

**NEW YORK ENERGY \$MARTSM PROGRAM
QUARTERLY EVALUATION AND
STATUS REPORT**

**QUARTERLY REPORT TO THE DEPARTMENT OF PUBLIC SERVICE
QUARTER ENDING JUNE 30, 2003**



New York Energy \$martSM
QUARTERLY EVALUATION AND STATUS REPORT UPDATE
For Quarter Ending June 30, 2003

INTRODUCTION

This report updates the progress of the eight-year **New York Energy \$martSM** Program through June 30, 2003. The following information has been updated since the last progress report (through March 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 June 30, 2003. Approximately \$663 million has been committed, representing 71% of the 8-year budget. Over \$522 million, or 56% of the 8-year budget, has been encumbered. It is estimated that every dollar of **New York Energy \$martSM** investment leads to approximately three dollars of outside investment in these projects. Outside investment expected from funds encumbered is approximately \$1.5 billion and total public and private investment is approximately \$2.0 billion. Over \$249 million, 29% of the 8-year budget, has been paid to program participants.

Table 1. Budget Status by Program Area as of June 30, 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	\$265.3	-6%	75%	\$227.9	64%
Residential	\$165.2	\$125.4	3%	77%	\$117.1	71%
Low-Income*	\$119.6	\$101.3	-4%	85%	\$52.7	44%
R&D	\$210.8	\$134.6	16%	64%	\$88.3	42%
Environmental Disclosure	\$2.9	\$0.4	0%	12%	\$0.35	12%
Evaluation	\$15.6	\$7.8	129%	50%	\$7.8	50%
Administration	\$62.5	\$28.6	11%	46%	\$28.6	46%
TOTAL	\$932.0	\$663.4	1%	71%	\$522.8	56%

*Two program areas, Business and Institutional and Low Income, released committed funds for programs that did not go forward, thus providing more funding for future projects and resulting in a reduction of funds previously reported as committed.

¹ Committed funds include (1) encumbered funds and (2) funds specifically designated or 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 second quarter of 2003.

Table 2. Second 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 energy-efficient equipment.	6/30/03
PON 695-02	Commercial/Industrial Performance: Requests applications from contractors for performance-based incentives to implement cost-effective energy efficiency improvements or summer electricity 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 electricity 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/or 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 certain, eligible organizations that provide technical services to industrial firms.	5/1/03
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 and strategic energy plans, 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 783	Combined Heat and Power (CHP) and Renewable Generation Technical Assistance: Seeks proposals to study the feasibility of implementing CHP and renewable generation.	11/19/03
PON 786	Municipal Water and Wastewater Technologies: Announces the availability of funds for projects that develop, demonstrate, or increase the use of innovative or underutilized energy-efficient water and wastewater technologies and systems.	8/18/03
PON 814	New York Energy SmartSM Loan Fund: Seeks applications from potential borrowers for interest rate reductions on loans and leases from participating lenders and lessors for energy efficiency improvements and renewable technologies; and participation agreements from potential participating lenders or lessors that wish to offer the New York Energy SmartSM Loan Fund (Loan Fund) to their customers.	6/30/05

(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. Second Quarter 2003 Solicitations (continued)

Residential and Low-Income Program Areas		
PON 745-02	Special Promotions: Residential Sector Initiatives: Announces the opportunity to develop innovative New York Energy \$martSM program marketing or promotional initiatives that promote Energy Star® products, services, and homes to residential energy customers in New York.	4/17/03
PON 765	Low Income Oil Buying Strategies Pilot Program: Seeks proposals to obtain a program implementor to assist in the development, implementation, monitoring and evaluation of local Oil Buying Pilot Projects targeted at more effective procurement strategies on behalf of the Home Energy Assistance Program (HEAP) and Temporary Assistance.	7/14/03
RFP 656	Multifamily Building Training Certification Program: Announces the opportunity to develop, market, and deliver standardized training for the multifamily building industry	8/4/03
R&D Program Area		
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 a DG/CHP system for a specific facility , 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 organization such as the Institute for Sustainable Power (ISP) to train renewable energy practitioners, such as PV installers, instructors, and trainers.	7/15/03
PON 767	Natural Gas Storage: Invites proposals to evaluate and develop advanced storage concepts to enhance the reliability of New York State's electric-generation system	8/20/03
PON 784	New York State Truck Stop Electrification: Invites proposals to accelerate the development and commercialization of truck stop electrification (TSE) equipment, systems design, and services. Specifically, this Program Opportunity Notice (PON) seeks to advance marine-style, shorepower TSE systems that provide grid electricity to stationary, long-haul trucks for the operation of onboard HVAC units, block heaters, and in-cab convenience appliances.	8/27/03
PON 786	Municipal Water and Wastewater Technology: Invites proposals to demonstrate, develop, or increase the use of energy-efficient water and wastewater technologies.	8/18/03
PON 792	Wind Incentives for Eligible Installers: Announces at least \$2.5 million in incentives to encourage the development of a network of eligible installers that will install end-use wind energy turbines for residential, commercial, institutional or government use.	12/30/05

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 June 30, 2003. For some programs, anticipated energy savings from funds committed are not available. In this case, the savings from installed measures only are reported.

Table 3. Energy and Demand Savings from Business and Institutional Programs as of June 30, 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	\$102.2	628.1	154.4	\$40.4	249.9	59.2	2%	2%
New Construction	\$69.7	294.9	41.4	\$17.2	54.1	7.2	15%	22%
Smart Equipment Choices	\$7.0	63.6	31.3	\$4.3	38.8	19.1	10%	10%
Small Commercial Lighting	\$6.9	2.4	0.6	\$3.3	2.4	0.6	20%	11%
Commercial HVAC	\$3.3	0.3	0.04	\$1.2	0.3	0.04	0%	0%
Cooling Recommissioning	\$1.9	24.7	9.0	\$1.9	24.7	9.0	0%	0%
Peak Load Reduction (permanent measures)	\$10.1	98.5	40.9	\$5.0	44.2	18.4	70%	70%
Peak Load Reduction (curtailable load)	\$24.8	--	493.2	\$12.4	--	318.1	--	15%
Premium-Efficiency Motors	\$3.5	5.7	1.1	\$1.9	5.7	1.1	13%	24%
Technical Assistance	\$27.3	615.6	163.7	\$9.4	304.6	81.0	21%	21%
Loan Fund (Business and Residential)	\$7.3	15.8	2.4	\$4.8	15.8	2.4	78%	60%
Total	\$264.0	1,749.6	938.0	\$101.8	740.5	516.1	15%	15%

Notes:

(1) For the three programs, Small Commercial Lighting, Commercial HVAC, and Premium-Efficiency Motors, savings from committed funds are reported as equal to savings from installed measures. Savings from funds committed are expected to be greater, but are difficult to accurately estimate due to the nature of these programs.

(2) The committed funding shown for the Small Commercial Lighting Program does not include \$879,000 in incentives made available to contractors in August 2003 under PON 809.

(3) Phase 1 of the Commercial HVAC program is nearing completion and Phase 2 is beginning. Therefore, there are no additional savings this quarter.

(4) All projects funded through the Cooling Recommissioning program were completed as of August 1, 2002.

(5) Since March 31, 2003, \$1.0 million in committed funding for Peak Load Reduction permanent measures projects that did not go forward were released to fund future Peak Load projects.

(6) Several Loan Fund projects previously under-reported energy and demand savings, resulting in a large percent change since the previous quarter.

Table 4. Energy and Demand Savings from Residential and Low-Income Programs as of June 30, 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	\$27.1	112	20.5	\$23.1	112	20.5	5%	8%
Keep Cool (permanent measures)	\$24.6	26.9	44.0	\$20.6	26.9	44.0	7%	5%
Keep Cool Public Appeal (load shift)		--	94		--	94	NA	NA
Assisted Multifamily Buildings Program (AMP)	\$34.7	46.9	1.0	\$5.5	0.4	NA	NA	NA
Low-Income Direct Installation	\$9.9	11.5	4.6	\$9.9	11.5	4.6	0%	0%
Other Residential	\$31.9	83.5	23.4	\$14.6	7.9	2.6	10%	31%
Total	\$128.2	280.8	187.5	\$73.7	158.7	165.7	5%	3%

NA: Not available.

Notes:

- (1) Other Residential includes the Home Performance with ENERGY STAR®, New York ENERGY STAR® Labeled Homes, and Comprehensive Energy Management programs.
- (2) Committed and Spent funding for ENERGY STAR® Products and ENERGY STAR® Bulk Purchase does not include marketing or recycling dollars because benefits associated with these have not been estimated.
- (3) Savings from funds committed for the ENERGY STAR® Products, ENERGY STAR® Bulk Purchase, and Keep Cool (permanent measures) programs are expected to be greater, but are difficult to accurately estimate due to the nature of these programs.
- (4) The Keep Cool Program (permanent measures) includes funding and savings for room air conditioners (including RAC spillover effects), as well as the ENERGY STAR® Clothes Washer Initiative. Funding does not include recycling costs because benefits associated with recycling have not been estimated.
- (5) The 2002 Keep Cool Public Appeal is listed separately to distinguish between short-term savings and those achieved through permanent measures. The 94 MW reduction is the potential average hourly load shift to off-peak hours due to voluntary behavioral changes in **New York Energy SmartSM** territory only during the Summer of 2002 (note: the hourly MW reduction does not include LIPA or NYPA territories, as was reported in the March 31, 2003 report).
- (6) Approximately \$2.5 million was spent on the Keep Cool tips marketing campaign during the Summer of 2002. This amount is included in the Keep Cool permanent measures category since spillover effects from the marketing campaign have also been estimated. This figure does not include the additional \$2.0 million for LIPA and NYPA reported in the March 31, 2003 report since the MW reductions were only applicable to **New York Energy SmartSM** territory.
- (7) 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 June 30, 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	\$1.90	--	201.5	\$1.90	--	201.5	--	0%
CHP Demonstration Projects	39.2	346.0	58.8	\$4.4	42.5	4.7	10%	15%
Total	\$41.1	346.0	260.3	\$6.3	42.5	206.2	10%	<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.

(2) Of the 4.7 MW installed measures for CHP Demonstration Projects, 4.3 MW are operational.

Table 6 provides a summary of information presented in Tables 3 through 5. Total electricity and demand savings with deductions for estimated program overlaps are shown. The anticipated electricity savings from funds committed is 2,280 GWh per year. The associated annual electricity bill savings are \$325.4 million per year.³ The anticipated demand savings is 1,330 MW.

Table 6. Summary of Energy and Demand Savings as of June 30, 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 & Institutional	\$264.0	1,749.6	938.0	\$101.8	740.5	516.1	15%	15%
Residential	\$128.2	280.8	187.5	\$73.7	158.7	165.7	5%	3%
R&D	\$41.1	346	260.3	\$6.3	42.5	206.2	10%	<1%
<i>Estimated Overlap</i>	--	-96.4	-55.8	--	-41.7	-28.0	--	--
Total	\$433.3	2,280.0	1,330.0	\$181.8	900.0	860.0	5%	<1%

Notes:

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

(2) Approximately 40% 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 the March 31, 2003 Quarterly Update). 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%.

³ Based on an electricity price of \$0.117/kWh, which represents 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.

Renewable Energy

Table 7 presents the energy generation from the renewable energy programs as of June 30, 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 June 30, 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 Generation Demonstration	\$24.0	980.0	358.0	\$7.0	100	41.5	0%	0%
PV on Buildings	\$2.1	0.70	0.50	\$0.9	0.35	0.25	2%	14%
Residential PV	\$0.8	0.20	0.14	\$0.6	0.10	0.100	0%	0%
Small PV Incentives	\$3.0	0.7	0.50	\$0.3	0.07	0.1	0%	0%
Total	\$29.9	981.6	359.1	\$8.8	100.5	41.9	0%	0%

* Rated capacity of generation projects.

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 6.7 TBtu of natural gas and 1.2 TBtu of oil. The associated annual bill savings are \$59.6 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 June 30, 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	6,612,000	1,140,000	3,321,000	21%	567,000	21%
ENERGY STAR® Homes	55,129	3,967	55,129	46%	3,967	0%
Home Performance with ENERGY STAR®	72,992	7,973	72,992	27%	7,973	67%
Assisted Multifamily Buildings Program (AMP)	NA	67,217	NA	NA	3,318	NA
Total	6,740,121	1,219,157	3,449,121	21%	582,258	22%

NA: Not available

Notes:

(1) For both ENERGY STAR® programs, savings from committed funds are reported as equal to savings from installed measures. Savings from funds committed are expected to be greater, but are difficult to accurately estimate due to the nature of both programs.

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 expected annual CO₂ reduction is equivalent to removing approximately 454,800 automobiles from New York's roadways. The cost savings from reduced energy use (all fuels) is expected to be approximately \$325.4 million per year, leading to the creation or retention of more than 10,400 jobs in New York's service and retail trade sectors.⁵

Table 9. Anticipated Annual Emission Reductions (in tons), as of June 30, 2003

Primary Pollutant	From Electricity Savings (2,280 GWh)	From Natural Gas Savings (6.7 Tbtu)	From Oil Savings (1.2 TBtu)	From Clean Generation by Wind & PV (980 GWh)	All Sources
NO _x	1,710	340	70	740	2,860
SO ₂	3,420	0	140	1,470	5,030
CO ₂	1,245,000	394,000	99,000	536,000	2,274,000

Notes:

(1) Emission reductions from electricity savings are estimated by applying factors to the energy savings expected from the **New York Energy \$martSM** 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.

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

SUMMARY

Table 10 provides a summary of the anticipated energy, environmental, and economic outcomes of the **New York State Energy \$martSM** Program as of June 30, 2003.

Table 10. Summary of Anticipated Energy, Environmental, and Economic Outcomes as of June 30, 2003

Outcome		Anticipated From Funds Committed	% Change from Last Quarter	Achieved from Installed Measures	% Change from Last Quarter
Annual Electricity Savings (GWh)		2,280	14%	900	15%
Summer Peak Demand Reduction (MW)		1330	6%	860	9%
Energy Generation from Renewable Energy (GWh)		980	0%	100	0%
Oil and Gas Savings (tBtu)		8	0%	4	34%
Annual Energy Bill Reduction (\$ million) - all fuels		\$325.4	12%	\$135.2	17%
Annual Emission Reductions	NO _x (tons)	2,860	8%	950	15%
	SO ₂ (tons)	5,030	9%	1,570	14%
	CO ₂ (tons)	2,274,000	8%	795,000	16%
Economic Benefits	Jobs per Year	10,400	12%	4,300	17%
	Estimated Market Value of NO _x reduction (\$ million)	\$5.1	--	\$1.6	--
	Estimated Market Value of SO ₂ reduction (\$ million)	\$0.9	--	\$0.3	--

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) 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.
- (4) Emission reductions are estimated by applying emissions factors to the energy savings expected from the **New York Energy \$martSM** 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 2,860 tons is \$5.1 million. Based on the current market price of SO₂ allowances, the value of the anticipated SO₂ reduction of 5,030 tons is \$0.9 million.