Clean Energy Initiative

Annual Report
2007

October 21, 2008

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Programs Implemented

LIPA's Clean Energy Initiative currently consists of several efficiency programs as well as a number of research, development and demonstration (RD&D) projects. As of December 31, 2007, the Clean Energy Initiative consisted of the following:

Residential
Residential Lighting and Appliance
Cool Homes
Residential Energy Affordability Partnership
Solar Pioneer
Information and Education
New York ENERGY STAR® Labeled Homes
Home Performance with ENERGY STAR®

Commercial / Industrial
Commercial Construction
Retrofit Energy and Capacity Program

Multi-Sector
Customer-Driven Efficiency
LIPA*edge*

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY

In May 1999, the LIPA Board of Trustees approved the Clean Energy Initiative ("CEI" or "the Initiative"), "a five-year, $160 million effort targeted at achieving energy and capacity savings for LIPA, delivering electric bill savings to customers and providing environmental benefits to society." In 2001 the overall commitment through 2003 was increased by $10 million to a new total of $170 million. In 2003, LIPA earmarked $185 million for the CEI from 2004 through 2008. Currently, the CEI is a 10-year, $355 million dollar commitment through 2008 to promote clean new electric generation technologies. The Board articulated eight policy objectives for the CEI:

1. Further customers' ability to control their energy bills

2. Provide a stimulus to the local economy

3. Enhance customer retention

4. Defer or reduce capacity needs

5. Build customer trust and LIPA brand loyalty

6. Promote a positive image for LIPA

7. Reduce power plant emissions

8. Contribute to a sustainable energy future

The original CEI portfolio contained eleven programs that pursued investments in energy-efficiency, renewable energy, peak load reduction, and a variety of research, development and demonstration (RD&D) projects. Among the key characteristics of these programs were their flexibility, multi-year commitments and their combined treatment of all customer classes.

Today the CEI has evolved to encompass eleven energy efficiency programs as set forth in Table 1 and cutting-edge RD&D initiatives. In 2004, the annual report presented a comprehensive review of the first five years of the Initiative. This report presents cumulative overall results as well as specific program results for the year-ending 2007.

The CEI is primarily conducted through National Grid who oversees the activities of a host of contractors carrying out implementation efforts in the field. A few of LIPA's most active contractors are; Conservation Services Group (CSG) who are involved with our Energy Star Homes Program, Home Performance with Energy Star Program, and RECAP; Applied Proactive Technologies (APT) who assist in our Lighting and Appliance Program and our Commercial Construction Program; and Honeywell who helps in our delivery of our Residential Energy Affordability Program (REAP).

During its first nine years (1999 through 2007), the CEI has produced significant savings for Long Island. Along with the reductions in energy use come a variety of benefits from the pollutants that were not generated. The CEI, including RD&D, has resulted in a total of approximately 2,404,000 MWh of energy saved and/or produced to date, which resulted in reduced emissions of over 1,535,500 tons of CO_2, over 2,110 tons of NO_x and over 6,560 tons of SO_2. These energy savings translate into fuel savings of more than 3.88 million barrels of oil, or more than 24.10 million decatherms of gas.

Throughout this report, except where stated otherwise, all energy and demand savings are expressed as cumulative annual, with the savings in each year added up from program inception in 1999 through 2007. In other words, cumulative annual savings are the total energy savings achieved in this year alone, from all of the program activity to date over the six year time period (1999 incremental savings plus 2000 incremental savings, and so on, through 2007).

The measures installed from CEI inception through 2007, excluding RD&D efforts, has resulted in 190 MW of peak demand savings and 595,682[1] MWh of energy savings in the year 2007, 2% higher and 8% lower, respectively, than the originally projected savings of 186 MW and 648,000 MWh for the same period.[2] By all measures of electricity savings and economic impacts, the Initiative has been a highly successful investment for Long Islanders. The portfolio of programs has met or exceeded initial goals.

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1 Total energy saved or produced for the time period of 1999 through 2007 was 2,395,000 MWh. This number is used to calculate emission reductions. Total energy savings/produced to date are determined by adding the cumulative annual savings resulting in each year to all following years in the time period. For example, the total energy savings/produced by year end 2000 equals the 2000 cumulative annual savings, plus the 1999 cumulative annual savings, (or the 2000 incremental annual savings plus two times the 1999 incremental annual savings). This is because the incremental savings that occurred in 1999 continue to accrue in subsequent years.

2 Totals no longer include the Peak Reduction Program which was included in the original CEI targets, but was moved to LIPA's Retail Service offering in 2002 and is no longer part of the CEI portfolio. Also, the Resource Conservation Manager program, due to findings in its pilot stage introduction that found it would not likely result in originally estimated adoption and savings levels, is also not included in the Totals. Results for three programs that were not envisioned in the original CEI portfolio are also included: LIPA*edge*, AC Turn-In Bounty (Keep Cool), RECAP and Energy Star® Labeled Homes. RD&D results are excluded.

Table 1

The following table shows Clean Energy Initiative results for participants, cumulative annual energy savings, and cumulative annual peak demand savings from inception in 1999 through year-end 2007 (December 31, 2007).

LIPA Clean Energy Initiative Results To Date: 1999 through December 31, 2007	Participants (Units, Customers, Applications, Certifications)	Cumulative Annual Energy Savings (MWh)	Cumulative Annual Peak Demand Savings (MW)
Program	**1999 through December 31, 2007**		
Residential			
Lighting and Appliances (RLA)	4,140,233	253,560	20.1
Cool Homes (HVAC)	40,910	30,385	44.9
Energy Affordability Partnership (REAP)	34,919	37,669	4.5
Solar Pioneer (Photovoltaics)	1,132	8,379	3.7
Information and Education	115,905	25,464	9.0
Energy Star® Labeled Homes	511	1,520	1.3
Home Performance with Energy Star®	114	182	0.1
Keep Cool AC Bounty (phased out in 2003)	93,512	20,324	26.4
Commercial/Industrial			
Commercial Construction (CCP)	3,886	155,213	30.3
Multi-Sector			
Customer-Driven Efficiency (CDE)	3,107	19,657	2.3
LIPA*edge* Events*	27,398	-	38.9
RD&D	N/A**	N/A**	N/A**
Total All Programs	**4,462,504**	**595,682**	**190.2**
Retrofit Energy and Capacity (RECAP)	877	43,328	8.7

*LIPAedge Events are the greatest number of controlled units that responded over the called hours and days (peak time), and also, the MW savings associated with those events.
LIPAedge net installed capacity reported for 2007 is 33,859 participants and 50.7 MW.
**N/A denotes Not Applicable in regards to the RD&D portfolio results being not applicable to the CEI Portfolio of savings.
Note: Results are not included for programs no longer a part of the CEI (Resource Conservation Manager and Peak Reduction) and Budget does not include Keyspan Labor.

Table 2

The following table shows Clean Energy Initiative results for actual budget dollars (nominal) in millions from inception in 1999 through year-end 2007 (December 31, 2007) for each program of the CEI portfolio.

LIPA Clean Energy Initiative Results To Date: 1999 through 2007 Nominal $ in millions	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**Cumulative 1999 - 2007**
Program										
Residential										
Lighting and Appliances (RLA)	2.48	6.35	10.90	1.24	3.44	2.64	4.70	3.98	5.13	40.86
Cool Homes (HVAC)		4.40	2.71	3.86	3.54	3.73	3.65	2.78	1.85	26.52
Energy Affordability Partnership (REAP)		2.05	3.01	2.27	2.74	3.11	3.15	3.73	2.83	22.89
Solar Pioneer (Photovoltaics)		1.06	0.69	6.27	5.37	4.91	5.00	8.80	7.83	39.93
Information and Education		0.47	0.57	0.38	0.69	0.52	0.51	0.43	0.51	4.08
Energy Star® Labeled Homes					0.18	2.52	1.88	2.08	2.90	9.56
Home Performance with Energy Star®				0.04	0.06	0.06		2.90	5.56	8.62
Keep Cool AC Bounty (phased out in 2003)				14.34	2.21	0.14				16.69
Commercial/Industrial										
Commercial Construction (CCP)	2.47	4.88	5.98	6.56	7.83	7.00	8.62	7.89	5.76	56.99
Multi-Sector										
Customer-Driven Efficiency (CDE)		0.55	0.30	0.40	0.33	0.54	0.79	0.55	0.79	4.25
LIPA*edge* *			7.20	7.72	5.61	2.16	3.39	2.58	2.57	31.23
RD&D		3.60	12.42	10.25	6.58	4.13	2.76	2.19	1.89	43.82
Total All Clean Energy Programs	**4.95**	**23.36**	**43.78**	**53.33**	**38.58**	**31.46**	**34.45**	**37.91**	**37.62**	**305.44**
Retrofit Energy and Capacity (RECAP)						0.06	0.15	1.72	7.86	7.86

II. PROGRAM SUMMARY

LIPA's Initiative aids the transformation of specific markets (how professionals make energy-related decisions, how manufacturers determine which products to develop, how various market participants involved in energy product distribution and delivery interact with each other) so that investments made now to encourage energy efficiency will continue to reap efficiency returns in the future. The CEI's initial five-year term (which ended in 2004) and its continuance through 2008, have sent a clear signal to equipment manufacturers and building construction professionals that their investments in product development, marketing and skills development on Long Island will have time to pay dividends.

To accomplish its objectives, LIPA continues to collaborate with a number of regional and national groups sharing similar purposes, including NYSERDA (New York State Energy Research and Development Authority), NEEP (Northeast Energy Efficiency Partnerships), the U.S. Department of Energy, AIA (American Institute of Architects), US Green Building Council and CEE (Consortium for Energy Efficiency). LIPA also works with an ever-expanding network of trade, business and consumer groups on Long Island e.g. International Brotherhood of Electrical Workers (IBEW), Hauppauge Industrial Association (HIA), and Long Island Builders Institute (LIBI).

Table 3
The following table lists the existing CEI programs by sector and the status of each of those programs

Program	Status		
	Existing	Newly-Proposed	Phased Out
Residential			
Lighting and Appliances	X		
Cool Homes (HVAC)	X		
Energy Affordability (REAP)	X		
Solar Pioneers (Photovoltaics)	X		
Information and Education	X		
New Construction (NY ENERGY STAR® Labeled Homes)	X		
Home Performance with ENERGY STAR®	X		
Keep Cool (AC Turn-In Bounty)			2003
Commercial/Industrial			
Commercial Construction	X		
Retrofit Energy and Capacity (RECAP)	X		
Peak Reduction*			2002
Resource Conservation Manager			2001
Multi-Sector			
Customer Demand Management (LIPA*edge)*	X		
Customer-Driven Efficiency	X		
* Currently included in LIPA's Retail Service's product offerings.			

III. CLEAN ENERGY INITIATIVE RESULTS

A. TOTAL RESULTS FROM 1999 THROUGH 2007

Since program inception, the CEI Initiative, ***excluding RD&D efforts***, has saved and/or produced 2,395 GWh of energy to date, resulting in the displacement of over 1,532,360 tons of CO_2, over 2,108 tons of NO_x and over 6,540 tons of SO_2. This energy savings represents a fuel savings of more than 3.86 million barrels of oil, or more than 24.01 million decatherms of gas.

B. 2007 CLEAN ENERGY INITIATIVE PROGRAMS TOTAL

Year-End Performance

The following table presents the 2007 annual results from paid applications for the Year ending December 31, 2007[3], and goals for the total of all CEI Initiative Programs (which does not include RD&D efforts).

Table 4

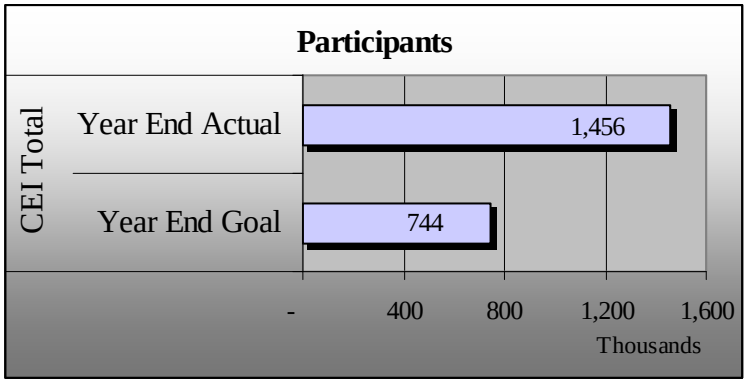
Annual results (paid applications) for the year ending December 31, 2007

Category	2007 Actual	2007 Goal	Actual vs. Goal
Participants	1,455,841	744,050	196%
MWh (energy savings)	155,559	154,282	101%
MW (demand savings)	23.89	30.05	79%

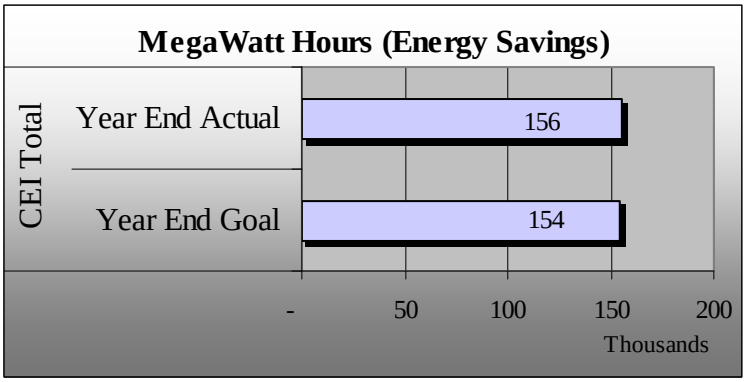
[3] The maximum one day LIPAedge event participants (27,398) and MW savings (38.8530) have not been included in the CEI portfolio year to date for 2007.

The following three graphs show Actual Results and Goals for the year ending December 31, 2007 for Participants (Energy Savings in MWh and Demand Savings in MW).

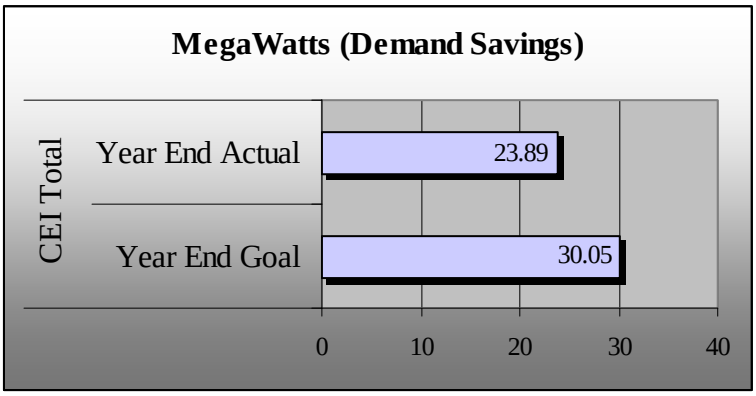
Graph 1
Actual Results and Goals for the year ending December 31, 2007 for Participants



Graph 2
Actual Results and Goals for the year ending December 31, 2007 for Energy Savings in MWh



Graph 3
Actual Results and Goals for the year ending December 31, 2007 for Demand Savings in MW



C. SOCIETAL BENEFITS & COSTS AND LEVELIZED COSTS 1999 THROUGH 2007

Total All Programs

The following table shows different measurements by which the programs can be judged. Cost-effectiveness is determined using all societal benefits and costs associated with the programs. This means the customer portion of the investment in energy efficiency is combined with the utility investment on the cost side, and the non-electricity savings are included on the benefit side. For instance, the fossil fuel and electricity savings stemming from new efficient shell measures are tallied together. The overall benefit/cost ratio is shown for the portfolio excluding RD&D efforts. Each market program section that follows lists the market program-specific societal benefits and costs, net societal benefits and societal benefit/cost ratios.

As shown in the following table, the CEI portfolio has yielded over $262 million in net societal benefits and a 1.87 benefit/cost ratio.

Total All Programs (2007$ million)	Through 2007
Societal Benefits (a)	$564.02
Societal Costs (b)	$301.21
Net Societal Benefits (a-b)	$262.81
Societal Benefit/Cost Ratio (a/b)	1.87

Levelized costs are a way to readily compare electric efficiency energy savings with electric energy production in the same terms. The way this is calculated is to amortize program expenditures over the life of the efficiency measure and then to divide that by the annual energy savings of the same measure. The overall levelized cost of the CEI portfolio is $0.045 per kWh which compares favorably with LIPA's cost of generation.

Residential Market Programs

As shown in the following table, the CEI residential programs[4] have produced over $102 million in net societal benefits along with a 1.46 benefit/cost ratio.

Total Residential Programs (2007$ million)	Through 2007
Societal Benefits (a)	$324.32
Societal Costs (b)	$222.09
Net Societal Benefits (a-b)	$102.23
Societal Benefit/Cost Ratio (a/b)	1.46

The overall levelized cost of the CEI residential programs is $0.058 per kWh which compares favorably with LIPA's cost of generation[5].

[4] The CEI residential programs benefits and costs include Solar Pioneer and LIPAedge.

[5] The CEI residential programs levelized cost does not include LIPAedge.

Commercial Market Programs

As shown in the following table, the commercial programs[6] have produced $160 million in net societal benefits along with a 3.03 benefit/cost ratio.

Total Commercial Programs (2007$ million)	Through 2007
Societal Benefits (a)	$239.70
Societal Costs (b)	$79.12
Net Societal Benefits (a-b)	$160.59
Societal Benefit/Cost Ratio (a/b)	3.03

The overall levelized cost of the CEI commercial programs is $0.028 per kWh which compares very favorably with LIPA's cost of generation.

[6] The CEI commercial programs benefits and costs include Customer Driven Efficiency.

D. 2007 RESIDENTIAL MARKET PROGRAMS

1. Residential Lighting and Appliance

Residential Lighting and Appliance 2007

In 2007, the LIPA ENERGY STAR lighting and appliance program was influential in promoting and processing 12,267 ENERGY STAR qualified clothes washer rebates for residential customers. In addition, a total of 4,723 ENERGY STAR qualified ceiling fans/fixtures and 1,408.665 ENERGY STAR qualified bulbs were rebated. These numbers reflect the increasing consumer demand for quality, energy-efficient products promoted by LIPA's Clean Energy Initiative.

2007 Rebate Structure:

- Light fixtures and torchieres were rebated at $10
- Ceiling fans with light kits were rebated at $15
- Compact Fluorescent Light bulbs (CFLs) rebates:
    - May 1, 2007 – December 31, 2007
        - Select ENERGY STAR Specialty Bulbs $2.00 per pack
        - High Heat tested ENERGY STAR Reflector Bulbs $2.50 per pack
    - September 1, 2007 – December 31, 2007
        - Select Cold Cathode Light Bulbs $2.00 per pack
    - Seasonal Promotions (3/1/07 – 4/30/07 and 9/1/07 – 11/30/07)
        - Select ENERGY STAR qualified bare spiral CFLs $1.00 per bulb per pack
- The clothes washer mail-in rebate program was a tiered rebate based on each model's Modified Energy Factor (MEF), as follows:
        - MEF 1.72-1.99 = $15
        - MEF 2.0 and higher $50

LIPA's ENERGY STAR Program field representatives conducted daily site visits to 110 enrolled appliance stores and 159 enrolled lighting stores on Long Island. Through LIPA's Clean Energy Initiative efforts, 100 percent of Long Island appliance retail stores now carry ENERGY STAR qualified refrigerators, dishwashers, and clothes washers. The campaigns below reflect a sample of this year's activity.

Daylight Energy Savings Time Promotion – In March, LIPA launched a $1 off per bulb per pack coupon promotion in Long Island retail locations that sold ENERGY STAR qualified CFL packages. A total of 186,054 ENERGY STAR qualified CFLs were sold as a result of this 8-week promotion.

Change A Light, Change the World - In September, LIPA launched a $1 off per bulb per pack coupon promotion in Long Island retail locations that sold ENERGY STAR qualified bulbs per package. A total of 419,566 ENERGY STAR qualified CFLs were sold over the course of the 12-week promotion.

Each retailer partner location was provided with the EPA ENERGY STAR Change a Light posters, co-branded with the LIPA Clean Energy Initiative logo and a message: "Ask a Sales Associate about special Change a Light promotions offered by the Long Island Power Authority." LIPA also created ENERGY STAR Change a Light pledge tear pads which were offered to customers during the field representatives' in-store promotions; a total of 368 pledges were collected during these activities.

Change A Light Pledge Campaign - LIPA sponsored the Change a Light pledge campaign on the LIPA Web site resulting in 1,118 pledges on the LIPA Clean Energy Initiative Web site (www.lipower.org/cei). The LIPA ENERGY STAR Change a Light Web page received 913 visits during the month of October alone, and a total of 1,118 pledges were received by the end of November, exceeding the goal of 500 pledges by 224%.

LED Holiday Light Rebate - In October, LIPA offered a LED Holiday Light rebate. The promotion was launched with a press event held at the Ace Hardware store in Farmingdale. LIPA residential customers were eligible for $2 back by mail for the purchase of an LED Holiday Light package purchased between 10/1/06-12/31/06. The mail-in rebate forms and signage were distributed to retail stores on Long Island that sold LED holiday lights, including Ace Hardware, BJ's Wholesale Club, Costco Wholesale Club, Home Depot, K-Mart, Lowe's, Rite Aid, Target, True Value and Wal-Mart. A total of 3,763 holiday light packages were rebated.

Co-op Advertising Campaign – LIPA continued its Cooperative Advertising Program for LIPA ENERGY STAR lighting and appliance retail partners. The co-op advertising program assists retailers in promoting ENERGY STAR qualified products by reducing their advertising costs. The program resulted in a total of 55 cooperative advertisements and 2,482,962 impressions and leveraged $23,839 in industry funds.

Formal Training Sessions - LIPA ENERGY STAR representatives conducted a total of 30 formal training sessions in Ace Hardware, Best Buy, Home Depot, Lowe's and Sears's stores. A total of 305 sales associates, cashiers, supervisors, and corporate trainers attended the LIPA ENERGY STAR training sessions.

LIPA's ENERGY STAR representatives participated in various activities throughout the year to educate retailers and consumers on the benefits of ENERGY STAR qualified appliance and lighting products and the LIPA ENERGY STAR program offerings:

- **In-store Promotions/Community Events** - LIPA ENERGY STAR representatives conducted a total of 54 in-store promotions and community events, with 17,538 ENERGY STAR qualified CFLs sold and 10,732 customers reached. During these events, LIPA representatives informed customers of LIPA's instant lighting coupons, the

Change a Light promotion, features and benefits of ENERGY STAR qualified appliances, and the LIPA clothes washer rebate program.

- **Home Show Raffles** - In March LIPA participated in the Home Show at Nassau Coliseum. LIPA held a free drawing for LIPA customers in which they had a chance to win a free ENERGY STAR qualified clothes washer. More than 1,500 LIPA customers entered for a chance to win.

- **Home Show CFL Surveys** – In March, LIPA's ENERGY STAR program staffed a lighting booth, which offered one ENERGY STAR qualified CFL to LIPA customers that completed a survey. A total of 2,131 customers completed a survey and received a CFL. In response to the question "Have you ever purchased an ENERGY STAR qualified CFL?" 45% of the participants responded "Yes."

- **ENERGY STAR/Energized Sales Appliance Training –** In April LIPA held the third annual training session for appliance retail associates, managers, and trainers. The event focused on the features and benefits of ENERGY STAR qualified appliances, the LIPA ENERGY STAR program, and how to increase sales of ENERGY STAR qualified appliances. Thirty-four associates from LIPA ENERGY STAR retail partner stores across Long Island attended the training.

- **Appliance Retailer Appreciation Event** - In August, LIPA sponsored the Sixth Annual Jones Beach Concert and Appliance Retailer Appreciation Event. A contest for appliance retail partners was held for a chance to win one pair of tickets per ENERGY STAR retail partner store. LIPA received 189 entries for the drawing. Although this event has been discontinued, LIPA is committed to maintaining strong relationships with our retail partners

- **ENERGY STAR/Energized Sales Lighting Training –** In October, LIPA offered its fourth annual Energized Sales Training for retailers. The event focused on the features and benefits of ENERGY STAR qualified products, an overview of the LIPA ENERGY STAR program, and how to increase sales of ENERGY STAR qualified lighting products. Twelve associates from LIPA ENERGY STAR retail partner stores across Long Island attended the training.

- **Lowe's Energy Efficiency Event** - In October, LIPA participated in an Energy Efficiency Event at the Lowe's store in Medford to help raise customer awareness of energy efficiency. Spoke with 60 people and sold 230 ENERGY STAR qualified CFLs.

- **Fire Safety Day Event** - In October, participated in a Fire Safety Day Event at the East Farmingdale Fire Department. Families were provided information about the safe alternative of ENERGY STAR qualified light fixtures at each event. Children were provided with LIPA safety hats, LIPA coloring books and crayons. Each participant was entered into a free drawing to win a LIPA gift basket full of energy efficient products. Spoke with 150 people and sold 144 ENERGY STAR qualified CFLs.

- **Oyster Fest CFL Surveys** - In October, LIPA's ENERGY STAR program staffed a lighting booth at the Oyster Fest in Oyster Bay. LIPA customers who completed a survey received one ENERGY STAR qualified CFL. A total of 2,558 customers completed a survey and received a CFL. In response to the question "Have you ever purchased an ENERGY STAR qualified CFL?" 50% of the participants responded "Yes."

Year-End Performance

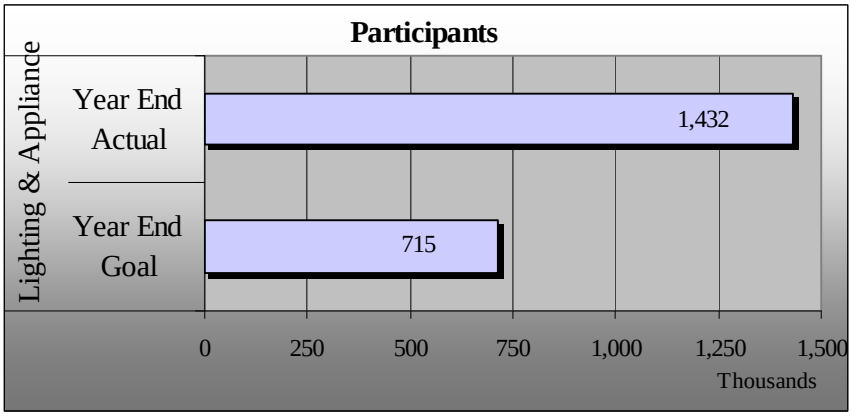
The following table shows the actual results (paid applications) for the year ending December 31, 2007

Table 5
Actual results (paid applications) for the year period ending December 31, 2007 for the Residential Lighting and Appliance Program

Category	2007 Actual	2007 Goal	Actual vs. Goal
Participants	1,432,162	715,000	200%
MWh (energy savings)	81,349	43,308	188%
MW (demand savings)	6.105	3.351	182%

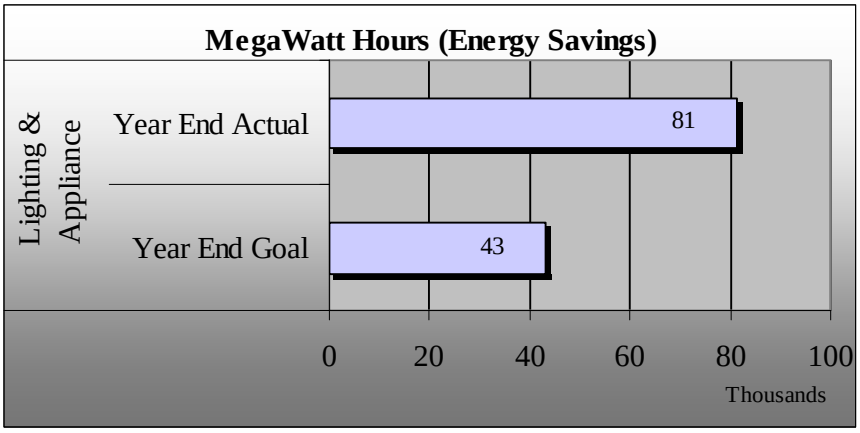
The following three graphs show Actual Results and Goals for the year ending December 31, 2007 for Participants, Energy Savings in MWh and Demand Savings in MW.

Graph 4
Actual Results and Goals for the year ending December 31, 2007 for Residential Lighting and Appliance Program Participants



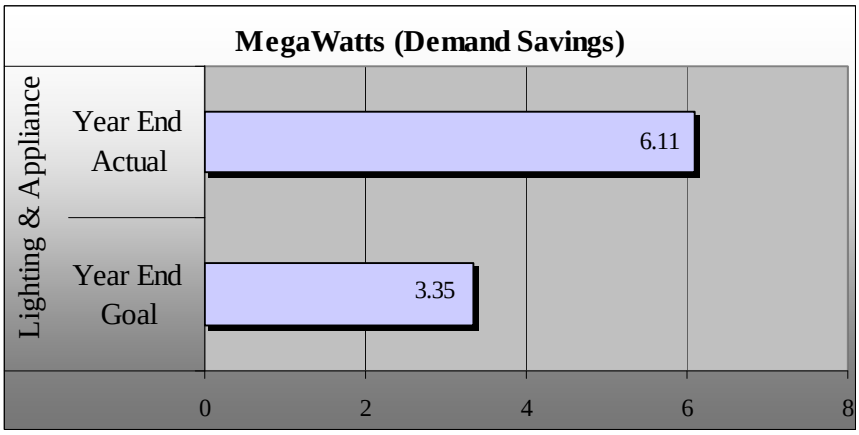
Graph 5

Actual Results and Goals for the year ending December 31, 2007 for Residential Lighting and Appliance Program Energy Savings in MWh



Graph 6

Actual Results and Goals for the year ending December 31, 2007 for Residential Lighting and Appliance Program Demand Savings in MW



2. Cool Homes Program

Cool Homes Program

The Cool Homes Program encourages customers to purchase and install energy-efficient central air conditioners (CAC) and geothermal heat pumps by providing financial incentives to offset a portion of the equipment's higher initial cost. Cool Homes' long-range goal is to encourage Quality Installation of energy efficient equipment while moving the entire CAC and heat pump market toward greater energy efficiency.

In 2007 there were 1,318 applications processed containing a total of 1,595 units that qualified for $1,004,000 in rebates. These installations resulted in savings of 1,071 MWH and 2.0 MW. Contractor participation in Cool Homes decreased significantly in 2007 due to changes made to the program in 2006 that continued in to 2007, including the requirement that contractors perform a Check Me Test on each installation. In an effort to increase participation, contractor incentives were re-instated in 2007. Customer incentives became assignable to the contractor (contractors can offer instant rebate to customers) and Ductless systems also became eligible. . Reduced contractor participation and a decrease in the number of units installed in the region, due in part to a decline in new residential construction, had a restraining effect on the Cool Homes program, which did not make goal in 2007. For 2008, the addition of a Tune Up incentive will attempt to capture savings by utilizing Check Me technology to verify a proper installation on existing CAC units. Corrections and/or repairs done by contractors, which will increase efficiency, equates to savings for the customer and the utility.

Program Management

- LIPA's Cool Homes Program published and communicated its Program Guidelines for 2007 to the HVAC contractor community. The guidelines highlight the federal minimum efficiency standards and changes in the market. The national minimum efficiency standard for split central cooling equipment increased from a Seasonal Energy Efficiency Ratio (SEER) of 10 to a SEER of 13 as of January 1, 2006. Therefore, *LIPA only provides an incentive to contractors for SEER 13 equipment.*

- To be eligible to participate in the 2007 Cool Homes program, contractors agreed to adhere to the guidelines and sign the Contractor Participation Agreement. Recognized participants of the Cool Homes Program are eligible for equipment and installation related incentives, are listed on LIPA's Cool Homes website. They also benefited from a comprehensive marketing campaign in the spring of 2007.

- The LIPA web site was updated to include information on quality installation. A quality installation can save the customer hundreds of dollars on their electric bill year after year, reduce maintenance costs, and lengthen the life of new equipment. A quality installation requires units to be properly sized and for the equipment be installed with the proper airflow and the ducts to be free from leaks. The info-line representatives were also re-trained so that they can pass this information along to customers that call.

Table 6
Program Components:
For Cool Homes participant installations between January 1 and December 31, 2007

2007 Customer Energy Efficient Equipment Installation Incentive			
Tier	**Eligible Equipment**	**Efficiency Requirements**	**Customer Incentive**
1	**a)** Split Central Air Conditioners **b)** Air Source Heat Pumps **c**) Ductless Mini Split Systems	**a)** SEER >= 14 and EER >=12.0 **b)** SEER >= 14 and EER >=12.0 and HSPF >= 8.2 **c)** SEER >= 14 and EER >=11.5	$250/unit
2	**a)** Split Central Air Conditioners **b)** Air Source Heat Pumps	**a)** SEER >= 15 and EER >=12.5 **b)** SEER >= 15 and EER >=12.5 and HSPF >= 8.5	$400/unit
3	**a)** Split Central Air Conditioners **b)** Air Source Heat Pumps	**a)** SEER >= 16 and EER >=13 **b)** SEER >= 16 and EER >=13 and HSPF >= 8.5	$600/unit

2007 Contractor Quality Installation Incentive		
Eligible Equipment	**Efficiency Requirements**	**Contractor Incentive**
a) Split Central Air Conditioners **b)** Air Source Heat Pumps **c)** Ductless Mini Split Systems	**a)** SEER >= 13 **b)** SEER >= 13 **c)** SEER >= 13	**a&b)** $150 for 1st qualifying unit on an application, +$50 for each additional qualifying unit on the same application (see requirement # 7) **c)** $50 for each qualifying unit

- LIPA's Cool Homes program signed up 44 HVAC contractors as participants in the 2007 Cool Homes program. There have been efforts to recruit Sears into the program for 2008 since they installed over 1000 units in 2007. Sears dropped participation in the program with the introduction of CheckMe! but an incentive program is being developed to assure their participation.
- In order to promote the new changes to the Cool Homes Program, management helped to develop and update ads that place a greater emphasis on quality installation. Updated ads in the Yellow Pages, Newsday, LIPA Bill Insert and LIPA commercial set to run on local cable, encourage the use of Participating Contractors in order to assure quality installation of central a/c equipment.
- LIPA's Cool Homes program worked closely with contractors to coordinate and schedule-in-house training on the CheckMe! system, Manual J and System Charging classes. This was to assure that contractors would be prepared to offer the program parameters to LIPA customers.

Contractor Training

- Participating contractors are listed on the Cool Homes website and will enjoy the benefits of a marketing effort geared towards educating customers about the benefits of quality installation of central air conditioning.

- LIPA's Cool Homes Program ran classes on Manual J Version 8 and System Charging and Airflow. Contractors participating in these classes learned how to perform Manual J loads properly. This information is vital for residential customers to be eligible for rebates on high efficiency HVAC equipment. Manual J Version is calculated and then present in report form through ACCA approved Software. The System Charging and Airflow class covers instruction on volume-velocity-pressure, duct system performance, measuring system pressure with instruments and understanding charging methods.

- Contractors who signed up as participating in the Cool Homes Program also took a CheckMe! class offered by LIPA throughout the year. Technicians learned the important steps necessary to verify quality installation of central A/C. The steps are outlined below:

    1. Cool Homes participating technician phones data from charge and air flow testing at the customer installation site to the CheckMe! Hotline operator.
    2. Real time data analysis generates results of refrigerant charge and airflow test data *in less than five minutes.*
    3. If the results show that the equipment is not operating to manufacturer specifications, CheckMe! technical support suggests solutions, and helps the technician to retest the unit.
    4. Customer receives a certificate by mail declaring that the unit has been correctly installed and explaining the testing.

Marketing and Presentations

- Contractors who joined LIPA’s Cool Homes program in 2007 will enjoy the benefits of a marketing effort geared towards driving customers back to the Web site where they are listed as participating in the program.

- A coordinated marketing approach was launched for the spring 2007 season that incorporated updated Newsday ads, updated Yellow Pages ads, a revamped website home page, a bill insert educating customers on the benefits of quality installation for central a/c and a commercial set to run on local cable.

- Yellow Pages featured the updated Cool Homes ad which emphasizes Quality Installation.

- A bill insert educating customers on the benefits of quality installation for central a/c was delivered to over 960,000 residential customers.

Year-End Performance

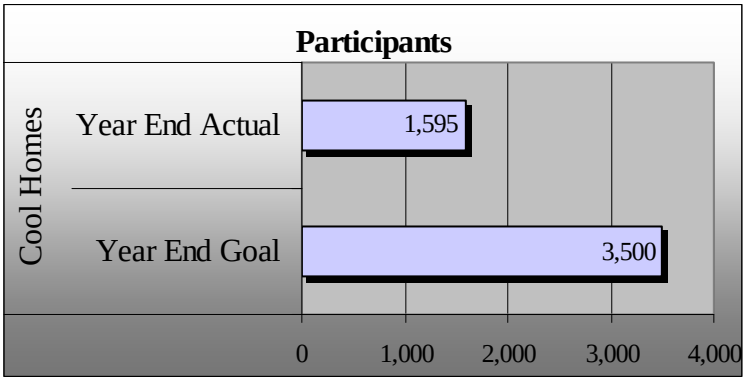
The following chart shows the actual results (paid applications) for the year ending December 31, 2007. Continued reluctance on the part of the contractors to utilize CheckMe resulted in reduced contractor participation. Also, a general decrease in the number of units installed in the region, due in part to a decline in new residential construction, was a major obstacle with regards to meeting goal.

Table 7
Actual results (paid applications) for the year ending December 31, 2007 for the Cool Homes Program

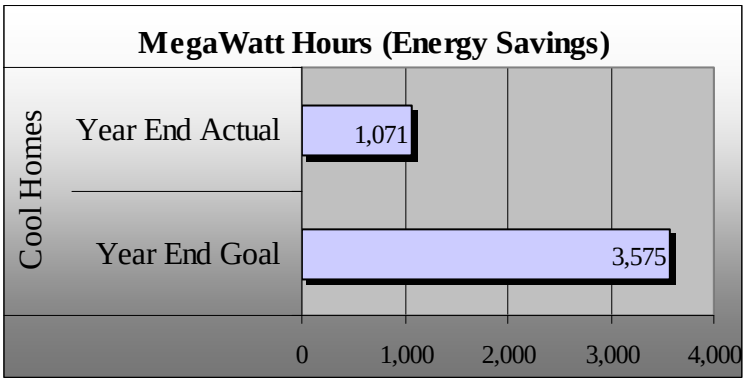
Category	2007 Actual	2007 Goal	Actual vs. Goal
Participants	1,595	3,500	46%
MWh (energy savings)	1,071	3,575	30%
MW (demand savings)	2.008	6.200	32%

The following three graphs show Actual Results and Goals for the year ending December 31, 2007 for Participants, Energy Savings in MWh and Demand Savings in MW.

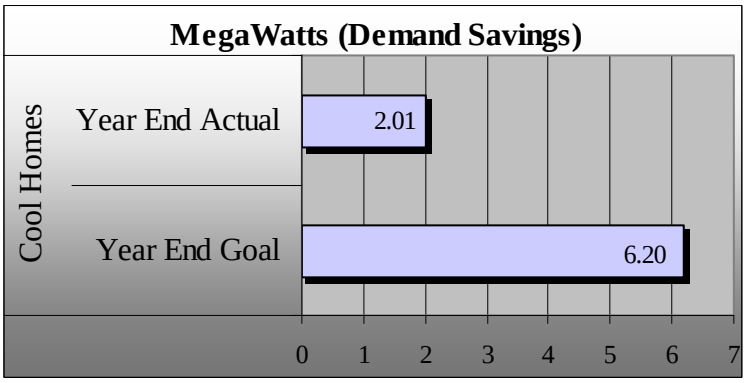
Graph 7
Actual Results and Goals for the year ending December 31, 2007 for Cool Homes Program Participants



Graph 8
Actual Results and Goals for the year ending December 31, 2007 for Cool Homes Program Energy Savings in MWh



Graph 9
Actual Results and Goals for the year ending December 31, 2007 for Cool Homes Program Demand Savings in MW



3. LIPA's Residential Energy Affordability Partnership (REAP)

LIPA's Residential Energy Affordability Partnership (REAP) program improves energy affordability for LIPA's lower income households through (1) the free installation of a comprehensive set of cost effective energy efficiency measures which may include refrigerator replacements and (2) extensive energy education and counseling.

The fundamental program objective is to improve energy affordability for LIPA's low-income customers, with a special emphasis on customers who are payment troubled and in the greatest need of assistance. Achieving these goals provides significant economic and social benefits for participating households and also reduces LIPA's costs associated with collections and bad debt.

In 2007, we installed 992 refrigerators, 122 torchiere lamps, 469 faucet aerators, 63 linear feet of duct insulation and 40,441 energy-efficient light bulbs for REAP participants.

We identified and obtained assistance for 61 LIPA customer homes with gas leaks and 3 LIPA customer homes with high CO situations.

Implementation

- Added new lighting inventory reducing costs which will increase total retrofits by reducing time protocols and increasing expected energy savings. The new lighting also supplements supply and increases potential retrofits due to smaller physical dimensions.

- Added bilingual (Spanish/English) technician to Field Staff. Carlos Correa began working on 1/10/07 and has been a good addition to the team. Many customers have called and mailed letters referring to him as a gentleman and praising his professional behavior.

- LIPA REAP was recognized for potentially life saving efforts (11/2/06) at LIPA/REAP customer's home in the March/April 2007 Issue of Home Energy Magazine. Health and safety inspections during a routing REAP visit identified high CO readings endangering the customer's life. Though not mentioned specifically in the article, the top (outlet) of the chimney had been completely blocked off with metal secured in place over the chimney by a contractor about 2 months before the Nov. REAP Audit. When the CO was detected the technician followed procedure and called it in to 911. The elderly customer who had been feeling sick was taken to the hospital via ambulance where she learned of her low level of blood oxygen and high levels of co in her blood.

- In April, all REAP technicians received a driver training to increase their traffic safety awareness driving skills.

- During the second half of 2007 LIPA Media Relations Coordinator Elizabeth Flagler arranged an NBC Television taping on Energy Efficiency tips aimed toward senior citizens. The taping was shot with REAP customer Vita Rose Cacace at her home in Dix Hills. Michael Patrey was the technician filmed during the spot.

- REAP Honeywell program manager accompanied LIPA at Brookhaven township workshop on Caithness. Honeywell manager was interviewed by town council on the benefits of REAP. This workshop was televised within the township.

- A strategic mailing was distributed to Caithness area residents advising them of the availability of REAP.

Advertising & Promotion

The "jewel in the crown" of the REAP Marketing Department's outreach is the annual Low Income Energy Forum, hosted by LIPA REAP. Close to 150 Long Island advocates participated in this year's event on 10/18/07. To put this number in context, please note that a similar event sponsored by Pepco Holdings, Inc on 10/10/07 attracted about 150 participants from *four states*.

LIPA REAP chaired the planning committee, hosted the event, and provided the "emcee" (thus keeping REAP in the limelight for the entire day). Conference speakers included representatives of NYS HEAP, the Nassau County Dept of Social Services, the United Way of Long Island, National Grid/Keyspan, Nassau Suffolk Law Services, the Community Development Corp of LI, and LIPA REAP. In less official but highly visible ways, representatives of the Suffolk County Dept of Social Services Commissioner's Office and the Nassau County Senior Citizens' Dept also addressed the conference. The participation of these agencies reinforces their professional relationships with REAP and leads to more referrals.

After the Forum the Suffolk County DSS Commissioner's Office contacted LIPA to receive more information about REAP and the Forum. Also, in December 2007, Liz McDermott of EAC (which works with Nassau DSS to process HEAP applications) requested 1500 REAP brochures in order to distribute them to all HEAP applicants.

- In February 2007, Chartwell Inc., a utility industry research group, published a study entitled "Low Income Energy Efficiency Programs". LIPA REAP was presented as a case study, spotlighting REAP's innovative approach to building relationships with other agencies serving lower income customers. Chartwell interviewed Program Manager Maggie Ramos and Senior Marketing Coordinator Virginia Walsh in preparation for this document.

- In order to improve the quality of marketing outreach presentations, the Senior Marketing Coordinator participated in the 2-day BPI workshop offered in February for the LIPA REAP technicians. The Senior Marketing Coordinator also attended a January conference of ACI (Affordable Comfort, Inc.).

- The LIPA REAP Marketing Coordinator continued to represent LIPA REAP on the Steering Committee for the state-wide Low Income Forum on Energy, ensuring that the concerns of Long Islanders are included in the Committee's work. The LIFE Regional Conference was held on May 15th in Manhattan, at a location chosen specifically to accommodate Long Islanders. Approximately 150 advocates from Long Island, NYC and Westchester met to discuss options for assisting low income energy customers. The event provided excellent networking opportunities, especially to promote REAP in the Rockaways. The Marketing Coordinator also serves on the LIFE Newsletter subcommittee.

- During 2007, the REAP Marketing Dept gave 125 presentations to community groups, social workers and advocates throughout LIPA territory. In addition to educating the consumers present at the meetings, each presentation has a "ripple effect" in the community for REAP and for the Clean Energy Initiative. For example, the Environmental Committee of the Garden City Jewish Center invited LIPA REAP to give an evening workshop as part of the Center's ongoing focus on environmental responsibility. In 2008, the Jewish Center contacted REAP to request a presentation on LIPA's Solar Pioneer Program, since the 2007 presentation had been so informative.

- REAP representatives staffed outreach tables at 29 community events, focusing in particular outreach to senior citizens. These 29 events are in addition to the large weekend street fairs that REAP staffs for LIPA. For example, the highlight of the summer was Suffolk County Unity Day, attended by over 1000 participants including hundreds of children from lower income school districts.

- The LIPA REAP networked aggressively to promote and strengthen relationships with agencies and professionals serving lower income Long Islanders. LIPA REAP participated in 79 networking events during 2007.

- In 2007, customers were referred to dozens of programs at agencies including:

    - Adelante of Suffolk County
    - America's Job Bank
    - Catholic Charities Central Intake
    - Catholic Charities NOEP (Nutrition Outreach & Education Program)
    - Catholic Parish Outreach offices throughout LIPA territory
    - Circulo de la Hispanidad
    - The Community Development Corporation of Long Island
    - FEGS
    - HEAP and alternate certifier agencies
    - Health & Welfare Council NOEP
    - The HIV Care Network
    - Hospice Care Network
    - Housing Help
    - JASA offices in Nassau, Suffolk, and the Rockaways
    - Jewish Community Council of the Rockaway Peninsula

- The Long Island Association for AIDS Care (LIAAC)
- LICIL (Long Island Center for Independent Living)
- Long Island Gay and Lesbian Youth
- Nassau County Dept for Senior Citizen Affairs
- Nassau County Dept of Social Services
- NYS Dept of Labor "One Stop Centers" in Nassau and Suffolk
- Peconic Community Council
- Project Warmth
- Pronto of Long Island
- Rebuilding Together Long Island
- St. Vincent de Paul Society
- The Suffolk Independent Living Organization (SILO)
- The Suffolk County Department of Health
- Suffolk County Dept of Social Services
- Suffolk County Office of the Aging
- The Workplace Project

In addition to promoting REAP, the REAP Marketing Coordinators also informed customers about LIPAedge, Assisted Home Performance, Home Performance with Energy Star, and LIPA Special Services. Customers with specific issues were directed to LIPA Customer Service or the Energy Wise Infoline.

Assisted Home Performance (AHP) with ENERGY STAR®

A related low-income initiative is the Assisted Home Performance with ENERGY STAR Program. This program is offered to low-income customers through a partnership effort between the New York State Energy Research and Development Authority (NYSERDA), the Long Island Power Authority (LIPA) and Community Development Corporation (CDC) of Long Island.

Assisted Home Performance takes the Residential Energy Affordability Partnership (REAP) Program one step further by offering customers the opportunity to additionally improve the overall energy efficiency performance of their home. Through Assisted Home Performance, customer's homes are evaluated by a Certified Home Performance Contractor, and using state-of-the art techniques and current diagnostic equipment, he/she will maximize the comfort and efficiency of the home, in addition to saving the homeowner up to 25 percent in energy costs. The Assisted Home Performance Program provides financial incentives, in the forms of homeowner subsidy and low-interest loans, to enhance the delivery of eligible energy efficiency services to one-to-four family residences with household incomes not exceeding 70% of the area median income.

In its fourth full year of operation, the Assisted Home Performance Program had 42 customers complete the program in 2007.

Year-End Performance

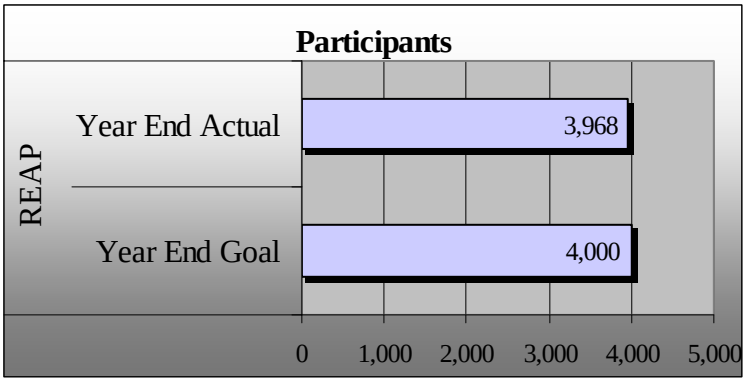
The following chart shows the actual results (paid applications) for the year ending December 31, 2007.

Table 8
Actual results (paid applications) for the year ending December 31, 2007 for the Residential Energy Affordability Partnership (REAP) Program

Category	2007 Actual	2007 Goal	Actual vs. Goal
Participants	3,968	4,000	99%
MWh (energy savings)	6,010	5,500	109%
MW (demand savings)	0.571	0.677	84%

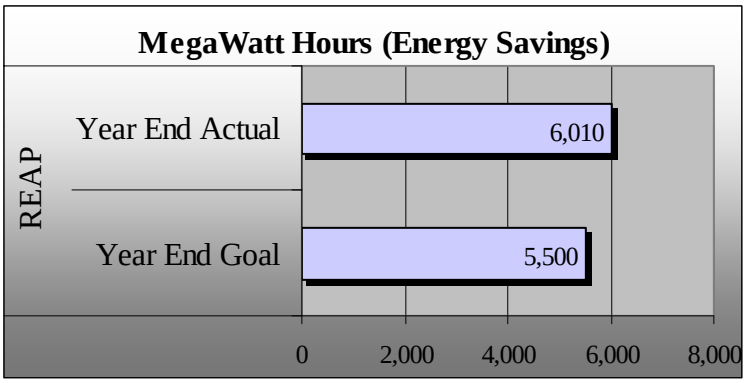
The following three graphs show Actual Results and Goals for the year ending December 31, 2007 for Participants, Energy Savings in MWh and Demand Savings in MW.

Graph 10
Actual Results and Goals for the year ending December 31, 2007 for Residential Energy Affordability Partnership (REAP) Program Participants



Graph 11

Actual Results and Goals for the year ending December 31, 2007 for Residential Energy Affordability Partnership (REAP) Program Energy Savings in MWh



Graph 12

Actual Results and Goals for the year ending December 31, 2007 for Residential Energy Affordability Partnership (REAP) Program Demand Savings in MW

4. Solar Pioneer Program

LIPA's Solar Pioneer Program continues to provide customers the opportunity to supplement their energy needs with clean, renewable solar power. Also known as photovoltaic (PV), this environmentally friendly source of electricity is becoming more affordable. LIPA's Solar Pioneer Program has helped to build an infrastructure for PV in LIPA's service territory and has dramatically lowered the PV system installation costs.

Before LIPA's Solar Pioneer program, the Long Island PV market was almost non existent. The installed costs from the few contractors were as high as $12 per watt. Currently, the Long Island market includes over 26 contractors installing PV for an average installed cost of approximately $7.50 per watt.

The initial rebate offered to customers was $3.00 per watt in the year 2000, providing customers with approximately 25% of the PV system installed costs. Rebates are typically offered in blocks of 1,000 kW. The program adjusts the rebate levels to reflect the overall cost effectiveness of the PV technology. To stimulate the PV market, in December of 2001, LIPA introduced the rebate level at $6.00 per watt. Since 2001, rebate levels have been designed to reflect approximately 50% of the installed costs for PV systems. Continuing its long-term incentive plan, in July 2002, LIPA introduced the $5.00 per watt rebate. In September of 2003, LIPA introduced the next rebate level of $4.50/watt rebate. In November of 2004, the next rebate level of $4.00 per watt was introduced. On Earth day in 2005, LIPA announced an extra dollar per watt (above the current rebate level) for schools, not for profits and government customers that this segment was not able to take advantage of. This helped to offset the tax advantages for residential and commercial customers. In November of 2005, the next rebate level of $3.75 was introduced. Due to market prices, on January 7th 2007, LIPA opted to maintain the rebate level of $3.75. An additional block of $3.75 was offer in May of 2007. This third rebate block expired on December 31st, 2007. The rebate level is $3.50 per watt for residential and commercial customers and $4.50 per watt for Not-for-Profits starting in 2008.

2007 Highlights

For the year 2007, LIPA's Solar Pioneer program offers rebates for PV systems up to 10 kW (DC) in system size. The average PV system size installed in 2007 was 6.0 kW. The results are listed below.

Table 9

PV systems installed *	Participants	Rebate Amount	System Size (DC)
Commercial	13	$499,090	121 KW
Residential	278	$6,116,931	1,607 KW
TOTALS	291	$6,616,021	1,728 KW

* PV systems installed from Jan 1, 2007 to Dec 31, 2007

Table 10
The number of PV systems that LIPA has supported from the program inception up to December 31st, 2007.

PV systems installed *	Participants	Rebate Amount	Cumulative KW (DC)
Commercial	63	$2,372,836	524 KW
Residential	1070	$26,783,150	6,015 KW
TOTAL REBATES	1133	$29,155,986	6,540 KW
PV Lottery 1999 & 2002	72	$502,046	44.46 KW
FALA Direct Marketing	1	$4,100,000	1,010 KW
PROGRAM TOTALS	1,206	**	7,594 KW

*PV systems installed from Jan 1, 2007 to Dec 31, 2007
** LIPA's PV lottery and FALA Direct Marketing required funding other than rebates.

Milestones

As an outgrowth from one of LIPA's Solar Pioneer contractor meetings, the solar contractors were offered the chance to become "one voice" to the solar industry. With guidance from LIPA and Renewable Energy Long Island (RELI), the contractors organized a local chapter to the New York Solar Energy Industries Association (NYSEIA). In the short time of Long Island Solar Energy Industries Association's (LISEIA) existence, they have begun working to design legislation to continue to grow the PV technology. This is a unique opportunity to allow the contractors to become involved and to self serve (and self police) the development and growth of the solar technology industry on Long Island. LIPA was also represented at the NYSEI conference in Albany which brought together numerous solar energy parties and supported one voice for a Solar Roadmap.

LIPA has rolled out the next rebate level at $3.50 per watt. LIPA has agreed to maintain the new rebate level mainly due to rising material costs and program activity. The program will also begin the new requirements of customer/contractors submitting serial numbers for the panels and the inverters, and a pre and post picture (preferably digital) of the installation's site. Serial numbers are being used for any product recalls and to maintain program integrity, and the pictures may be used to help (with the customer's permission) promote the program.

To provide a uniformed presentation of the LIPA sponsored free evening customer seminars, public speaking training was held with the contractors. Twenty five people attended. This was a unique opportunity to provide installers with the opportunity to practice public speaking.

A LIPA press event was held in Hicksville to celebrate the 1,000th PV rebate. This press event was covered by local media outlets.

LIPA participated with RELI in the fourth National Solar Tour on October 6th, 2007. The Solar Tour is a free tour offered to interested customers to visit existing solar energy homes with a focus on PV. This recent solar tour had 98 host sites with 952 guest passes issued. It was estimated that a total of 3,000 site visits were completed (customers visiting more than one site).

Students from the New York Institute of Technology (NYIT) Solar Decathlon project have started their own PV installation company and a PV contractor has hired students from the NYIT. In addition, a PV contractor ally has started advertising his business on 97.5 WALK FM. There has also been positive Newsday coverage and a local Cable TV show (Hauppauge Channel 78) featuring the PV technology and the recent Solar Tour.

Education

Twelve customer seminars were held throughout LIPA's service territory in 2007. Locations included the Town Halls and libraries from Bridgehampton to Far Rockaway. A total of 750 customers attended these seminars. These free seminars provide information about the PV technology as well as LIPA's Solar Pioneer program.

Training

On October 25th & 26th, LIPA was a major sponsor for the sixth annual solar conference held at Farmingdale State University. LIPA's is to grow this event into a two day conference, include other institutions of higher education and promote all renewable technologies. Conference topics included the various forms of renewable energy, energy policy and energy regulations. LIPA and RELI assisted Farmingdale University in the design and implementation of this conference. This event included workshops and vendor displays of renewable energy. For both days, approximately 350 people attended, which included college students.

New Opportunities

Meetings were held with representatives from the Family Residences Essential Enterprise Inc. (FREE) to discuss energy savings opportunities in their many facilities throughout Long Island. FREE provides community residential alternatives to the institutionalization of people with mental retardation, developmental disabilities and/or mental illness. LIPA coordinated the installation of a 10kW system on one of their residences in Hicksville. FREE has been very appreciative of LIPA's involvement with the entire process.

School Opportunities

There has been a very strong interest concerning the PV technology and its application in the Education sector. In 2007, LIPA met with a number of interested school districts to discuss these applications relative to the aggregation of systems; Eastern BOCES, Great Neck and Carle Place,

to name a few. In fact, a press conference was held at the Carle Place School District to announce the installation of 50 kW of PV systems on three school buildings. Channel 4, Fox 5, News 12 and TV 55 were in attendance with LIPA's Chairman for the dedication of these PV systems.

Program Development

A three year contract was executed for a performance evaluation study of PV systems rebated under LIPA's Solar Pioneer program. Field work has begun to test the evaluation process of the rebated PV systems. This study will provide feedback for future program growth.

LIPA hosted two Solar Contractor Ally meetings. Over one hundred people were in attendance for both meetings. These meetings have been growing in attendance as additional contractors install PV. The meeting included topics on LIPA's Solar Pioneer program, New York Energy Star Homes Program, increasing PV system warranties, Building Code Standards and future PV seminars/events.

LIPA coordinated a mailing for the Solar Electric Power Association (SEPA) organization. LIPA worked with SEPA on two surveys. The first survey was directed to the customers who had installed PV systems. The survey covered topics of: why they installed PV, post installation impressions, incentive structure, performance of their own PV system and demographics. The second survey was directed towards utilities and their PV programs. The survey's objective was to compile a matrix of solar energy rebate programs across the country. LIPA will be included in this database and SEPA will share the results of this nationwide survey.

Year-End Performance

The following chart shows the actual results (paid applications) for the year ending December 31, 2007.

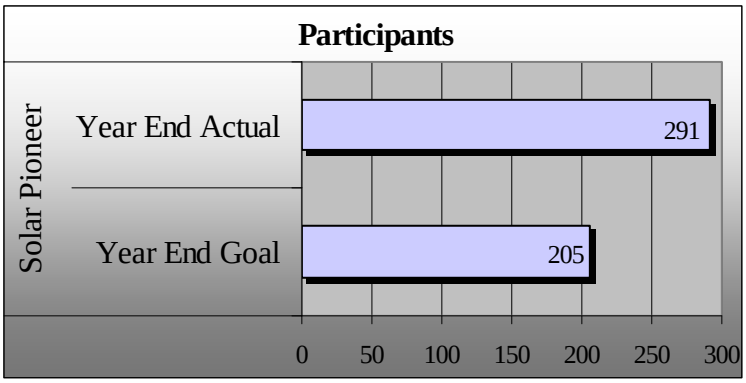
Table 11
Actual cumulative results (paid applications) for the year ending December 31, 2007 for the Solar Pioneer Program

Category	2007 Actual	2007 Goal	Actual vs. Goal
Participants	291	205	142%
MWh (energy savings)	2,160	1,545	140%
MW (demand savings)	1.025	0.667	154%

The following three graphs show Actual Results and Goals for the year ending December 31, 2007 for Participants, Energy Savings in MWh and Demand Savings in MW.

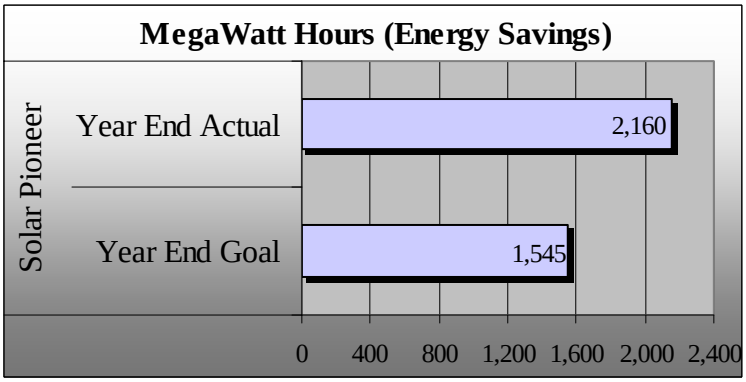
Graph 14

Actual Results and Goals for the year ending December 31, 2007 for Solar Pioneer Participants



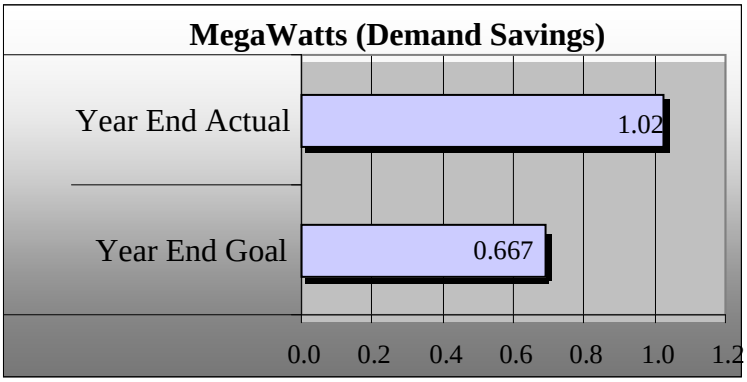
Graph 15

Actual Results and Goals for the year ending December 31, 2007 for Solar Pioneer Energy Savings in MWh



Graph 16

Actual Results and Goals for the year ending December 31, 2007 for Solar Pioneer Demand Savings in MW



5. Residential Information & Education Program

The Information/Education Program is a marketing, education, and market transformation oriented program that is offered to residential customers in many different ways. LIPA participates in various events throughout Long Island to speak directly with customers about its Clean Energy programs, the home energy analysis tools and in-classroom energy education (ICWE) presentations to students in Grades 5-8 with accompanying audit activities are other programs under Information/Education.

2007 Highlights

Home Energy Analyzer

The Information Education Program reaches customers through LIPA's website, where children and adults have access to on-line games, tools, and educational resources. One of the more important on-line resources available to customers is the "Home Energy Analyzer", which is a web-based audit that is available for LIPA customers to utilize at no cost. This web audit allows customers to model their home's energy consumption and identify areas for efficiency upgrades. There are three pages (or tiers) to it with each page requesting progressively more detailed information, and also provide more detailed recommendations on how to improve the energy efficiency of each customer's home.

LIPA's Web-based Home Energy Analyzer continued to provide energy saving ideas tailored to each customer's home. Awareness of this resource increased towards the end of 2007 following an e-mail campaign to LIPA customers. Over 11,000 customers visited the Web site in 2007.

In Concert with the Environment

The Information Education Program sponsors a two-day energy efficiency education class for students in Grades 4-8, known as the In-Concert with the Environment (ICWE) Program. The ICWE Program is offered through two, 40-minute classes and includes an energy audit that students can take home and complete with their parents.

LIPA's In Concert with The Environment Program (ICWE) reached 3,706 students in 2007. LIPA's ICWE Program. Listed below are the names of the schools that participated in ICWE during 2007.

	School	Town
1	Charles Campagne Elementary School	Bethpage
2	JFK Middle School	Bethpage
3	John H. West Elementary School	Bethpage
4	Willam Floyd Middle School	Center Moriches
5	St. Mary	East Islip
6	Covert Avenue Elementary School	Elmont
7	Tecumseh Elementary School	Farmingville
8	Hauppauge Middle School	Hauppauge
9	Grundy Avenue Elementary School	Holbrook
10	Seneca Middle School	Holbrook
11	Islip Middle School	Islip
12	Cayuga Elementary School	Lake Grove
13	Gatelot Elementary School	Lake Ronkonkoma
14	Samoset Middle School	Lake Ronkonkoma
15	Jonas Salk Middle School	Levittown
16	Long Beach Catholic	Long Beach
17	Lynbrook North Middle School	Lynbrook
18	Lynbrook South Middle School	Lynbrook
19	Munsey Park Elementary School	Manhasset
20	Shelter Rock Elementary School	Manhasset
21	William Paca	Mastic Beach
22	Mount Sinai Elementary School	Mount Sinai
23	Eastplain Elementary School	N. Massapequa
24	Schwarting Elementary School	N. Massapequa
25	Kramer Lane Elementary School	Plainview
26	Cherokee Elementary School	Ronkonkoma
27	Helen B. Duffield Elementary School	Ronkonkoma
28	Willets Road Middle School	Roslyn Heights
29	Sayville Middle School	Sayville
30	Westbury Friends School	Westbury

In an effort to expand the ICWE program message, LIPA plans to work with New York State Energy Research and Development Authority (NYSERDA) to offer the "Energy Smart Students ("ESS") Program" targeting middle school grades. The ESS Program is based on the "Train the Trainer" model. The Train the Trainer workshop is entitled, "The 4 E's of Energy". Under the Agreement, NYSERDA will bring this "Train the Trainer" workshop to middle school teachers in LIPA's service territory. The curriculum contained within the ESS Program is aligned with New York State learning standards in Math, Science, Technology, Language Arts, Social Studies and Family/Consumer Science.

The Pilot program will include delivery of ten (10) workshops within the LIPA service territory with a class size of approximately 20 teachers. The workshop will cover energy basics, renewable/non-renewable sources of energy, and energy efficiency measures that can be implemented in the home. All workshops are free to attendees.

Participating educators will be asked to then submit lesson plans detailing information on how the curriculum was used in their classroom. Students will be asked to bring home a questionnaire which will be used to determine actions students and their parents took based on the energy education materials.

LIPA Shows and Events

In 2007 LIPA participated in 45 various trade, community and business events throughout Long Island.

In 2007, LIPA also collaborated with the New York Islanders to promote energy efficiency through the "I Am An Energy Star Idol Contest", for which LIPA received an award from the Environmental Protection Agency. This marketing campaign showcased LIPA's Clean Energy programs with a focus on the Home Performance with Energy Star Program. In the future LIPA will build on this message with a greater emphasis on targeted mail and bill inserts

Listed below are the numerous shows and events that LIPA participated in during 2007.

2007 Shows

	Event	Date	Event Type
1	Long Island Forum for Technology	January	Business
2	Home and Garden Show Extravaganza	January	Home Show
3	Business without Boundaries	January	Business
4	NARI	January	Trade Show
5	Spring 2007 Home Show-Suffolk	February	Home Show
6	Spring Home Improvement & Remodeling Expo	March	Home Show
7	LIBI Trade Show & Expo	April	Business
8	EarthStock	April	Community
9	Sustainable Long Island Conference	April	Renewable
10	Hispanic Small Business Seminar	April	Business
11	Heckscher Park Earth Day	April	Renewable

12	SCECA Vendor's Night	April	Trade Ally
13	Massapequa Community Festival	April	Community
14	Hamptons Home & Garden Expo	May	Community
15	LI Marathon-Health Expo	May	Community
16	Farmingdale State Entrepreneurial Conference	May	Business
17	Senior Celebration Luncheon	May	REAP
18	American Liver Foundation Walk	May	Community
19	Energy Star Affordable Housing Conference	May	EStar Homes
20	HIA Trade Show	May	Business
21	Massapequa Mall-Safety Day	June	Community
22	Amityville Day	June	REAP
23	Major Accounts Breakfast	June	Major Accounts
24	Wyandanch Day	June	REAP
25	AIA Product Fair	June	Business
26	Life Science Summit	June	Eco Dev
27	Vision Long Island - Smart Growth Summit	June	Business
28	Summer Senior Fest	July	REAP
29	Energy for the Future	August	Business
30	Jones Beach Event	August	Community
31	Merrick Street Festival	September	Community
32	Greenport Maritime Festival	September	Community
33	Bellmore Family Street Festival	September	Community
34	Fall 2007 Home Show	September	Home Show
35	St James Street Fair	September	Community
36	RSVP Expo	October	REAP
37	Farmingdale Street Fair	October	Community
38	Golden Gathering	October	REAP

39	2007 Health Festival	October	Community
40	Golden Gathering	October	REAP
41	Go Green Expo	October	Community
42	GLICC Clean Cities Coalition	October	Business
43	Energy Long Island Conference	October	Business
44	Health Safety	October	REAP
45	Golden Gathering	October	REAP
46	ABCO Expo 2007	November	Business
47	SCECA Vendor's Night	November	Trade Ally

Year-End Performance

The following chart shows the actual results (paid applications) for the year ending December 31, 2007. Information and Education is made up of three components that include participants in the In Concert with the Environment Program, visitors to LIPA's Home Analyzer website and recipients of the EnergyWise CD. Goals were established with the assumption that the EnergyWise CD would continue to be distributed at LIPA attended shows and events throughout 2007 (the goal was set for 5,000 CDs with an associated MW and MWh savings of 0.3905 and 1098 respectively). A Program Management decision was made in April 2007 to immediately discontinue distribution of these CDs after it was determined that the cost to update them would prove prohibitive. The loss of over 3,000 CDs potentially getting to LIPA customers resulted in not meeting the goal. However, in anticipation of not meeting the EnergyWise CD goal, the program promoted efforts to drive traffic to LIPA's Home Analyzer website, that goal was exceeded in 2007.

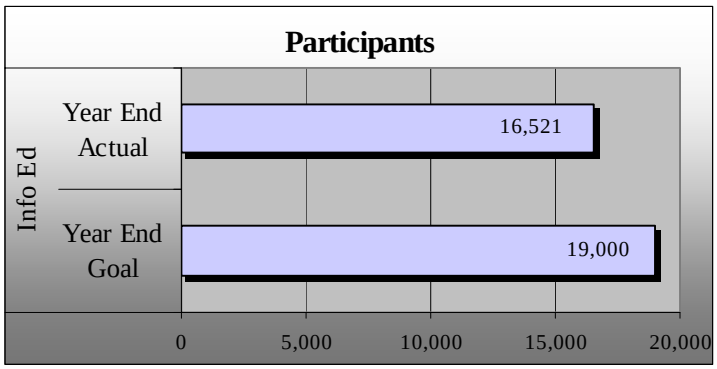
Table 12
Actual results (paid applications) for the year ending December 31, 2007 for the Information and Education Program

Category	2007 Actual	2007 Goal	Actual vs. Goal
Participants	16,521	19,000	87%
MWh (energy savings)	3,630	4,174	87%
MW (demand savings)	1.290	1.484	87%

The following three graphs show Actual Results and Goals for the year ending December 31, 2007 for Participants, Energy Savings in MWh and Demand Savings in MW.

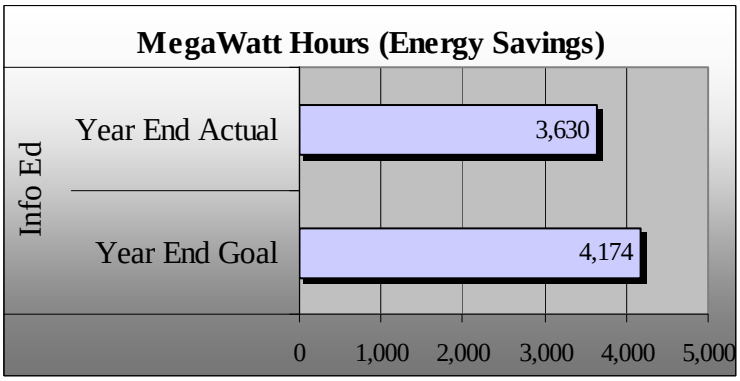
Graph 17

Actual Results and Goals for the year ending December 31, 2007 for Information and Education Participants



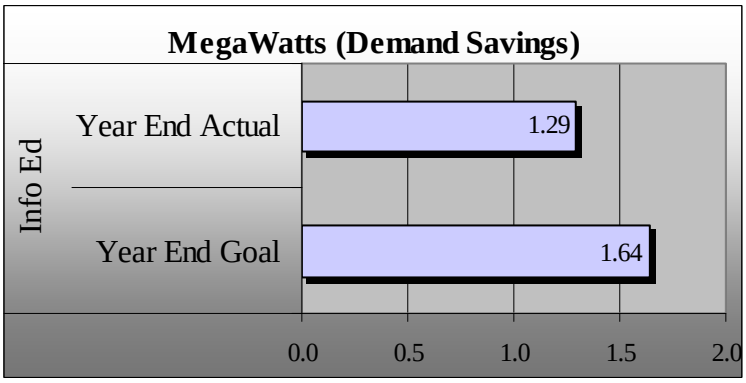
Graph 18

Actual Results and Goals for the year ending December 31, 2007 for Information and Education Energy Savings in MWh



Graph 19

Actual Results and Goals for the year ending December 31, 2007 for Information and Education Demand Savings in MW



6. New York ENERGY STAR® Labeled Homes (Residential New Construction Program)

LIPA's Residential New Construction Program, New York ENERGY STAR® Labeled Homes, seeks to improve the energy efficiency of the residential new construction market.

PROGRAM IMPLEMENTATION

Our goal for 2007 was 500 labeled homes. This objective proved to be challenging as a direct result of the severe downturn in the new construction housing market. In addition, we started out the new program year with 2 of our largest labeled homes producers completing significant projects—Beechwood and Emmy. On the positive side, the program has recruited many new partners, effectively doubling the number of builder partners from years start. This has resulted in numerous projects in the production pipeline. A summary of 2007 Program activity follows:

- The number of builder partners that have homes in production for the 2007/08 program year is more than double than the builder partners with labeled homes produced in 2006. In the 2006 program year, of the 343 homes labeled, two builders produced over 300 labeled homes. In the 2007 program year most of our projected homes will be distributed over 35 or more builder partners demonstrating an increase in the builder's capacity to deliver ENEGY STAR homes has increased.

- Account Managers and Field Technicians have been working with multiple large residential developers and their associated trades with the intent on bringing their multi-family home projects into the NYESLH program. Included are Pulte Homes' Massapequa project (100+), Engel Burman's East Meadow project (165), and Heatherwood Communities' Valley Stream project (435). Combined, these projects represent almost 700 units not including contributions form other builders. It is interesting to note that these projects are located outside of town mandated areas.

- Several large single family developments are also in progress and will result in ENERGY STAR home production throughout 2008. These include Avalon Bay Communities with 200 units and Blue and Gold Development with up to 65 units. Calvosa Construction has a 28 unit attached housing project underway. North Wind in Eastport is slated to deliver 65 units. Ornstein Leyton has committed to constructing their entire 93 duplex housing development. These projects are high priority objectives for our account managers.

- At this time, Beechwood Communities continues to construct their (120 multi-family units with a flat) Arverne by the Sea project. Account Managers and Field Technicians are working directly with project supervisors, tradesman, and HERS raters to bring this project into the program production.

- The aforementioned housing market downturn has resulted in several builder partners stretching out their construction timelines. It has been observed that builders are extending the number of days or months to complete the construction process. These

builder partners include, Pine Hollow's 9 manufactured multi-family attached units, originally planned to complete this spring. Glenwood village planned order of 20 manufactured detached homes is on hold. Jefferson Woods' 9 detached units will only complete 2 units. Burr Manor Estates is holding back on breaking ground on 22 detached. Newtown and Country is waiting to file permits for 25 detached homes. In fact, the lengthening of the builder's production cycles resulted in the 2007 production shortfall.

- We have secured 5+ builder partners committed to building 100% ENERGY STAR. Their commitment extends to include either exclusively all homes constructed by the builder or by their particular development site covered under an LLC.

Program Infrastructure Development:

Initially, the lack of qualified HERS Raters, to support the builder's production, was perceived to be the most significant barrier to LIBI regarding the towns adopting ENERGY STAR as code. Therefore, implementation efforts throughout 2007 have brought about a significant increase in the number of raters available to support the towns seeking to adopt ENERGY STAR as code. A few examples are:

- Long Island Builders Institute's HERS raters training has experienced great success turning out HERS raters and prospective raters. Interest remains high amongst potential rater candidates eager to participate in the next round of trainings. The HERS rater training format was modified to streamline the coursework and produce as many qualified raters as possible. Current trainings offer a total of 7 days instead of 4. The new format consists of 4 standardized modules. Training modules are spread out over 3 weeks—two, 2-day modules.

- The 3rd module will be 1-day review and test. For those who pass the exam, REM/Rate software training continues in the 4th and final 2-day module. Since the adoption of the new modular structure HERS exam passing rates have steadily increased and surpassed the national average. For 2008 the HERS trainings will include an online, self-study, internet segment to further enhance the offerings by making them more accessible.

- The supply of raters is increasing at a faster rate than that of homes being labeled. It is a strong desire to increase builder participation to foster new HERS rater development. Account Managers will continue to speak to the LIBI members in regard to constructing to program standards and participating in the NYESLH program. There is additional post HERS rater trainings, such as Advanced REM/Rate training as well as one-to-one field trainings available to HERS raters and HERS rater trainees.

- Technical Field Representatives have been actively offering and assisting current and prospective HERS raters with field procedures including performance testing (blower door, duct blaster, etc.), thermal by-pass checklist, and combustion safety tests. The number of requests for in-field assistance has increased significantly due to the 55+ HERS raters and HERS CIPs.

- The NYESLH program now has insulator-contractors performing HERS rater services. Several insulation contractors in the LIPA territory have put personnel through training and have reached HERS certification. There are 3 key-industry insulation contractors that are Resnet accredited and are actively providing HERS rater services to partner builders. A chief feature of the insulator-contractors is their capacity to deploy sales staff to recruit new builders into the NYESLH program. Additionally, current HERS raters began to use this as an example and embarked on actively pursuing new builder partners.

- CSG staff is actively involved with The Long Island Builders Institutes' Energy Committee. The committee's mission is to help educate member builders and trades how to comply with the approaching ENERGY STAR as code mandates.

- Masco Contractor Services, an accredited HERS provider, is offering HERS rater services in the LIPA territory. Masco may offer providership services to independent HERS raters in the future. MaGrann Associates, another accredited provider, is now operating in the LIPA territory. MaGrann is actively soliciting builders with the objective of providing HERS rater services.

- For 2008 trainings have been developed for builder's HVAC and insulation trade contractors. These include HVAC trainings to perform Manual J, D, S, and T as well as duct sealing.

- CSG staff is actively involved with Habitat for Humanity of Suffolk County's Green Energy Committee. The committee's mission is to formulate strategy and implementation procedures on all future homes constructed by Habitat for Humanity of Suffolk County to be certified by the USGBC LEED for New Homes program.

- 2007 ENERGY STAR Labeled Homes Electrical Energy Savings are categorized in Table 11 below:

Table 13

Savings	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*	*Jul*	*Aug*	*Sept*	*Oct*	*Nov*	*Dec*	*2007 Total*
MWh	0	10.18	0	0	3.39	0	9.71	69.08	3.99	10.90	22.01	16.27	145.53
MW	0	0.01	0	0	0	0	0.01	0.09	0.01	0.02	0.02	0.01	0.17
Therms	0	3,415.63	0	0	442.45	0	1,277.10	14,342.91	921.18	2,454.60	3,193.25	5,184.31	31,231.43
MMBTU	0	0.02	0	0	0.01	0	57.63	55.12	23.10	117.21	0.04	0.03	253.16

Marketing Efforts:

- The program has captured savings associated with the Town of Brookhaven's 45 interim compliance path homes constructed through their modified ENERGY STAR program. Surprisingly, there were 465 new single family unit permits issued between April and November of 2007. Of these 465 permits, there were 163 homes constructed and issued Certificates of Occupancies by December 2007. Through due diligence, it was discovered that 118 permits were in fact permit renewals and therefore did not fall under Brookhaven's mandated policy.

- LIPA staff is actively involved in assisting building department officials within the LIPA territory that have mandated or are considering mandating ENERGY STAR as part of their town building codes. To date, Brookhaven Township, The Town of Oyster Bay, Babylon Township, and Riverhead Township have mandated ENERGY STAR as code; full compliance for permitted units begin April 2008. Other townships, such as The Town of Hempstead and The Town of North Hempstead have ENERGY STAR mandates on their legislative agendas; The Town of Huntington has recently passed this resolution as well.

- Brookhaven Town has requested specialized builder code official trainings to assist them in the administration of the ENERGY STAR program. The trainings are slated to be delivered in January 2008.

- The Village of North Haven on Long Island's southern fork has adopted ENERGY STAR as part of their new construction building code and has requested help in implementation.

- LIPA staff attended and participated in the Affordable Housing Conference in May of 2007 which was sponsored by the Long Island Power Authority and United Way of Long Island, along with partnering community groups and building trades. The conference allowed attendees to learn more about how ENERGY STAR Labeled Homes improves long-term affordability by lowering operating costs and helps ensure greater efficiency, comfort, health and safety.

Special Initiatives:

The Compact Fluorescent Bulb (CFL) Direct Install Program was implemented in late Fall 2007. Bulk purchases are made through the Energy Efficient Products' Bulk Purchase Program at discounted rates and include a variety of replacement wattage and bulb types that complement the majority of new home usage. There were over 3000 CFL bulbs distributed in 2007.

Table 14
Savings Contributed by "Special" Initiatives and interim compliance homes in the "code" townships:

CFL Direct Install Initiative	
Total Number of Bulbs Installed	3,340
Annual kWh Per Bulb	50
Total Annual kWh Supplemental Savings	167,000

Brookhaven Interim Energy Star Compliance	
Total Number of Homes Built in Brookhaven	45
Annual kWh Per Home	1,340
Total Annual kWh Supplemental Savings	60,300

Year-End Performance

The following chart shows the actual results (paid applications) for the year ending December 31, 2007. The 2007 goal was not met in part to housing market downturn that began prior to 2007 and will continue unabated through 2008. The housing market will continue its stumble in 2008 as demand dries up, therefore leading housing prices to fall between 5 and 10 percent. Projected permit data provided by NYSBA from the U.S. Census Bureau shows that 2008 permits will be down in the Northeast region 33% and Housing starts will be down approx.38% in the Northeast region. Faced with daunting imbalances between housing demand and supply, builders continued to cut housing starts and issuance of building permits, particularly in the single-family sector.

As we enter 2008, this downward pressure is likely to continue, although less severely than in 2007. However, a key success of the program in 2008 will be the facilitation of multiple towns in both counties to adopt ENERGY STAR® Homes as the code minimum. These townships include Brookhaven, Babylon, Oyster Bay, Huntington, Islip, Riverhead, Southampton and Hempstead complying and mandating the Energy Star as Building code in 2008. The program will continue efforts to recruit the remaining townships through 2008 and into 2009.

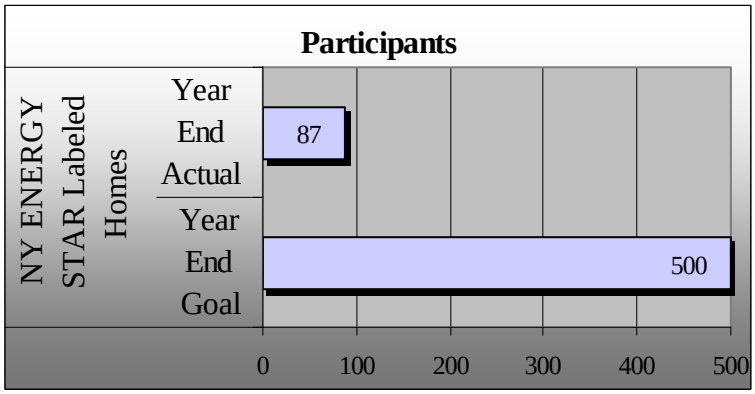
A positive factor of the shrinking market, which evolved in 2007, is that as builder inventories grow, and the market shifted in favor of the buyer, builders began to seek-out ways to differentiate themselves from their competition and have begun looking to the Program for assistance. This is also expected to continue throughout 2008, and may motivate many builders to up the "ante" above basic ENERGY STAR® requirements in most Townships across Long Island.

Table 15
Actual results (paid applications) for the year ending December 31, 2007 for New York ENERGY STAR® Labeled Homes

Category	2007 Actual	2007 Goal	Actual vs. Goal
Participants	87	500	17%
MWh (energy savings)	314	1,450	22%
MW (demand savings)	0.176	1.400	13%

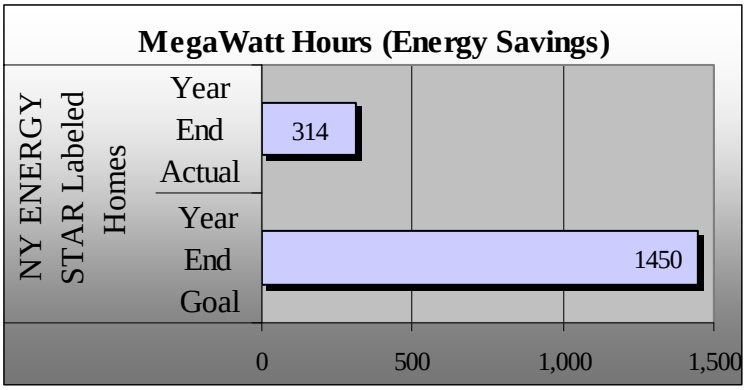
The following three graphs show Actual Results and Goals for the year ending December 31, 2007 for Participants, Energy Savings in MWh and Demand Savings in MW.

Graph 20
Actual Results and Goals for the year ending December 31, 2007 for New York ENERGY STAR® Labeled Homes Participants



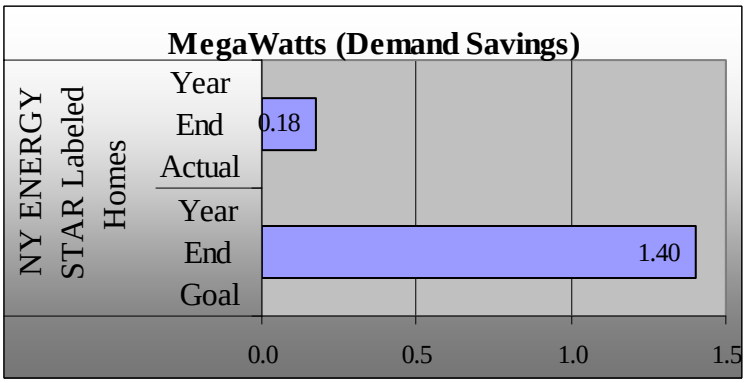
Graph 21

Actual Results and Goals for the year ending December 31, 2007 for New York ENERGY STAR® Labeled Homes Energy Savings in MWh



Graph 22

Actual Results and Goals for the year ending December 31, 2007 for New York ENERGY STAR® Labeled Homes Demand Savings in MW



7. Home Performance with ENERGY STAR® Program

LIPA's Home Performance with ENERGY STAR® is a residential retrofit program which seeks to transform the way energy efficiency services are delivered to 1 - 4 family size existing homes on Long Island. At the program's core is its "house as a system" approach to home improvement contracting. This approach incorporates an extensive building science component, and places a high priority on quality, requiring that participating contractors are accredited by, and have employees who hold relevant certifications from, the Building Performance Institute (BPI). As part of the Home Performance with ENERGY STAR® program, the participating contractor will perform a Comprehensive Home Assessment (CHA). The CHA provides homeowners with the valuable information regarding the existing condition of their home, and identifies areas where energy efficiency, comfort and safety improvements can be made. The Home Performance contractor will provide a cost estimate to do the improvements, and LIPA will either provide a rebate or buy down the loan, through a third party lender, for the work performed.

In its second year of implementation, Home Performance with ENERGY STAR® continues to provide valuable resources focused on the way energy efficiency services are delivered to 1 - 4 family existing homes here on Long Island. The services offered by the Program's Building Performance Institute (BPI) certified contractors has done much to help lower the cost of utility prices for many homeowners within the LIPA service territory. It has also helped to reduce peak demand loads for electricity, and has contributed toward the reduction of green house gases associated with the combustion of fossil fuels. With the increased cost of such fuels and electricity, as well as the general cost of living, Home Performance with ENERGY STAR should continue to grow as energy conservation and "green" living become more and more a part of residential Long Island's awareness and understanding.

Year-End Project Values:

The following table shows the total value of the work performed (it does not include customer/contractor incentives or implementation costs) by accredited contractors as well as Sales Pilot projects for the Year-to-Date period ending December, 2007:

Table 16

	Total $ Project Amount	Minimum $ Project Amount	Maximum $ Project Amount	Average $ Project Amount
Home Performance	$236,991.55	$1,000	$22,914	$6,771
Sales Pilot	$82,424	$6,270	$38,464	$10,303
Totals	**$319,415.55**			**$7,428**

Note: The $38,464 dollar amount for Maximum Sales Pilot Project Amount is based on two separate contracts for one site. The individual contract breakdown was $20,000 for shell work and $18,464 for mechanicals.

Year-End Measure Summary:

Table 17

Building Demographics represent the total square footage and volume of the conditioned space for the homes treated by HPwES in 2007.

Size	Total	Average	Max	Min
Area (ft^2)	71,202	2,158	5,025	924
Volume (ft^3)	573,100	17,367	40,200	8,000

Table 18

Summary of Installed Measures in homes treated by HPwES in 2007

Measure Type	Description	Qty
Domestic Hot Water Heater Replacement	Gas	3
	Oil	2
	Electric (heat pump)	1
Central A/C	14 SEER	3
Heating Systems	Gas	3
	Oil	4
Thermostats	ESTAR Programmable	9
Insulation (ft^2)	Cellulose	24,138
	Dense Pack Cellulose	16,348
	Netted Cellulose	444
	Fiberglass Batts	681
	Fiberglass w/ 1" Poliso	336
	Low Density Foam	2,002
	High Density Foam	9,637
	2" Polyisocyanurate	2,083

	Other	394
	High Hat Insulators	71
Lighting	Compact Fluorescent Lights	116
	Lighting Fixture	1
Refrigerator	22 ft^3 no ice	1
Appliances	ESTAR Clothes Washer	1
Appliances	ESTAR Dishwasher	1
Door	Exteriors	3
Windows	U-Value between .30 and .35	25

2007 Program Highlights:

IMPLEMENTATION

- A total of 15 contractors participated in Home Performance with ENERGY STAR® during 2007 resulting in 43 job completions resulting in kWh savings of 1.7 MWh per job.

- Offered special contractor production based incentives to enhance existing cooperative advertising and diagnostic equipment offerings.

- Developed and offered special contractor and customer incentives as a way to increase overall kWh savings per project, including special coupon incentives designed for use in marketing to LIPA solar pioneers customer and through collaboration with Renewable Energy Long Island (RELI).

- BPI training and training logistics were provided throughout 2007 during a transitory time period between OCM Boces and Hudson Valley Community College, allowing uninterrupted service to prospective program partners.

- Implemented strategies and processes for successful integration of the Cool Homes and Home Performance with ENERGY STAR programs. Developed a "Coupon" referral process to allow participating Cool Homes contractors to refer work to the Home Performance contractors.

- Developed and implemented a Home Performance Sales Pilot to explore the feasibility of selling and performing comprehensive Home Performance style work. Initial results

demonstrated an assessment to installation rate exceeding 40% with an average job value of over $10,000 per job.

- Attended numerous NARI and LIBI events promoting and recruiting for the Home Performance program.

TRAINING

- Year-to-date there have been 5 Building Analyst classes, 2 Envelope Specialist classes and 2 Heating Specialist classes with at total of 67 students representing 37 companies. Due to the time required to complete the entire training, certification and accreditation process, it is anticipated that the bulk of the trained contractors will achieve accredited status and begin production in 2008.

- Recruitment led to the accreditation of 5 companies.
- Frequent direct specialized in-field trainings were conducted to assist participating contractors in increasing their technical skills and competencies.

- There were also several program software (HomeCheck) trainings provided via both one-on-one sessions and multiple attendee sessions. Additionally, ongoing training and support was available via telephone or by "shadowing".

MARKETING AND PRESENTATIONS

- Delivered ongoing Home Performance with ENERGY STAR presentations to local townships as a way to increase program awareness and obtain contractor interest.

- Developed a partnership with RELI on the solar panel tour to help build awareness of the Home Performance with ENERGY STAR program and to help secure work for participating contractors.

OPERATIONS

- Several operational and procedural changes/ additions were made to the Program. Each of which were revised in (or added to) the Contractor Resource Manual. Those modifications include:

    - Developed an HFI Rebate Assignment process which allows the homeowner to "sign over" to the contractor their 10% HFI as partial payment of the work being performed.
    - Added and Removed Eligible Measures and Accessories to maximize electrical savings

- Implemented a Quality Assurance Administrative Review Process along with Field Inspection Procedures to verify that HP projects were meeting all Program requirements while maintaining healthy and safe living conditions.

Year-End Performance

The following chart shows the actual results (paid applications) for the year ending December 31, 2007. The existing Home Performance with ENERGY STAR program, is based on establishing a comprehensive model of contracting, and hinges on overcoming numerous market barriers before sufficient consumer demand is created in any given market. This results in slower than desired program growth, and slow acceptance of the Home Performance contracting model in the market place. Contractor participation and growth in a Home Performance with ENERGY STAR program is therefore largely constrained by this lack of consumer demand. In addition, the current program design is fuel neutral with most of the installation measures resulting in fossil fuel use reductions and little electrical energy savings.

The disparity in electrical savings versus program implementation costs has resulted in a need to revise the current program design, to be able to meet the program goals for 2008. Currently under review is a Residential Energy Services Direct Install (RES DI) initiative. RES DI is intended to be a resource acquisition component for an Existing Home Services Program which will enable LIPA to install electric energy efficiency measures during a requested customer home visit. It then can be followed with referrals for other services through an "Added Services" component, and a "Remodeling" component to capture that market segment engaged in major remodeling efforts.

RES DI will provide LIPA with more control over retrofit work in the marketplace, resulting in immediate electric energy and demand savings, while allowing the market to pursue and achieve savings for gas and oil customers through the "Added Services" and "Remodeling" components. Program design will commence in 2008 and will include discussions with stakeholders including NYSERDA, National Grid and current HPwES in an effort to deliver a pilot version in the 4th quarter of 2008.

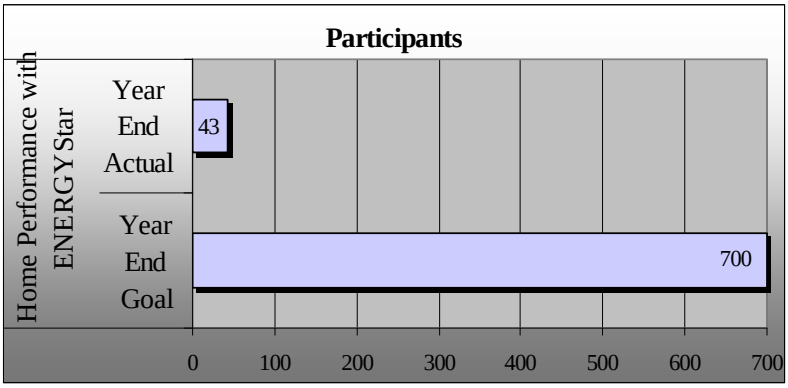
Table 19
Actual results (paid applications) for the year ending December 31, 2007 for Home Performance with ENERGY STAR®

Category	2007 Actual	2007 Goal	Actual vs. Goal
Participants	43	700	6%
MWh (energy savings)	72	700	10%
MW (demand savings)	0.041	0.420	10%

The following three graphs show Actual Results and Goals for the year ending December 31, 2007 for Participants, Energy Savings in MWh and Demand Savings in MW.

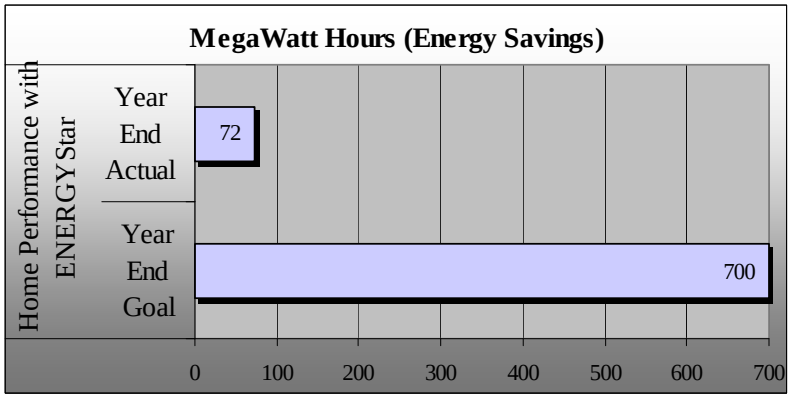
Graph 23

Actual Results and Goals for the year ending December 31, 2007 for Home Performance with ENERGY STAR® Participants



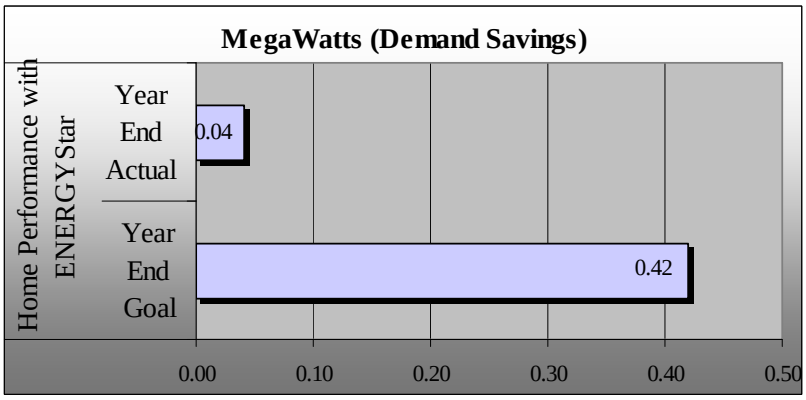
Graph 24

Actual Results and Goals for the year ending December 31, 2007 for Home Performance with ENERGY STAR® Energy Savings in MWh



Graph 25

Actual Results and Goals for the year ending December 31, 2007 for Home Performance with ENERGY STAR® Demand Savings in MW



E. 2007 COMMERCIAL AND INDUSTRIAL MARKET PROGRAMS

1. Commercial Construction Program

LIPA's Commercial Construction Program (CCP) is LIPA's largest, most aggressive and most complex Clean Energy Initiative program. CCP promotes the application of a broad range of energy-efficient electric technologies and design opportunities and is comprised of three components: Prescriptive, Custom and Whole Building.

The Prescriptive component provides financial incentives to customers who purchase and install qualifying energy-efficient electric equipment from a list of technologies that exceed both current code requirements and standard practices in the marketplace. The list of qualifying equipment is representative of the most commonly installed and best understood equipment available in the marketplace: HVAC, lighting and motors. In 2007, the Prescriptive component rebated 417 projects in the amount of $2,496,364.

The Custom component provides financial incentives to customers who install cost-effective, energy-efficient equipment or make design improvements that may exceed those found in Prescriptive. Specifically, the Custom component targets customers installing equipment, designing lighting, or incorporating control systems not found on the Prescriptive applications or not eligible for Whole Building Treatment. In 2007, the Custom component of the program rebated 64 projects in the amount of $1,205,145.

The Whole Building component seeks to achieve the greatest degree of energy efficiency by encouraging building owners, developers, and architects to design and construct the most energy efficient buildings from the onset of a construction project. The Whole Building component provides incentives for all commercial/industrial, new construction, major renovations, and large expansion projects in LIPA's service territory. In 2007, the Whole Building component rebated 6 projects in the amount of $1,164,571.

Market Segments

In 2007, the four most active market segments were General Commercial, with approximately 23% of the total energy savings for the year, followed by Government with 16%, Office, and Retail with 10%.

Prescriptive Projects

In 2007, LIPA paid 417 Prescriptive projects that accounted for 13,142 MWh of energy savings.

Prescriptive Electric Technologies

- *Lighting technologies*, consisting of fluorescent fixtures and fluorescent lighting controls and HID lighting fixtures and HID lighting controls, accounted for 9,496 MWh of energy savings.

- *Cooling technologies*, consisting of unitary and split air conditioning systems, air and water source heat pumps and chillers, accounted for approximately 2,582 MWh of energy savings.

- All other technologies including controls, compressors, motors, VFDs and commercial kitchen equipment accounted for the remaining Prescriptive MWh.

Custom and Whole Building Projects

- In 2007, LIPA paid 64 Custom projects that resulted in 7,808 MWh of energy savings.

- LIPA also paid 6 Whole Building projects that resulted in 4.848 MWh of energy savings.

Marketing

The Commercial Construction Program remains a program that is most effectively marketed or promoted face to face. In adhering to this approach, the Program focused on developing relationships with architects and engineers, trade allies, developers – essentially, the professionals, organizations and/or individuals who can promote the program or participate in the program. To support this outreach LIPA continued memberships in professional and trade ally organizations like the AIA, AEE, USGBC and ASHRAE.

LIPA attended more than 50 meetings with the architecture and engineering firms during the course of 2007 with the purpose of discussing the Program, presenting the High Performance Design Guide and reviewing current and planned projects.

Presentations

- Comprehensive presentation made to the Building Owners & Managers Association (BOMA) in March 2007 on LIPA's Commercial Construction Program, Retrofit Energy and Capacity Program (RECAP) and Peak Reduction Program. The presentation focused on program eligibility, incentives and benefits to the customer.

- Met with numerous town building officials to present information on LIPA's CCP and discuss the opportunities for strategic partnerships. Towns met with included Oyster Bay, Hempstead, Babylon, Smithtown and Easthampton to name a few.

- Illuminating Engineering Society Monthly Meeting: "LIPA's Clean Energy Programs"

- Healthy Schools Network: Greening Schools for Healthy Children: A Community Forum: "How LIPA Can Help Your School Go Green"

- The Town of Brookhaven and the Farmingville Residents Association: Farmingville Beautification/Clean Up Project Meeting for Business Owners: "What Can LIPA Do for Your Business"

- USGBC Chapter Networking Event: A presentation on LIPA's Clean Energy Initiatives was given at the USGBC Chapter Networking event at Art Sites in Riverhead

Projects

- Successfully worked with a large development firm on a comprehensive whole building project that was completed in the fall of 2007. This project represents approximately 600,00kWh in energy savings and is more noteworthy since this project was built without a major tenant and referred to as a speculative project in the real estate community.

- Worked closely with the NY State Office of General Services (OGS) for LIPA's CCP on a "Custom" refrigeration project at OGS's disaster contingency facility in Edgewood. With LIPA's assistance, the customer installed a state of the art refrigeration system resulting in approximately 750,000 kWh in energy savings.

- Continued to work closely with local supermarkets on renovation and new construction projects. One particular store, completed in 2007, will realize an annual energy savings of 985,328 kWh and received a rebate check of $142,846.

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- Completed multi-building project for Nassau County with energy savings of nearly 500 MWh. This project included 2 large scale chiller plants as well as motors and VFDs.

- Initiated six projects in 2007 that are in the process of pursuing Leadership in Energy and Environmental Design (LEED) certification, with the help of LIPA's additional incentives for LEED projects.

Year-End Performance

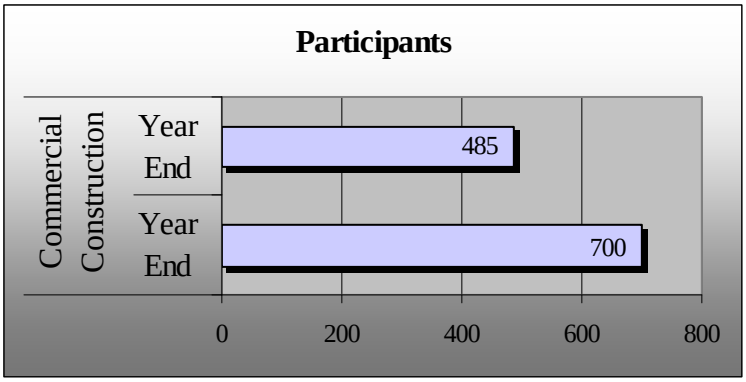
The following chart shows the actual results (paid applications) for the year ending December 31, 2007. In 2007, the Commercial Construction Program achieved the MWh (energy savings) goal at 101%. The 84% of MW (demand savings) represents a majority of lighting projects, which will provide more energy savings than demand savings. In 2008, the CCP Program will address the delivery of more comprehensive projects in an effort to increase the MW (demand savings).

Table 20
Actual results (paid applications) for the year ending December 31, 2007 for the Commercial Construction Program

Category	2007 Actual	2007 Goal	Actual vs. Goal
Participants	485	700	69%
MWh (energy savings)	25,823	25,500	101%
MW (demand savings)	5.260	6.230	84%

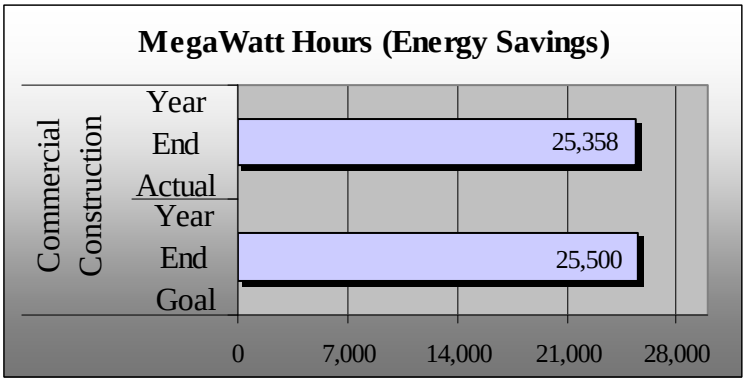
The following three graphs show Actual Results and Goals for the year ending December 31, 2007 for Participants, Energy Savings in MWh and Demand Savings in MW.

Graph 26
Actual Results and Goals for the year ending December 31, 2007 for Commercial Construction Program Participants



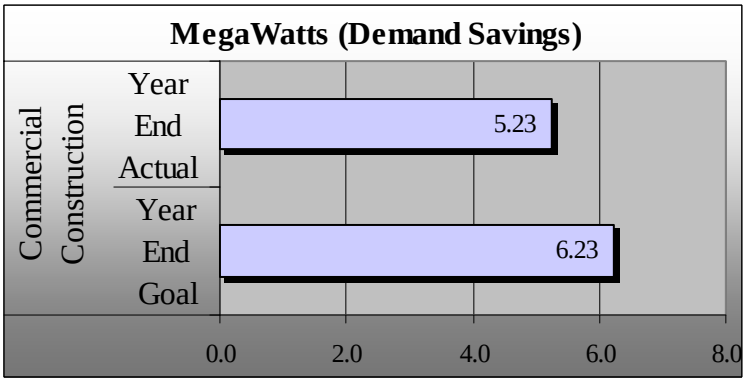
Graph 27

Actual Results and Goals for the year ending December 31, 2007 for Commercial Construction Program Energy Savings in MWh



Graph 28

Actual Results and Goals for the year ending December 31, 2007 for Commercial Construction Program Demand Savings in MW



2. Retrofit Energy and Capacity Program (RECAP)

The LIPA RECAP program is a unique partnership between ESCO'S (Energy Service Companies) and commercial customers, designed to assist participating customer in lowering their overall energy consumption and lower their overall operating costs.

The program focus is on replacement of older equipment and retrofit of existing equipment with newer technology, to reduce the energy consumption for our LIPA customers and reduce the energy cost for the commercial customers participating in the program.

After a modest ramp up in 2006, LIPA'S Retrofit Capacity and Energy Program experienced tremendous growth during the 2007 calendar year.

That interest and growth was generated in part by the energy savings experienced by customers who participated in the program during 2006 and greater customer awareness of the energy saving opportunities available through the LIPA RECAP program.

The programs success in 2007 accounted for a reduction in energy demand of over 7.0 Megawatts and 33,783 Megawatt hours while assisting over 700 commercial customers realized lower energy costs.

Year-End Performance

The following chart shows the actual results (paid applications) for the year ending December 31, 2007.

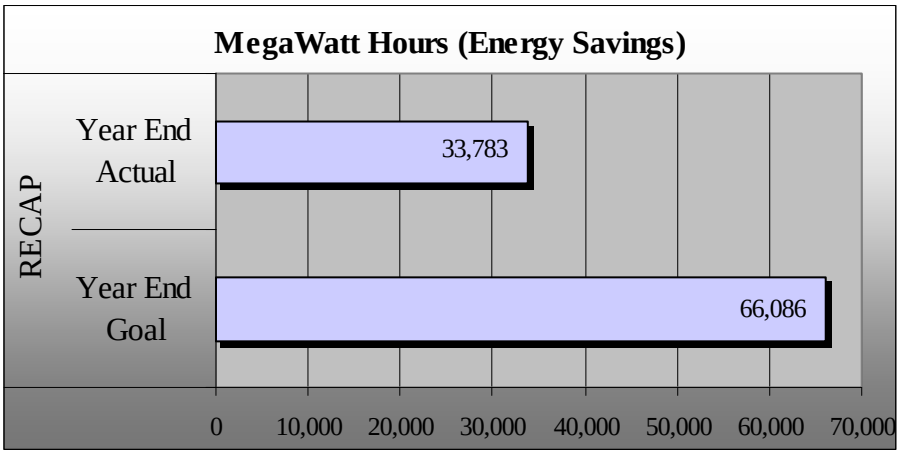
Table 21
Actual results (paid applications) for the year ending December 31, 2007 for the RECAP Program

Category	2007 Actual	2007 Goal	Actual vs. Goal
MWh (energy savings)	*33,783*	*66,086*	*51%*
MW (demand savings)	*7.08*	*9.000*	*79%*

The following two graphs show Actual Results and Goals for the year ending December 31, 2007 for Energy Savings in MWh and Demand Savings in MW

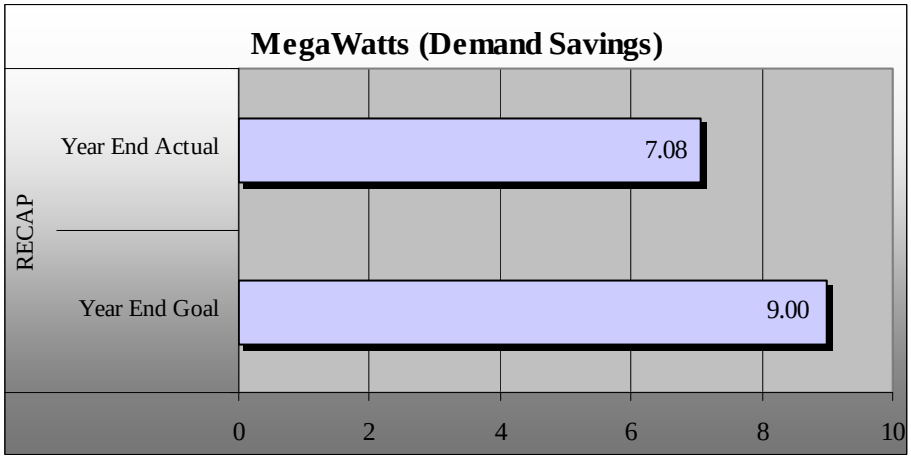
Graph 29

Actual Results and Goals for the year ending December 31, 2007 for RECAP Program Energy Savings in MWh



Graph 30

Actual Results and Goals for the year ending December 31, 2007 for RECAP Program Demand Savings in MW



F. 2007 MULTI-SECTOR MARKET PROGRAMS

1. Customer-Driven Efficiency Program

LIPA's Customer-Driven Efficiency Program provides assistance to both residential and commercial customers wishing to make energy efficiency improvements not covered in any of LIPA's other Clean Energy Initiative programs. The program also provides technical, on-site energy analysis and audits to help commercial/industrial (C/I) customers evaluate potential energy-saving opportunities. LIPA provides financial incentives for those opportunities shown to be cost effective.

The C/I audit report is a quality product that LIPA Major Account Executives offer to customers who are seeking assistance in reducing their energy related costs. LIPA's Infoline staff also recommends the audit program to customers with energy related concerns. The report not only identifies opportunities for energy cost reduction, but it is also used to assist customers in understanding their energy bills. It has been used to help craft bid documents for construction projects, to seek energy services contracts and to set budgets for capital projects. It is the first logical step of in the creation of an energy master plan for a customer.

In 2007, the audit program has completed 216 consultations, 355 audits and 8 Not-for-profit applications, which equates to 1,747 MWh savings.

In 2007 LIPA instituted ENERGY STAR Benchmarking in every audit report where applicable. This gave our customers a guideline for moving forward with energy efficiency improvements. It has been well received and we will continue with this component of the program in 2008.

In May of 2007, LIPA presented to the Long Island Interfaith Environment Network on the Commercial and Residential Programs that are available for the Places of Worship. As a result of this meeting we have completed over 80 audits for the Places of Worship and expect that several of them will participate in our Not-for-Profit Program in the near future. LIPA also enhanced incentive levels of the Commercial Construction Program for our Not-for-Profit customers. This includes lighting, HVAC and controls. This will be rolled out in 2008 to all Not-for-Profit customers.

LIPA is in the process of constructing a Not-for-Profit Web page which will be a separate link on LIPA's Web site. It will be geared specifically to NFP customers who are interested in energy efficiency.

Year-End Performance

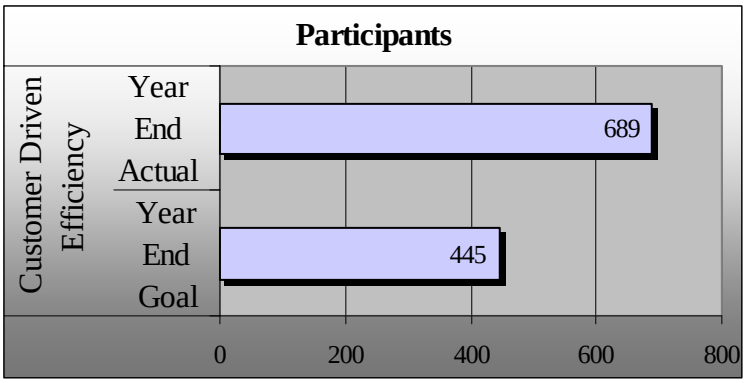
The following chart shows the actual results (paid applications) for the year ending December 31, 2007.

Table 22
Actual results (paid applications) for the year ending December 31, 2007 for Customer-Driven Efficiency Program

Category	2007 Actual	2007 Goal	Actual vs. Goal
Participants	689	445	155%
MWh (energy savings)	*1,812*	2,444	*74%*
MW (demand savings)	0.359	0.249	144%

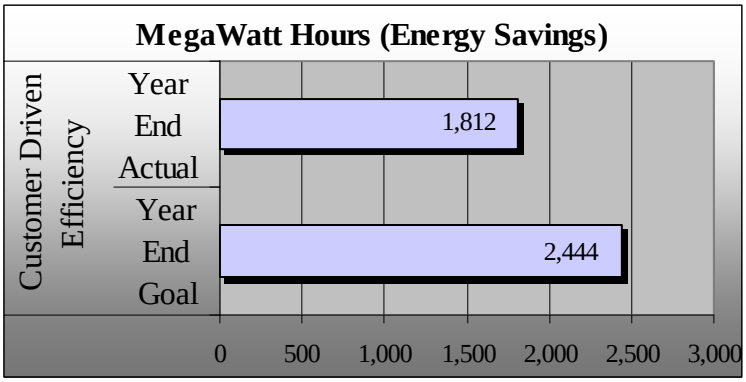
The following three graphs show Actual Results and Goals for the year ending December 31, 2007 for Participants, Energy Savings in MWh and Demand Savings in MW.

Graph 31
Actual Results and Goals for the year ending December 31, 2007 Customer-Driven Efficiency Program Participants



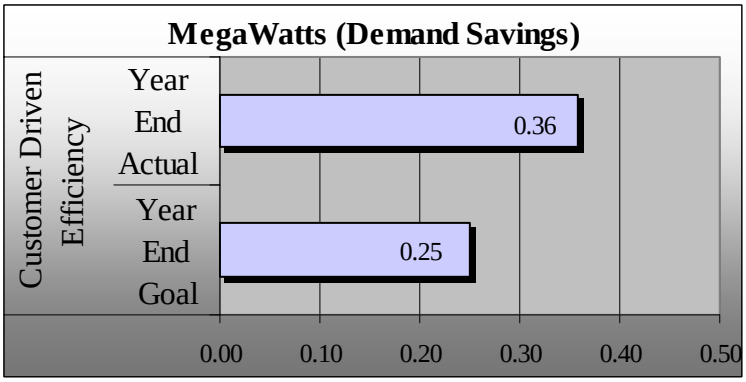
Graph 32

Actual Results and Goals for the year ending December 31, 2007 Customer-Driven Efficiency Program Energy Savings in MWh



Graph 33

Actual Results and Goals for the year ending December 31, 2007 Customer-Driven Efficiency Program Demand Savings in MW



2. LIPA*edge* Program

LIPA*edge* is a demand response program offered by LIPA for its residential and small commercial customers. Customers are offered a two-way communicating EnergySmart™ thermostat system for their central air conditioning (and, in some cases, their heating) systems which provides them with the ability to better monitor and manage their energy use. Small commercial customers are offered a one-time incentive of $50 per site. The thermostat technology enables customers to remotely monitor and control the thermostat settings and HVAC unit condition via the internet with a password-encoded login on a LIPA-hosted Web site. Some commercial customers with multiple electric accounts have utilized the system as an EMS (Energy Management System). LIPA retains the option to control the thermostats during utility system-critical times when power requirements are high, generally from 2-6 pm (4 hours) and up to 7 times per summer (subject to NYISO declared events). The control takes the form of cycling the central air conditioning compressors 50% per hour and/or potentially, turning the thermostat ups a few degrees. If customers become uncomfortable, they can override the curtailment events (but only at the thermostat, not over the Internet). LIPA provides 24/7 customer service through a call center and overnight emergency line to support the program. Each of the thermostats store hourly runtime and indoor temperature data, which can be remotely downloaded via the Internet. This data, coupled with unit load information collected on site, enables accurate impact evaluation for each curtailment event.

Year-End Performance

The following chart shows the actual results (paid applications) for the year ending December 31, 2007.

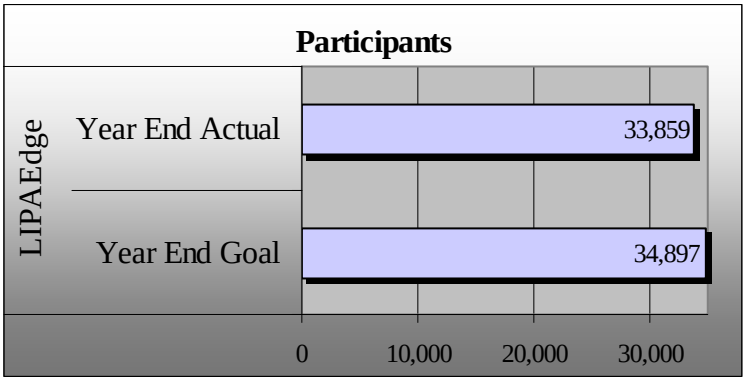
Table 23
Actual results (paid applications) of installed capacity for the year ending December 31, 2007 for LIPAedge

Category	2007 Actual	2007 Goal	Actual vs. Goal
Participants	33,859	34,897	97%
MWh (energy savings)	N/A	N/A	N/A
MW (demand savings)	50.70	51.97	98%

The following two graphs show Actual Results and Goals for the year ending December 31, 2007 for Participants and Demand Savings in MW.

Graph 34

Actual Results and Goals for the year ending December 31, 2007 for LIPAedge Participants



Graph 35

Actual Results and Goals for the year ending December 31, 2007 for LIPAedge Demand Savings in MW

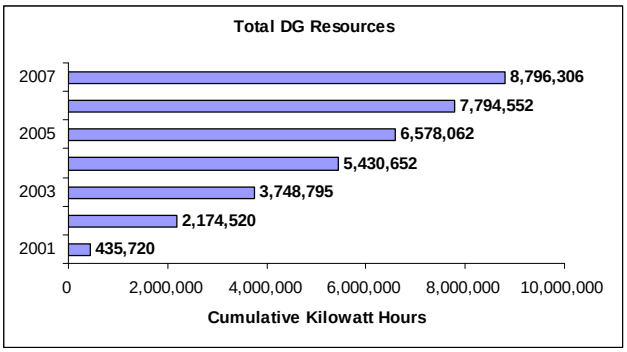
G. RESEARCH, DEVELOPMENT AND DEMONSTRATION (RD&D) PROGRAM

LIPA's Clean Energy Research Development & Demonstration (RD&D) Program supports a wide range of environmentally-friendly electric generation technologies, including wind turbines, fuel cells, solar photovoltaics, electric vehicles, tidal power devices, wave power studies, advanced geothermal designs, hybrid vehicle technology, and advanced battery systems. The goals of the program are to: analyze the technology through controlled demonstrations and deployments; involve regulatory groups, permitting agencies and groups; and facilitate the deployment and acceptance of the technology. In addition, the program provides information and education to the Long Island community, and encourages public collaboration with LIPA on Clean Energy RD&D projects.

Since program inception, the RD&D program has generated over 8,796 MWh (8.8 GWh) of clean electricity, resulting in the displacement of 20.17 tons of SO_2, 6.40 tons of NO_x, and 3,145 tons of CO_2. This translates into the equivalent omitted omissions of nearly 12.7 million passenger car miles (the annual emissions from 761 cars), and represents a fuel savings of approximately 14,150 barrels of oil or 87,963 decatherms of gas. A complete report on LIPA's RD&D activities was issued to the Board in June 2008.

Graph 31

Total distributed generation (DG) resources provided by the RD&D Program since 2001

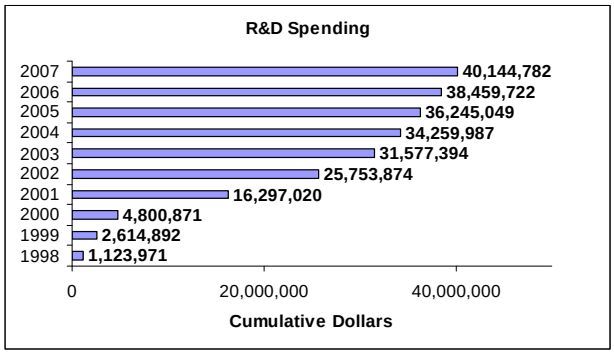


Spending on the RD&D program has totaled over $40 million since the program's inception in 1998.

Table 24
RD&D spending by year from 1999 through 2007

LIPA RD&D 1999 through 2007 Nominal $ in millions	1999	2000	2001	2002	2003	2004	2005	2006	2007	Cumulative 1999 - 2007
		3.60	12.42	10.25	6.58	4.13	2.76	2.19	1.89	43.82

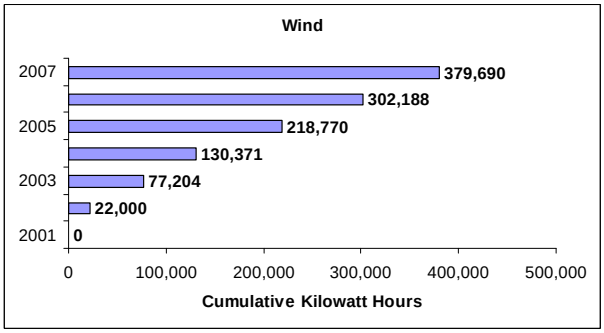
Graph 32
RD&D spending from 1998 through 2007



Full details on 2007 RD&D activities are contained in the May 31, 2007 report to the Board of Trustees.

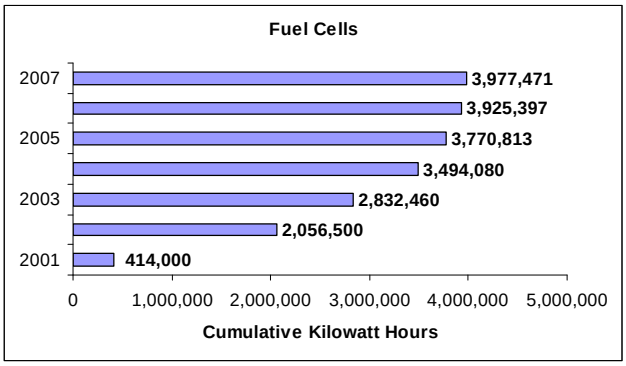
Generation by Segment

Graph 33
Installed wind resources. Since 2002, LIPA installed wind resources accounted for 380 MWh of generation. In 2007, LIPA installed wind resources produced 77 MWh of electric generation



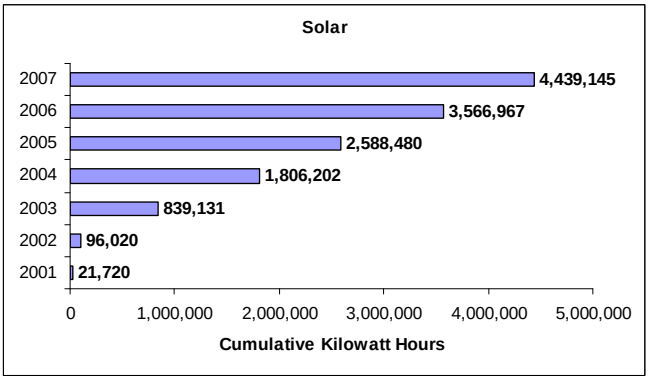
Graph 34

Installed fuel cell resources. Since 2001, LIPA installed fuel cell resources accounted for 3,977 MWh of generation. In 2007, RD&D installed fuel cell resources accounted for 52 MWh of electric generation



Graph 35

Installed solar photovoltaic resources. Since 2001, LIPA installed solar photovoltaic resources accounted for 4,439 MWh of generation. In 2007, RD&D installed solar photovoltaic resources accounted for 872 MWh of electric generation



H. Summary

LIPA has spent approximately $315 Million on energy efficiency and renewables over the last nine years, including RECAP. This effort has resulted in the savings of nearly 2,404,000 MWh and reduction of our peak demand by 190 MW. 2008 represents the last year of the CEI and will culminate with a comprehensive summary report of all of our activities during the previous ten years to be developed and presented to the Board in 2009.

LIPA is currently working on a successor offering following the CEI which will be targeting higher demand and energy savings as well as expanded customer sited renewable programs.