

**NEW YORK ENERGY SMARTSM PROGRAM
QUARTERLY EVALUATION AND
STATUS REPORT**

**QUARTERLY REPORT TO THE DEPARTMENT OF PUBLIC SERVICE
QUARTER ENDING MARCH 31, 2003**



New York Energy SmartSM
QUARTERLY EVALUATION AND STATUS REPORT UPDATE
For Quarter Ending March 31, 2003

INTRODUCTION

This report updates the progress of the eight-year **New York Energy SmartSM** Program through March 31, 2003. The following information was updated since the last report on progress (through December 31, 2002): budget status; recent solicitations; anticipated energy and electric peak demand savings from committed funds; and energy and electric peak demand savings from installed measures.

BUDGET STATUS

The status of the eight-year budget (1998-2006) is shown by major funding category in Table 1. Also shown are the funds committed¹ and encumbered² as of March 31, 2003. Approximately \$655 million has been committed, representing 70% of the 8-year budget. Over \$500 million, or 54% of the 8-year budget, has been encumbered. It is estimated that every dollar of **New York Energy SmartSM** investment leads to approximately three dollars of outside investment in these projects. Therefore, total outside investment expected from funds encumbered is approximately \$1.5 billion. Over \$223 million, 24% of the 8-year budget, has been paid to program participants.

Table 1. Budget Status by Program Area as of March 31, 2003 (\$ million)

Program Area	8-year Budget	Funds Committed	% Change From Previous Quarter	% of 8-year Budget Committed	Funds Encumbered	% of 8-year Budget Encumbered
Business and Institutional	\$355.4	\$282.3	7%	79%	\$229.8	65%
Residential	\$165.2	\$121.4	9%	74%	\$110.3	67%
Low-Income	\$119.6	\$105.3	2%	88%	\$49.6	42%
R&D	\$210.8	\$116.0	7%	55%	\$82.5	39%
Environmental Disclosure	\$2.9	\$0.35	0%	12%	\$0.35	12%
Evaluation	\$15.6	\$3.4	143%	22%	\$3.4	22%
Administration	\$62.5	\$25.8	8%	41%	\$25.8	41%
TOTAL	\$932.0	\$654.6	7%	70%	\$501.8	54%

¹ Committed funds include (1) encumbered funds and (2) funds set aside for pending contracts.

² Encumbered funds are funds associated with signed contracts and purchase orders.

SOLICITATIONS

Table 2 provides information on Requests for Proposals (RFPs) and Program Opportunity Notices (PONs) that were open during the first quarter of 2003.

Table 2. First Quarter 2003 Solicitations

Solicitation Number	Solicitation Name and Purpose	Solicitation Closing Date
Business and Institutional Program Area		
PON 593-01	New Construction: Requests applications from eligible building owners and leaseholders for financial incentives to improve the energy efficiency of new and renovated buildings.	12/31/03
PON 660-02	Premium Efficiency Motors: Announces the availability of financial incentives to motor vendors for the sale of qualified premium-efficiency motors in New York.	12/31/05
PON 693-02	Smart Equipment Choices: Requests applications from eligible ratepayers for financial incentives to offset a portion of the incremental capital costs of the energy efficiency equipment that reduces electric energy consumption.	6/30/03
PON 695-02	Commercial/Industrial Performance: Request applications from contractors for performance-based incentives to implement cost-effective electrical efficiency improvements or summer demand reduction for eligible customers.	6/30/03
PON 733-02	Peak Load Reduction Program: Requests applications from eligible contractors to identify and implement one or more project(s), which will result in reduced peak electric demand in New York, particularly New York City, for summer 2003 through four distinct program components: Permanent Demand Reduction Efforts (PDRE), Load Curtailment/Shifting Measures (LC/S), Dispatchable Emergency Generator Initiatives (DEGI), and Interval Meters (IM).	10/31/03
PON 758-02	Manufacturing Assistance for Peak Shaving: Seeks projects that identify utility peak shaving opportunities in the New York industrial sector through adoption of manufacturing technologies that reduce peak electricity demand and operating costs.	5/28/03
RFI 757-02	Manufacturing Assistance for Peak Shaving (Implementation): seeks program implementation agreements with organizations that provide technical services to industrial firms.	5/1/03
RFP 755-02	Comprehensive Marketing Services for the Peak-Load Reduction Program: Seeking one contractor to provide comprehensive marketing services.	3/10/03
PON 738-02	Technical Assistance: Seeks applications for conducting studies that identify energy efficient capital improvements or provide guidance with energy-related process improvements; develop energy operations procedures, strategic energy planning, or retro-commission existing systems; or help electric customers analyze electric rates, load shapes, or aggregation opportunities for saving energy costs.	6/11/03
PON 739-02	Combined Heat and Power (CHP) and Renewable Generation Technical Assistance: Seeks proposals to study the feasibility of CHP and renewable generation.	3/5/03
PON 740-02	Enabling Technologies for Price Responsive Load: Invites proposals that expand demand response in the New York Independent System Operator (NYISO) wholesale electricity marketplace.	1/9/03

(1) Funding for New Construction Program PON 593-01 consists of \$27 million from the Business and Institutional Program area and \$3 million from the R&D Program area for photovoltaic (PV) installations.

Table 2: First Quarter 2003 Solicitations (Continued)

Residential and Low-Income Program Areas		
RFP 643-01	Rebuild New York's Communities, New York City Region: Seeks proposals from qualified organizations interested in managing the New York Energy Smart Communities program in New York City	3/12/03
RFP 747-02	Promotional Item Fulfillment: Seeks proposals for all or part of NYSERDA's needs for promotional items, which may include, but is not limited to: pens, pot holders, chip clips and stadium cups. Promotional items will be ordered as needed and distributed at home shows, fairs, etc..	2/4/03
PON 745-02	Special Promotions: Residential Sector Initiatives: Announces the opportunity to develop innovative New York Energy SmartSM program marketing or promotional initiatives that promote Energy Star® products, services and homes to residential energy consumers in New York.	4/17/03
R&D Program Area		
PON 691-02	PV on Buildings: Will provide partial funding for projects to install, demonstrate, and operate photovoltaic (PV) systems on buildings in New York.	2/25/03
PON 724-02	Next Generation of Energy-Efficient End-Use Technologies: Seeks proposals to accelerate research, development and demonstration of emerging and innovative end-use technologies that improve energy efficiency and peak load management.	4/9/03
PON 750-02	Power Systems, Distributed Generation, and Combined Heat and Power: Announces a program to support: 1) Demonstration of DG/CHP systems at industrial/ institutional/commercial/ residential facilities, 2) Feasibility studies to define the baseline design of DG/CHP systems for specific facilities, 3) Technology transfer studies to broaden the market penetration of DG/CHP systems, 4) Product development of new DG power systems and/or related components, and 5) Feasibility studies to assess the viability of new DG product designs/concepts.	4/16/03
PON 764-02	Photovoltaic Practitioner Training: Accreditation and Certification: Requests proposals that will help New York technical schools, colleges, universities, and continuing education providers develop and implement training programs and facilities that are accredited by a national accreditation organization such as the Institute for Sustainable Power (ISP) to train renewable energy practitioners, such as PV installers, instructors, and trainers.	7/15/03
Evaluation Program Area		
RFP 744-02	Process Evaluation Contractor for New York Energy SmartSM Program: Seeks to hire a contractor to assist in the process evaluation and audience research for the New York Energy SmartSM Program	1/14/03
RFP 743-02	Program Analysis Evaluation Contractor for New York Energy SmartSM Program: Seeks to hire a contractor to assist in the evaluation and development of program theories, program logic models, and program portfolio analyses for the New York Energy SmartSM Program	1/13/03
RFP 742-02	Market Assessment, Characterization, and Causality Analysis for New York Energy SmartSM Program: Requests proposals from organizations or individuals interested in providing program evaluation assistance in the areas of market assessment, market characterization, and causality analysis for the New York Energy SmartSM Program.	1/21/03
RFP 753-02	Macroeconomic Impacts of the New York Energy SmartSM Program: Requests proposals from organizations or individuals interested in conducting an analysis to estimate the macroeconomic impacts in New York from implementation of the State's public benefit-funded New York Energy SmartSM Program	3/11/03

PROGRESS SUMMARY

Anticipated Electricity Savings

Tables 3 through 5 show electricity and demand savings for Business and Institutional, Residential and Low-Income, and Industry and Buildings R&D programs. Each table shows the anticipated electricity savings from funds committed and from measures installed as of March 31, 2003. For some programs, anticipated energy savings from funds committed are not available. In this case, the savings from installed measures are reported.

Table 3. Energy and Demand Savings from Business and Institutional Programs as of March 31, 2003

Program	Cumulative Committed Funding (\$ Million)	Anticipated from Funds Committed		Spent Funding (\$ Million)	Achieved from Installed Measures		% Change From Prev. Quarter	
		GWh	MW		GWh	MW	GWh	MW
C/I Performance	\$96.7	602.5	140	\$39.0	245	58	4%	12%
New Construction	\$70.6	278.8	39.8	\$14.5	46.9	5.9	12%	18%
Smart Equipment Choices	\$4.5	40.6	20.0	\$3.9	35.2	17.3	171%	188%
Small Commercial Lighting	\$7.6	2.0*	0.5*	\$3.1	2.0	0.5	5%	25%
Commercial HVAC	\$3.3	0.3*	0.04*	\$0.9	0.3	0.04	<1%	14%
Cooling Recommissioning	\$1.9	24.7	9	\$1.9	24.7	9	0%	0%
Peak Load Reduction (permanent measures)	\$11.1	93.1	38.7	\$3.5	26.0	10.8	0%	0%
Peak Load Reduction (curtailable load)	\$22.6	--	478.7	\$11.8	--	277.5	--	9%
Premium-Efficiency Motors	\$4.0	5.2*	0.9*	\$1.6	5.2	0.9	12%	2%
Technical Assistance	\$27.0	607.5	161.5	\$9.3	251.9	67.0	12%	12%
Loan Fund (Business and Residential) ⁽³⁾	\$6.2	8.9	1.5	\$4.1	8.9	1.5	0%	0%
Total	\$255.5	1,663.6	890.6	\$93.6	646.1	448.4	11%	12%

NA: Not available.

*Savings from installed measures. Savings from funds committed are expected to be greater, but are difficult to accurately estimate due to the nature of the program.

Notes:

(1) Savings estimates for Smart Equipment Choices were refined based on program experience and database improvements. High percent changes are due to this refinement.

(2) All projects funded through the Cooling Recommissioning program have been completed as of August 1, 2002.

(3) Due to database changes and improvements, last quarter's (December 2002) Loan Fund figures for electricity and demand savings were re-calculated in March 2003 and reflected activity through that date. Thus, there is no change from last quarter's figures.

Table 4. Energy and Demand Savings from Residential and Low-Income Programs as of March 31, 2003

Program	Cumulative Committed Funding (\$ Million)	Anticipated from Funds Committed		Spent Funding (\$ Million)	Achieved from Installed Measures		% Change From Prev. Quarter	
		GWh	MW		GWh	MW	GWh	MW
ENERGY STAR® Products and ENERGY STAR Bulk Purchase	\$45.4	107*	19*	\$21.8	107	19	11%	0%
ENERGY STAR® Homes	\$17.9	0.7*	0.4*	\$12.3	0.7	0.4	0%	0%
Home Performance with ENERGY STAR®		1.0*	0.09*		1.0	0.09	0%	0%
Keep Cool (permanent measures)	\$17.0	25.1*	41.8*	\$15.0	25.1	41.8	0%	0%
Keep Cool Public Appeal (load shift)	\$4.5	--	94**	\$4.5	--	94**	NA	NA
Comprehensive Energy Management	\$14.5	73	20	\$5.3	5.5	1.5	0%	0%
Assisted Multifamily Buildings Program (AMP)	\$33.9	37.3	1.0	\$5.5	NA	NA	NA	NA
Low-Income Direct Installation	\$9.9	11.5	4.6	\$9.9	11.5	4.6	0%	0%
Total	\$143.1	255.6	180.9	\$74.3	150.8	161.4	8%	0%

NA: Not available.

*Savings from installed measures. Savings from funds committed are expected to be greater, but are difficult to accurately estimate due to the nature of the program.

**Potential average hourly load shift to off-peak for the entire State. The impact of the public appeal was not disaggregated by funding source.

Notes:

(1) The cumulative funding for the ENERGY STAR® Products and ENERGY STAR Bulk Purchase also includes funding for Residential ENERGY STAR® Marketing and Special Promotions.

(2) The spent funding for ENERGY STAR® Products and ENERGY STAR Bulk Purchase does not include marketing dollars because spillover effects that impact energy savings have not been estimated.

(3) ENERGY STAR® Homes and Home Performance with ENERGY STAR® are known collectively as the ENERGY STAR® Small Homes Program.

(4) The results of the Keep Cool Program consist of estimated savings from room air conditioners, heat pump water heaters, and clothes washers, including spillover effects. The public appeal budget includes \$1 million each in funding from LIPA and NYPA.

(5) This is the first reporting of Keep Cool Public Appeal.

(6) The Assisted Multifamily Buildings Program (AMP) was formerly known as the Publicly Assisted Housing Program (PAHP) which was a pilot program that began in 2000. The PAHP program name was changed to AMP in May 2002 when the pilot effort became a full program, offering comprehensive services to multifamily and publicly assisted buildings.

Table 5. Energy and Demand Savings from Industry and Buildings R&D Programs as of March 31, 2003

Program	Cumulative Committed Funding (\$ Million)	Anticipated from Funds Committed		Spent Funding (\$ Million)	Achieved from Installed Measures		% Change From Prev. Quarter	
		GWh	MW		GWh	MW	GWh	MW
Enabling Technologies for Price Responsive Load	\$1.85	--	201.5	\$1.85	--	201.5	--	0%
Distributed Generation/CHP Demonstration Projects	\$30.6	178.0	46.2	\$4.8	20.4	5.3	13%	10%
Total	\$32.5	178.0	247.7	\$6.7	20.4	206.8	13%	<1%

Notes:

(1) The savings from the Enabling Technologies for Price Responsive Load program represent curtailable load and emergency generation capacity. Actual load reduction during an emergency is anticipated to be 60% of capacity.

Table 6 provides a summary of information presented in Tables 3 through 5. Total electricity and demand savings with deductions for program overlaps are shown. The anticipated electricity savings from funds committed is 2,005 GWh per year. The associated annual electricity bill savings are \$291.5 million per year.³ The anticipated demand savings is 1,260 MW.

³ Based on an electricity price of \$0.117/kWh. This is a weighted average price based on the January 2002 and July 2002 costs for commercial, industrial, and residential customers and represents only the variable part of the electric bill.

Table 6. Summary of Energy and Demand Savings as of March 31, 2003

Program	Cumulative Committed Funding (\$ Million)	Anticipated from Funds Committed		Spent Funding (\$ Million)	Achieved from Installed Measures		% Change From Prev. Quarter	
		GWh	MW		GWh	MW	GWh	MW
Business and Institutional Programs	\$255.5	1,663.6	890.6	\$93.6	646.1	448.4	11%	12%
Residential Programs	\$143.1	255.6	180.9	\$74.3	150.8	161.4	8%	0%
R&D Programs	\$32.5	178.0	247.7	\$6.7	20.4	206.8	13%	<1%
<i>Estimated Overlap</i>	-	-91.7	-56.5	-	-38.4	-24.2	-	-
Total	\$431.1	2,005.5	1,262.7	\$174.6	778.9	792.4	8%	31%

Notes:

(1) The estimated overlap was calculated as 15% of the savings from the Technical Assistance Program projects to account for participation in other programs and 29% of the Small Commercial Lighting Program savings to account for overlap with other programs.

(2) Approximately 41% of the anticipated demand savings is from energy efficiency measures and the remainder represents curtailable load. Of the demand savings from installed measures, 30% is from energy efficiency measures and 70% is from curtailable load. The Residential Programs' calculations for MW percent change from the previous quarter does not include Keep Cool Public Appeal (first reported in this document). If the figures for that program were included, the MW change would show a 140% increase and the change for all programs would total 48%.

Renewable Energy

Table 7 presents the energy generation from the renewable energy programs as of March 31, 2003. The energy and capacity are shown for two categories of outcomes: anticipated energy generation from funds committed and energy generation from equipment installed.

Table 7. Energy and Rated Capacity of Renewable Energy Generation Projects as of March 31, 2003

Program	Cumulative Committed Funding (\$ Million)	Anticipated from Funds Committed		Spent Funding (\$ Million)	Achieved from Installed Measures		% Change From Prev. Quarter	
		GWh	MW		GWh	MW	GWh	MW
Wind Plant Demonstration	\$24.0	980.0	358.0	\$7.0	100	42	0%	0%
PV on Buildings	\$3.0	0.95	0.70	\$0.3	0.342	0.22	0%	0%
Residential PV	\$1.0	0.34	0.25	\$0.4	0.168	0.120	118%	131%
Small PV Incentives	\$0.3	0.091	0.06	\$0.0	0.0	0.0	0%	0%
High-Value Wind & PV	\$1.2	0.77	0.38	NA	0.036	0.024	0%	0%
PV System and ENERGYSTAR®-Labeled Home Demonstration	\$0.4	0.033	0.24	\$0.0	0.0	0.0	0%	0%
Solar Schools PV Development	\$1.8	NA	0.1	\$0.3	0.0	0.0	0%	0%
Total	\$31.7	982.2	359.7	\$8.0	100.5	42.4	<1%	1%

NA: Not available.

Note: The December 31, 2002 total expected generation from installed measures as reported in May 2003 was misstated as 150 Gwh.

Other Fuel Savings.

Several programs provide other fuel savings in addition to electricity savings. Anticipated natural gas and oil savings from these programs are reported in Table 8. From committed funds, the anticipated annual savings amount to 6.5 TBtu of natural gas and 1.2 TBtu of oil. The associated annual bill savings are \$58 million per year.⁴

⁴ Based on a Year 2002 sector-weighted average price of \$7.70 per mmBtu for natural gas and sector-weighted average price of \$6.31 per mmBtu for fuel oil.

Table 8. Natural Gas and Oil Savings (MMBtu) as of March 31, 2003

Program	Anticipated from Funds Committed		Achieved Savings From Installed Measures			
	Natural Gas	Oil	Natural Gas	% Change from Previous Quarter	Oil	% Change from Previous Quarter
C/I Technical Assistance Programs	6,525,000	1,125,000	2,747,000	12%	469,000	12%
ENERGY STAR® Homes	NA	NA	37,846	78%	3,971	3%
Home Performance with ENERGY STAR®	NA	NA	57,393	47%	4,761	21%
Assisted Multifamily Buildings Program (AMP)	NA	53,076	NA	NA	NA	NA
Total	6,525,000	1,178,076	2,842,239	13%	477,732	12%

NA: Not available

Environmental and Economic Benefits

Anticipated reductions in nitrogen oxides (NO_x), sulfur dioxide (SO₂), and carbon dioxide (CO₂) emissions are presented in Table 9. Collectively, the annual CO₂ reduction is equivalent to removing approximately 421,000 automobiles from New York’s roadways. The cost savings from reduced energy use (all fuels) is expected to be approximately \$292 million per year, leading to the creation or retention of more than 9,300 jobs in New York’s service and retail trade sectors.⁵

⁵ These jobs will be supported annually for as long as the implemented energy efficiency measures remain in effect.

Table 9. Anticipated Annual Emission Reductions (in tons), as of March 31, 2003

Primary Pollutant	From Electricity Savings	From Natural Gas Savings	From Oil Savings	From Clean Generation by Wind & PV	All Sources
	(2,005 GWh)	(6.5 Tbtu)	(1.2 TBtu)	(1,000 GWh)	
NO _x	1,500	320	70	740	2,630
SO ₂	3,000	0	130	1,480	4,610
CO ₂	1,095,000	380,000	95,000	537,000	2,107,000

Notes:

(1) Emission reductions from electricity savings are estimated by applying factors to the energy savings expected from the **New York Energy SmartSM** Program. The factors for lbs. **reduced** per kWh saved are based on the average mix of generation in the State. These factors are periodically reviewed and updated to reflect changes in the average mix of generation.

SUMMARY

Table 10 provides a summary of the anticipated energy, environmental, and economic outcomes of the **New York State Energy SmartSM** Program as of March 31, 2003.

Table 10. Summary of Anticipated Energy, Environmental, and Economic Outcomes as of March 31, 2003

Outcome		Anticipated From Funds Committed	% Change from Last Quarter	Achieved from Installed Measures	% Change from Last Quarter
Annual Electricity Savings (GWh)		2,005	28%	780	13%
Summer Peak Demand Reduction (MW)		1260	13%	790	15%
Energy Generation from Renewable Energy (GWh)		980	0%	100 ⁽³⁾	0%
Oil and Gas Savings (tBtu)		8	10%	3	11%
Annual Energy Bill Reduction (\$ million) - all fuels		\$291.5	22%	\$115.7	13%
Annual Emission Reductions	NO _x (tons)	2,630	16%	830	4%
	SO ₂ (tons)	4,610	17%	1,370	8%
	CO ₂ (tons)	2,107,000	15%	685,000	7%
Economic Benefits	Jobs per Year	9,300	23%	3,700	16%
	Market Value of NO _x reduction (\$ million)	\$4.7	--	\$1.4	--
	Market Value of SO ₂ reduction (\$ million)	\$0.8	--	\$0.2	--

Entries in Table are rounded

Notes:

- (1) Summer Peak Demand Reduction Potential includes energy efficiency measures and curtailable load.
- (2) Annual Energy Bill Reduction includes bill savings from electricity, oil, and natural gas.
- (3) The December 31, 2002 Achieved Energy Generation from Renewable Energy as reported in May 2003 was misstated as 150 GWh.
- (4) Jobs per year represents jobs created or retained as a result of bill savings and includes the impacts of capital investment, installation labor, and administration.
- (5) Emission reductions are estimated by applying emissions factors to the energy savings expected from the **New York Energy SmartSM** Program. Statewide tonnage caps on nitrogen dioxide and sulfur dioxide emissions from electricity and generation sources limit the impact of reduced electricity use on actual emissions of these pollutants. However, the reduction in electricity use represents lower emissions controls costs and reduced need to purchase emission allowances. NO_x reductions, based on kWh savings from electric and clean generation, are measured only during the ozone season, the 5-month period from May through September, when NO_x controls are required to be in place. Based on the current market price of NO_x allowances, the value of the anticipated NO_x reduction of 2,240 tons is \$4.7 million. Based on the current market price of SO₂ allowances, the value of the anticipated SO₂ reduction of 4,480 tons is \$0.8 million.