



An Exelon Company

Smart Ideas 2014-16 Plan Overview

SAG Presentation

June 12, 2013

Today's Meeting

- Overview of legislative mandates
- Summary of programs
- Avoided Cost Updates
- Portfolio Issues
- Feedback from SAG

Disclaimer

The plan being presented today is still preliminary, and is subject to modifications based on:

- Stakeholder feedback
- Gas portfolio design, allocation and sizing (impacts joint programs)
- Outcome of ICC/IPA workshops
- Determination of DCEO portfolio of programs
- Which programs go into IPA
- Final budgets and portfolio balancing

8-103 versus 16-111.5B

8-103 (EEPS):

- Third Plan under this legislative construct
- Statutory goals rise to 2% by 2015 (PY8)

	Spend Screen (millions)	Statutory Goal %	Statutory Goal GWh	Cost to Achieve
PY7	\$157	1.8%	1,600	\$0.10
PY8	\$157	2.0%	1,800	\$0.09
PY9	\$158	2.0%	1,800	\$0.09

It is unlikely that this level of performance can be achieved

16-111.5B (IPA)

- First 3-year Plan under this legislative construct
- All cost-effective energy efficiency ***that is practicable***.
- Only for non-competitive customer classes
 - Residential
 - Small Business (<100 kW)

Contrasts between EEPA and IPA

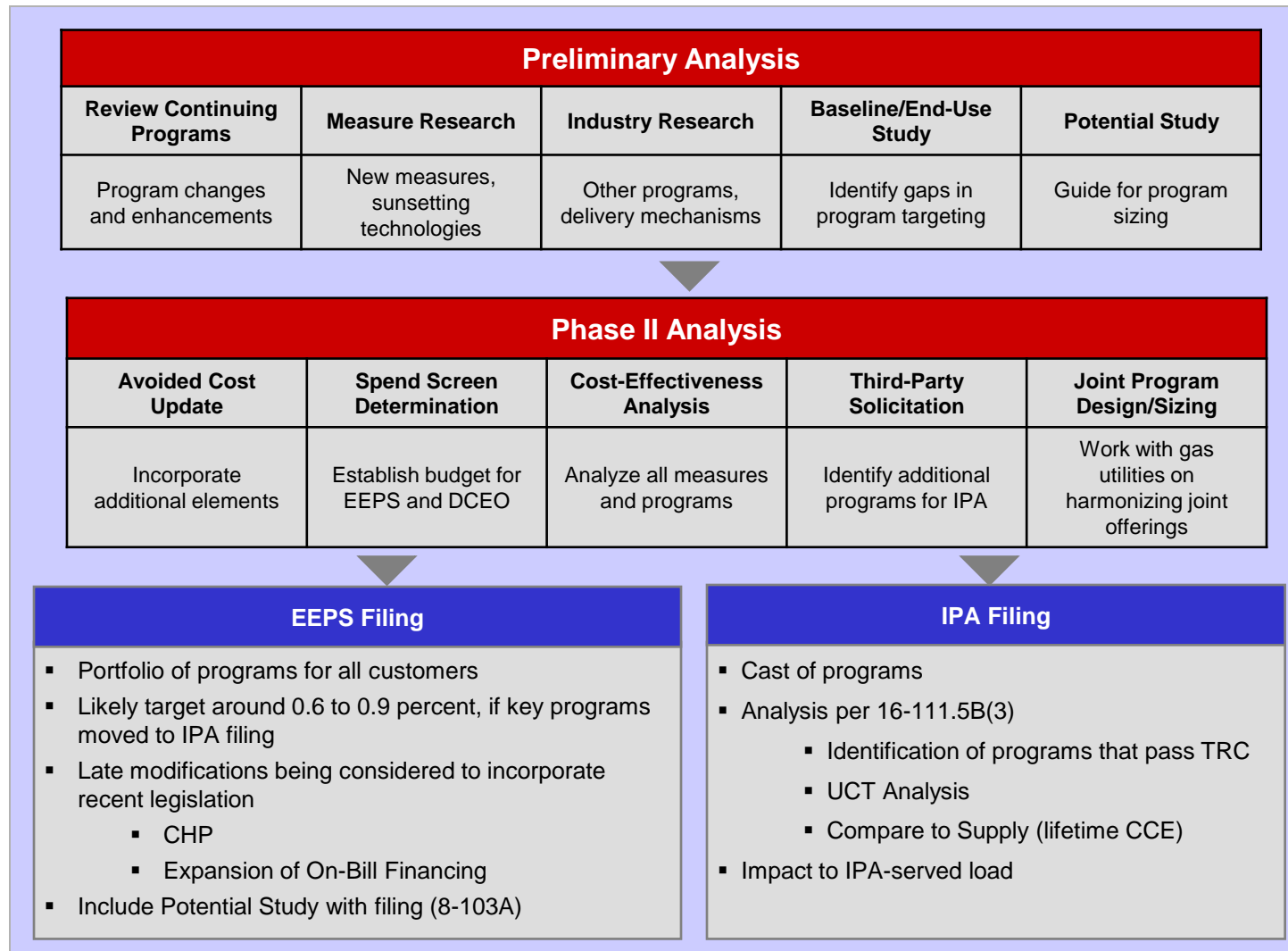
EEPS:

- Plan is developed as a Portfolio of programs
 - Balanced combination of elements
 - Education and Outreach
 - Market Transformation
 - Public Sector and low-income carve-outs (DCEO)
 - Broad Reach
- TRC is primarily relevant at portfolio level
- Must work within spend screen
- Penalty (loss of portfolio) if failure to achieve 3-year plan target

IPA

- Each program must be cost-effective on its own
- Annual solicitation for third-party proposals
- No accommodation for separate education and outreach
- No spend screen
- Should complement EEPS portfolio
- Not a portfolio in and of itself
- No Penalty

- Work began last summer to research program practices around the country
- Also have researched new/different measures, primarily focusing on residential end-uses
- Major end-use study conducted during 2012/13 in support of potential study and plan development



Smart Ideas - Summary

Program	PY7		PY8		PY9		Total		Cost
	Net MWh	Budget (1,000's)	Net MWh	Budget (1,000's)	Net MWh	Budget (1,000's)	Net MWh	Budget (1,000's)	\$/kWh
Residential Lighting Discounts	122,035	\$17,571	117,643	\$19,409	85,142	\$17,680	324,820	\$54,660	\$0.21
Fridge and Freezer Recycling	25,350	\$7,699	25,350	\$7,699	25,350	\$7,699	76,050	\$23,113	\$0.30
Multi-Family	16,452	\$6,271	16,452	\$6,273	16,452	\$6,276	49,356	\$18,820	\$0.38
Single-Family	2,727	\$1,407	2,727	\$1,410	2,727	\$1,412	8,181	\$4,229	\$0.51
Complete System Replacement	2,792	\$3,250	2,792	\$3,264	2,792	\$3,278	8,376	\$9,792	\$1.16
Home Energy Reports	180,200	\$11,037	249,900	\$11,048	264,000	\$11,058	694,100	\$33,143	\$0.05
Home Energy Kits	843	\$809	843	\$810	843	\$812	2,529	\$2,431	\$0.96
C/I Incentives	200,540	\$36,447	189,440	\$34,499	182,040	\$33,138	572,020	\$104,084	\$0.18
C/I Study-Based	55,941	\$9,451	59,235	\$9,902	60,943	\$10,249	176,119	\$29,602	\$0.16
C/I Mid-Stream	75,750	\$4,731	83,260	\$5,144	91,450	\$5,531	250,460	\$15,406	\$0.06
C/I Direct Install	100,000	\$27,543	133,000	\$36,580	\$167,000	\$45,891	400,000	\$110,014	\$0.27
New Construction	15,900	\$6,170	16,840	\$6,477	17,750	\$6,965	50,490	\$19,612	\$0.39
Total	676,495	\$114,815	779,839	\$123,106	831,347	\$132,309	2,287,681	\$370,246	\$0.16

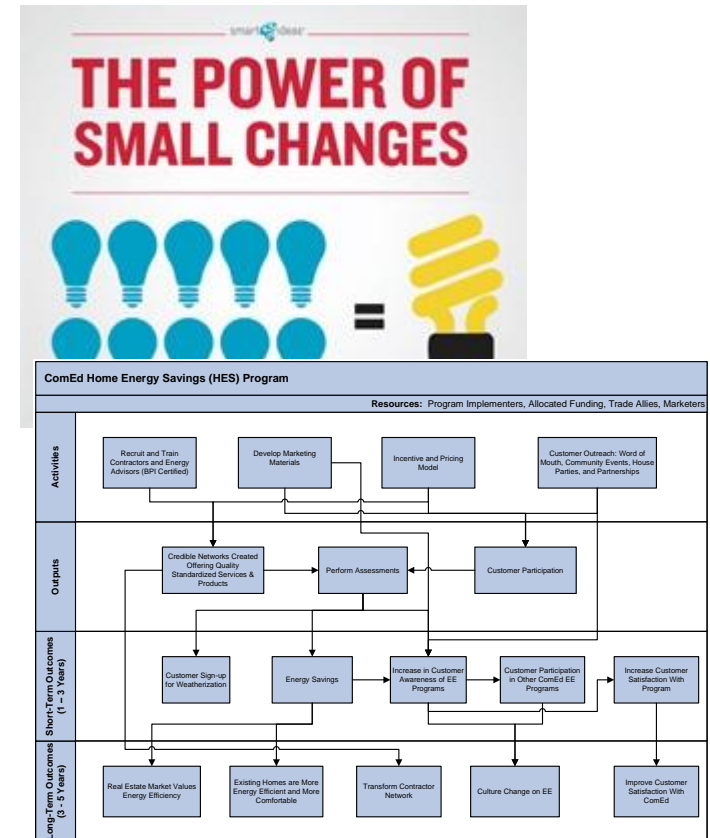
Continuing Programs

Residential

- Lighting Discounts
- Fridge and Freezer Recycling Rewards
- Multi-Family Home Energy Savings
- Single Family Home Energy Savings
- Complete System Replacement
- Home Energy Reports
- Home Energy Kits
- Residential New Construction

Other Potential Programs

- Residential Prescriptive
- Codes Compliance



Continuing Programs

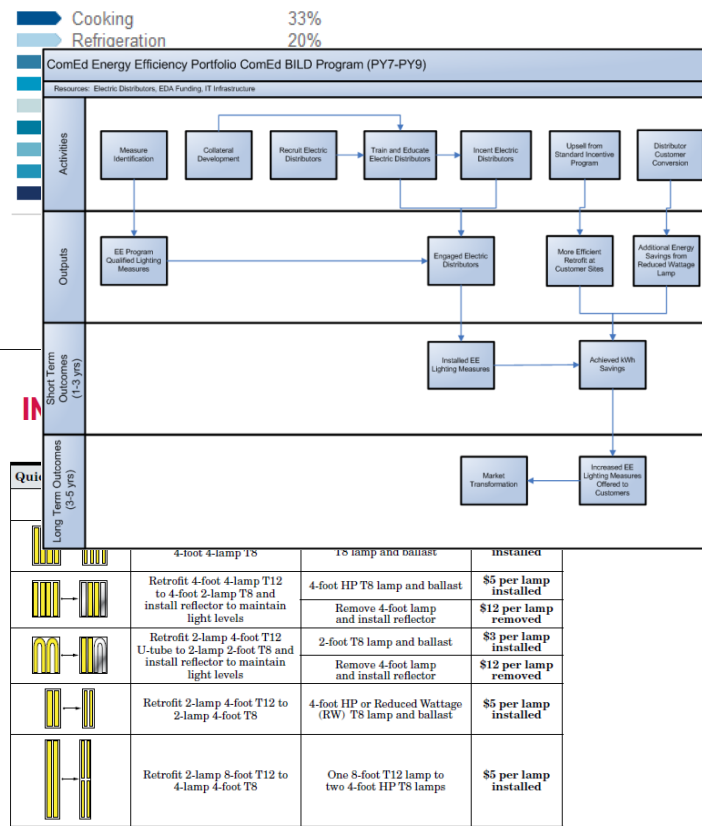
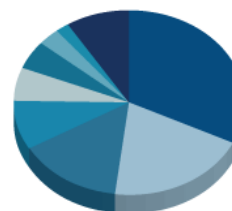
Business and Commercial programs

- Incentives
 - Standard
 - Custom
- Study-Based Programs
 - Retrocommissioning
 - Industrial Optimization
- Mid-Stream
 - Business Lighting Discounts
- Direct Install
 - Small Business Efficiency
- New Construction

Other Potential Programs

- Efficient Streetlighting
- Large C/I Pilot
- Combined Heat & Power
- Behavioral
- Codes Compliance

Average Energy Use



Residential Lighting Discounts

- Instant in-store discounts on select ENERGY STAR® qualified lighting products at participating retailers in the Chicagoland area
- Continuing program

Year	Number of Bulbs	Net MWh	Budget	TRC	\$/kWh	CCE
PY7	8,303,000	122,035	\$17,571,000			
PY8	8,180,000	117,643	\$19,409,000			
PY9	6,020,000	85,142	\$17,680,000			
Total	22,503,000	324,820	\$54,660,000	5.28	\$0.207	\$0.028

- Transitional focus to LED
 - Over 1.4 million/yr in PY9
- Cost-effectiveness deteriorates over time
 - EISA Phase 2 standards begin January 1, 2020
 - CFL becomes baseline during lifetime of measures installed in PY9

Fridge and Freezer Recycle Rewards

- Free pick up and recycling of old refrigerators and freezers as well as cash incentives for program participants
- Continuing program

Year	Number of Units	Net MWh	Budget	TRC	\$/kWh	CCE
PY7	40,000	25,350	\$7,699,000			
PY8	40,000	25,350	\$7,704,000			
PY9	40,000	25,350	\$7,710,000			
Total	120,000	76,050	\$23,113,000	1.91	\$0.304	\$0.027

- Relatively steady program
- Savings deteriorate as vintage of units shifts
- Some volatility in savings algorithms during current plan
 - Significant reduction in PY5
 - Modest increase in PY6
 - Uncertain what changes may lie ahead

Multi-Family Home Energy Savings

- Installation of energy-efficient showerheads, faucet aerators and CFLs to help property owners and tenants reduce natural gas, water and electricity costs
- Modified program

Year	Number of Units	Net MWh	Budget	TRC	\$/kWh	CCE
PY7	40,000	16,452	\$6,271,000			
PY8	40,000	16,452	\$6,273,000			
PY9	40,000	16,452	\$6,276,000			
Total	120,000	49,356	\$18,820,000	1.94	\$0.381	\$0.031

- Jointly delivered with gas utilities
- PY6 program added common-area lighting retrofits (via IPA process)
- PY7-9 will include more comprehensive work at building and campus level
- Some modifications being explored due to OBF legislation
- Numbers shown only reflect electric portion of costs/benefit

Single-Family Home Energy Savings

- Energy assessments including installation of energy-saving products along with customized energy-efficiency recommendations and rebates for completing suggested improvements
- Modified program

Year	Number of Homes	Net MWh	Budget	TRC	\$/kWh	CCE
PY7	11,000	2,727	\$1,407,000			
PY8	11,000	2,727	\$1,410,000			
PY9	11,000	2,727	\$1,412,000			
Total	33,000	8,181	\$4,229,000	1,63	\$0.51	\$0.059

- Jointly delivered with gas utilities
- PY7-9 expected to include some participation with PGL/NS
- Including appliance rebates as part of retrofit package
- Expanded flexibility with OBF legislation

Complete System Replacement

- Cash incentives for the installation of qualifying, high-efficiency furnace and cooling systems
- Continuing program

Year	Number of Units	Net MWh	Budget	TRC	\$/kWh	CCE
PY7	7,000	2,792	\$3,250,000			
PY8	7,000	2,792	\$3,264,000			
PY9	7,000	2,792	\$3,278,000			
Total	21,000	8,376	\$9,792,000	1.34	\$1.169	\$0.048

- Jointly delivered with gas utilities
- Gas utilities exploring upstream delivery model
 - Existing design assumes no change
 - Upstream model may impact ComEd's ability to participate

Home Energy Reports

- Bi-monthly reports provide homeowners with household usage analytics including a comparison of their usage to similar homes nearby and customized tips to save energy
- Continuing program

Year	Number of Participants	Net MWh	Budget	TRC	\$/kWh	CCE
PY7	1,000,000	180,200	\$11,037,000			
PY8	1,000,000	249,900	\$11,048,000			
PY9	1,000,000	264,000	\$11,058,000			
Total	1,000,000*	694,100	\$33,143,000	1.29	\$0.047	\$0.047

- Will likely be submitted through IPA process
 - At least 1 million participants expected

Home Energy Kits

- Energy-saving kits provided to K-12 students as part of curriculum package at participating schools
- Modified program

Year	Number of Kits	Net MWh	Budget	TRC	\$/kWh	CCE
PY7	26,000	843	\$809,200			
PY8	26,000	843	\$810,600			
PY9	26,000	843	\$811,900			
Total	78,000	2,529	\$2,431,700	5.95	\$0.96	\$0.0148

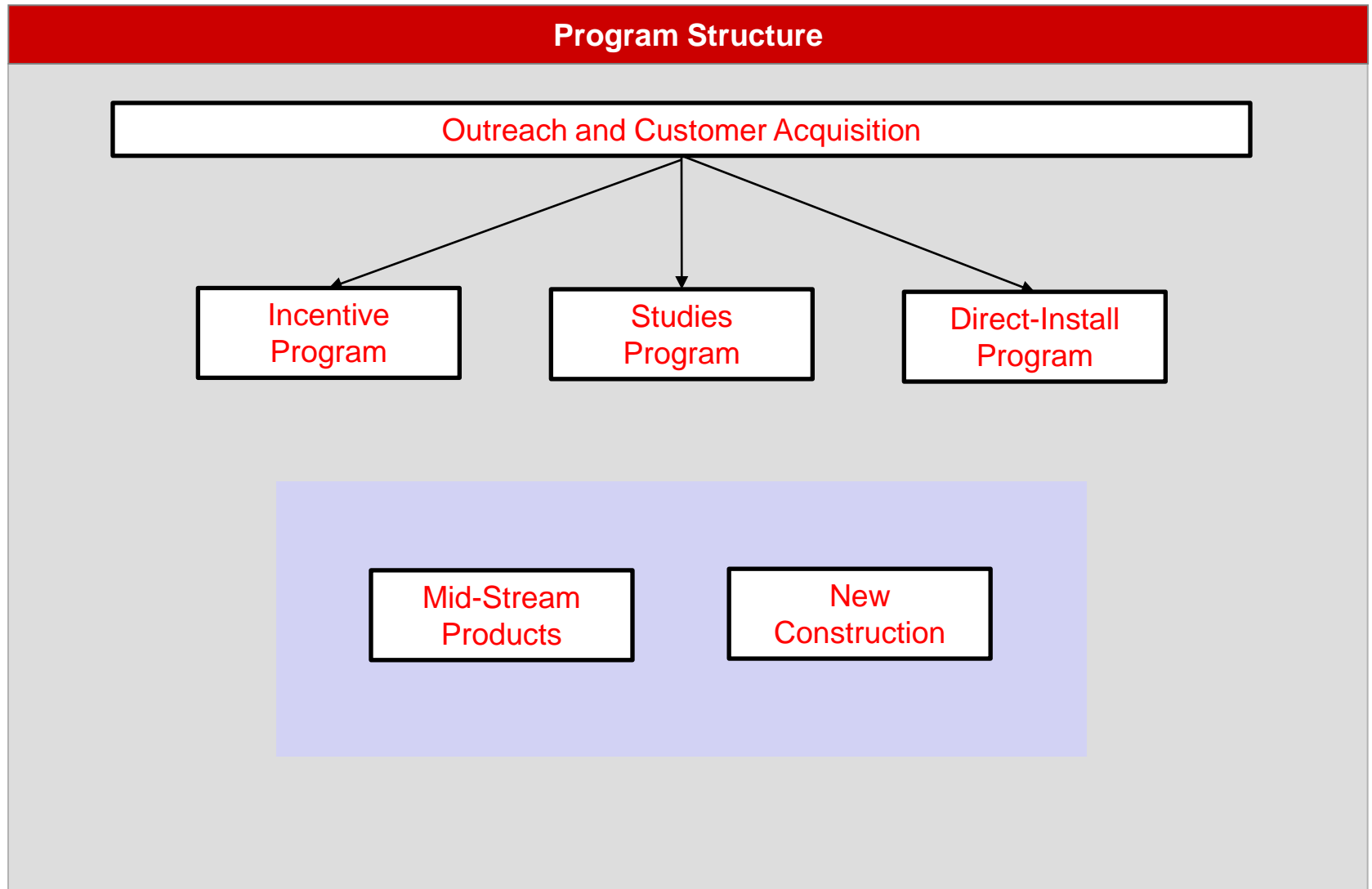
- Jointly delivered with gas utilities
- Originally developed as Elementary Education kits
- Combination of energy-saving kits with consumer education component
- May expand to non-school venues

Residential New Construction

- Program initially launched for PY5, targets home builders in ComEd service territory
- Modified program

Year	Number of Homes	Net MWh	Budget	TRC	\$/kWh	CCE
PY7	?	-	\$20,000			
PY8	?	-	\$20,000			
PY9	?	-	\$20,000			
Total	?	-	\$60,000	-	-	-

- Jointly delivered with gas utilities
- Exploring changes to program due to low level of electric savings achieved in current plan



Incentives Program

- Standard cash incentives for common energy-efficiency improvements to commercial and industrial lighting, HVAC, refrigeration and other systems, as well as customized incentives and technical support for larger and more complex system upgrades
- Modified program

Year	Number of Projects	Net MWh	Budget	TRC	\$/kWh	CCE
PY7	2,421	200,540	\$36,447,000			
PY8	2,283	189,440	\$34,499,000			
PY9	2,190	182,040	\$33,138,000			
Total	6,894	572,020	\$104,084,000	1.50	\$0.182	\$0.020

- Standard (prescriptive) incentives
- Custom incentives

Study-based Program

- Expert analysis of building systems that identifies no-cost and low-cost conservation measures to optimize electricity and gas usage, plus industrial system assessments and financial incentives to reduce electricity used by compressed air, industrial refrigeration and process cooling systems
- Modified program

Year	Number of Projects	Net MWh	Budget	TRC	\$/kWh	CCE
PY7	204	55,941	\$9,451,000			
PY8	224	59,235	\$9,902,000			
PY9	241	60,943	\$10,249,000			
Total	669	176,119	\$29,602,000	1.50	\$0.168	\$.02

- Commercial Retro-Commissioning
- Monitoring-Based Retro-Commissioning
- Industrial Systems Optimization

Mid-Stream Program

- Provides incentives through participating lighting dealers on qualifying energy efficient lighting equipment including lamps, ballasts and some fixtures
- Modified program

Year	Number of Bulbs	Net MWh	Budget	TRC	\$/kWh	CCE
PY7	1,269,000	75,750	\$4,731,000			
PY8	1,395,000	83,260	\$5,144,000			
PY9	1,532,000	91,450	\$5,531,000			
Total	4,196,000	250,460	\$15,406,000	2.54	\$0.062	\$0.009

- Business Lighting Discount Program element
- Exploring other opportunities/end-use targets

Direct Install Program

- Free energy usage assessments and financial incentives for projects that reduce electricity and gas use in small businesses
- Expanded, modified program

Year	Number of Customers	Net MWh	Budget	TRC	\$/kWh	CCE
PY7	14,000	100,000	\$27,543,000			
PY8	16,000	133,000	\$36,580,000			
PY9	18,000	167,000	\$45,891,000			
Total	48,000	400,000	\$110,014,000	1.97	\$0.27	\$0.020

- Significant expansion of program from current plan
- Approximately 16,000 customers/yr
- Jointly delivered with gas utilities
- Additional modifications being explored in response to OBF legislation

New Construction Services

- Technical assistance and financial incentives to encourage architects, engineers and contractors to surpass standard efficiency requirements in new construction and major renovation projects
- Expanded program

Year	Number of Sq.Ft. Built	Net MWh	Budget	TRC	\$/kWh	CCE
PY7	17,000,000	15,900	\$6,170,000			
PY8	18,000,000	16,840	\$6,477,000			
PY9	19,000,000	17,750	\$6,965,000			
Total	54,000,000	50,490	\$19,612,000	1.57	\$0.388	\$0.014

- Relatively steady-state participation
- Jointly delivered with gas utilities
- Savings levels are challenged with IECC 2012

Program	PY7		PY8		PY9		Total		Cost
	Net MWh	Budget (1,000's)	Net MWh	Budget (1,000's)	Net MWh	Budget (1,000's)	Net MWh	Budget (1,000's)	\$/kWh
Total	17,106	\$2,726	23,426	\$4,246	31,049	\$5,007	71,580	\$11,979	\$0.167

- 17 proposals received
- 2 proposals simply marketing existing Smart Ideas programs
- 5 proposals fail TRC test
- 4 proposals determined to compete directly against existing programs
- 1 proposal withdrawn
- 5 proposals accepted by stakeholder review

Other Portfolio Elements

Non-acquisition components yet to be budgeted

- Evaluation
- Emerging Tech/R&D
- Portfolio Administration
- Education and Outreach

In last plan, approximately \$15 million/yr for these elements