QUARTERLY REPORT

For the quarter ending December 31, 2001

NEW YORK ENERGY $MART℠ PROGRAM EVALUATION AND STATUS REPORT

Quarterly Report to the New York State Department of Public Service

NYSERDA

New York Energy $mart℠
PUBLIC SERVICE COMMISSION — NYSERDA

New York Energy $mart℠
QUARTERLY PROCESS AND PROGRESS UPDATE
For Quarter Ending December 31, 2001

INTRODUCTION

This report updates the implementation status of the **New York Energy $mart℠** program as of December 31, 2001. The results from the initial three-year System Benefits Charge program have been combined with those from the five-year expanded program.[1] This report provides the following updates: budget status; recent solicitations; anticipated energy and demand savings from committed funds; energy and demand savings from installed measures; anticipated oil and natural gas savings from committed funds; and anticipated environmental and economic benefits from committed funds.

[1] New York State Public Service Commission. January 26, 2001. *Order Continuing and Expanding the System Benefits Charge for Public Benefits Programs.*

BUDGET STATUS

The eight-year budget by major funding category is shown in Table 1. Also shown are the funds committed[2] and encumbered[3] as of December 31, 2001. Approximately $310 million has been committed as of December 31, representing 33.9% of the 8-year budget. Approximately $233.5 million has been encumbered, representing 25.5% of the 8-year budget.[4]

Table 1: Budget Status by Program Area as of December 31, 2001 ($ million)

Program Area	8-year Budget	Funds Committed (See Footnote 2)	% of 8-year Budget Committed	Funds Encumbered (See Footnote 3)	% of 8-year Funds Encumbered
Business and Institutional	$355.4	$166.5	46.8%	$109.1	30.7%
Residential	$150.2	$50.5	33.6%	$48.3	32.2%
Low-Income	$119.6	$17.4	14.5%	$15.4	12.9%
R&D	$210.8	$59.1	28.0%	$44.2	20.9%
Environmental Disclosure	$2.9*	$0.4	13.8%	$0.4	13.8%
Evaluation	$15.3	$1.4	9.2%	$1.4	9.2%
Administration	$61.4	$14.7	23.9%	$14.7	23.9%
TOTAL	**$915.6**	**$310.0**	**33.9%**	**$233.5**	**25.5%**

[2] For financial incentive programs administered through NYSERDA, *e.g.*, New Construction Program, committed funds include (1) funds associated with signed or pending contracts and purchase orders and (2) funds set aside to meet applicants' incentive requests. For projects administered by NYSERDA through a competitive solicitation, *e.g.*, Distributed Generation-Combined Heat and Power Program, committed funds represent funds awarded to contractors. For programs administered by outside contractors, *e.g.*, Direct Installation Program, committed funds represent the total amount awarded to the contractor for implementation and participant incentives.

[3] Encumbered funds are funds associated with signed contracts and purchase orders.

[4] As of December 31, 2001, $109.5 million, or nearly 12% of the 8-year budget, has been invoiced.

SOLICITATIONS

Table 2 lists Program Opportunity Notices (PONs) that were open during the fourth quarter of 2001. The purposes of the PONs were to announce financial incentives or to solicit contractor support for program implementation.

Table 2: Fourth Quarter 2001 Solicitations

Solicitation Number	Solicitation Name and Purpose
Business and Institutional Program Area	
PON 593-01[5]	New Construction Program: Provide financial incentives.
PON 597-01	Smart Equipment Choices Program: Provide financial incentives.
PON 602-01	**New York Energy $mart**[sm] Loan Fund: Solicit lender participation and provide borrower incentives.
PON 624-01	Commercial/Industrial Performance Program (Standard Performance Contracting): Provide financial incentives.
PON 592-01	Premium Efficiency Motors: Provide distributor-based incentives.
RFP 595-01	Outreach and Project Management and Technical Assistance Services for Commercial/Industrial **New York Energy $mart**[sm] Programs: Hire multiple regionally-based contractors to perform project outreach and management tasks for various C/I programs.
PON 605-01 PON 657-01	Technical Assistance: Provide financial incentives.
RFP 662-01	Web Site Hosting Services: Hire a contractor for website hosting services.
PON 680-02	Industrial Process and Productivity Improvement: Proposals to apply innovative process technologies in the industrial sector.
Residential and Low-Income Program Areas	
RFP 618-01	Financing Through Home Performance with ENERGY STAR® and Assisted Home Performance with ENERGY STAR®: Hire implementation contractor to provide interest rate subsidies for the installation of approved energy efficiency measures.
PON 635-01	Special Promotions for Residential Sector Initiatives: Hire contractors to assist in developing strategies to promote ENERGY STAR® products, services, and homes.
RFP 636-01	Residential ENERGY STAR® Program Marketing: Hire a contractor to design and implement a multi-media advertising campaign.
RFP 638-01	Residential ENERGY STAR® Products Program Implementation: Hire a contractor to assist with program design refinements and implementation of a retailer program.

[5] This funding for this solicitation consisted of $27 million from the Business and Institutional Program area and $3 million from the R&D Program area for photovoltaic (PV) installations.

RFP 641-01	Rebuild New York's Communities Rebuild Regional Coordinator: Seek proposals from agencies and organizations interested in housing a Regional Rebuild Coordinator.
RFP 652-01	Lighting Catalogue and Bulb Offer Evaluation Surveys: Hire a contractor to assist with the development, administration and analysis of participant and non-participant surveys.
RFP 651-01	Low-Income Forum on Energy Administrative Support and Conference Management: Seek proposals for administrative support and conference management for the Low-Income Forum on Energy (LIFE) Program.
RFP 655-01	Photovoltaic System and ENERGY STAR® Labeled Home Demonstration Project: Seek proposals to build new home subdivisions in each SBC utility area that meet ENERGY STAR® requirements and offer PV as an option.
R&D Program Area	
PON 599-01	Green Power Marketing Incentives: Hire contractors to develop programs that promote the consumption of qualified green power by retail customers.
PON 590-01	Renewable Energy Technologies: Technical Training, Education, Outreach and Market Support: Hire a group of contractors to provide educational materials and analysis on PV and wind technologies.
RFP 601-01	Wastewater Treatment Plants Energy Performance Evaluation Through Submetering: Seek proposals from contractors to evaluate the process and energy performance of wastewater treatment plants using submetering technology.
PON 607-01	Environmental Attribute Accounting and Trading System: Hire contractors to develop business plans for a regional environmental attribute accounting and trading system.
PON 608-01	Next Generation of Energy-Efficient End-Use Technologies: Solicit proposals for demonstration of new end-use technologies.
PON 609-01	Enabling Technology for Price Responsive Load: Solicit proposals to develop and demonstrate technologies that will reduce electricity load from the utility grid in response to emergency and/or price signals
PON 616-01	Alternative Fuels Power Generation and Energy Storage: Solicit proposals for the development of alternative fuel systems for commercial applications.
RFP 622-01	Solar Schools: Hire a contractor to design and implement an educational program for K-12 schools in New York and to install PV on 50 schools.
RFP 628-01	Energy Efficiency and Renewable Energy Technology Assessment: Hire a contractor to assess the potential of energy efficiency and renewable energy technologies in New York State..
PON 668-01[6]	Innovation in Agriculture: Solicit proposals that apply underutilized technologies to increase energy effectiveness of New York State's agricultural sector.

[6] The funding for this solicitation consisted of $1.25 million from the R&D Program area and $0.5 million from the Business and Institutional Program area.

PROGRESS SUMMARY

Anticipated Electricity Savings

Tables 3 through 5 provide energy and demand savings for three categories of programs: (1) Business and Institutional, (2) Residential and Low-Income, and (3) Industry and Building R&D. Each table shows the anticipated energy savings from funds committed as of December 31, 2001 and the energy savings from measures installed as of December 31, 2001. For some programs, the anticipated energy savings from funds committed are currently not available and are denoted as To Be Determined (TBD).

Table 3: Energy and Demand Savings from Business and Institutional Programs

	Anticipated from Funds Committed			**From Measures Installed as of Dec. 31, 2001**		
Program	**Funding ($ Million)**	**kWh (Million)**	**MW**	**Funding ($ Million)**	**kWh (Million)**	**MW**
C/I Performance (Standard Performance Contracting)	$58.0	386.4	91.3	$27.0	162.9	38.5
New Construction	$33.7	107.4	41.3	$4.4	**3.2**	**1.2**
Smart Equipment Choices	$0.6	TBD	TBD	$0.06	TBD	TBD
Small Commercial Lighting	$3.5	TBD	TBD	$1.1	0.2	0.004
Commercial HVAC	$1.6	TBD	TBD	$0.2	0	0
Cooling Recomissioning	$2.1	26.8	8.8	$1.7	26.8	8.8
Peak Load Reduction Program	$15.6	n/a	221.1*	$9.0	n/a	126.7
Premium-Efficiency Motors	$1.0	4.0	0.9	$0.8	2.2	0.5
Technical Assistance Programs	$16.0	390.0	100.0	$4.4	110.0	28.0
Loan Fund (C/I and Residential)	$3.1	TBD	TBD	$2.1	7.7	2.0
Business and Institutional Program Total	**$135.2**	**914.6**	**463.4**	**$50.8**	**313.0**	**205.7**

TBD: To be determined.

n/a: Not applicable.

*Approximately 95% of the demand reduction is curtailable load or on-site generation capacity.

Table 4: Energy and Demand Savings from Residential and Low-Income Programs

	Committed/Awarded			From Measures Installed as of Dec. 31, 2001		
Program	**Funding ($ Million)**	**kWh (Million)**	**MW**	**Funding ($ Million)**	**kWh (Million)**	**MW**
Appliance & Lighting and ENERGY STAR® Awareness	$18.8	71.6	12.1	$18.1	71.6	12.1
ENERGY STAR® Homes	$4.5	TBD	TBD	$2.1	0.062	0.04
Home Performance with Energy Star	$3.6	TBD	TBD	$3.4	0.1	0.02
Keep Cool	$8.1	5.4	8.0	$8.1	5.4	8.0
Residential Comprehensive Energy Management	$2.8	TBD	TBD	$0.4	0.2	0.06
Low-Income Aggregation	$2.6	TBD	TBD	$0.41	TBD	TBD
Publicly Assisted Housing Houseing	$2.6	TBD	TBD	$0.18	TBD	TBD
Low-Income Direct Installation	$9.3	13.3	1.4	$5.7	8.1	0.84
Residential Programs Total	**$52.3**	**90.3**	**21.5**	**$38.4**	**85.5**	**21.1**

TBD - To be determined.

Table 5: Energy and Demand Savings from Industry and Buildings R&D Programs

	Anticipated from Funds Committed			From Measures Installed as of Dec. 31, 2001		
Program	**Funding ($ Million)**	**kWh (Million)**	**MW**	**Funding ($ Million)**	**kWh (Million)**	**MW**
Enabling Technologies for Price Responsive Load	$0.8	n/a	67.0*	$0.8	n/a	67.0*
Distributed Generation /CHP	$15.5	n/a	32.0	$0.0	0.0	0.0
Industry and Buildings R&D Programs Total	**$16.3**	**0.0**	**99.0**	**$0.8**	**0.0**	**67.0**

n/a: Not applicable

***** Represents curtailable load and on-site generation capacity.

Table 6 provides a summary of information presented in Tables 3 through 5. The total energy and demand savings are shown separately for energy efficiency measures and curtailable load. The anticipated energy savings from funds committed as of December 31, 2001 is 1,004.98 million kWh per year.[7] The anticipated demand savings is 561.9 MW of which 306.9 MW is from energy efficiency measures. The energy savings from measures installed as of December 31, 2001 is 398.5 million kWh per year. The demand savings from installed measures is 279.8 MW of which 106.4 MW is from energy efficiency measures.

Table 6: Summary of Energy and Demand Savings

	Anticipated from Funds Committed		From Measures Installed as of Dec. 31, 2001	
	kWh (million)	**MW**	**kWh (million)**	**MW**
Energy Efficiency (Permanent) Measures				
Business and Institutional Programs	914.6	254.3	313.0	85.3
Residential Programs	90.3	21.5	85.5	21.1
Distributed Generation / CHP	n/a	32.0	n/a	0.0
Energy Efficiency Measures Subtotal	**1,004.9**	**306.9**	**398.5**	**106.4**
Curtailable Load				
Peak Load Program	n/a	210.0	n/a	120.4
Enabling Technologies Program	n/a	67	n/a	67.0
Overlap Between Programs*	n/a	-22	n/a	-14.0
Curtailable Load Subtotal	**n/a**	**255**	**n/a**	**173.4**
Total of Permanent Measures and Curtailable Load	**1,004.9**	**561.9**	**398.5**	**279.8**

*The overlap represents the demand reduction achieved by customers that participated in both the Peak Load Reduction Program and the Enabling Technologies Program.

[7] Based on Year 2000 weighted average electricity price of $0.113, the annual electricity bill savings are $152 million per year.

Renewable Energy

Table 7 presents the energy generation from the renewable energy programs. As in the previous tables, the energy and capacity is shown for two categories of outcomes: anticipated energy generation from funds committed and energy generation from equipment installed as of December 31, 2001.

Table 7: Energy and Capacity from Renewable Energy Generation

	Anticipated from Funds Committed			From Measures Installed as of Dec. 31, 2001		
Program	**Funding ($ Million)**	**kWh (Million)**	**MW**	**Funding ($ Million)**	**kWh (Million)**	**MW**
Wind Plant Demonstration	$7.0	103.0	41.5	$7.0	103.0	41.5
PV on Buildings	$3.0	0.95	0.70	$0.3	0.21	0.15
Residential PV	$1.2	0.40	0.29	TBD	<0.0	0.03
High-Value Wind & PV	$1.2	0.77	0.38	TBD	0.01	0.01
Renewable Energy Generation Total	**12.4**	**105.1**	**42.9**	**$7.3**	**103.2**	**41.7**

TBD: To be Determined.

Other Fuel Savings.

Several programs provide energy savings for fuels other than electricity. The anticipated natural gas and oil savings from these programs are reported in Table 8. From committed funds, the anticipated savings in natural gas is 4.0 TBtu per year and the anticipated oil savings 1.3 TBtu per year.[8] For several programs, there is insufficient data to project the savings from committed funds. Therefore, the savings for these programs are denoted as To Be Determined (TBD).

Table 8: Natural Gas and Oil Savings

New York Energy $mart℠ Program	Anticipated from Funds Committed		From Measures Installed as of Dec. 31, 2001	
	Natural Gas (mmBtu)	Oil (mmBtu)	Natural Gas (mmBtu)	Oil (mmBtu)
C/I Technical Assistance Programs	4,000,000	1,300,000	1,100,000	340,000
Geothermal Heat Pump Project	TBD	TBD	TBD	TBD
Loan Fund	TBD	TBD	0.03	0
ENERGY STAR® Homes	TBD	TBD	1,380	1,330
Home Performance ENERGY STAR®	TBD	TBD	**580**	**530**
Publicly Assisted Housing	0	9,133	TBD	TBD
Total	**4,000,000**	**1,309,133**	**1,101,960**	**341,860**

TBD: To be Determined.

[8] Based on Year 2000 weighted average natural gas price of $7.48 per mmBtu and weighted average oil price of $7.12 mmBtu, annual bill savings are 39 million per year.

Environmental and Economic Benefits.

Anticipated reductions in nitrogen oxides (NOx), sulfur dioxide (SO_2), and carbon dioxide (CO_2) emissions are presented in Table 9 for those programs listed in previous tables. These reductions are based on anticipated annual electricity savings of 1,004.9 million kWh , clean generation of 105.1 million kWh, natural gas savings of 4.0 TBtu, and annual oil savings of 1.3 TBtu. Collectively, the annual CO_2 reduction is equivalent to removing approximately 165,000 automobiles from New York's roadways. The cost savings from reduced energy use (from electricity, oil, and natural gas bills) is expected to be approximately $152 million per year, leading to the creation or retention of about 2,900 jobs in New York's service and retail trade sectors.[9]

Table 9: Anticipated Annual Emission Reductions From Funds Committed as of Dec. 31, 2001

Primary Pollutant	From Electricity Savings	From Natural Gas Savings	From Oil	From Clean Generation: Wind & PV	All Sources
NOx (in tons)	754	200	79	79	1,111
SO_2 (in tons)	1,517	0	151	159	1,827
CO_2 (in tons)	443,161	234,000	106,040	46,358	829,559

[9] 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 outcomes as of December 31, 2001.

Table 10: Summary of Anticipated Energy, Environmental, and Economic Outcomes

Outcomes		Anticipated from Funds Committed as of Dec. 31, 2001	From Measures Installed as of Dec. 31, 2001
Annual Electricity Savings		1,004.9 million kWh	398.5 million kWh
Summer Peak Demand Reduction Potential (MW)*		561.9 MW	279.8 MW
Energy Generation from Renewable Energy		105.1 million kWh	103.2 million kWh
Oil and Gas Savings (tBtu)		5.3 tBtu	1.4 tBtu
Annual Energy Bill Reduction - all fuels **		$152.2 million	
Annual Emission Reductions	NO_X (tons per year)	1,111	
	SO_2 (tons per year)	1,827	
	CO_2 (tons per year)	829,559	
Economic Benefits	Jobs Created (jobs created or sustained per year)	2,900	

* Including energy efficiency measures and curtailable load.
** Includes bill savings from electricity, oil, and natural gas.