including household energy consumption, average household energy demand, household energy uses, and energy expenditures.

<b>Table C-1. New York State Energy Profile, Residential and Low-Income Households</b>	
Household Characteristic	New York State Total Residential Household Statistics
<b>Total Number of Households</b>	
All residential households	6.8 million
Owned	3.8 million
Rented	3.1 million
Using natural gas	75%
Using electricity	100%
Using fuel oil	43%
Using wood	12%
Using liquefied petroleum gases	8%
<b>Residential Household Energy Consumption</b>	
Total, excluding electricity losses and wood (Btu)	0.8 quadrillion
Electricity (kilowatthours)	0.04 trillion
Natural gas (cubic feet)	0.4 trillion
Fuel oil (gallons)	2.2 billion
Liquefied petroleum gases (gallons)	0.1 billion
Per household (Btu)	64 million
<b>Average Residential Household Energy Demand</b>	
Electricity (kilowatthours)	5,900
Natural gas (cubic feet)	74,000
Fuel oil (gallons)	743
Kerosene (gallons)	334
Liquefied petroleum gases (gallons)	184
Wood (cords)	5.0

<b>Table C-1. New York State Energy Profile, Residential and Low-Income Households</b>	
<b>Household Characteristic</b>	<b>New York State Total Residential Household Statistics</b>
<b>Residential Household Energy Uses</b>	
<u>Space heating</u> <ul style="list-style-type: none"> <li>- Heating degree days per household</li> <li>- Heated square footage per household</li> <li>- Natural gas as main space heating fuel</li> <li>- Fuel oil as main space heating fuel</li> <li>- Electricity as main space heating fuel</li> <li>- Total energy demand for space heating (Btu)</li> <li>- Natural gas share</li> <li>- Fuel oil share</li> <li>- Electricity share</li> </ul>	5,579 1,628 3.4 million households 2.7 million households 0.4 million households 0.5 quadrillion 52% 44% 2%
<u>Electric air-conditioning</u> <ul style="list-style-type: none"> <li>- Cooling degree-days per household</li> <li>- Cooled square footage per household</li> <li>- Households with electric central air-conditioning</li> <li>- Households with electric room/wall air-conditioning</li> <li>- Total electricity demand for air conditioning per household (kWh)</li> <li>- Average electricity demand for air-conditioning per household (kWh)</li> </ul>	775 1,081 19% 44% 2 billion 518
<u>Water heating</u> <ul style="list-style-type: none"> <li>- Total energy demand for water heating (Btu)</li> <li>- Natural gas share</li> <li>- Fuel oil share</li> </ul>	0.2 quadrillion 47% 41%
<u>Appliances operation and lighting</u> <ul style="list-style-type: none"> <li>- Total electricity demand for appliances and lighting (kWh)</li> <li>- Total natural gas demand for appliances and lighting (cubic feet)</li> <li>- Total liquified petroleum gases demand for appliances and lighting (gallons)</li> <li>- Average electricity demand for appliances and lighting per household (kWh)</li> <li>- Share of electricity used for refrigerators</li> </ul>	34 billion 31 billion 18 million 4,878 20%
<b>Residential Household Energy Unit Costs</b>	
Energy average cost per million Btu	\$13.97
Electricity average cost per kWh	14.4 cents
Natural gas average cost per thousand cubic feet	\$9.98
Fuel oil average cost per gallon	\$0.94
Kerosene average cost per gallon	\$1.14
Liquefied petroleum gases average cost per gallon	\$1.47

<b>Table C-1. New York State Energy Profile, Residential and Low-Income Households</b>	
<b>Household Characteristic</b>	<b>New York State Total Residential Household Statistics</b>
<b>Residential Household Energy Expenditures, per Year</b>	
<u>Energy Expenditures by Source</u> – Total – Electricity – Natural gas – Fuel oil – Liquefied petroleum gases	\$12 billion \$5.8 billion \$3.7 billion \$2.0 billion \$0.15 billion
<u>Expenditures per household</u> – Median expenditures – Average expenditures	\$1,563 \$1,724
<u>Average expenditures per household using the specified type of energy</u> – Electricity – Natural gas – Fuel oil – Liquefied petroleum gas – Kerosene	\$846 \$731 \$699 \$271 \$381
<u>Average expenditures per household engaged in the specified end use</u> – Space heating – Electric air-conditioning – Water heating – Refrigerators – Other appliances and lighting	\$661 \$80 \$244 \$147 \$634

Source: U.S. DOE, Energy Information Administration. Middle Atlantic Data Abstract. Residential Energy Consumption Survey, 1997.

## **APPENDIX D**

### **OTHER STATEWIDE LOW-INCOME PROGRAM SUMMARIES**

This Appendix D serves to identify and outline the following programs that provide low-income energy services in New York:

- The Affordability Program, served by Niagara Mohawk Power Corporation.
- NYSEG Power Partner, served by New York State Electric and Gas Corporation.
- Low-Income Home Energy Assistance Program (HEAP), administered by the New York State Office of Temporary and Disability Assistance (OTDA).
- Weatherization Assistance Program (WAP), administered by the New York State Department of Housing and Community Renewal (DHCR).

## **The Affordability Program (Niagara Mohawk Power Corporation)<sup>1</sup>**

Program Description. The Affordability Program, administered by Niagara Mohawk Power Corporation (NMPC), and funded by the system benefits charge (SBC), is targeted to low-income customers who are not on temporary assistance and who have a documented “inability-to-pay” for their full energy costs. The program provides all participants with a negotiated maximum monthly partial payment, affordable energy use management education, and arrears forgiveness (50% up to a maximum of \$250 per year).

Program Objective. The objective of the program is to provide “can’t pay” customers with remedial services that will enable such customers to better manage their energy use and costs in the long-term. This would help to ensure that such customers have a continuation in utility service, and have lower arrears. Ultimately, all ratepayers benefit by keeping these customers on the system and reducing the costs associated with uncollectibles.

Program Goal (Number of Customers to Serve). The Affordability Program will enroll 29,000 customers.

Eligibility Criteria. The following criteria are necessary for low-income customers to participate in The Affordability Program:

- Customer must have been approved for HEAP.
- Customer is not on temporary assistance.
- Customer’s monthly expenses must be greater than monthly resources.
- Customer is in arrears.
- Customer is in the Niagara Mohawk service area.

Implementation Date. The program is active an on-going. The program was implemented as a pilot in November 1994 and was expanded to a full program September 1, 1998 as part of the PowerChoice Settlement Agreement.

Outreach and Education Activities. Outreach and education activities are provided by NMPC consumer advocates, program coordinators, and the customer service phone center. The Affordability Program is incorporated into the company’s Customer Assistance Program.

Results-to-date. More than 16,700 customers have enrolled into the program. Initial impact studies of the program demonstrated that on average, the net increase in bill payment coverage for participants who received full program services including energy efficiency retrofits increased from 75% to 94%.

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<sup>1</sup> Source for information on the Niagara Mohawk Affordability Program: New York State Public Service Commission. <http://www.dps.state.ny.us/00m0504/00m0504.html>

## **Power Partner (New York State Electric and Gas)<sup>2</sup>**

Program Description. The New York State Electric and Gas (NYSEG) Power Partner program, funded by the system benefits charge, offers a reduced basic service charge, places unpaid balances on hold, and matches dollar-for-dollar customer payments made towards balances on hold. Power Partner also offers financial and energy services, as well as family development through community collaboration and outreach. Financial services provided by the program include: a calendar, monthly newsletter, workshops, and debt counseling. Energy services include weatherization, refrigerator replacement, water heater replacement, and health and safety measures. Family development includes working one-on-one with a credentialed family development counselor.

Program Objective. The objective of the program is to reduce energy bills, promote energy efficiency, and help customers become self-reliant.

Program Goal (Number of Customers to Serve). The Power Partner program will enroll 22,500 customers.

Eligibility Criteria. The program serves customers who reside in the NYSEG electric and gas service area and who have arrears on their NYSEG account for 30 days or more and an income up to 200% of Federal Poverty Level.

Implementation Date. The program began October 1, 1998.

Outreach and Education Activities. Outreach and education activities are provided by Power Partner staff who coordinate activities to increase awareness and promote the program with NYSEG employees and community agencies. Direct mail pieces are sent to targeted customers. The program also uses brochures, posters, and a video that were created to distribute to community agencies.

Results-to-date. As of May 31, 2000:

- 16,067 customers had enrolled in the Power Partner program.
- 16,469 customers and other workshop participants had received self study calendars and monthly newsletters.
- 324 customers attended workshops.
- 1,817 customers had received new refrigerators.
- 596 customers have had their water heater replaced or converted.
- 668 customers received energy audits.
- 1,019 customers have had their heating systems services.

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<sup>2</sup> Source for information on the NYSEG Power Partner program: New York State Public Service Commission. <http://www.dps.state.ny.us/00m0504/00m0504.html>

## **The Home Energy Assistance Program (HEAP)<sup>3</sup>**

Program Description. The Home Energy Assistance Program (HEAP) is a federal program that helps low income households pay for heating and or cooling their homes. HEAP seeks to make home energy more affordable for two groups of low income households that have the highest home energy needs:

- Vulnerable households which include frail older individuals, individuals with disabilities, and very young children. These households face serious health risks if they do not have adequate heating or cooling in their homes.
- High energy burden households which include those households with the lowest incomes and highest home energy costs. These households face safety risks in trying to heat or cool their homes if they cannot pay their heating or cooling fuel bills.

In New York, HEAP is funded through a federal grant, allocated to the New York State Office of Temporary and Disability Assistance (OTDA), and administered through the New York State Division of Housing and Community Renewal (DHCR) for weatherization services and the State Office for the Aging for outreach and referral services.

Program Objective: HEAP assists eligible low-income households in meeting the heating and cooling portion of their residential energy needs.

Eligibility Criteria. In order to be eligible to receive HEAP assistance, a household must be low-income and meet any additional eligibility criteria established by the HEAP grantee. In New York, a household must be 60% of State Median Income to be eligible for participation.

Program Results: During the 2001 heating program year, it was estimated that 818,000 households were served.

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<sup>3</sup> Sources for information on the Home Energy Assistance Program: New York State Office of Temporary and Disability Assistance: [www.otda.state.ny.us/otda/heap/default.htm](http://www.otda.state.ny.us/otda/heap/default.htm), the Administration for Children and Families, National Energy Affordability and Accessibility Project: [www.ncaat.org/neaap/programs/lowincome/ny-li.htm](http://www.ncaat.org/neaap/programs/lowincome/ny-li.htm), and the Administration for Children and Families, Low-Income Home Energy Assistance Program: [www.acf.hhs.gov/programs/liheap/eligible.htm](http://www.acf.hhs.gov/programs/liheap/eligible.htm).

## **Weatherization Assistance Program (WAP)<sup>4</sup>**

Program Description. The Weatherization Assistance Program (WAP) is federally authorized and funded through the U.S. Department of Energy (DOE) and the Department of Health and Human Services (DHHS) through a suballocation from the New York State Office of Temporary and Disability Assistance (OTDA). In New York, WAP is administered by the Department of Housing and Community Renewal (DHCR). Weatherization services provided through WAP include:

- Whole-house weatherization;
- Advanced energy audits;
- Air leakage control;
- Insulation;
- Heating efficiency measures;
- Cooling efficiency measures;
- Water heater system improvements;
- Reduction in electricity consumption; and,
- Improving health and safety.

Program Objectives. The objectives of WAP include creating functioning partnerships; providing an economic boost for individuals and communities; improving health and safety; and mitigating the effects of natural disasters.

Eligibility Criteria. Across the State, weatherization services are provided by 73 organizations referred to as subgrantees. These groups include community action agencies, various community and neighborhood organizations, county governments, and Native American Tribal organizations. The weatherization work carried out by these groups is performed by their own trained crews, and or local subcontractors. Weatherization funds are used to assist low-income persons, particularly the elderly, handicapped, and families with young children; and to reduce national energy consumption, while minimizing the impact of higher fuel costs on low-income families.

There are an estimated 1.5 million dwelling units of individuals and families eligible for service under WAP. The income-eligibility guidelines for WAP are set at 60% of the State Median Income (SMI) level. More than 3.5 million persons who reside in 1.5 million homes in the State are eligible for WAP. Income eligibility thresholds are shown in the table below.

Program results. Since the inception of WAP in 1977, more than 430,000 dwellings have been weatherized in New York.

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<sup>4</sup> Sources of information on the Weatherization Assistance Program: New York State Division of Housing and Community Renewal: [www.dhcr.state.ny.us/ocd/progs/wap/ocdprgwe.htm](http://www.dhcr.state.ny.us/ocd/progs/wap/ocdprgwe.htm), and United States Department of Energy Office of Energy Efficiency and Renewable Energy: [www.eren.doe.gov/buildings/weatherization\\_services.html](http://www.eren.doe.gov/buildings/weatherization_services.html).

### Income Eligibility Thresholds for WAP in New York

Household Size	2001 Annual Income	2002 Annual Income
1	\$17,832	\$18,648
2	\$23,316	\$24,384
3	\$28,800	\$30,120
4	\$34,284	\$35,856
5	\$39,786	\$41,592
6	\$45,252	\$47,328
7	\$46,284	\$48,396
8	\$47,316	\$49,476
9	\$48,336	\$50,556
10	\$51,672	\$53,664
Each Additional	\$4,356	\$4,536

Table Source: NYS Department of Housing and Community Renewal. Weatherization Assistance Program Amended State Plan 2001-2002. [www.dhcr.state.ny.us](http://www.dhcr.state.ny.us)

## **APPENDIX E**

### **INITIAL 3-YEAR NEW YORK ENERGY \$MART<sup>SM</sup> LOW-INCOME ENERGY AFFORDABILITY PROGRAM LOGIC MODEL**

**APPENDIX E. Initial 3-Year New York Energy Smart<sup>SM</sup> Low-Income Energy Affordability Program Logic Model**

INPUTS	ACTIVITIES	OUTPUTS	SHORT-TERM OUTCOMES	LONG-TERM OUTCOMES
<b>Initial 3-Year Program</b>				
\$16.2 million in public benefits funding.	Design, implementation, and evaluation of programs	Cost-effectiveness of program opportunities		
<p><u>Direct Installation Program</u></p> <p>\$9.9 million (61.3% of total low-income budget)</p> <p>Weatherization Assistance subgrantees Program staff</p>	<ul style="list-style-type: none"> <li>- Determine program eligibility</li> <li>- Conduct energy audits</li> <li>- Install energy-efficient measures</li> <li>- Conduct satisfaction surveys</li> <li>- Manage database</li> <li>- Coordinate program offering with WAP</li> <li>- Provide training to WAP subgrantees</li> <li>- Provide training to building-owners</li> </ul>	<ul style="list-style-type: none"> <li># customers served</li> <li># audits completed</li> <li># of measure installations</li> <li># of 1-4 family units (small homes) served</li> <li># of multifamily units served</li> <li># training and educational sessions held</li> <li>Total funds committed</li> <li>Total investment per unit</li> <li>External and leveraged investment</li> </ul>	<ul style="list-style-type: none"> <li>• kWh savings</li> <li>• kW demand savings</li> </ul>	
<p><u>Low-Income Awareness, including the Low-Income Forum on Energy (LIFE)</u></p> <p>\$0.8 million (4.8% of total low-income budget)</p> <p>Hotline staff Program staff</p>	<ul style="list-style-type: none"> <li>- Conduct a baseline of low-income household awareness of energy assistance programs</li> <li>- Design and operate the 1-866-HELP-4-NY hotline</li> <li>- Manage the 1-866-HELP-4-NY hotline</li> <li>- Provide weekly, monthly, and quarterly data on the quarterly</li> <li>- Conduct regional and statewide meetings for LIFE</li> </ul>	<ul style="list-style-type: none"> <li># of calls to hotline</li> <li># of referrals made</li> <li># of callers who were provided energy assistance as a result of calling the hotline</li> <li># of impressions made</li> <li>Number of participating allies</li> <li>Total number of regional meetings held</li> <li>Number of policy recommendations made</li> <li>Total number of participants by sector and type</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in energy awareness of energy assistance programs and energy options</li> <li>• Energy cost savings</li> <li>• Reduction in the amount of materials entering landfills (diverted from landfills from recycling of program products)</li> <li>• Low-income participant satisfaction with services</li> </ul>	<ul style="list-style-type: none"> <li>• Reduction in the energy burden of low-income households served</li> <li>• Increase in awareness of energy efficiency options</li> <li>• Increased energy affordability</li> <li>• Improved health, safety, and comfort of low-income households served</li> <li>• Policy recommendations made to improve low-income participation in markets</li> </ul>
<p><u>Publicly Assisted Housing Program</u></p> <p>\$3.8 million (23.4% of total low-income budget)</p> <p>Program staff Technical service providers Local case managers</p>	<ul style="list-style-type: none"> <li>- Identify income-eligible buildings</li> <li>- Identify and package creative finance options for efficiency projects</li> <li>- Complete energy assessments that establish a scope of recommended energy improvements</li> <li>- Construction oversight</li> <li>- Bulk purchase of efficiency measures</li> <li>- Train and certify boiler mechanics</li> </ul>	<ul style="list-style-type: none"> <li># customer served</li> <li># of measures installed</li> <li># buildings identified for financing</li> <li># buildings approved</li> <li>Total funds committed</li> <li>Investment per unit</li> <li>External and leveraged investment</li> <li>Number of participating allies</li> <li># training and educational sessions held</li> </ul>	<ul style="list-style-type: none"> <li>• Efficiency gains of boilers from clean and tunes performed</li> <li>• Total leveraged funding</li> <li>• Emission reductions resulting from kWh electricity savings</li> </ul>	<ul style="list-style-type: none"> <li>• Market development indicators (<i>i.e.</i>, entrance of new market players, reduction in barriers)</li> <li>• Changes made to how low-income energy assistance programs operate within the State</li> </ul>
<p><u>Low-Income Aggregation Pilot and Oil Buying Strategies Pilot Programs</u></p> <p>\$1.7 million (10.5% of total low-income budget)</p> <p>Program staff Oil vendors Community action agencies</p>	<ul style="list-style-type: none"> <li>- Partner with oil vendors</li> <li>- Develop and maintain website to facilitate commodity supply</li> <li>- Arrange for the bulk purchase of natural gas, fuel oil and or electricity</li> <li>- Coordinate with WAP programs and other private and public efficiency efforts including utility-run programs</li> <li>- Provide energy efficiency education</li> <li>- Provide education on managing finances</li> </ul>	<ul style="list-style-type: none"> <li># of customers aggregated</li> <li>\$ price of fuel or electricity</li> <li># participating fuel-oil dealers</li> <li>Total amount of electricity or fuel-oil purchased</li> <li># clean and tunes performed</li> <li>Number of participating allies</li> <li># of educational sessions held</li> </ul>		

Source: NYSERDA