

# **ComEd's 2008 – 2010 Energy Efficiency / Demand Response Plan**



## **Plan Year 2 – 2<sup>nd</sup> Quarter Performance Update (September 2009 – November 2009)**

*The data presented in this document is based on preliminary results and is subject to revision and evaluation adjustments.*

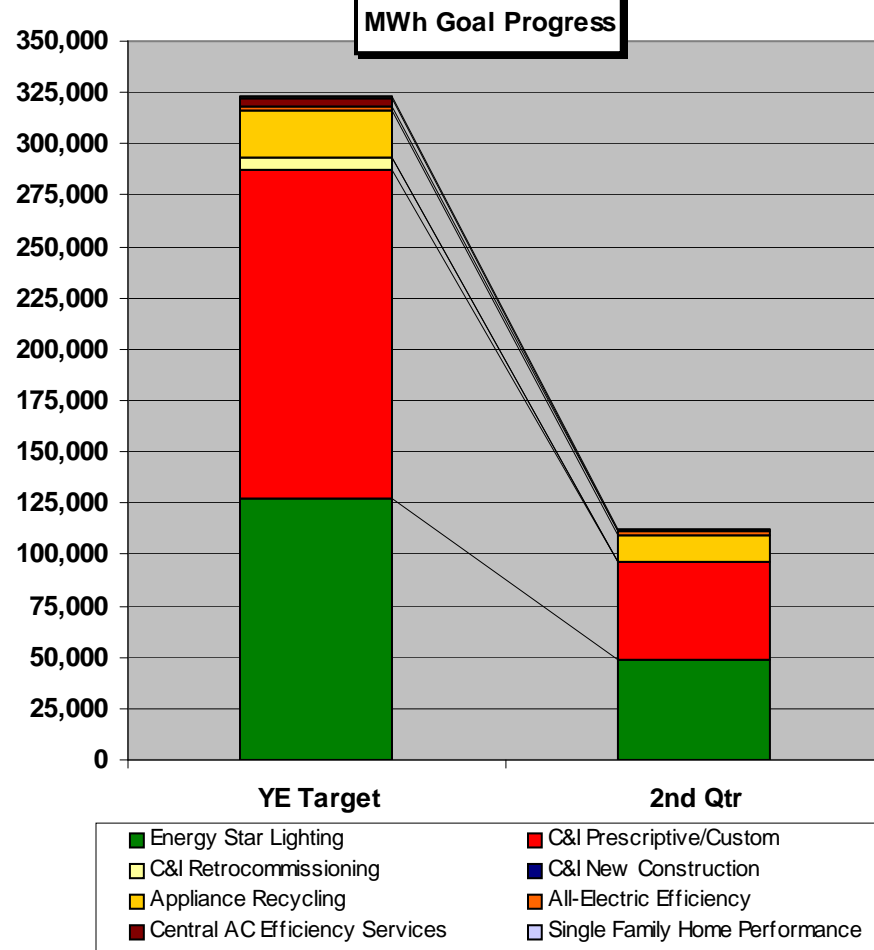
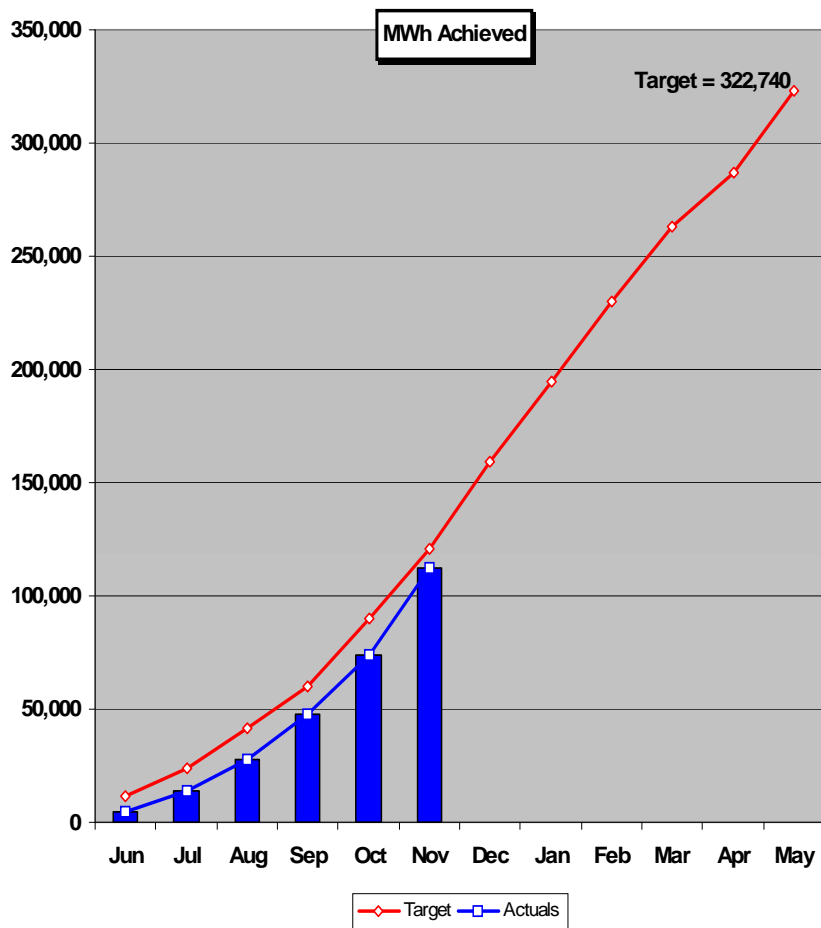
Portfolio Results Energy Saved (MWh)			
	PY2 Quarterly Results	PY2 Goal	PY2 % of Goal Achieved
Statutory Goal	111,934	312,339	36%

Program Year 2 Ex-Ante Results							
Program	Original Plan Net MWh Target	Target Gross MWh	Realization Rate	NTG Ratio	Revised Net MWh Target	PY2 Quarterly Results	% of Target Achieved
All-Electric Efficiency	2,369	2,961	0.85	0.80	2,014	<b>1,029</b>	51%
Appliance Recycling	18,358	46,916	0.68	0.71	22,627	<b>13,183</b>	58%
Central AC Efficiency	9,029	11,286	0.50	0.75	4,232	<b>915</b>	22%
ENERGY STAR® Lighting	126,349	299,087	0.65	0.65	126,958	<b>48,712</b>	38%
Single Family Home	1,407	671	0.60	0.70	282	<b>151</b>	54%
Prescriptive & Custom	160,985	275,000	0.90	0.65	160,875	<b>47,766</b>	30%
Retrocommissioning	6,456	8,000	0.85	0.80	5,440	-	0%
C&I New Construction	596	745	0.60	0.70	313	<b>178</b>	57%
<b>Totals</b>	<b>325,549</b>	<b>644,666</b>			<b>322,740</b>	<b>111,934</b>	<b>35%</b>

\*Due to Rounding, Target Net MWh may not equal Target Gross MWh multiplied by the Realization Rate and the NTG Ratio.

# ComEd Portfolio Summary

- ComEd's portfolio is **below target** for the Plan Year 2 goal of 322,740 MWh
  - The Business Solutions program activity has been brisk; a wait list has been established.
  - The Residential Solutions program activity is steady.
    - ENERGY STAR Lighting Program has sold over 3,000,000 CFLs
    - Appliance Recycling has picked up over 14,000 units
    - All-Electric Efficiency Upgrade Program has retrofitted nearly 2,140 multi-family units



NOTE – All MWhs Savings reported are “net” savings

# Smart Ideas for your Business - Prescriptive/Custom



An Exelon Company

## Program Overview

- The Program goal is 160,875 MWh

## Results through 11/30/09

- There are 1,907 active projects totaling 158,603 MWh (98% of goal)

## Completed Projects

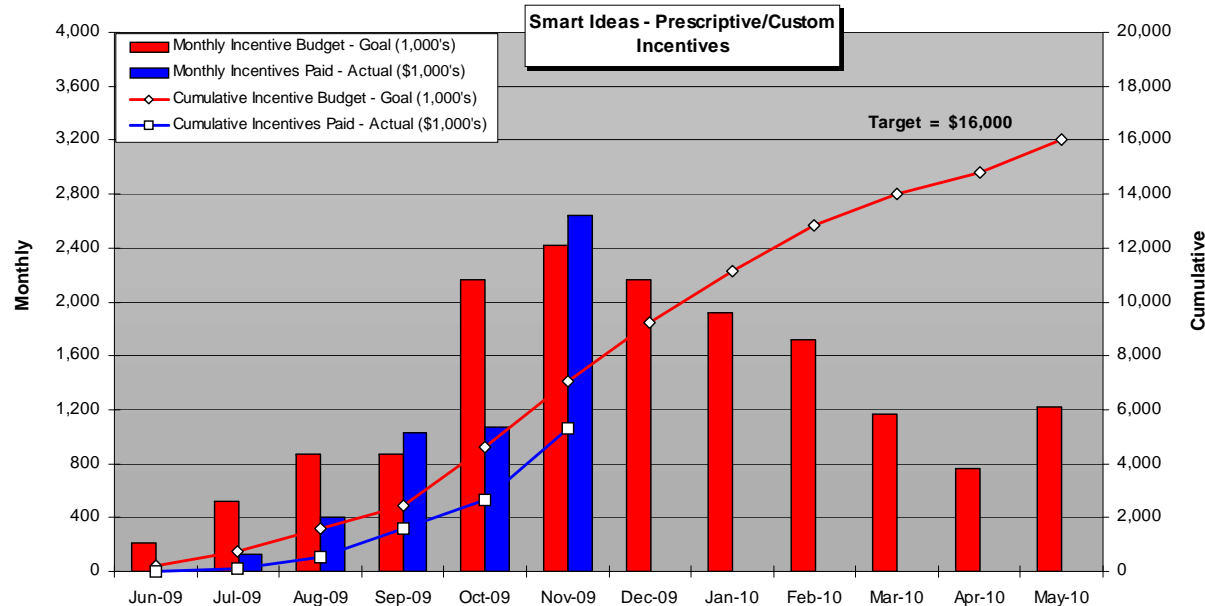
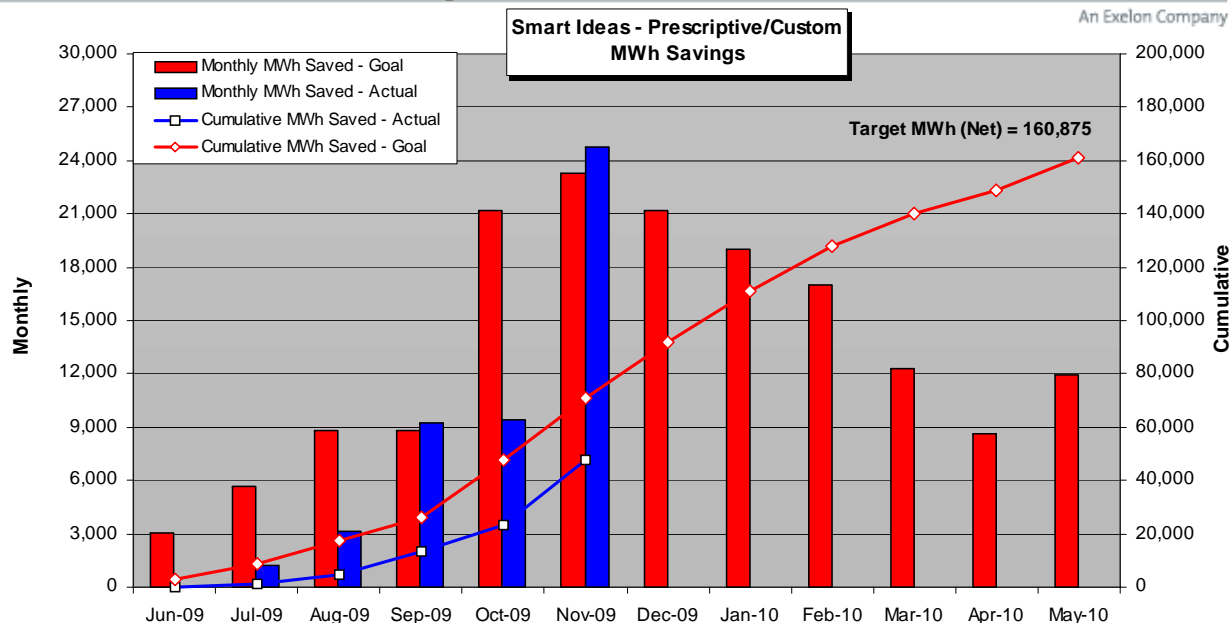
- 662 Projects
- 47,766 MWh Saved (30% of goal)
- \$5.3M Incentives Paid

## Reserved Projects

- 1,119 Projects
- 110,838 MWh Potential
- \$11.9M Potential Incentives

## “Under Review” Projects

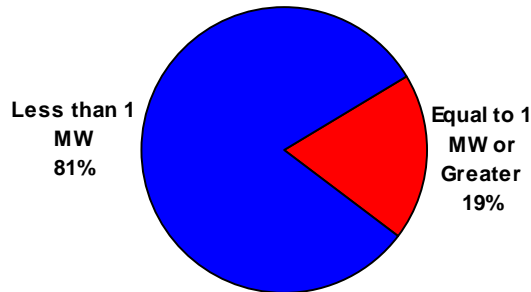
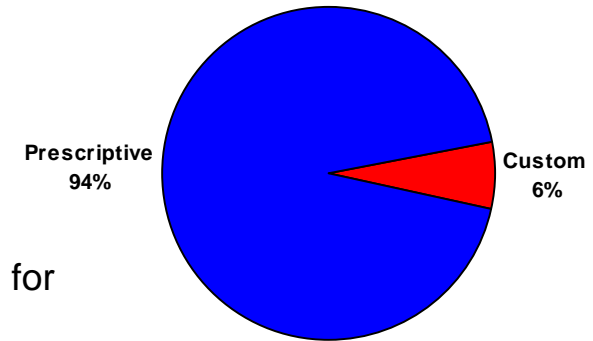
- 126 Projects
- 14,477 MWh Potential
- \$1.6 M Potential Incentives



## Program Highlights

- Strong interest from customers and the Trade Ally community
  - Over 1900 applications (approximately 900 are final applications)
  - 265 Trade Allies listed on ComEd.com
  - On target to exceed plan goal
- Established a waitlist for new lighting projects
  - Non-lighting applications are still accepted
  - Large (\$725K) lighting applications can apply for “early reservation” for Program Year 3 on a case by case basis
- Talking points and Frequently Asked Questions are on the web
- Continued strong participation from Customers <1 MW

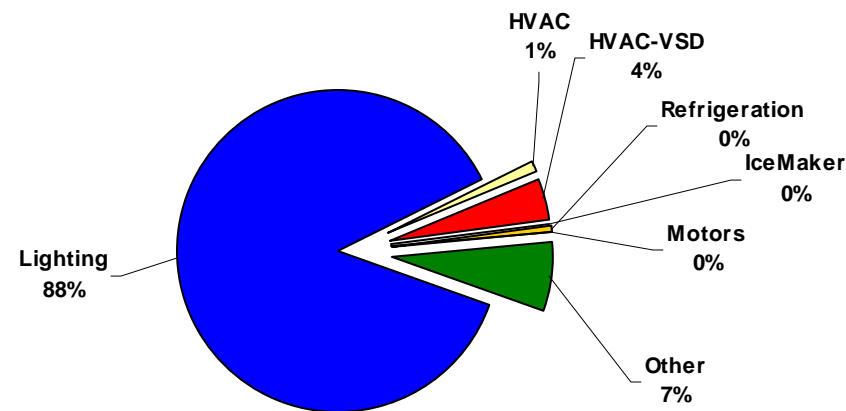
MWh Savings by Project Type



## Program Challenges / Issues

- Demand for incentives exceeding program budget
- Diversifying into other technologies beyond lighting
- Providing program continuity through Program Year 1- Program Year 3

MWh Savings by Technology



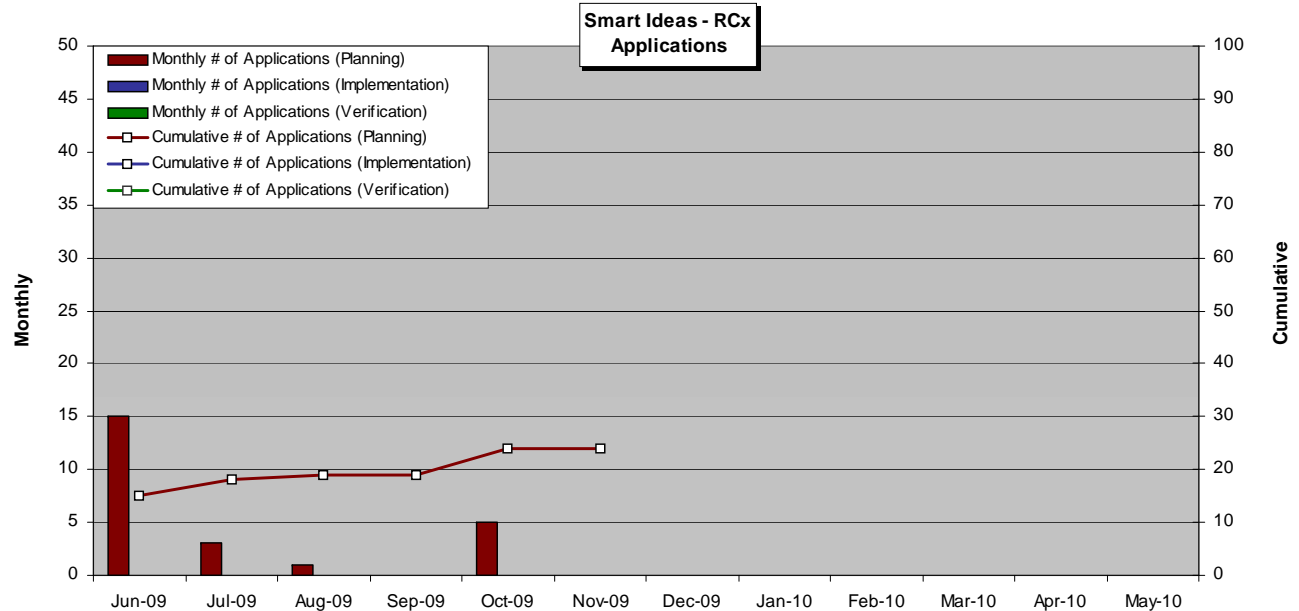
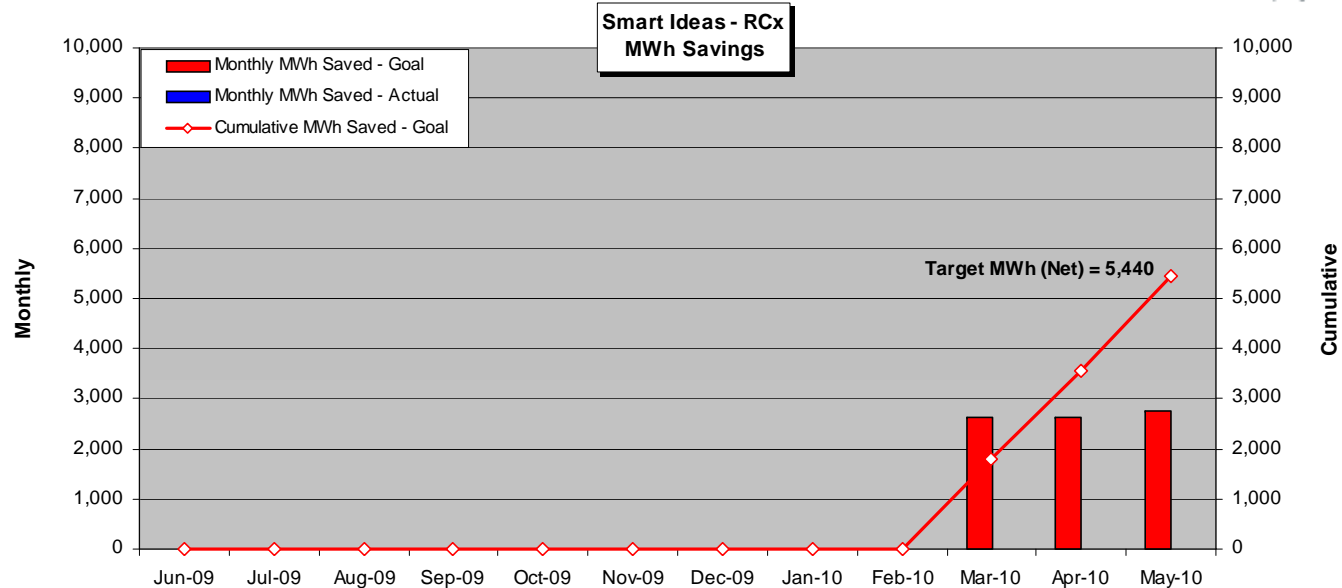
# Smart Ideas for your Business- Retrocommissioning (RCx)

## Program Overview

- The Program goal is 5,440 MWh
- Retro-commissioning Process
  - Planning Phase
  - Implementation Phase
  - Measurement & Verification

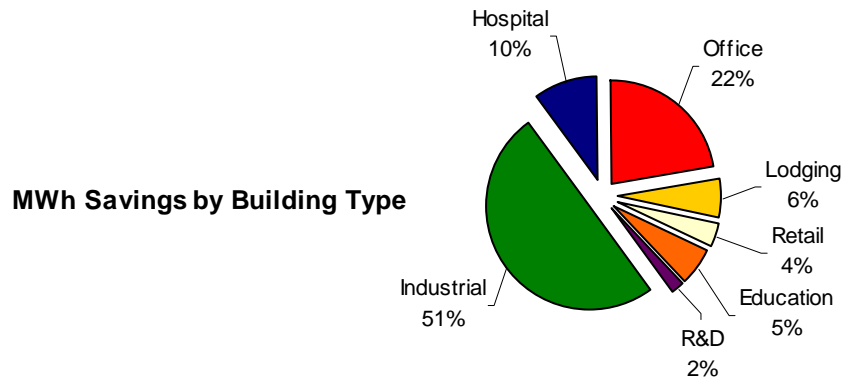
## Results through 11/30/09

- 17 projects have been accepted into the program
  - Projected savings of 13,310 MWh
  - 72% of incentive budget allocated
- No additional projects pending for Program Year 2
- 16 applications pending for Program Year 3
  - Potentially 6,600 MWh additional projected savings
- 4 projects accepted into Program Year 3
  - Potentially 2,450 MWh additional projected savings



## Program Highlights

- Retro-commissioning incentives have seen a small number of applications, but a large number of expected kWh savings
- There are 9 retro-commissioning service providers (RSP's) affiliated with the RCx program, and 6 have submitted projects for PY2. An RSP scoring system and Quality Assurance/Quality Control metrics have been developed
- All projects that have applied for participation in PY2 have been generated by the RSPs
- Applications are already being accepted and screened for PY3



## Program Challenges / Issues

- Managing consistency and uniformity across RSP's
- Staggering project kick-off and completion to avoid all projects starting and ending at the same time
- Getting each RSP to submit a project to the program
- Ensuring customer implementation by 4/1/10 deadline

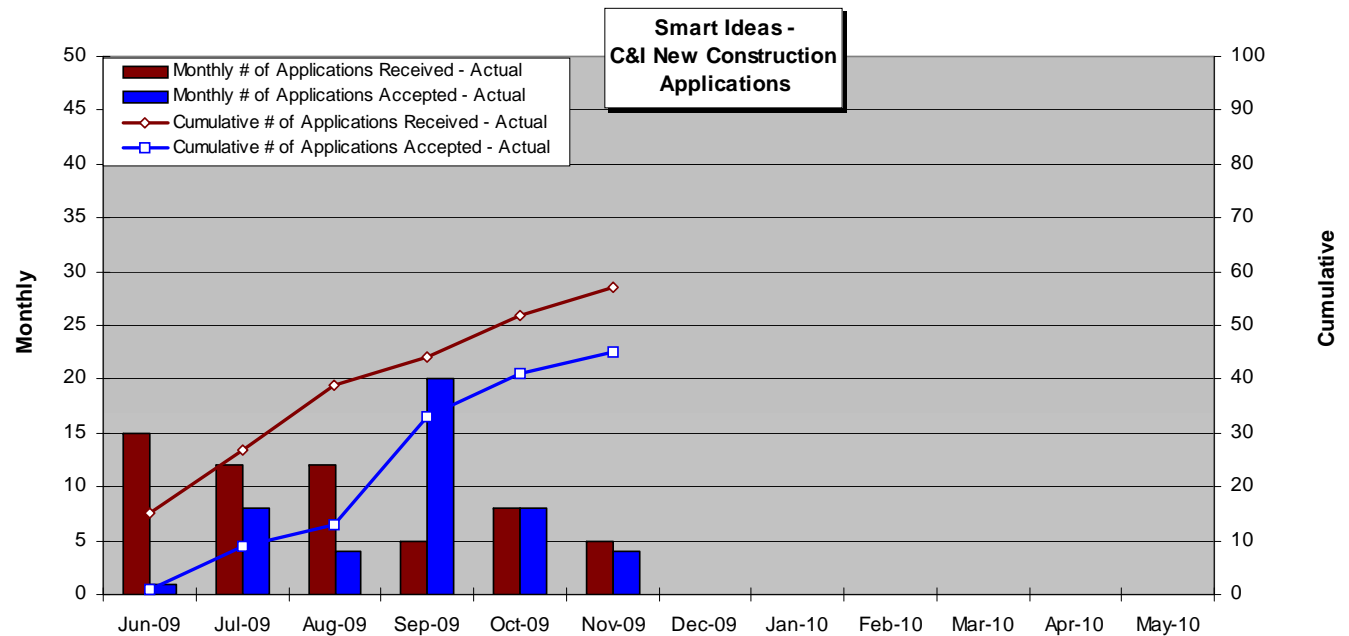
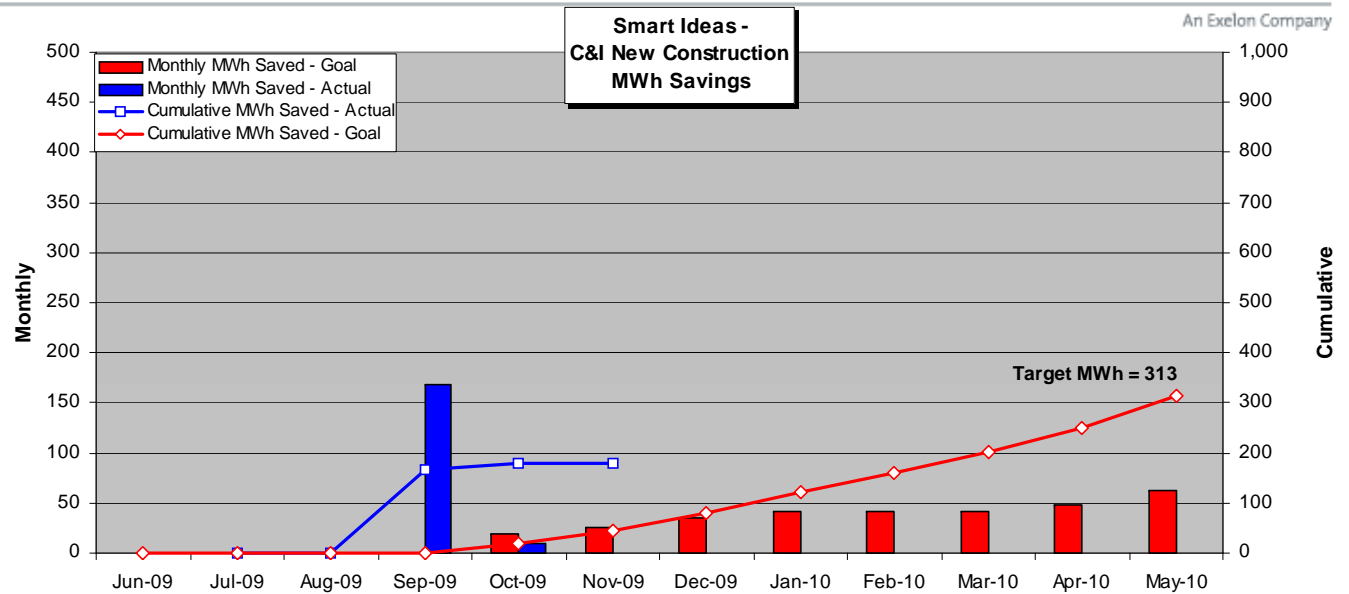
# Smart Ideas for your Business- C&I New Construction

## Program Overview

- The Program goal is 313 MWh
- “Two-Track” approach allows customers in various stages of design to participate

## Results through 11/30/09

- 45 applications accepted with expected savings of 240 MWh
- 57 applications received





## Program Highlights

- Launched Small Buildings Track:
  - Targets buildings less than 20,000 square feet
  - Focuses on lighting, sidelighting and daylighting
- Diverse building use types:
  - Hospitals
  - Commercial Office
  - Grocery Stores
  - Retail
  - Training Centers
  - Manufacturing
- Training
  - Lighting and Daylighting Training June 17<sup>th</sup> – 118 attendees
  - Building Systems Training September 23<sup>rd</sup> – 77 attendees
  - Energy Efficient Lighting Training November 3<sup>rd</sup> – 75 attendees
  - Optimizing HVAC design Training February 10<sup>th</sup>
  - Integrated Design Training April 14<sup>th</sup>

## Program Challenges / Issues

- Building a multi-year comprehensive project pipeline while achieving first year savings

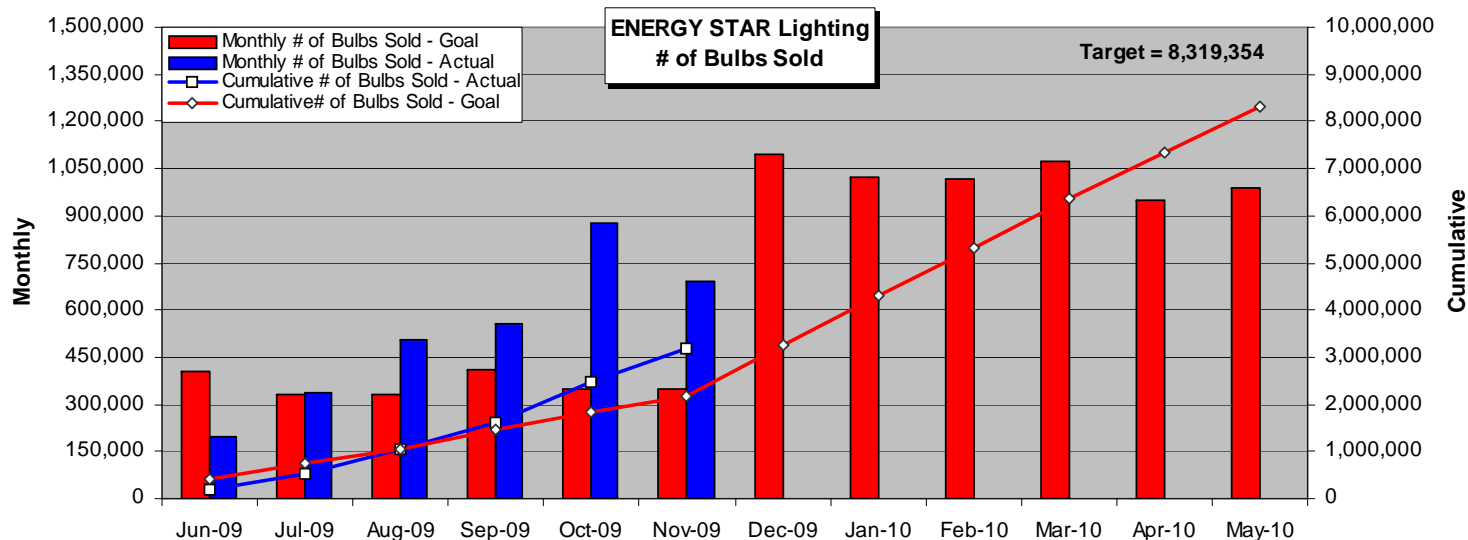
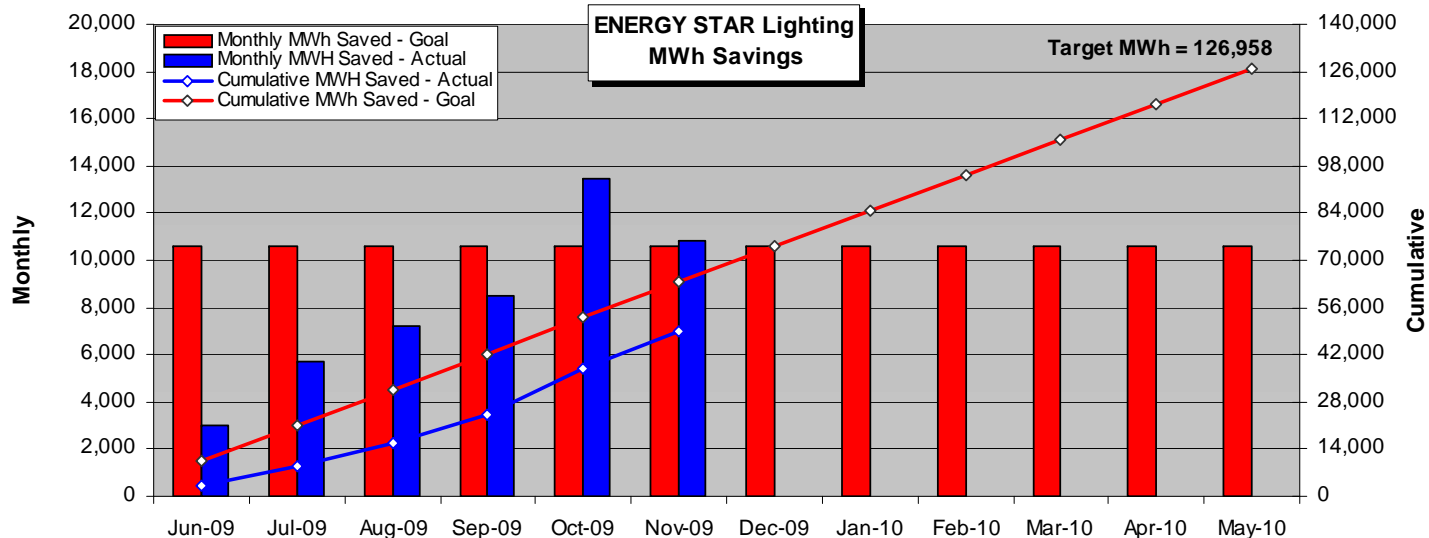
# Smart Ideas for your Home – ENERGY STAR® Lighting

## Program Overview

- The Program goal is 126,958 MWh, totaling 8.3 million CFLs and 42,300 fixtures

## Results through 11/30/09

- Energy Savings – 48,712 MWh (38% of goal)
- 3,164,818 bulbs sold (specialty & twists)
- 27,127 fixtures sold



## Program Highlights

- Almost doubled the CFL goal from 4,176,565 to 8,319,354 due to PY1 Evaluation results that lowered the NTG ratio and installation rates
- Sold more than 3 million CFLs – 38% of goal
- Sold more than 27,000 fixtures – 64% of goal
- Field reps serviced more than 660 retail locations and performed more than 114 retail education demonstrations
- Added an additional field rep for a total of 11 – additional rep added to better serve the numerous Jewel-Osco locations
- Added select True Value locations to the recycling program which also includes select Ace Hardware stores and The Home Depot
- Increased the incentive per CFL at Costco, Menards, The Home Depot and Sam’s Club to increase the rate of sale and help ensure better retail placement
- Issued PY3 RFP for manufacturer/retailer participation; submissions are currently being reviewed

## Program Challenges/ Issues

- Bulb target almost doubled with less than 5 months of PY2 remaining
- Decreased foot traffic at retail/reduced consumer spending – sales are down 20-35% depending on the retailer
- Harder to get “good” placement at retail – competing with other products for shelf space in a bad economy – prominent shelf space is important as CFLs are typically an impulse purchase

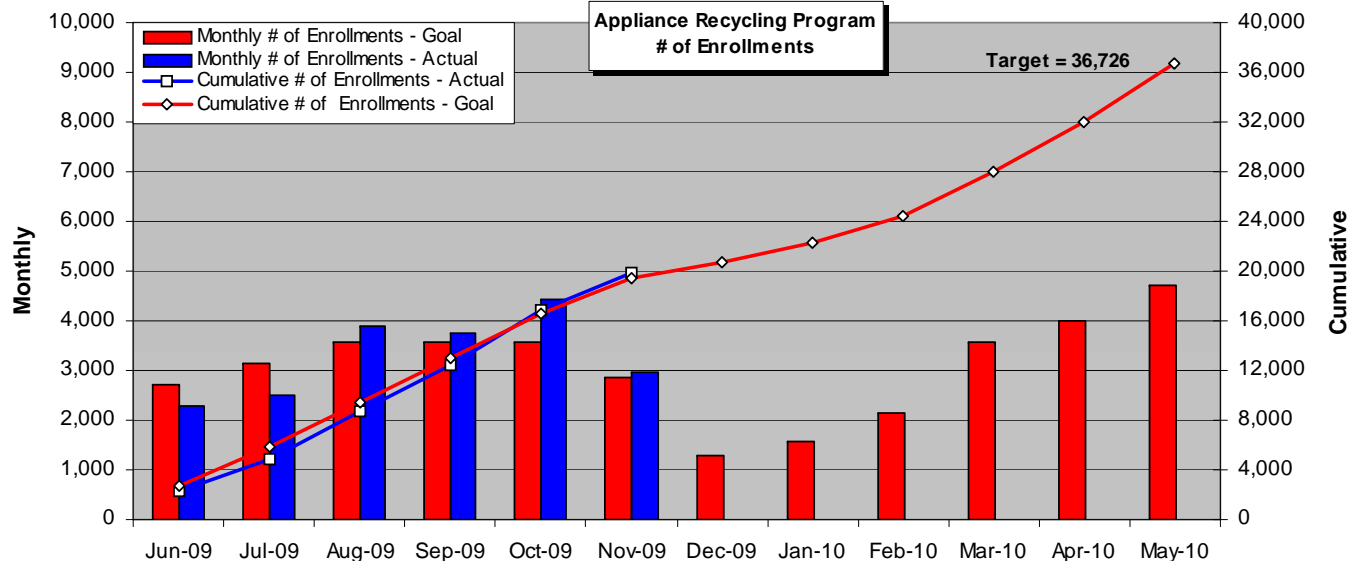
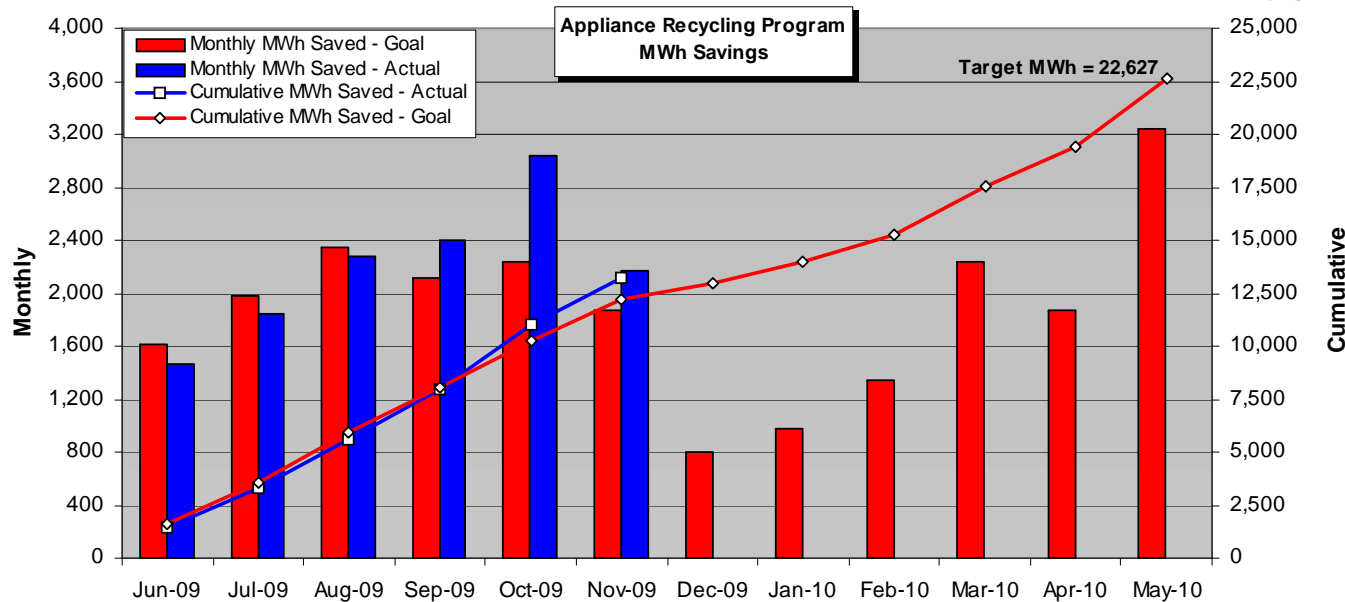
# Smart Ideas for your Home – Appliance Recycling

## Program Overview

- The Program goal is 22,627 MWh, targeting 36,726 enrollments and 25,710 units

## Results through 11/30/09

- Energy Savings – 13,183 MWh (58% of goal)
- Enrollments total 19,792 (54% of goal)
- 14,661 total appliances picked up (57% of goal)



## Program Highlights

- Launched a Customer Satisfaction survey
  - Returns through October (n=641) showed 94% overall satisfaction
    - PY1 Evaluation likewise showed 94% overall customer satisfaction
  - Reasons as to why customers participated were equally high for
    - Wanted to save money on my electric bill
    - Free pick-up
- Final report in 3<sup>rd</sup> Quarter

## Program Challenges / Issues

- Program has tested many marketing channels, looking for the most cost-effective method to attain enrollment goals

# Smart Ideas for your Home – Multi-Family All-Electric Efficiency Upgrade

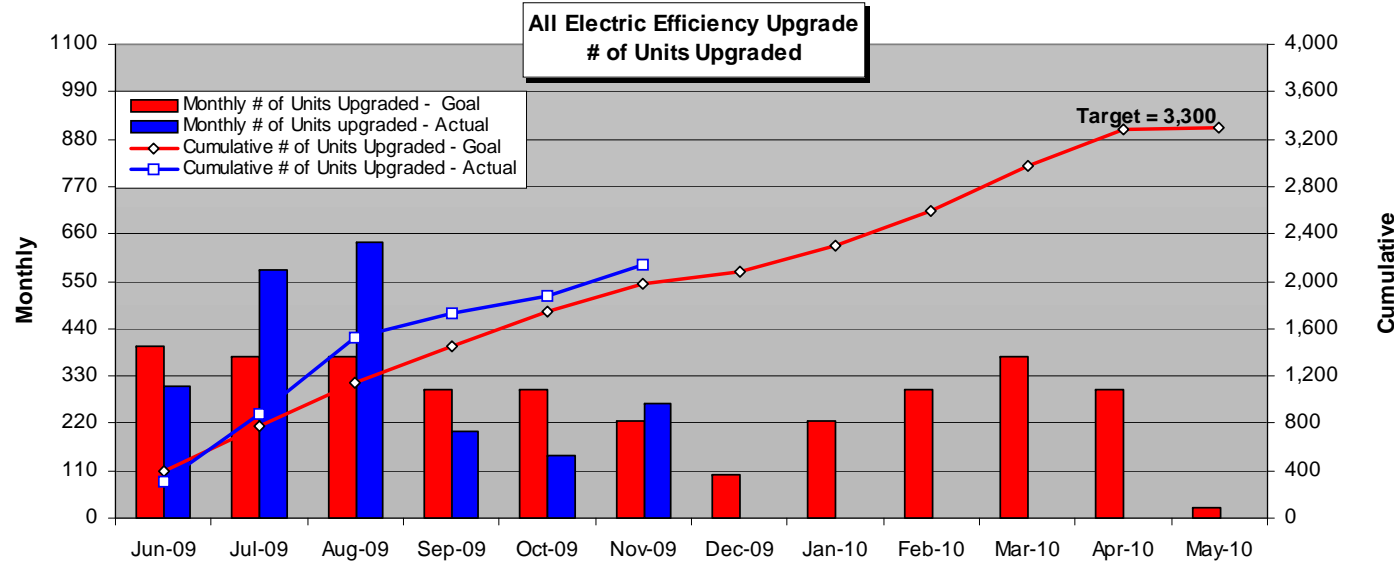
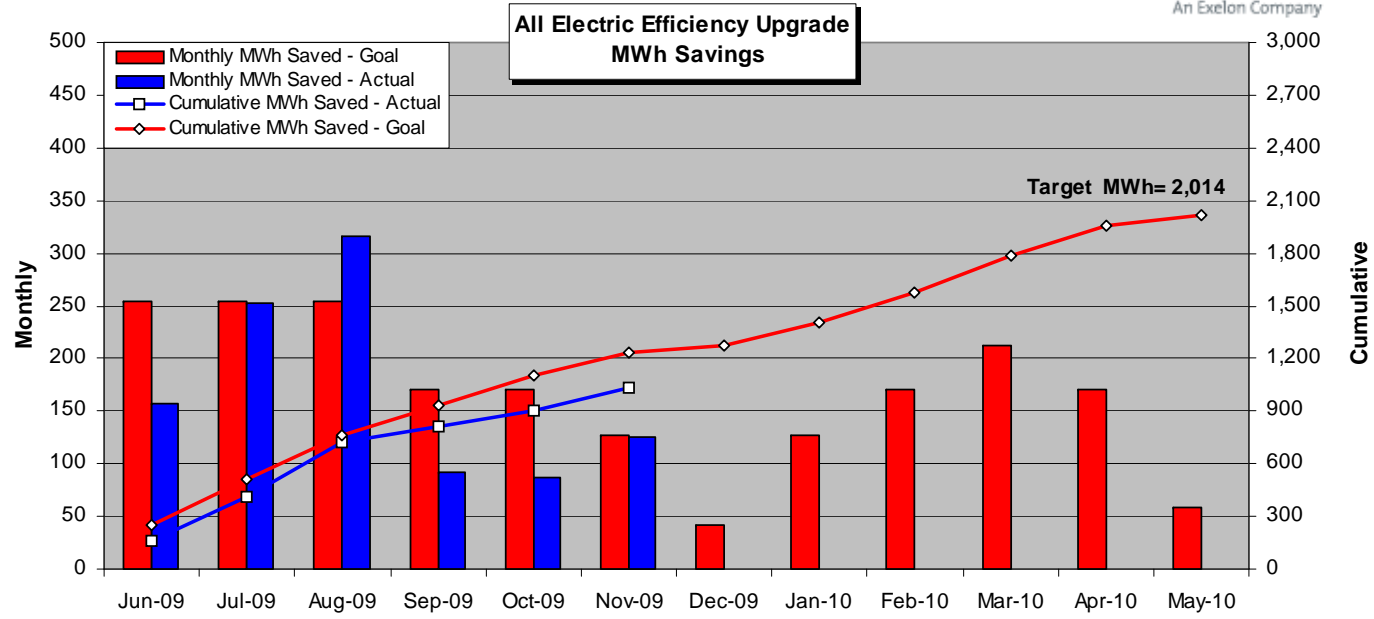
An Exelon Company

## Program Overview

- The Program goal is 2,014 MWh which will require 3,300 units upgraded

## Results through 11/30/09

- 2,140 units upgraded (i.e., at least one energy conservation measure has been installed in each unit)
- 1,028 MWh saved (51% of goal)
- 2,701 units in buildings surveyed – 83% of units in these buildings have been upgraded



## Program Highlights

- Penetration rate per building over 83%
  - Some building owners/managers are accompanying Honeywell techs to perform furnace filter change-outs during direct install visit, increasing occupant likelihood of participating
  - Finding building owners/managers especially keen on water saving aspect of direct installs, leading them to co-promote the program more earnestly

## Program Challenges/Issues

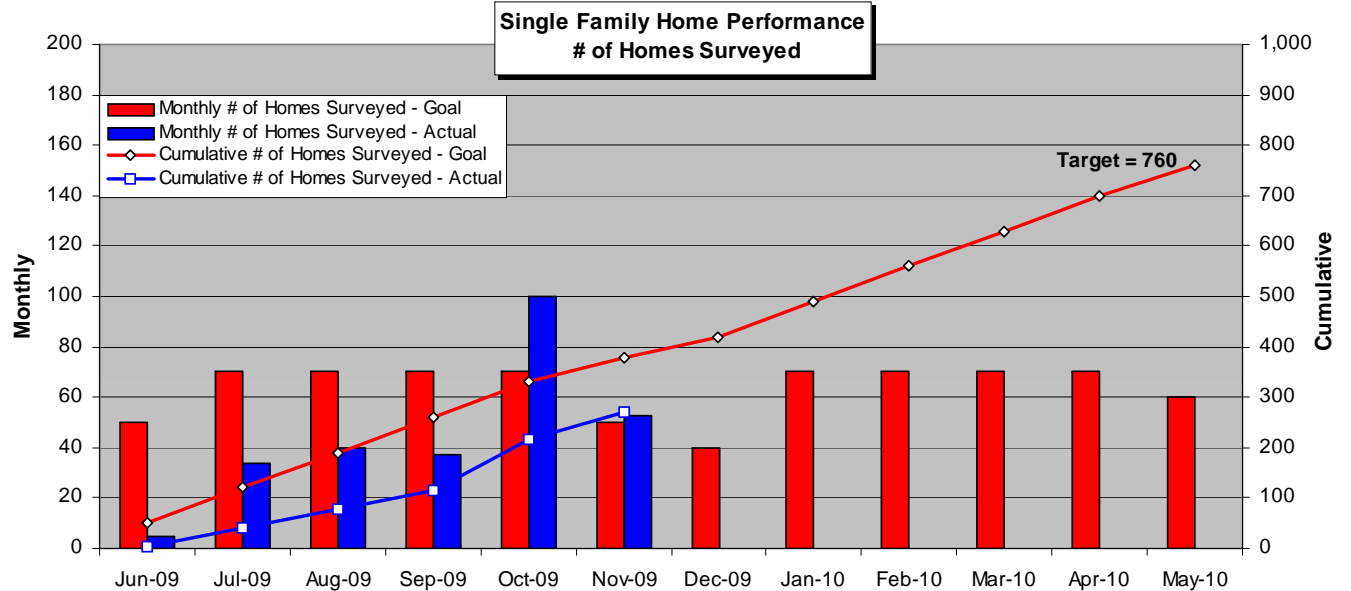
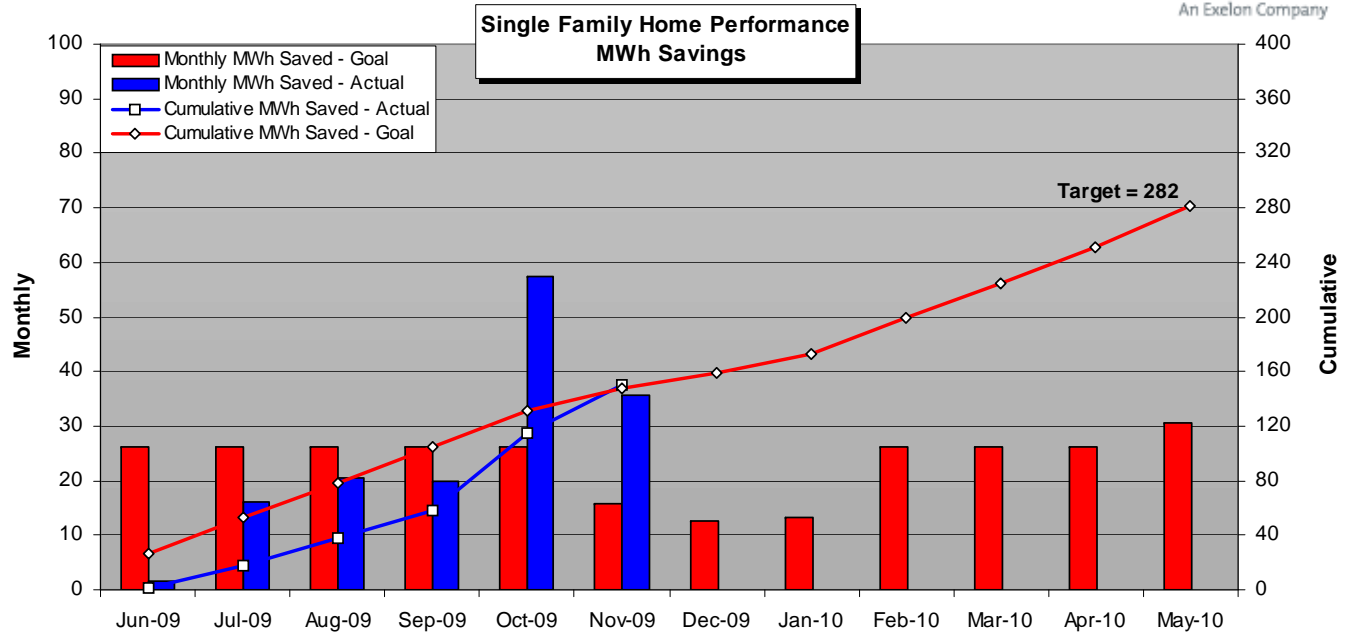
- Significant percentage of buildings listed as “all-electric” have non-electric (gas) water heating
- Condos offer unique challenges – fewer residents participate, and those who do accept fewer direct install measures
  - Many have high-end plumbing fixtures; owners do not care for aesthetics of low-flow showerheads and aerators on these fixtures

## Program Overview

- The Program goal is 282 MWh
- Approximately 760 homes will need this Tune-Up to reach the MWh goal

## Results through 11/30/09

- Energy Savings – 151 MWh (53% of goal)
- 269 homes completed





## Program Highlights

- Customer satisfaction – 4.86 on a 5-point scale
- Typically mailing 300 prospects every other week to keep appointment wait times under two weeks
- Launched “Enhanced” Tune Up pilot program, offering a blower door test and air sealing measures for an additional \$100
  - Report on results in 3<sup>rd</sup> Quarter

## Program Challenges/Issues

- Fewer than 9,000 customers qualify for program
  - Electric space heat and electric water heater, non-LIHEAP (they qualify for DCEO weatherization programs)
- Winter weather direct mail response rates have gone up from 4% to 11% but will decrease as warm weather returns

# Smart Ideas for your Home – Central AC Efficiency Services (CACES)

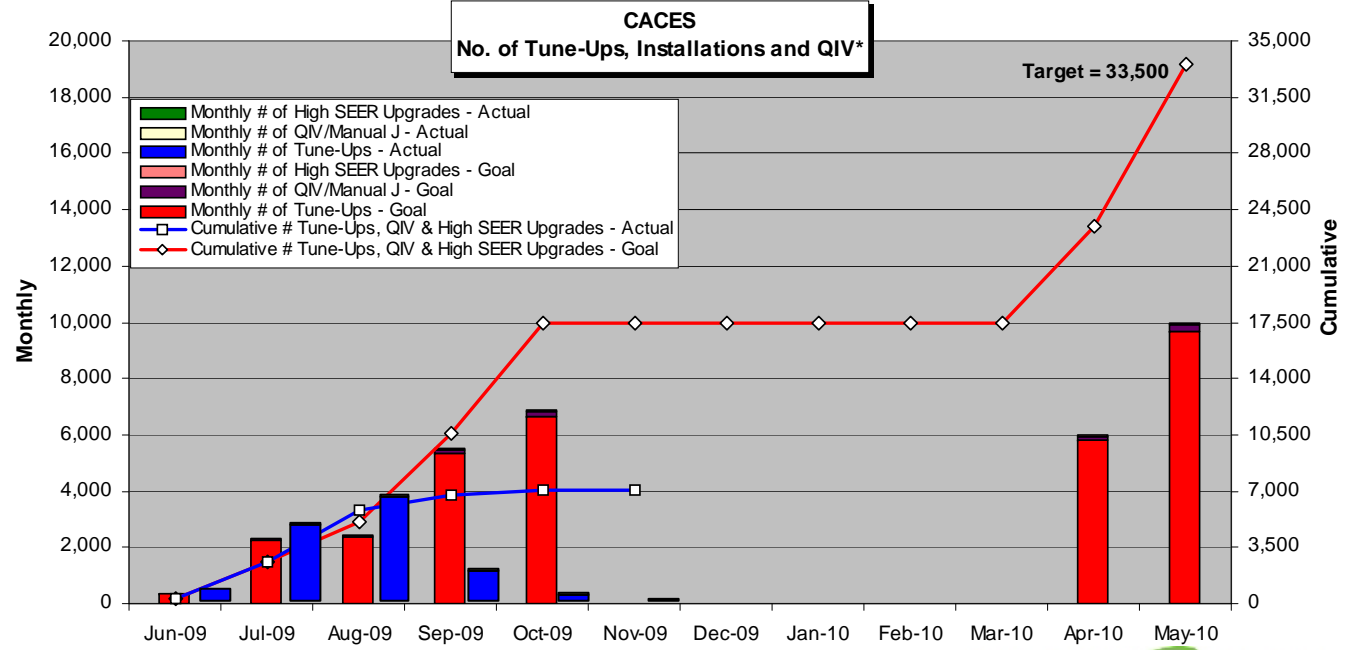
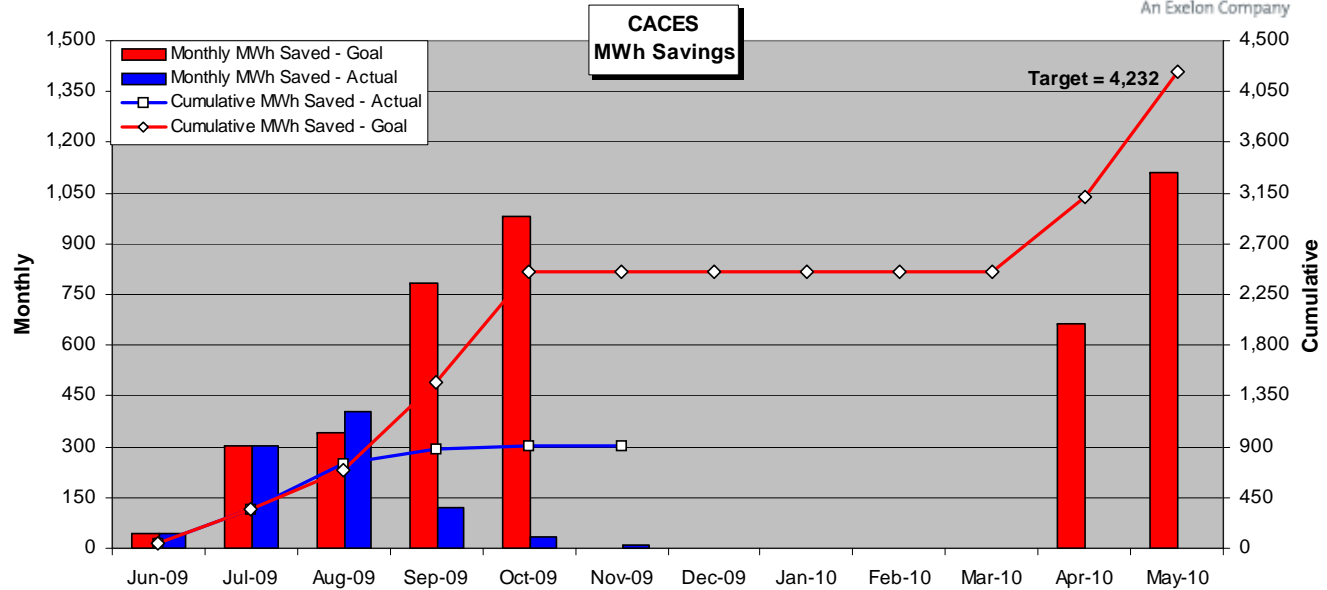
An Exelon Company

## Program Overview

- The Program goal is 4,232 MWh

## Results through 11/30/09

- 6,836 Tune-Up Applications have been approved, equal to 874 MWh savings
- 210 Quality Installation Applications have been approved, equal to 27 MWh savings
- 51 High SEER Upgrade Applications have been approved, equal to 14 MWh savings
- The total combined savings of 915 MWh represents 22% of this program's first year goal.



## Program Highlights

- 64 HVAC contractors currently participating in the program
- Broad cross section of HVAC industry represented by participating contractors – participants range in size from 1-man shops up to several of the largest regional contractors (with 25+ field technicians)
- Participating contractors have purchased / leased 146 Service Assistant Tools
- Field QC inspections have been completed for each Service Assistant tool linked to an incentive application
- 34 days of contractor training completed (25 days technical and 9 days business/sales training)
- Incentives totaling >\$750K have been paid to contractors for the completion of 7,880 qualifying tune-ups and Quality Installations

## Program Challenges/Issues

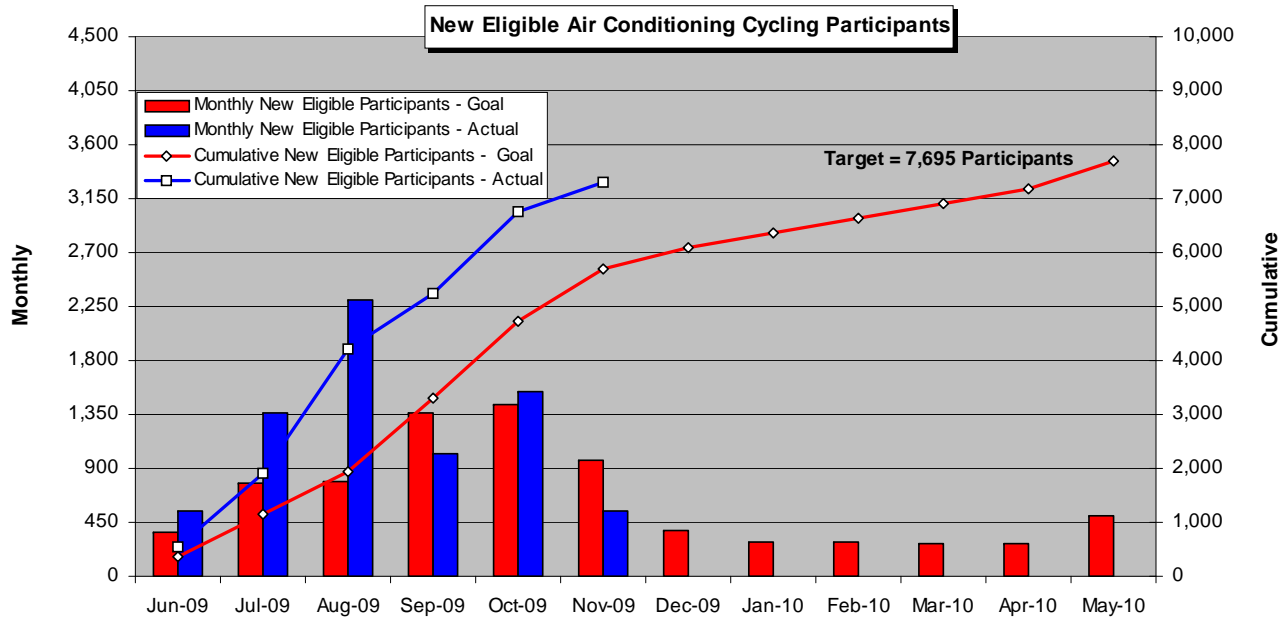
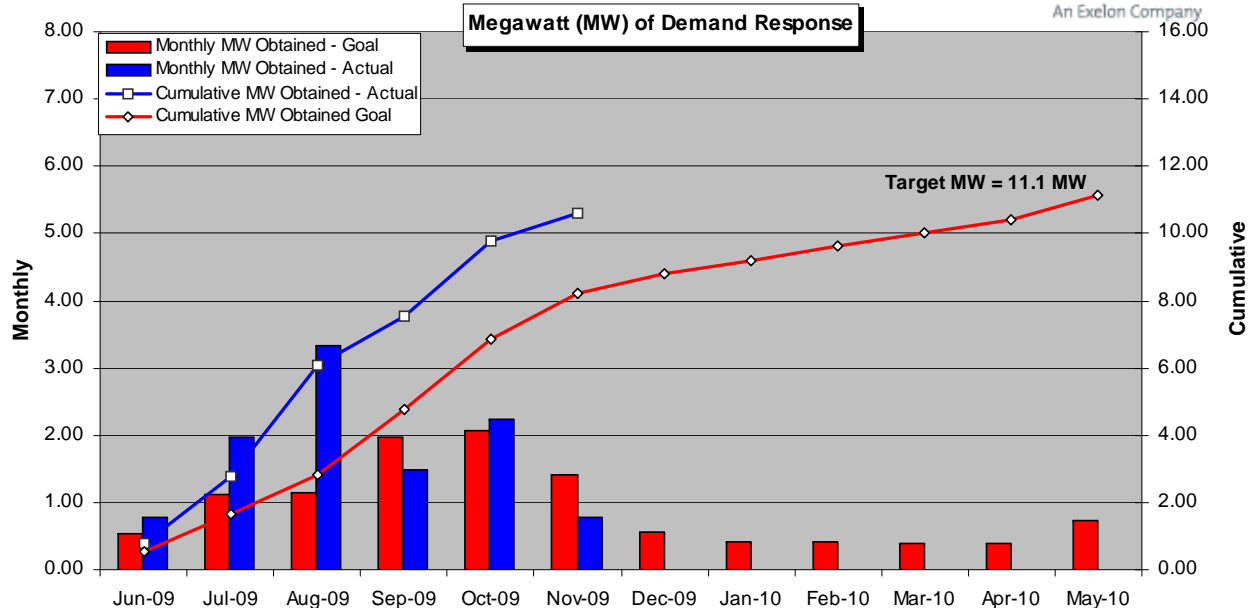
- Depressed economy along with one of the coolest summers on record have made it very challenging for contractors to sell tune-up services and new installations.
- The Service Assistant data upload process and the paperless incentive application both require a level of computer proficiency. Learning curve for these required computer skills has been fairly steep for some contractors.
- Timing of the program launch in the middle of the cooling season (after the typical spring tune-up push), was a concern for all contractors, and contributed to some declining to participate. Even those contractors who opted to participate, voiced concern about introducing a new process to their technicians in mid-season.

## Program Overview

- AC Cycling is a residential central air conditioner direct load control initiative designed to meet the Plan's demand response requirement.
- The AC Cycling goal is 11.1 MW and 7,695 new participants.

## Results through 11/30/09

- 7,317 new participants have been added to the program (95.1% of the goal).
- 10.6 MW of controllable load has been obtained.

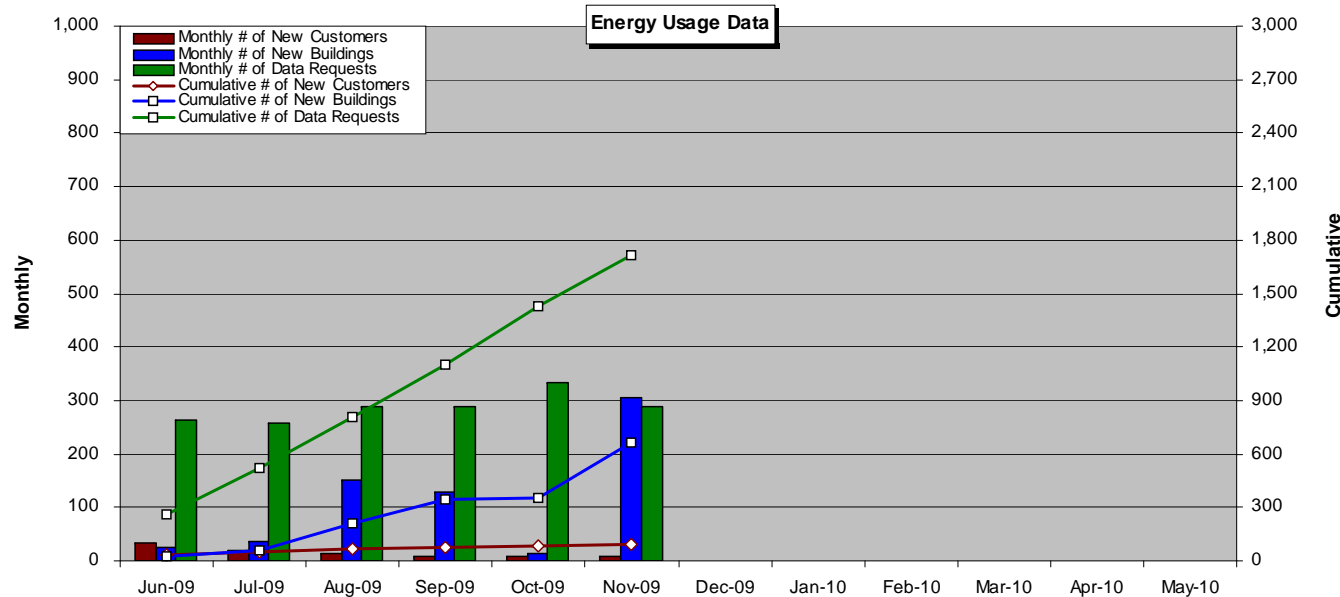
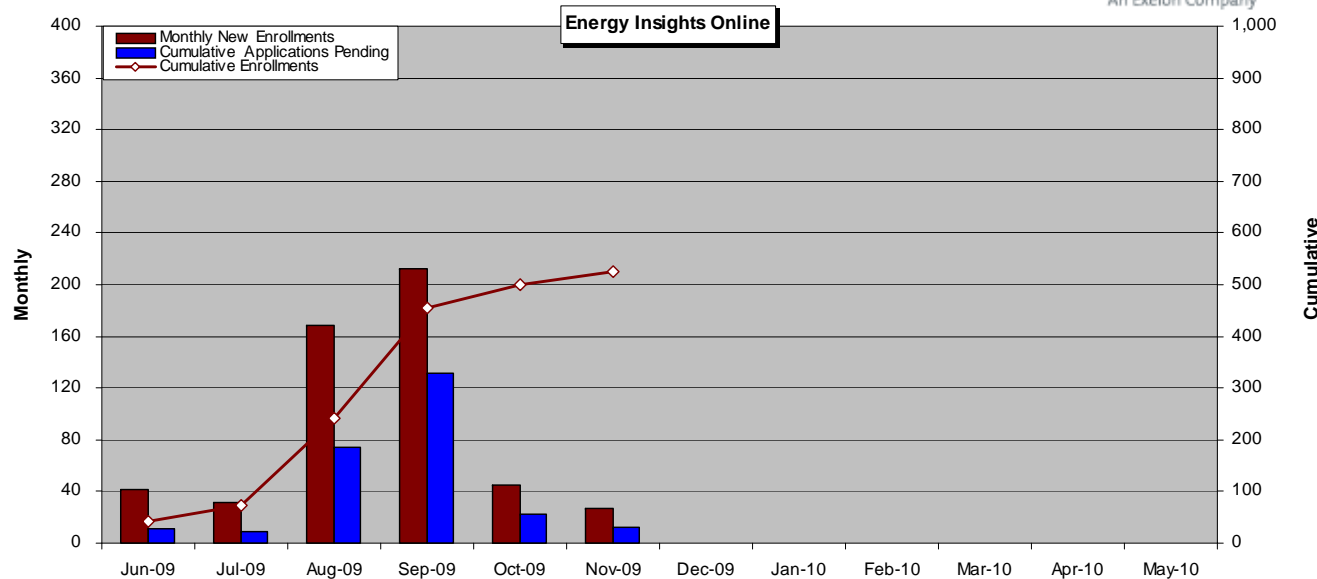


## Program Overview

- **Energy Insights Online** is a Web-based energy analysis service. The service interprets data gathered from the Customer's recording meters and converts either monthly or daily data into easy-to-understand graphs and reports that show how much electricity the customer consumes.
- **Energy Usage Data** program provides customers with an automated system to obtain aggregated whole building energy usage on a monthly basis. This information can be used by the customer as part of the Energy Star benchmarking process in conjunction with the EPA's Portfolio Manager.

## Results through 11/30/09

- Energy Insights Online
  - 526 Enrolled
- Energy Usage Data
  - 94 Building Managers
  - 661 Buildings
  - 1,717 Data Requests



For the 3 year EE/DR Plan, ComEd has allocated approximately \$1M per year for the investigation of emerging technologies / R&D projects.

- The law allows up to 3% of the spending screen be allocated to these types of projects. Due to the budget constraints, ComEd does not allocate the maximum amount in any year.

- **Two Key Pilot Programs have been launched**

- Community Energy Challenge Pilot Program
- Positive Energy “Home Energy Report” Pilot Program

## “Community Energy Challenge” Pilot Program

The purpose of this pilot is to determine if municipalities can leverage their own resources to deliver energy efficiency programs in a cost-effective manner; ComEd will reserve \$2.35M of PY2 incentive dollars for these municipalities.

### Status:

- CEC participants are now charged with implementing the energy projects outlined in their plans. The implementation period runs parallel to ComEd’s EEDR plan year June 1, 2009 – May 31, 2010.
- ComEd is working closely with the ten municipalities that submitted plans to keep them motivated to make progress on their energy projects. During the 2<sup>nd</sup> quarter, ComEd participated in several outreach events that some of the communities held to promote the Smart Ideas programs.
- All communities are required to submit 2nd quarter tracking reports by 12/15/09. These reports detail the progress to-date on each project, action items planned and completed, and forecast dates for future action items.
- At the end of the implementation period, participants’ plans will be re-scored based on the actual energy savings realized from their projects. The winning plan will win a \$100,000 cash award.



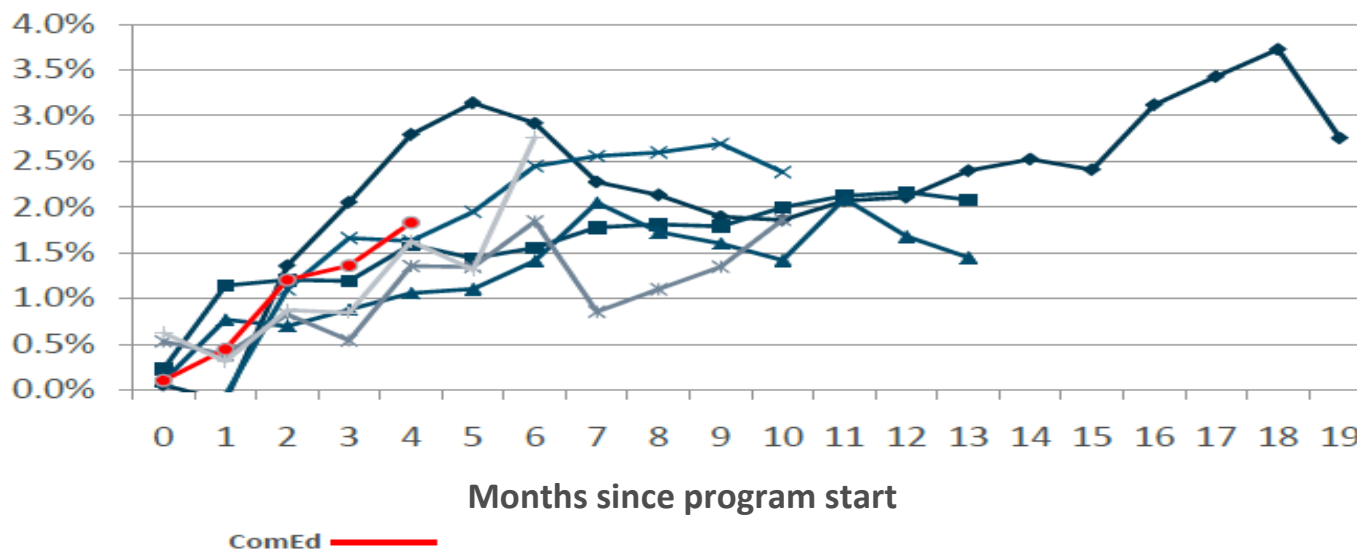
## Positive Energy “Home Energy Report” Pilot Program

The Positive Energy pilot is designed to measure energy consumption savings in 50,000 residential homes through changes in behavior and was launched July 2009.

### Status:

- To date there have been a total of 661 customer calls; most calls have been handled as high bill complaints.
- Call Center receives on average 5 calls per day.
- No major issues with customer feedback; only 80 participants out of 50,000 (.2%) have opted out of the program to date.
- The graph illustrates ComEd’s performance for the first four months compared to other OPOWER pilots across the country - Note that ComEd is almost at the 2% savings mark – faster than all but one of the other utilities (***data is confidential***)

Program savings over time



## **Evaluation Contractors (ComEd / DCEO programs)**

- Evaluation of Plan Year 1 programs is completed, with ComEd final reports to be issued in December. ComEd's Annual Report for Plan Year 1 is waiting for final DCEO Reports.
- Evaluators are providing feedback on adjustments to measure savings' estimates for forecasting purposes, and improving communications and processes.
- Plan Year 2 evaluations have begun. Retail intercepts planned for lighting program to more accurately survey customers purchasing CFL's.



## Appendix

Portfolio Results Energy Saved (MWh)			
	PY1 Net MWh Achieved	PY1 Goal	PY1 % of Goal Achieved
Statutory Goal	163,717	148,842	110%

Plan Year 1 Ex Post Results						
Program	Plan Target	Ex-Ante Gross MWh	Realization Rate	NTG Ratio	Net MWh Achieved	% Plan Achieved
ENERGY STAR® Lighting	75,809	119,151	0.74	0.69	60,789	80%
Appliance Recycling	8,159	21,570	0.73	0.73	11,478	141%
All-Electric Efficiency	2,369	2,568	0.90	0.80	1,852	78%
Prescriptive & Custom	62,187	98,982	1.29	0.67	85,693	138%
Retrocommissioning	1,090	1,509	0.90	0.80	1,090	100%
Small C&I Intro Kit	16,816	25,064	0.20	0.56	2,815	17%
<b>Totals</b>	<b>166,430</b>	<b>268,844</b>			<b>163,717</b>	<b>98%</b>

\*Due to Rounding, Target Net MWh may not equal Target Gross MWh multiplied by the Realization Rate and the NTG Ratio.

Environmental and Economical Impact	
Performance Metrics	PY2 YTD QTR Results
Carbon Reduction (MTs)	63,121
Cars removed from the road	11,561
Acres of trees planted	17,252
Number of homes powered for 1 year*	11,645
Portfolio Jobs**	84



\* Assumes average ComEd single-family residential home with no electric space heat consumes 801 kWh monthly or 9,612 kWh annually per the filing.  
 \*\* Portfolio Jobs reflect actual positions by ComEd and its contractors that are part of the Rider EDA and does not attempt to capture indirect jobs in the energy efficiency industry that may result from the ComEd portfolio.