



# ComEd PY7-PY9 Summary Impact Evaluation Report

Energy Efficiency / Demand Response Plan:  
Plan Year 7 to 9 (PY7-PY9) June 1, 2014 – December 31, 2017

Presented to  
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## 1. INTRODUCTION

This report presents the results of the impact evaluation of ComEd's third plan (Plan 3)<sup>1</sup> slate of energy efficiency programs offered under the Energy Efficiency Portfolio Standard (EEPS), and the Illinois Power Agency (IPA) umbrella. It presents a summary of the energy and demand impacts for the portfolio and each program and some detail on cost effectiveness. The report fulfills the Illinois Public Utilities Act (PUA) requirement for a review of the 3-year results of the broader net program impacts for Program Year 7 (PY7) starting in June 1, 2014 through Program Year 9 (PY9) which ended in December 31, 2017.<sup>2</sup>

In Plan 3, ComEd's portfolio included programs implemented under the EEPS and IPA umbrella, pilot programs, and public sector and income eligible programs that ComEd took over from the Department of Commerce and Economic Opportunity (DCEO) portfolio on June 1, 2017.<sup>3</sup> Overall, the ComEd Plan 3 portfolio implemented 66 programs, which included 24 IPA and 42 EEPS (including 12 DCEO transition period programs), as listed in Table 1-1. The list contains 28 programs in the residential sector (including 4 income eligible programs) and 38 programs in the business sector (including 8 public sector programs).<sup>4</sup> This report presents a summary of the energy and demand savings from programs implemented for which final impact evaluation reports with realized savings have been submitted to ComEd. This included 22 PY7 programs, 32 PY8 programs, and 56 PY9 programs.<sup>5</sup>

The AirCare Plus, Lighting Discounts, Small Business and Streetlighting Programs had savings counting toward both EEPS and IPA targets. Those programs appear twice in the program-level results shown in Table 3-1 but savings were not double counted. The Lighting Discounts Program and Instant Discounts Program both had carryover savings from measures sold or incented in prior years that were installed in PY7, PY8 and PY9. The PY9 Instant Discounts Program carryover savings were attributed to the EEPS portfolio. The PY9 Lighting Discounts Program carryover savings from PY7 were attributed to the EEPS portfolio, and the carryover savings from PY8 were attributed to the IPA portfolio.

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<sup>1</sup> The triennial energy efficiency and demand response plan filings required by Section 8-103 of Illinois Public Utilities Act ("Act"), 220 ILCS 5/8-103, generally referred to herein as "Plan" or "Plan 3".

<sup>2</sup> PY7 started in June 1, 2014 and ended in May 30, 2015. PY8 started in June 1, 2015 and ended in May 30, 2016. PY9 original 12-month program started in June 1, 2016 and got extended 7 months more (transition period) and ended in December 31, 2017 (PY9+).

<sup>3</sup> Public Sector and Income Eligible programs were implemented only in PY9 during the transition period between June 1, 2017 and December 31, 2017.

<sup>4</sup> Programs with carryover savings are counted only once. Programs that had both an IPA component and an EEPS component were counted separately.

<sup>5</sup> Some programs had no savings in specific years. These programs were: Meter Genius, Great Energy Stewards, Root3 Energy Data Model, Low-Income Multi-family (UIC-ERC), and Total Connected Savings Wi-Fi Thermostat Optimization. These programs are shown in Table 1-1 but are excluded from subsequent tables containing program evaluation results.

## Table 1-1. ComEd PY7-PY9 Energy Efficiency Programs

Sector	Portfolio	Program PY7	Program PY8	Program PY9
Business		PY7	PY8	PY9
Business	EEPS		AirCare Plus	AirCare Plus
Business	EEPS	New Construction	New Construction	C&I New Construction*
Business	EEPS	Custom	Business Custom	Custom*
Business	EEPS	Data Centers	Data Centers	Data Center Efficiency*
Business	EEPS	Industrial Systems	Industrial Systems	Industrial Systems Optimization*
Business	EEPS	Business Instant Lighting Discount	Business Instant Lighting Discounts	Instant Discounts*
Business	EEPS			Operational Savings*
Business	EEPS	Retro-Commissioning	Retro-Commissioning	Retrocommissioning (RCx)*
Business	EEPS	Standard	Business Standard	Standard*
Business	EEPS			Strategic Energy Management (SEM)
Business	EEPS	Small Business Energy Savings		
Business	EEPS	LED Street Lighting		
Business	IPA			Agriculture Energy Efficiency
Business	IPA		AirCare Plus	AirCare Plus
Business	IPA			CLEAResult LLLC
Business	IPA		CLEAResult Schools Direct Install	CLEAResult Schools DI
Business	IPA			Elevate Energy Assisted & Senior Housing
Business	IPA			Energy Advisor MBCx
Business	IPA		LED Street Lighting	LED Street Lighting
Business	IPA		Matrix Demand Control Ventilation	Matrix DCV
Business	IPA		Matrix School Direct Install	Matrix K-12 Private Schools DI
Business	IPA		Weidt Group New Construction	New Construction Small Buildings
Business	IPA			Rural Small Business EE Kits
Business	IPA			SEDAC Enhanced Building Optimization
Business	IPA	Small Business Energy Savings (IPA)	Small Business Energy Savings	Small Business Energy Savings
Business	IPA			Small Commercial Lit Signage
Pilot Business	EEPS		Agentis Business Energy Analyzer Pilot	Business Energy Analyzer*
Pilot Business	EEPS		Strategic Energy Management Pilot	
Pilot Business	EEPS			Multi-family Common Area Pilot*
Pilot Business	EEPS		Root3 Pilot	Root3 Energy Data Model
Residential		PY7	PY8	PY9
Residential	EEPS	Home Energy Rebates	Appliance Rebates	Appliance Rebates*
Residential	EEPS	Elementary Energy Education	Elementary Energy Education	Elementary Education Kits*
Residential	EEPS	Fridge and Freezer	Residential Fridge and Freezer	Fridge Freezer Recycling*
Residential	EEPS		HVAC and Weatherization	Heating, Cooling & Weatherization Rebates (HVAC)*
Residential	EEPS		HVAC and Weatherization	Heating, Cooling & Weatherization Rebates (Wx)*
Residential	EEPS	Home Energy Assessments	Home Energy Assessments	Home Energy Assessments*
Residential	EEPS	Multi-family - Tenant Area	Multi-Family Assessment	Multi-Family Comprehensive EE*
Residential	EEPS	Residential New Construction	Residential New Construction	Residential New Construction*
Residential	EEPS			Total Connected Savings Wi-Fi Thermostat Optimization
Residential	EEPS	Energy Star Lighting		
Residential	IPA			CLEAResult Community-based CFL Distribution
Residential	IPA	Accelerate CUB Energy Saver	CUB Energy Saver	CUB Energy Saver
Residential	IPA	Elevate Electric Multifamily	Elevate Electric Multifamily	Elevate Energy MF All Electric
Residential	IPA	Home Energy Reports	Home Energy Report	Home Energy Reports
Residential	IPA			Lighting Discounts
Residential	IPA			Low-income Kits (UIC ERC)
Residential	IPA		National Theatre for Children	NTC Gas & Electric Water Heater Kits
Residential	IPA	Great Energy Stewards	Great Energy Stewards	Shelton Solutions Great Energy Stewards
Residential	IPA			Low-Income Multi-family (UIC-ERC)
Pilot Residential	EEPS			Bidgely*
Pilot Residential	EEPS			Nest Seasonal Savings (Cooling & Heating)*
Pilot Residential	EEPS		Meter Genius Pilot	
Pilot Residential	EEPS	Energy Check		
Pilot Residential	IPA		C3 Home Energy Reports	
Public Sector (DCEO Bridge)		PY7	PY8	PY9
Public Sector	EEPS			C&I New Construction
Public Sector	EEPS			Custom
Public Sector	EEPS			Free Lights
Public Sector	EEPS			LED Street Lighting
Public Sector	EEPS			PHA Efficient Living
Public Sector	EEPS			Retrocommissioning
Public Sector	EEPS			Savings Through Efficient Products (STEP)
Public Sector	EEPS			Standard
Income Eligible (DCEO Bridge)		PY7	PY8	PY9
Income Eligible	EEPS			Affordable Housing New Construction
Income Eligible	EEPS			Illinois Home Weatherization Assistance Program (IHWAP)
Income Eligible	EEPS			Residential Retrofit: Energy Savers Multi-Family
Income Eligible	EEPS			Residential Retrofit: Single Family Retrofits (CBA)
Carryover Savings		PY7	PY8	PY9
Carryover Savings	EEPS	Business Instant Lighting Discount	Business Instant Lighting Discounts	Instant Discounts
Carryover Savings	EEPS	Energy Star Lighting (EEPS)	Residential Lighting Discounts (EEPS)	Lighting Discounts (EEPS)
Carryover Savings	IPA	Energy Star Lighting (IPA)	Residential Lighting Discounts (IPA)	Lighting Discounts (IPA)

\* Programs with transition period savings.

Source: ComEd tracking data and Navigant evaluation reports.

## 2. PORTFOLIO SAVINGS

Table 2-1 compares the ComEd EEPS Modified MWh goal<sup>6</sup> and the ComEd EEPS savings over the portfolio cycle.

**Table 2-1. Comparing EEPS Annual Electric Net Goals to Actual Achieved**

Energy Savings Category	PY7 (MWh)	PY8 (MWh)	PY9 Original 12 Months (MWh)	PY9 Transition Months (MWh)	Total PY9+ (MWh)*	Overall Total (MWh)
Statutory MWh Goal†	1,605,201	1,803,142	1,811,811	NA	NA	5,220,154
ComEd Modified Goals (MWh)‡	648,029	541,983	517,369	270,260	787,629	1,977,641
Verified Net Savings§	809,878	666,514	658,796	428,281	1,087,076	2,563,468
TRC Test†§	2.87	2.33	NA	NA	1.46	2.02
Proposed Goal Achieved (%)	125%	123%	127%	158%	138%	130%

Note: This table shows savings and goals from only EEPS programs. "NA" means value are not provided or derived.

\* PY9+ is the sum of PY9 original 12 months program savings and transition period savings.

† Statutory MWh Goal is sourced from 220 ILCS 5/8-103 and Docket No. 13-0495, ComEd Ex 2.1.

‡ ComEd Modified MWh Goal is sourced from Docket No. 13-0495, EE&DR Plan compliance filed (Feb.27.2014, Docket No. 17-0212). Joint filing (April 27, 2017)

§ The verified net savings are sourced from the annual final summary reports. The transition period net MWh are derived from PY9 Transition Period WAML Memo dated 8/30/2018 (program verified gross MWh savings multiplied by program NTG values). The PY9 original 12 months MWh savings is derived from the difference in PY9 Plus program level MWh and the transition period MWh savings. Program level details are provided in Table 3-1.

†§ Total Resource Cost (TRC) values are sourced from PY7-PY9 TRC Reports TRC reports submitted to ComEd on June 26, 2019.

Source: ComEd tracking data, Navigant team analysis, and Plan 3.

The findings from Table 2-1 show that ComEd exceeded its proposed EEPS MWh goals by 125% for PY7, 123% for PY8, 127% for PY9 (original period), and 138% PY9 plus transition period. ComEd achieved 158% of the MWh goal set for the Transition Period. Overall, ComEd achieved 130% of goal in Plan 3, which translates to 585,827 MWh more than the proposed goal.

Table 2-2 through Table 2-4 summarize the incremental energy and demand savings the ComEd portfolio achieved in PY7 through PY9, combining savings from EEPS, IPA, and DCEO transition programs.

**Table 2-2. Total Annual Energy Savings**

Energy Savings Category	PY7 (MWh)	PY8 (MWh)	PY9 Original 12 Months (MWh)	PY9 Transition Months (MWh)*	Total PY9+ (MWh)	Overall Total (MWh)
Ex Ante Gross Savings	1,534,824	1,562,353	2,316,271	45,202	2,361,473	5,458,650
Portfolio Gross Realization Rate	0.98	1.12	0.97	0.93	0.97	1.01
Verified Gross Savings	1,497,299	1,751,675	2,241,572	42,225	2,283,796	5,532,770
Portfolio Net-to-Gross Ratio (NTG)	0.75	0.77	1.04	0.84	1.04	0.88
Verified Net Savings	1,122,657	1,352,339	2,334,999	35,482	2,370,481	4,845,477

Note: The totals in this table may vary slightly from the totals in other tables and the totals summed across the individual program reports due to rounding issues. Some programs do not report ex ante gross savings (e.g., the Home Energy Reports program), so the evaluation did not calculate verified gross savings. The ex ante gross shown here is as reported by the programs and verified gross is only for those reporting ex ante gross. For the purposes of calculating a portfolio NTG ratio, Navigant used only those programs reporting ex ante gross and verified gross. Based on the same issue, the ratio of the net and verified gross savings shown in the table will not present an accurate ratio for the portfolio.

\* PY7 and PY8 savings include EEPS and IPA and exclude DCEO. The PY9+ program includes DCEO transition savings.

Source: ComEd tracking data and Navigant team analysis.

<sup>6</sup> The triennial energy efficiency and demand response plan filings required by Section 8-103 of Illinois Public Utilities Act ("Act"), 220 ILCS 5/8-103, generally referred to herein as "Plan" or "Plan 3".

**Table 2-3. Total Annual Demand Savings**

Demand Savings Category	PY7 (MW)	PY8 (MW)	PY9 Original 12 Months (MW)	PY9 Transition Months (MW)*	Total PY9+ (MW)	Overall Total (MW)
Ex Ante Gross Savings	NA*	NA	98	3.03	101	101
Portfolio Gross Realization Rate	NA	NA	12.34	3.52	12.08	12.08
Verified Gross Savings	NA	NA	1,215	10.68	1,225	1,225
Portfolio Net-to-Gross Ratio (NTG)	NA	NA	0.68	0.90	0.68	0.68
Verified Net Savings	NA	NA	829	9.59	839	839

Note: MW Demand savings are equivalent to the reduction in aggregate non-coincident kW in PY7-PY9.

\* PY7 and PY8 savings include EEPS and IPA and exclude DCEO. The PY9 program includes DCEO transition savings.

Source: ComEd tracking data and Navigant team analysis.

**Table 2-4. Total Annual Peak Demand Savings**

Peak Demand Savings Category	PY7 (MW)	PY8 (MW)	PY9 Original 12 Months (MW)	PY9 Transition Months (MW)*	Total PY9+ (MW)	Overall Total (MW)
Ex Ante Gross Savings	80	62	176	1.76	178	320.39
Portfolio Gross Realization Rate	2.46	3.18	1.69	3.12	1.71	7.35
Verified Gross Savings	197	198	298	5.48	304	698.97
Portfolio Net-to-Gross Ratio (NTG)	0.72	0.75	0.75	0.96	0.75	2.22
Verified Net Savings	141	148	223	5.26	229	519

Note: The MW Peak Demand are aggregate non-coincidence kW savings occurring at coincident Summer Peak period, defined as 1:00-5:00 PM Central Prevailing Time on non-holiday weekdays, June through August.

\* PY7 and PY8 savings include EEPS and IPA and exclude DCEO. The PY9 program includes DCEO transition savings.

Source: ComEd tracking data and Navigant team analysis.

Table 2-5 summarizes savings from the EEPS, IPA and DCEO transition period portfolios. In Plan 3, ComEd’s energy efficiency portfolio achieved a total of 4,845,477 verified net MWh savings, with the EEPS portion achieving 2,563,468 verified net MWh, the IPA portion achieving 2,246,527 verified net MWh, and the DCEO transition period programs achieving 35,482 verified net MWh. The total savings included 4,625,705 net MWh from funded measures and 219,772 net MWh savings from previously funded lighting measures, or carryover, funded in PY7 or PY8 through the Lighting Discounts Program and Instant Discounts Program and expected to be installed by PY9. Of the 219,772 MWh in total carryover savings, 189,395 net MWh was attributable to EEPS and 30,377 net MWh was attributable to IPA.

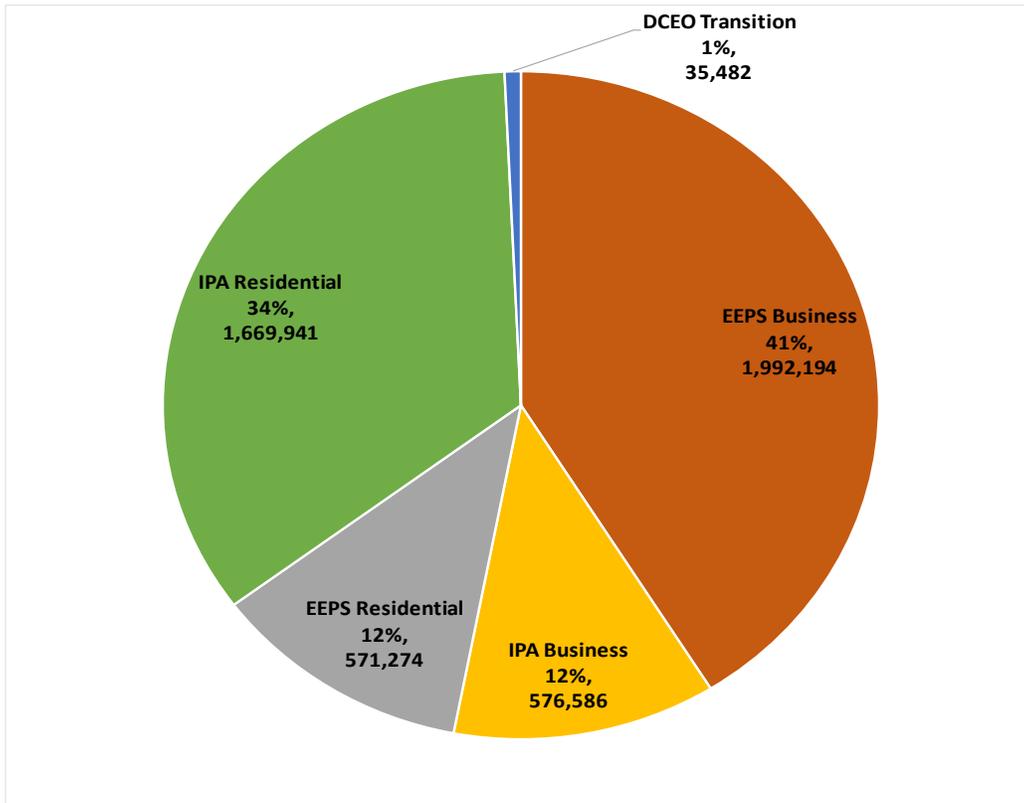
**Table 2-5. Total Annual Savings by Portfolio**

Savings Type	Portfolio	Verified Net Savings PY7	Verified Net Savings PY8	Verified Net Savings PY9	Verified Net Savings Total
Energy (MWh)	EEPS	809,878	666,514	1,087,076	2,563,468
Energy (MWh)	IPA	312,779	685,825	1,247,923	2,246,527
Energy (MWh)	DCEO Transition	-	-	35,482	35,482
<b>Energy (MWh)</b>	<b>Total</b>	<b>1,122,657</b>	<b>1,352,339</b>	<b>2,370,481</b>	<b>4,845,477</b>
Demand (MW)	EEPS	-	-	261.8	261.8
Demand (MW)	IPA	-	-	567.2	567.2
Demand (MW)	DCEO Transition	-	-	9.6	9.6
<b>Demand (MW)</b>	<b>Total</b>			<b>838.6</b>	<b>838.6</b>
Peak Demand (MW)	EEPS	124.5	91.7	124.5	340.6
Peak Demand (MW)	IPA	17.0	58.8	98.9	174.7
Peak Demand (MW)	DCEO Transition	-	-	5.3	5.3
<b>Peak Demand (MW)</b>	<b>Total</b>	<b>141.5</b>	<b>148.4</b>	<b>228.7</b>	<b>518.6</b>

Note: MW Demand savings are equivalent to the aggregate non-coincident reduction in kW in PY7-PY9. The Peak Demand are kW savings occurring at coincident Summer Peak period, defined as 1:00-5:00 PM Central Prevailing Time on non-holiday weekdays, June through August. Savings may be rounded to the nearest MWh or MW, so direct addition of numbers may produce slight discrepancy.  
 Source: ComEd tracking data and Navigant team analysis.

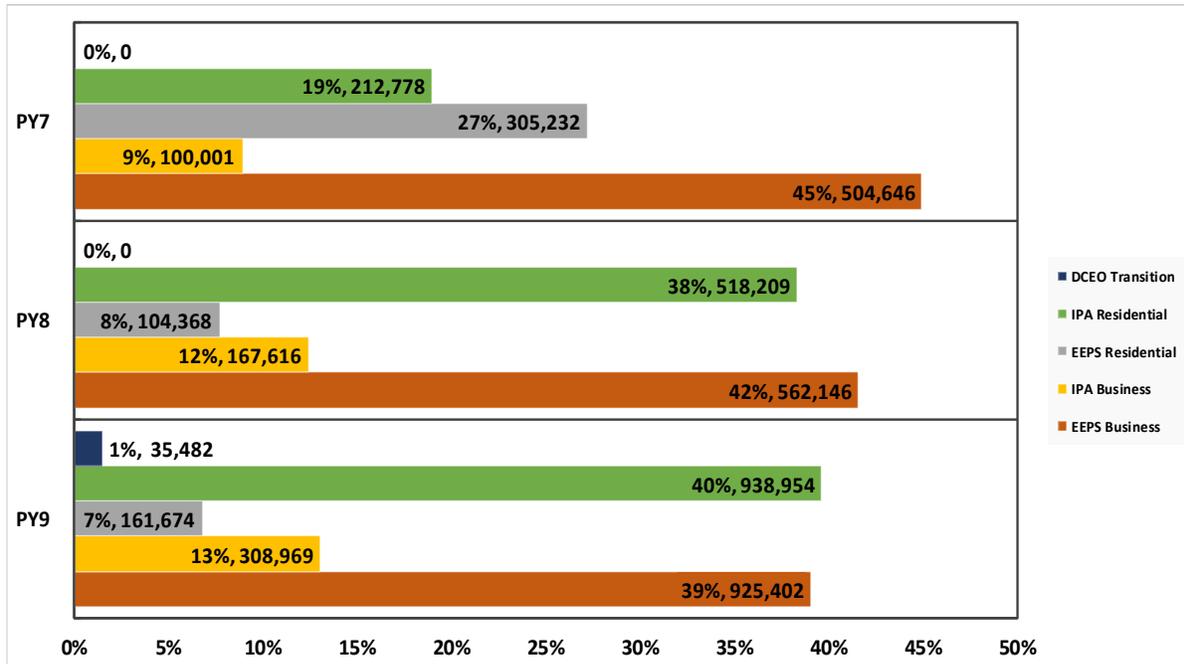
Overall, the IPA programs realized 46 percent of the portfolio savings and the EEPS programs had 53 percent while one percent came from DCEO transition period programs. The EEPS Business programs contributed 41 percent of the total savings, followed by IPA Residential programs at 34 percent (see Figure 2-1). Figure 2-2 disaggregates the annual savings by portfolio category. Further detail on the savings by program category is shown in subsequent sections.

Figure 2-1. Energy (MWh) Savings by Portfolio Category (3-Year Total)



Source: ComEd tracking data and Navigant team analysis.

Figure 2-2. Energy Savings (MWh) by Portfolio Category (Annual Breakdown)



Source: ComEd tracking data and Navigant team analysis.

### 3. SAVINGS BY PROGRAM

The savings by program are shown in Table 3-1 and Table 3-2. Note that the AirCare Plus Program, Lighting Discounts, Small Business and Streetlighting Programs had savings counted toward both EEPS and IPA targets, and therefore appear twice in the tables, but savings were not double counted. The Lighting Discounts Program had carryover savings counted toward both EEPS and IPA targets, while the Instant Discounts Program had carryover savings counted toward the EEPS target.

### Table 3-1. Annual Energy Savings by Program

Portfolio	Sector	Program	PY7 Verified Net Savings (MWh)	PY8 Verified Net Savings (MWh)	PY9 Verified Net Savings (MWh)	Total Verified Net Savings (MWh)
EEPS	Business	AirCare Plus		2,507	12,734	15,241
EEPS	Business	C&I New Construction	16,536	34,642	49,511	100,689
EEPS	Business	Custom	18,788	18,173	24,213	61,174
EEPS	Business	Data Center Efficiency	6,599	11,492	30,152	48,243
EEPS	Business	Industrial Systems Optimization	10,261	29,576	26,019	65,856
EEPS	Business	Instant Discounts	155,239	191,523	171,805	518,567
EEPS	Business	Operational Savings			3,922	3,922
EEPS	Business	Retrocommissioning	21,703	23,955	33,398	79,056
EEPS	Business	Standard	180,799	164,471	265,810	611,080
EEPS	Business	Strategic Energy Management (SEM)			15,978	15,978
EEPS	Business	Small Business Energy Savings	73,704			73,704
EEPS	Business	LED Street Lighting	460			460
EEPS	Business	<b>Subtotal</b>	<b>484,089</b>	<b>476,339</b>	<b>633,542</b>	<b>1,593,970</b>
EEPS	Pilot Business	Business Energy Analyzer		59,217	276,462	335,679
EEPS	Pilot Business	Multi-family Common Area Pilot			4,391	4,391
EEPS	Pilot Business	Roof Energy Data Model		103		103
EEPS	Pilot Business	Strategic Energy Management Pilot		6,800		6,800
EEPS	Pilot Business	<b>Subtotal</b>		<b>66,120</b>	<b>280,853</b>	<b>346,973</b>
EEPS	Residential	Appliance Rebates	4,697	4,446	40,743	49,886
EEPS	Residential	Elementary Education Kits	1,537	1,700	4,377	7,614
EEPS	Residential	Fridge Freezer Recycling	18,885	14,221	34,336	67,442
EEPS	Residential	Heating, Cooling & Weatherization Rebates (HVAC)*		18,743	19,421	38,164
EEPS	Residential	Heating, Cooling & Weatherization Rebates (Wx)			1,425	1,425
EEPS	Residential	Home Energy Assessments	4,283	7,316	25,223	36,822
EEPS	Residential	Multi-Family Comprehensive EE	3,963	3,123	5,491	12,577
EEPS	Residential	Residential New Construction	518	547	943	2,008
EEPS	Residential	Lighting Discounts	213,377			213,377
EEPS	Residential	<b>Subtotal</b>	<b>247,260</b>	<b>50,096</b>	<b>131,958</b>	<b>429,314</b>
EEPS	Pilot Residential	Bigdely			100	100
EEPS	Pilot Residential	Nest Seasonal Savings			3,522	3,522
EEPS	Pilot Residential	<b>Subtotal</b>			<b>3,621</b>	<b>3,621</b>
EEPS	EEPS Carryover	Instant Discounts	20,557	19,687	11,007	51,251
EEPS	EEPS Carryover	Lighting Discounts	57,776	54,272	26,095	138,143
EEPS	EEPS Carryover	<b>Subtotal</b>	<b>78,333</b>	<b>73,959</b>	<b>37,103</b>	<b>189,395</b>
EEPS	EEPS Pilot	Energy Check	196			196
EEPS	EEPS Pilot	<b>Subtotal</b>	<b>196</b>			<b>196</b>
EEPS		<b>Portfolio Total</b>	<b>809,878</b>	<b>666,514</b>	<b>1,087,076</b>	<b>2,563,468</b>
IPA	IPA Business	Agriculture Energy Efficiency			630	630
IPA	IPA Business	AirCare Plus		6,910	10,535	17,445
IPA	IPA Business	CLEARresult LLLC			8,094	8,094
IPA	IPA Business	CLEARresult Schools DI		773	1,285	2,058
IPA	IPA Business	Elevate Energy Assisted & Senior Housing			1,222	1,222
IPA	IPA Business	Energy Advisor MBCx			2,021	2,021
IPA	IPA Business	LED Street Lighting		5,978	4,497	10,475
IPA	IPA Business	Matrix DCV		8	737	745
IPA	IPA Business	Matrix K-12 Private Schools DI		181	761	942
IPA	IPA Business	New Construction Small Buildings		42	856	898
IPA	IPA Business	Rural Small Business EE Kits			3,251	3,251
IPA	IPA Business	SEDAC Enhanced Building Optimization			2,119	2,119
IPA	IPA Business	Small Business	100,001	153,724	256,465	510,190
IPA	IPA Business	Small Commercial Lit Signage			16,496	16,496
IPA	IPA Business	<b>Subtotal</b>	<b>100,001</b>	<b>167,616</b>	<b>308,969</b>	<b>576,586</b>
IPA	IPA Residential	CLEARresult Community-based CFL Distribution			21,383	21,383
IPA	IPA Residential	CUB Energy Saver	1,224	2,169	2,191	5,584
IPA	IPA Residential	Elevate Energy MF All Electric	908	1,784	1,127	3,819
IPA	IPA Residential	Home Energy Reports	205,278	252,036	442,029	899,343
IPA	IPA Residential	Lighting Discounts		254,854	443,105	697,959
IPA	IPA Residential	Low-income Kits (UIC ERC)			5,581	5,581
IPA	IPA Residential	NTC Gas & Electric Water Heater Kits		1,247	2,232	3,479
IPA	IPA Residential	Shelton Solutions Great Energy Stewards			530	530
IPA	IPA Residential	<b>Subtotal</b>	<b>207,410</b>	<b>512,090</b>	<b>918,179</b>	<b>1,637,679</b>
IPA	IPA Carryover	Lighting Discounts	5,368	4,234	20,775	30,377
IPA	IPA Carryover	<b>Subtotal</b>	<b>5,368</b>	<b>4,234</b>	<b>20,775</b>	<b>30,377</b>
IPA	IPA Pilot	C3 Home Energy Reports			1,885	1,885
IPA	IPA Pilot	<b>Subtotal</b>		<b>1,885</b>		<b>1,885</b>
IPA		<b>Portfolio Total</b>	<b>312,779</b>	<b>685,825</b>	<b>1,247,922</b>	<b>2,246,526</b>
DCEO Transition	Income Eligible	Affordable Housing New Construction			40	40
DCEO Transition	Income Eligible	Illinois Home Weatherization Assistance Program (IHWAP)			802	802
DCEO Transition	Income Eligible	Residential Retrofit: Energy Savers Multi-Family			1,006	1,006
DCEO Transition	Income Eligible	Residential Retrofit: Single Family Retrofits (CBA)			614	614
DCEO Transition	Income Eligible	<b>Subtotal</b>			<b>2,461</b>	<b>2,461</b>
DCEO Transition	Public Sector	C&I New Construction			1,887	1,887
DCEO Transition	Public Sector	Custom			371	371
DCEO Transition	Public Sector	Free Lights			4,596	4,596
DCEO Transition	Public Sector	LED Street Lighting			12,955	12,955
DCEO Transition	Public Sector	PHA Efficient Living			435	435
DCEO Transition	Public Sector	Retrocommissioning			191	191
DCEO Transition	Public Sector	Savings Through Efficient Products (STEP)			1,763	1,763
DCEO Transition	Public Sector	Standard			10,823	10,823
DCEO Transition	Public Sector	<b>Subtotal</b>			<b>33,021</b>	<b>33,021</b>
DCEO Transition		<b>Portfolio Total</b>			<b>35,482</b>	<b>35,482</b>
DCEO Transition	All	<b>Grand Total</b>	<b>1,122,657</b>	<b>1,352,339</b>	<b>2,370,481</b>	<b>4,845,477</b>

Note: The Small Business, Lighting Discount, LED Streetlighting and SEM had both EEPS and IPA.

\* Heating and Cooling Rebates included both HVAC and weatherization savings in PY8 but split in PY9.

Source: ComEd tracking data and Navigant team analysis.

Table 3-2 shows total summer peak demand savings by program. Very few programs reported total demand savings. The total peak demand reduction was 519 MW for the 3-year period.

**Table 3-2. Annual Peak Demand Savings by Program**

Portfolio	Sector	Program	PY7 Verified Net Savings (MW)	PY8 Verified Net Savings (MW)	PY9 Verified Net Savings (MW)	Total Verified Net Savings (MW)
EEPS	Business	AirCare Plus		0.31	1.71	2.02
EEPS	Business	C&I New Construction	3.37	6.87	8.58	18.82
EEPS	Business	Custom	4.74	2.45	3.26	10.45
EEPS	Business	Data Center Efficiency	0.75	1.00	2.86	4.61
EEPS	Business	Industrial Systems Optimization	1.50	4.09	3.37	8.96
EEPS	Business	Instant Discounts	34.50	39.00	34.07	107.57
EEPS	Business	Operational Savings				-
EEPS	Business	Retrocommissioning	2.25	0.48	2.20	4.93
EEPS	Business	Standard	22.31	18.72	30.74	71.77
EEPS	Business	Strategic Energy Management (SEM)				-
EEPS	Business	Small Business Energy Savings	13.15			13.15
EEPS	Business	LED StreetLighting	0.08			0.08
EEPS	Business	Subtotal	82.65	72.92	86.78	242.35
EEPS	Pilot Business	Business Energy Analyzer				-
EEPS	Pilot Business	Multi-family Common Area Pilot			0.49	0.49
EEPS	Pilot Business	Root3 Energy Data Model				-
EEPS	Pilot Business	Subtotal		-	0.49	0.49
EEPS	Residential	Appliance Rebates	3.00	0.76	9.67	13.43
EEPS	Residential	Elementary Education Kits	0.16	0.18	0.44	0.78
EEPS	Residential	Fridge Freezer Recycling	2.38	1.42	4.64	8.44
EEPS	Residential	Heating, Cooling & Weatherization Rebates (HVAC)*		4.75	7.57	12.32
EEPS	Residential	Heating, Cooling & Weatherization Rebates (Wx)			0.58	0.58
EEPS	Residential	Home Energy Assessments	0.44	0.75	2.98	4.17
EEPS	Residential	Multi-Family Comprehensive EE	0.44	0.31	0.54	1.29
EEPS	Residential	Residential New Construction	0.28	0.28	0.46	1.02
EEPS	Residential	Lighting Discounts	24.50			24.50
EEPS	Residential	Subtotal	31.20	8.45	26.88	66.53
EEPS	Pilot Residential	Bidgely				-
EEPS	Pilot Residential	Nest Seasonal Savings			5.25	5.25
EEPS	Pilot Residential	Subtotal			5.25	5.25
EEPS	EEPS Carryover	Instant Discounts	4.20	4.00	2.19	10.39
EEPS	EEPS Carryover	Lighting Discounts	6.40	6.30	2.90	15.60
EEPS	EEPS Carryover	Subtotal	10.60	10.30	5.09	25.99
EEPS	EEPS Pilot	Energy Check				-
EEPS	EEPS Pilot	Subtotal	-	-	-	-
EEPS		Portfolio Total	124.45	91.67	124.49	340.61
IPA	IPA Business	Agriculture Energy Efficiency			0.10	0.10
IPA	IPA Business	AirCare Plus		0.06	1.90	1.96
IPA	IPA Business	CLEAResult LLLC			1.59	1.59
IPA	IPA Business	CLEAResult Schools DI		0.19	0.25	0.44
IPA	IPA Business	Elevate Energy Assisted & Senior Housing			0.13	0.13
IPA	IPA Business	Energy Advisor MBCx				-
IPA	IPA Business	LED StreetLighting		0.99	0.71	1.70
IPA	IPA Business	Matrix DCV				-
IPA	IPA Business	Matrix K-12 Private Schools DI		0.04	0.20	0.24
IPA	IPA Business	New Construction Small Buildings		0.01	0.10	0.11
IPA	IPA Business	Rural Small Business EE Kits			0.41	0.41
IPA	IPA Business	SEDAC Enhanced Building Optimization			0.30	0.30
IPA	IPA Business	Small Business	16.22	23.68	35.55	75.45
IPA	IPA Business	Small Commercial Lit Signage				-
IPA	IPA Business	Subtotal	16.22	24.97	41.22	82.41
IPA	IPA Residential	CLEAResult Community-based CFL Distribution			2.14	2.14
IPA	IPA Residential	Elevate Energy MF All Electric	0.12	0.11	0.12	0.35
IPA	IPA Residential	CUB Energy Saver				-
IPA	IPA Residential	Home Energy Reports				-
IPA	IPA Residential	Lighting Discounts		31.00	52.15	83.15
IPA	IPA Residential	Low-income Kits (UIC ERC)			0.58	0.58
IPA	IPA Residential	NTC Gas & Electric Water Heater Kits		0.20	0.28	0.48
IPA	IPA Residential	Shelton Solutions Great Energy Stewards				-
IPA	IPA Residential	Subtotal	0.12	31.31	55.27	86.70
IPA	IPA Carryover	Lighting Discounts	0.70	0.50	2.42	2.42
IPA	IPA Carryover	Subtotal	0.70	0.50	2.42	3.62
IPA	IPA Pilot	C3 Home Energy Reports				-
IPA	IPA Pilot	Subtotal	-	-	-	-
IPA		Portfolio Total	17.04	56.78	98.92	172.74
DCEO Transition	Income Eligible	Affordable Housing New Construction			0.01	0.01
DCEO Transition	Income Eligible	Illinois Home Weatherization Assistance Program (IHWAP)			0.19	0.19
DCEO Transition	Income Eligible	Residential Retrofit: Energy Savers Multi-Family			0.16	0.16
DCEO Transition	Income Eligible	Residential Retrofit: Single Family Retrofits (CBA)			0.13	0.13
DCEO Transition	Income Eligible	Subtotal			0.49	0.49
DCEO Transition	Public Sector	C&I New Construction				-
DCEO Transition	Public Sector	Custom			0.06	0.06
DCEO Transition	Public Sector	Free Lights			0.74	0.74
DCEO Transition	Public Sector	LED StreetLighting			2.05	2.05
DCEO Transition	Public Sector	PHA Efficient Living			0.08	0.08
DCEO Transition	Public Sector	Retrocommissioning			0.01	0.01
DCEO Transition	Public Sector	Savings Through Efficient Products (STEP)			0.67	0.67
DCEO Transition	Public Sector	Standard			1.18	1.18
DCEO Transition	Public Sector	Subtotal			4.77	4.77
DCEO Transition		Portfolio Total			5.26	5.26
All		Grand Total	141.49	148.45	228.66	518.60

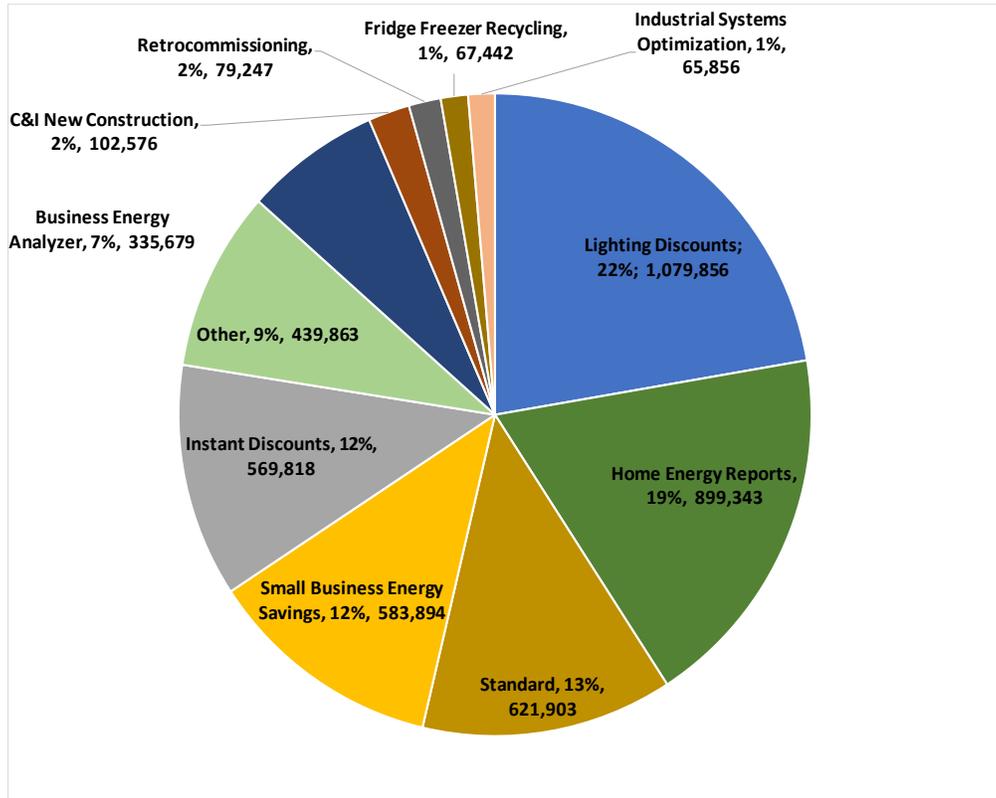
Note: The Small Business, Lighting Discount, and LED Streetlighting programs had both EEPS and IPA.

\* Heating and Colling Rebates included both HVAC and weatherization savings in PY8 but split in PY9.

Source: ComEd tracking data and Navigant team analysis.

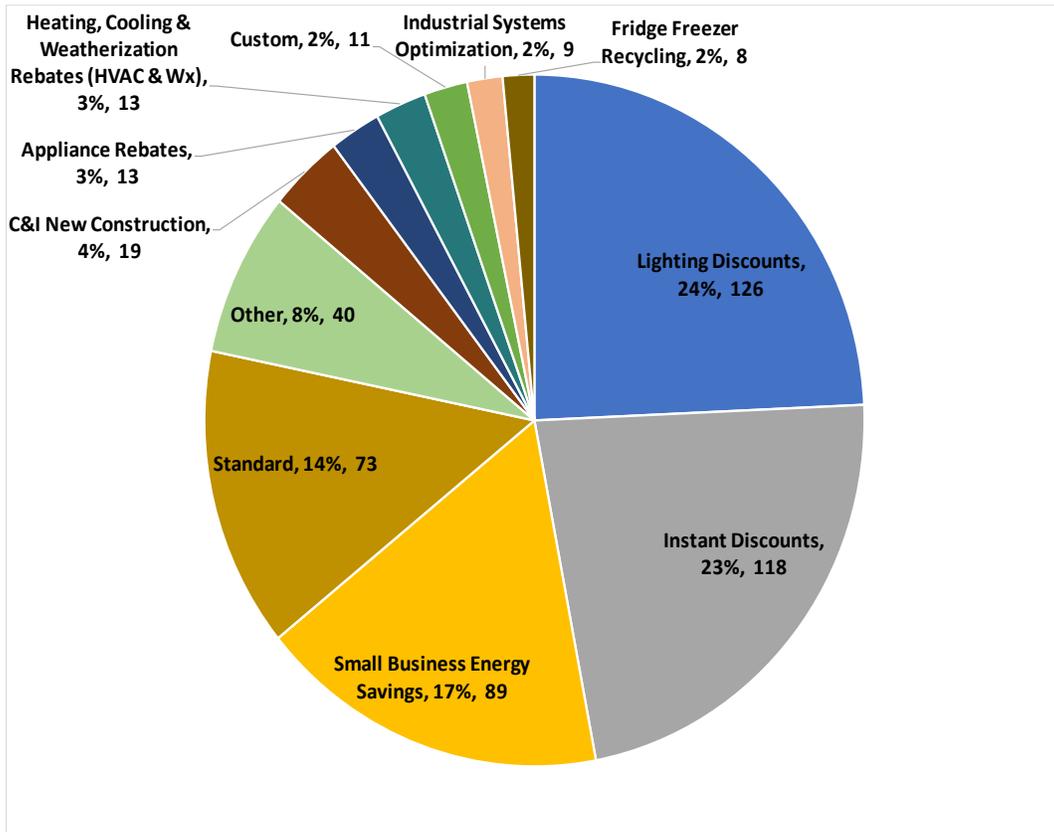
Figure 3-1 and Figure 3-2 show energy and summer peak demand savings for the programs with highest net savings impact. Seven programs Figure 3-1 account for 84% of the net energy savings (or 4,193,069 MWh), and seven programs in Figure 3-2 account for 87% of the demand reduction or 451 MW.

**Figure 3-1. Net Energy (MWh) Savings by Program**



Source: ComEd tracking data and Navigant team analysis.

Figure 3-2. Net Peak (MW) Demand Savings by Program



Source: ComEd tracking data and Navigant team analysis.

#### 4. LIFETIME SAVINGS AND COST BY PROGRAM

This table provides the weighted average measure life and estimated lifetime savings from the verified first year gross and net savings, and cost information.

**Table 4-1. Verified First Year and Lifetime MWh Savings in PY7**

Portfolio	Sector	ComEd PY7 Program	Verified Gross Realization Rate (%)	Verified Gross Savings			Verified Net Savings	
				First Year Annual Energy Savings (MWh) - Gross	Lifetime Savings (MWh) - Gross	NTG (%)	First Year Annual Energy Savings (MWh) - Net	Lifetime Savings (MWh) - Net
EEPS	Residential	Residential Energy Star Lighting	100%	350,816	2,069,814	0.61	213,377	1,258,924
EEPS	Residential	Residential Fridge and Freezer	98%	34,011	4,209,792	0.56	18,885	226,620
EEPS	Residential	Multifamily - Tenant Area	101%	4,065	2,104,896	0.98	3,963	23,778
EEPS	Residential	Home Energy Rebates	119%	4,718	6,314,688	0.99	4,697	84,546
EEPS	Residential	Home Energy Assessments	100%	5,354	2,069,814	0.80	4,283	25,270
EEPS	Residential	Residential New Construction	123%	647	7,016,320	0.80	518	10,360
EEPS	Residential	Elementary Energy Education	104%	2,022	2,420,630	0.76	1,537	10,605
<b>EEPS</b>	<b>Residential</b>	<b>Subtotal</b>	<b>100%</b>	<b>401,633</b>	<b>26,205,955</b>	<b>0.62</b>	<b>247,260</b>	<b>1,640,103</b>
EEPS	Business	Business Standard	101%	225,492	4,455,363	0.80	180,799	2,296,147
EEPS	Business	Business Instant Lighting Discount	92%	229,798	2,806,528	0.68	155,239	1,241,912
EEPS	Business	Small Business Energy Savings	97%	77,582	4,806,179	0.95	73,704	1,009,745
EEPS	Business	Business Custom	99%	29,356	4,315,037	0.64	18,788	231,092
EEPS	Business	New Construction	93%	28,027	4,209,792	0.59	16,536	198,432
EEPS	Business	Retro-Commissioning	97%	20,868	1,754,080	1.04	21,703	108,515
EEPS	Business	Industrial Systems	86%	15,089	3,543,242	0.68	10,261	103,636
EEPS	Business	Data Centers	95%	13,749	5,262,240	0.48	6,599	98,985
EEPS	Business	LED Street Lighting	100%	460	4,279,955	1.00	460	5,612
<b>EEPS</b>	<b>Business</b>	<b>Subtotal</b>	<b>96%</b>	<b>640,421</b>	<b>35,432,416</b>	<b>0.76</b>	<b>484,089</b>	<b>5,294,077</b>
EEPS	Third Party	Energy Check/Pulse		196		1.00	196	
EEPS	EEPS Carryover	EEPS Carryover						
EEPS	EEPS Carryover	Residential Energy Star Lighting	79%	101,847	1,894,406	0.56	57,776	311,990
EEPS	EEPS Carryover	Business Instant Lighting Discount (BILD)	NA	30,501	2,806,528	0.68	20,557	164,456
<b>EEPS</b>	<b>EEPS Carryover</b>	<b>Subtotal</b>	<b>102%</b>	<b>132,348</b>		<b>0.59</b>	<b>78,333</b>	<b>476,446</b>
<b>EEPS</b>		<b>Portfolio Total</b>	<b>98%</b>	<b>1,174,598</b>		<b>0.69</b>	<b>809,878</b>	<b>7,410,626</b>
IPA	ComEd IPA	Small Business Energy Savings IPA	102%	105,265	4,911,424	0.95	100,001	1,400,014
IPA	ComEd IPA	Home Energy Report	95%	205,278	350,816	1.00	205,278	205,278
IPA	ComEd IPA	Residential Lighting IPA Carryover	100%	9,940	1,052,448	0.54	5,368	16,104
<b>IPA</b>	<b>ComEd IPA</b>	<b>Subtotal</b>		<b>320,483</b>	<b>6,314,688</b>	<b>0.97</b>	<b>310,647</b>	<b>1,621,396</b>
IPA	Third Party IPA	Elevate Electric Multifamily	94%	994	4,876,342	0.95	908	12,621
IPA	Third Party IPA	CUB	NA	1,224	350,816	1.00	1,224	1,224
IPA	Third Party IPA	Energy Stewards*	NA	-	350,816	1.00	-	-
<b>IPA</b>	<b>Third Party IPA</b>	<b>Subtotal</b>		<b>2,218</b>	<b>5,577,974</b>	<b>0.96</b>	<b>2,132</b>	<b>13,845</b>
<b>IPA</b>		<b>Portfolio Total</b>	<b>98%</b>	<b>322,701</b>		<b>0.97</b>	<b>312,779</b>	<b>1,635,241</b>
<b>All</b>	<b>All</b>	<b>Total</b>	<b>98%</b>	<b>1,497,299</b>		<b>0.75</b>	<b>1,122,657</b>	<b>9,045,868</b>

\* Savings from the Energy Stewards program were evaluated using regression billing analysis.

Source: Evaluation Analysis

**Table 4-2. Verified First Year and Lifetime MW Savings in PY7**

Portfolio	Sector	ComEd PY7 Program	Verified Gross Realization Rate (%)	Verified Gross Savings			Verified Net Savings		
				First Year Peak Demand Savings (MW) - Gross	Lifetime Savings (MW) - Gross	NTG (%)	First Year Peak Demand Savings (MW) - Net	Lifetime Savings (MW) - Net	
EEPS	Residential	Residential Energy Star Lighting	NA	40.4	238	0.61	24.5	145	
EEPS	Residential	Residential Fridge and Freezer	98%	4.3	52	0.55	2.4	29	
EEPS	Residential	Multifamily - Tenant Area	100%	0.5	3	0.98	0.4	3	
EEPS	Residential	Home Energy Rebates	NA	3.0	54	0.99	3.0	54	
EEPS	Residential	Home Energy Assessments	99%	0.5	3	0.81	0.4	3	
EEPS	Residential	Residential New Construction	NA	0.4	7	0.80	0.3	6	
EEPS	Residential	Elementary Energy Education	106%	0.2	2	0.73	0.2	1	
<b>EEPS</b>	<b>Residential</b>	<b>Subtotal</b>	<b>884%</b>	<b>49.3</b>	<b>359</b>	<b>0.63</b>	<b>31.2</b>	<b>239</b>	
EEPS	Business	Business Standard	96%	27.8	353	0.80	22.3	283	
EEPS	Business	Business Instant Lighting Discount	NA	50.9	407	0.68	34.5	276	
EEPS	Business	Small Business Energy Savings	100%	13.8	189	0.95	13.2	180	
EEPS	Business	Business Custom	336%	7.4	91	0.64	4.7	58	
EEPS	Business	New Construction	86%	5.7	69	0.59	3.4	40	
EEPS	Business	Retro-Commissioning	153%	2.2	11	1.04	2.3	11	
EEPS	Business	Industrial Systems	97%	2.2	22	0.68	1.5	15	
EEPS	Business	Data Centers	93%	1.6	24	0.48	0.8	11	
EEPS	Business	LED Street Lighting	NA	0.1	1	1.00	0.1	1	
<b>EEPS</b>	<b>Business</b>	<b>Subtotal</b>	<b>196%</b>	<b>111.7</b>	<b>1,167</b>	<b>0.74</b>	<b>82.7</b>	<b>877</b>	
EEPS	EEPS Carryover	Residential Energy Star Lighting	NA	11.3	61	0.57	6.4	35	
EEPS	EEPS Carryover	Business Instant Lighting Discount (BILD)	NA	6.2	50	0.68	4.2	34	
<b>EEPS</b>	<b>EEPS Carryover</b>	<b>Subtotal</b>	<b>NA</b>	<b>17.5</b>	<b>111</b>	<b>0.61</b>	<b>10.6</b>	<b>68</b>	
<b>EEPS</b>		<b>Portfolio Total</b>	<b>285%</b>	<b>178.5</b>	<b>1,637</b>	<b>0.70</b>	<b>124.5</b>	<b>1,184</b>	
IPA	ComEd IPA	Small Business Energy Savings IPA	98%	17.1	239	0.95	16.2	227	
IPA	ComEd IPA	Residential Lighting IPA Carryover	NA	1.3	4	0.54	0.7	2	
<b>IPA</b>	<b>ComEd IPA</b>	<b>Subtotal</b>	<b>98%</b>	<b>18.4</b>	<b>243</b>	<b>0.92</b>	<b>16.9</b>	<b>229</b>	
IPA	Third Party IPA	Elevate Electric Multifamily	100%	0.1	2	0.92	0.1	2	
<b>IPA</b>	<b>Third Party IPA</b>	<b>Subtotal</b>	<b>100%</b>	<b>0.1</b>	<b>2</b>	<b>0.92</b>	<b>0.1</b>	<b>2</b>	
<b>IPA</b>		<b>Portfolio Total</b>	<b>106%</b>	<b>18.5</b>	<b>245</b>	<b>0.92</b>	<b>17.0</b>	<b>231</b>	
<b>All</b>	<b>All</b>	<b>Total</b>	<b>246%</b>	<b>197.0</b>	<b>1,881</b>	<b>0.72</b>	<b>141.5</b>	<b>1,415</b>	

NA = programs did not report ex ante kW as such realization rates were not determined.  
 Source: Evaluation Analysis

**Table 4-3. Participation and Acquisition Costs in PY7**

Portfolio	Sector	ComEd PY7 Program	Cost			IL UCT Test	Participation		Weighted Average Measure Life
			First Year Cost per First Year Net Annual Savings	First Year Cost per Net Lifetime Savings	Program Costs		# Units	Units Definition	
EEPS	Residential	Residential Energy Star Lighting	\$95.48	\$16.18	\$20,374,111	3.83	12,237,113	Bulbs	5.9
EEPS	Residential	Residential Fridge and Freezer	\$180.23	\$15.02	\$3,403,623	3.19	40,964	Appliances	12.0
EEPS	Residential	Multifamily - Tenant Area	\$355.98	\$59.33	\$1,410,739	0.85	129,250	Measures	6.0
EEPS	Residential	Home Energy Rebates	\$593.57	\$32.98	\$2,787,986	3.95	8,541	Measures	18.0
EEPS	Residential	Home Energy Assessments	\$628.28	\$106.49	\$2,690,914	0.45	170,122	Measures	5.9
EEPS	Residential	Residential New Construction	\$463.71	\$23.19	\$240,200	3.67	874	Homes	20.0
EEPS	Residential	Elementary Energy Education	\$148.62	\$21.54	\$228,425	2.28	14,254	Kits	6.9
<b>EEPS</b>	<b>Residential</b>	<b>Subtotal</b>	<b>\$125.92</b>	<b>\$18.98</b>	<b>\$31,135,998</b>		<b>12,601,118</b>		<b>6.6</b>
EEPS	Business	Business Standard	\$165.97	\$13.07	\$30,007,158	3.52	4977	Measures	12.7
EEPS	Business	Business Instant Lighting Discount	\$100.49	\$12.56	\$15,600,454	5.31	2250178	Bulbs	8.0
EEPS	Business	Small Business Energy Savings	\$243.73	\$17.79	\$17,964,224	2.53	959103	Measures	13.7
EEPS	Business	Business Custom	\$211.14	\$17.17	\$3,966,886	5.03	123	Projects	12.3
EEPS	Business	New Construction	\$332.72	\$27.73	\$5,501,810	3.09	57	Projects	12.0
EEPS	Business	Retro-Commissioning	\$197.23	\$39.45	\$4,280,406	1.90	64	Projects	5.0
EEPS	Business	Industrial Systems	\$324.04	\$32.08	\$3,324,964	2.37	25	Projects	10.1
EEPS	Business	Data Centers	\$172.59	\$11.51	\$1,138,942	5.87	14	Projects	15.0
EEPS	Business	LED Street Lighting	\$825.66	\$67.68	\$379,802	0.65	735	Measures	12.2
<b>EEPS</b>	<b>Business</b>	<b>Subtotal</b>	<b>\$169.73</b>	<b>\$15.52</b>	<b>\$82,164,646</b>		<b>3,215,276</b>		<b>10.9</b>
EEPS	Third Party	Energy Check/Pulse	\$ -	\$ -	\$ -		10,607	Participants	
EEPS	EEPS Carryover	EEPS Carryover	\$ -	\$ -	\$ -	NA			
EEPS	EEPS Carryover	Residential Energy Star Lighting	\$ -	\$ -	\$ -	NA	1539885	Bulbs	5.4
EEPS	EEPS Carryover	Business Instant Lighting Discount (BILD)	\$ -	\$ -	\$ -	NA	111272	Bulbs	8.0
<b>EEPS</b>	<b>EEPS Carryover</b>	<b>Subtotal</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0</b>		<b>1,651,157</b>		<b>6.1</b>
<b>EEPS</b>		<b>Portfolio Total</b>	<b>\$139.90</b>	<b>\$15.29</b>	<b>\$113,300,644</b>		<b>17,478,158</b>		<b>9.2</b>
IPA	ComEd IPA	Small Business Energy Savings IPA	\$277.25	\$19.80	\$27,725,240	NA	959103	Measures	14.0
IPA	ComEd IPA	Home Energy Report	\$49.66	\$49.66	\$10,194,075	NA	1916492	Participants	1.0
IPA	ComEd IPA	Residential Lighting IPA Carryover	\$28.17	\$9.39	\$151,196	NA	NA		3.0
<b>IPA</b>	<b>ComEd IPA</b>	<b>Subtotal</b>	<b>\$122.55</b>	<b>\$23.48</b>	<b>\$38,070,511</b>		<b>2,875,595</b>		
IPA	Third Party IPA	Elevate Electric Multifamily	\$532.59	\$38.32	\$483,595	NA	5882	Measures	13.9
IPA	Third Party IPA	CUB	\$195.69	\$195.69	\$239,528	NA	10478	Participants	1.0
IPA	Third Party IPA	Energy Stewards*	\$ -	\$ -	\$ -	NA	1673	Measures	1.0
<b>IPA</b>	<b>Third Party IPA</b>	<b>Subtotal</b>	<b>\$339.18</b>	<b>\$52.23</b>	<b>\$723,123</b>		<b>18,033</b>		
<b>IPA</b>		<b>Portfolio Total</b>	<b>\$124.03</b>	<b>\$23.72</b>	<b>\$38,793,634</b>		<b>2,893,628</b>		<b>5.2</b>
<b>All</b>	<b>All</b>	<b>Total</b>	<b>\$135.48</b>	<b>\$16.81</b>	<b>\$152,094,278</b>		<b>20,371,786</b>		<b>8.1</b>

NA = Not Applicable. In the case of IL UCT Test, Navigant did not perform UCT analysis on this program.

\* Costs weren't available in ComEd's PY7 TRC analysis report

Source: Evaluation Analysis. Costs data from Utility Cost Test (UCT), sourced from PY7 TRC Reports.

### Table 4-4. Verified First Year and Lifetime MWh Savings in PY8

Portfolio	Sector	ComEd PY8 Program	Verified Gross Realization Rate (%)	Verified Gross Savings			Verified Net Savings	
				First Year Annual Energy Savings (MWh) - Gross	Lifetime Savings (MWh) - Gross	NTG (%)	First Year Annual Energy Savings (MWh) - Net	Lifetime Savings (MWh) - Net
EEPS	Residential	Residential Fridge and Freezer*	101%	26,185	208,956	0.54	14,221	113,484
EEPS	Residential	Multifamily - Tenant Area	100%	3,268	21,013	0.98	3,123	20,081
EEPS	Residential	HVAC and Weatherization	104%	18,770	279,485	1.00	18,743	279,083
EEPS	Residential	Home Energy Assessments	97%	8,875	60,528	0.82	7,316	49,895
EEPS	Residential	Residential New Construction	101%	547	10,949	1.00	547	10,949
EEPS	Residential	Elementary Energy Education	97%	1,734	12,726	0.98	1,700	12,478
EEPS	Residential	Appliance Rebates	101%	5,580	59,929	0.80	4,446	47,750
EEPS	Residential	Meter Genius Pilot†	-	-	-	-	-	-
<b>EEPS</b>	<b>Residential</b>	<b>Subtotal</b>	<b>101%</b>	<b>64,959</b>	<b>653,587</b>	<b>0.77</b>	<b>50,096</b>	<b>533,720</b>
EEPS	Business	Business Standard	99%	230,289	2,765,771	0.71	164,471	1,975,297
EEPS	Business	Business Instant Lighting Discount	96%	282,451	1,931,128	0.76	191,523	1,470,897
EEPS	Business	Business Custom	79%	26,725	316,959	0.68	18,173	215,532
EEPS	Business	New Construction‡	90%	43,303	866,060	0.80	34,642	706,060
EEPS	Business	Retro-Commissioning	99%	25,215	126,075	0.95	23,955	119,775
EEPS	Business	Industrial Systems	107%	39,434	279,981	0.75	29,576	209,990
EEPS	Business	Data Centers	103%	19,153	287,295	0.60	11,492	172,380
EEPS	Business	AirCare Plus	100%	2,786	8,943	0.90	2,507	8,047
EEPS	Business	Agentis Business Energy Analyzer Pilot	100%	59,217	59,217	1.00	59,217	59,217
EEPS	Business	Roof Pilot	39%	108	NA	0.95	103	NA
EEPS	Business	Strategic Energy Management Pilot	113%	7,160	7,160	0.95	6,800	6,800
<b>EEPS</b>	<b>Business</b>	<b>Subtotal</b>	<b>106%</b>	<b>735,841</b>	<b>6,648,589</b>	<b>0.77</b>	<b>542,459</b>	<b>4,943,994</b>
EEPS	EEPS Carryover	Residential Energy Star Lighting§	-	87,810	442,562	0.62	54,272	273,531
EEPS	EEPS Carryover	Business Instant Lighting Discount (BILD)	100%	31,002	153,770	0.65	19,687	99,805
<b>EEPS</b>	<b>EEPS Carryover</b>	<b>Subtotal</b>	<b>383%</b>	<b>118,812</b>	<b>596,332</b>	<b>0.63</b>	<b>73,959</b>	<b>373,336</b>
<b>EEPS</b>		<b>Portfolio Total</b>	<b>117%</b>	<b>919,612</b>	<b>7,898,508</b>	<b>0.75</b>	<b>666,514</b>	<b>5,851,050</b>
IPA	ComEd IPA	Residential Lighting - IPA	117%	381,167	2,904,493	0.67	254,854	1,941,987
IPA	ComEd IPA	Small Business Energy Savings	101%	168,928	1,957,876	0.91	153,724	1,781,661
IPA	ComEd IPA	LED Street Lighting	100%	5,978	72,932	1.00	5,978	72,932
IPA	ComEd IPA	Home Energy Report	97%	252,036	252,036	1.00	252,036	252,036
IPA	ComEd IPA	C3 Home Energy Reports	-	1,885	1,885	1.00	1,885	1,885
IPA	ComEd IPA	Residential Lighting IPA Carryover	-	7,842	51,992	0.54	4,234	28,071
<b>IPA</b>	<b>ComEd IPA</b>	<b>ComEd IPA Total</b>	<b>108%</b>	<b>817,836</b>	<b>5,241,213</b>	<b>0.82</b>	<b>672,711</b>	<b>4,078,573</b>
IPA	Third Party IPA	Elevate Electric Multifamily	96%	1,991	8,940	0.90	1,784	8,010
IPA	Third Party IPA	CUB	-	2,169	2,169	1.00	2,169	2,169
IPA	Third Party IPA	Great Energy Stewards†	-	-	NA	-	-	NA
IPA	Third Party IPA	National Theatre for Children	98%	1,332	7,086	0.94	1,247	6,634
IPA	Third Party IPA	AirCare Plus	100%	7,678	15,586	0.90	6,910	14,027
IPA	Third Party IPA	CLEAResult School Direct Install	104%	813	7,764	0.95	773	7,382
IPA	Third Party IPA	Matrix School Direct Install	84%	191	2,754	0.95	181	2,610
IPA	Third Party IPA	Matrix Demand Control Ventilation	100%	11	106	0.80	8	85
IPA	Third Party IPA	Weidt Group New Construction	92%	42	42	1.00	42	42
<b>IPA</b>	<b>Third Party IPA</b>	<b>Third Party IPA Total</b>	<b>117%</b>	<b>14,226</b>	<b>44,447</b>	<b>0.92</b>	<b>13,114</b>	<b>40,959</b>
<b>IPA</b>		<b>IPA Total</b>	<b>108%</b>	<b>832,062</b>	<b>5,285,660</b>	<b>0.82</b>	<b>685,825</b>	<b>4,119,532</b>
<b>All</b>	<b>All</b>	<b>EEPS and IPA Total</b>	<b>112%</b>	<b>1,720,673</b>	<b>13,184,168</b>	<b>0.79</b>	<b>1,352,339</b>	<b>9,970,582</b>

\* Includes the part use factor

† Savings from the Meter Genius pilot and Energy Stewards program were not statistically significant, which means they cannot be causally attributed to the program.

‡ With interactive effects

§ There were no EEPS savings reported for the Residential Lighting program (only carryover savings).

Source: Evaluation Analysis

### Table 4-5. Verified First Year and Lifetime MW Savings in PY8

Portfolio	Sector	ComEd PY8 Program	Verified Gross Realization Rate (%)	Verified Gross Savings		NTG (%)	Verified Net Savings	
				First Year Peak Demand Savings (MW) - Gross	Lifetime Savings (MW) - Gross		First Year Peak Demand Savings (MW) - Net	Lifetime Savings (MW) - Net
EEPS	Residential	Residential Fridge and Freezer	101%	2.6	21.0	0.5	1.4	11.3
EEPS	Residential	Multifamily - Tenant Area	100%	0.3	2.1	1.0	0.3	2.0
EEPS	Residential	HVAC and Weatherization	107%	4.8	71.1	1.0	4.8	70.7
EEPS	Residential	Home Energy Assessments	103%	0.9	6.2	0.8	0.7	5.1
EEPS	Residential	Residential New Construction	NA	0.3	5.5	1.0	0.3	5.5
EEPS	Residential	Elementary Energy Education	111%	0.2	1.4	1.0	0.2	1.3
EEPS	Residential	Appliance Rebates	96%	0.9	9.6	0.8	0.8	8.2
<b>EEPS</b>	<b>Residential</b>	<b>Subtotal</b>	<b>106%</b>	<b>10.0</b>	<b>116.9</b>	<b>0.8</b>	<b>8.4</b>	<b>104.2</b>
EEPS	Business	Business Standard	81%	25.8	310.1	0.7	18.7	224.8
EEPS	Business	Business Instant Lighting Discount	NA	51.1	392.4	0.8	39.0	299.5
EEPS	Business	Business Custom	123%	3.6	42.7	0.7	2.4	29.0
EEPS	Business	New Construction	81%	8.6	171.8	0.8	6.9	137.4
EEPS	Business	Retro-Commissioning	38%	0.5	2.5	1.0	0.5	2.4
EEPS	Business	Industrial Systems	110%	4.9	34.6	0.8	4.1	29.0
EEPS	Business	Data Centers	103%	1.8	26.4	0.6	1.0	15.0
EEPS	Business	AirCare Plus	NA	0.3	1.1	0.9	0.3	1.0
EEPS	Business	Agentis Business Energy Analyzer Pilot	NA	NA	NA	NA	NA	NA
EEPS	Business	Roof Pilot	NA	NA	NA	NA	NA	NA
EEPS	Business	Strategic Energy Management Pilot	NA	NA	NA	NA	NA	NA
<b>EEPS</b>	<b>Business</b>	<b>Subtotal</b>	<b>184%</b>	<b>96.6</b>	<b>981.6</b>	<b>0.8</b>	<b>72.9</b>	<b>738.3</b>
EEPS	EEPS Carryover	Residential Energy Star Lighting	NA	9.9	49.9	0.6	6.3	31.8
EEPS	EEPS Carryover	Business Instant Lighting Discount (BILD)	NA	6.3	31.2	0.6	4.1	20.3
<b>EEPS</b>	<b>EEPS Carryover</b>	<b>Subtotal</b>	<b>NA</b>	<b>16.2</b>	<b>81.1</b>	<b>0.6</b>	<b>10.4</b>	<b>52.1</b>
<b>EEPS</b>	<b>Portfolio Total</b>		<b>198%</b>	<b>122.8</b>	<b>1,179.7</b>	<b>0.7</b>	<b>91.8</b>	<b>894.5</b>
IPA	ComEd IPA	Residential Lighting - IPA	NA	46.3	352.8	0.7	31.0	236.2
IPA	ComEd IPA	Small Business Energy Savings	NA	26.0	301.6	0.9	23.7	274.5
IPA	ComEd IPA	LED Street Lighting	NA	1.0	12.1	1.0	1.0	12.1
IPA	ComEd IPA	Home Energy Report	NA	NA	NA	NA	NA	NA
IPA	ComEd IPA	C3 Home Energy Reports	NA	NA	NA	NA	NA	NA
IPA	ComEd IPA	Residential Lighting IPA Carryover	NA	1.0	6.6	0.5	0.5	3.3
<b>IPA</b>	<b>ComEd IPA</b>	<b>ComEd IPA Total</b>	<b>NA</b>	<b>74.3</b>	<b>673.1</b>	<b>0.8</b>	<b>56.2</b>	<b>526.1</b>
IPA	Third Party IPA	Elevate Electric Multifamily	NA	0.1	0.6	0.8	0.1	0.5
IPA	Third Party IPA	CUB	NA	NA	NA	NA	NA	NA
IPA	Third Party IPA	Great Energy Stewards	NA	NA	NA	NA	NA	NA
IPA	Third Party IPA	National Theatre for Children	NA	0.2	1.1	1.0	0.2	1.1
IPA	Third Party IPA	AirCare Plus	NA	0.1	0.1	0.9	0.1	0.1
IPA	Third Party IPA	CLEAResult School Direct Install	369%	0.2	1.9	1.0	0.2	1.8
IPA	Third Party IPA	Matrix School Direct Install	241%	0.0	0.6	1.0	0.0	0.6
IPA	Third Party IPA	Matrix Demand Control Ventilation	NA	NA	NA	NA	NA	NA
IPA	Third Party IPA	Weidt Group New Construction	79%	0.0	0.0	1.0	0.0	0.0
<b>IPA</b>	<b>Third Party IPA</b>	<b>Third Party IPA Total</b>	<b>312%</b>	<b>0.6</b>	<b>4.3</b>	<b>0.9</b>	<b>0.6</b>	<b>4.0</b>
<b>IPA</b>	<b>IPA Total</b>		<b>95368%</b>	<b>75.0</b>	<b>677.4</b>	<b>0.8</b>	<b>56.8</b>	<b>530.1</b>
<b>All</b>	<b>All</b>	<b>EEPS and IPA Total</b>	<b>318%</b>	<b>197.7</b>	<b>1,857.1</b>	<b>0.8</b>	<b>148.5</b>	<b>1,424.6</b>

NA = programs did not report ex ante kW or there was no realization of kW savings, as such realization rates were not determined.

Source: Evaluation Analysis

## Table 4-6. Participation and Acquisition Costs in PY8

Portfolio	Sector	ComEd PY8 Program	Verified Gross Realization Rate (%)	Cost			IL UCT Test	Participation		Weighted Average Measure Life
				First Year Cost per First Year Net Annual Savings	First Year Cost per Net Lifetime Savings	Program Costs		# Units	Units Definition	
EEPS	Residential	Residential Fridge and Freezer*	101%	\$426.55	\$53.45	\$6,065,962	1.03	31,801	Appliances	8.0
EEPS	Residential	Multifamily - Tenant Area	100%	\$87.30	\$13.58	\$272,636	3.73	92,981	Measures	6.4
EEPS	Residential	HVAC and Weatherization	104%	\$553.97	\$37.20	\$10,383,126	1.65	42,137	Projects	14.9
EEPS	Residential	Home Energy Assessments	97%	\$680.16	\$99.73	\$4,976,059	0.37	239,961	Measures	6.8
EEPS	Residential	Residential New Construction	101%	\$497.69	\$24.88	\$272,459	3.79	749	Homes	20.0
EEPS	Residential	Elementary Energy Education	97%	\$157.32	\$21.43	\$267,437	2.50	13,474	Kits	7.3
EEPS	Residential	Appliance Rebates	101%	\$998.69	\$92.99	\$4,440,178	0.63	40,740	Appliances	10.7
EEPS	Residential	Meter Genius Pilot†	-	-	-	\$71,474	-	6,016	Participants	1.0
EEPS	Residential	<b>Subtotal</b>	<b>101%</b>	<b>\$533.96</b>	<b>\$50.12</b>	<b>\$26,749,332</b>		<b>467,859</b>		<b>10.7</b>
EEPS	Business	Business Standard	99%	\$193.33	\$16.10	\$31,797,044	2.07	4,382	Measures	12.0
EEPS	Business	Business Instant Lighting Discount	96%	\$59.77	\$7.78	\$11,447,175	6.42	1,566,456	Bulbs	7.7
EEPS	Business	Business Custom	79%	\$162.03	\$13.66	\$2,944,591	4.64	75	Projects	11.9
EEPS	Business	New Construction‡	90%	\$229.27	\$11.25	\$7,942,255	5.38	74	Projects	20.0
EEPS	Business	Retro-Commissioning	99%	\$180.76	\$36.15	\$4,330,066	1.20	80	Projects	5.0
EEPS	Business	Industrial Systems	107%	\$207.61	\$29.24	\$6,140,399	2.38	74	Projects	7.1
EEPS	Business	Data Centers	103%	\$263.07	\$17.54	\$3,023,224	3.02	29	Projects	15.0
EEPS	Business	AirCare Plus	100%	\$168.33	\$52.44	\$422,008	1.07	553	Measures	3.2
EEPS	Business	Agents Business Energy Analyzer Pilot	100%	\$8.87	\$8.87	\$525,000	4.09	1,374	Participants	1.0
EEPS	Business	Roof Pilot	39%	\$609.16	-	\$62,500	NA	1	Project	NA
EEPS	Business	Strategic Energy Management Pilot	113%	\$39.61	\$39.61	\$269,363	5.10	10	Participants	1.0
EEPS	Business	<b>Subtotal</b>	<b>106%</b>	<b>\$127.02</b>	<b>\$13.94</b>	<b>\$68,903,624</b>		<b>1,563,108</b>		<b>9.1</b>
EEPS	EEPS Carryover	Residential Energy Star Lighting§	-	\$0.00	\$0.00	\$0	NA	2,714,372	Bulbs	5.0
EEPS	EEPS Carryover	Business Instant Lighting Discount (BILD)	100%	\$0.00	\$0.00	\$0	NA	321,813	Bulbs	5.0
EEPS	EEPS Carryover	<b>Subtotal</b>	<b>383%</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0</b>		<b>3,036,185</b>		<b>5.0</b>
EEPS		<b>Portfolio Total</b>	<b>117%</b>	<b>\$143.51</b>	<b>\$16.35</b>	<b>\$95,652,956</b>	<b>1.78</b>	<b>5,067,152</b>		<b>8.8</b>
IPA	ComEd IPA	Residential Lighting - IPA	117%	\$137.21	\$18.01	\$34,967,703	1.68	10,773,575	Bulbs	7.6
IPA	ComEd IPA	Small Business Energy Savings	101%	\$221.03	\$19.07	\$33,978,009	1.32	784,534	Measures	11.6
IPA	ComEd IPA	LED Street Lighting	100%	\$656.00	\$53.77	\$3,921,563	NA	10,077	Measures	12.2
IPA	ComEd IPA	Home Energy Report	97%	\$35.56	\$35.56	\$8,961,499	NA	1,720,609	Participants	1.0
IPA	ComEd IPA	C3 Home Energy Reports	-	\$0.00	\$0.00	\$0	NA	200,000	Participants	1.0
IPA	ComEd IPA	Residential Lighting IPA Carryover	-	\$0.00	\$0.00	\$0	NA	184,551	Bulbs	6.6
IPA	ComEd IPA	<b>ComEd IPA Total</b>	<b>108%</b>	<b>\$121.64</b>	<b>\$20.06</b>	<b>\$81,828,774</b>		<b>13,673,346</b>		<b>6.1</b>
IPA	Third Party IPA	Elevate Electric Multifamily	96%	\$382.93	\$85.29	\$683,155	NA	13,866	Measures	4.5
IPA	Third Party IPA	CUB	-	\$69.16	\$69.16	\$150,000	NA	9,486	Participants	1.0
IPA	Third Party IPA	Great Energy Stewards†	-	-	-	\$0	NA	1,958	Participants	NA
IPA	Third Party IPA	National Theatre for Children	98%	\$558.20	\$104.93	\$696,081	NA	7,612	Kits	5.3
IPA	Third Party IPA	AirCare Plus	100%	\$289.74	\$142.73	\$2,002,088	0.44	901	Measures	2.0
IPA	Third Party IPA	CLEARresult School Direct Install	104%	\$269.57	\$28.23	\$208,379	NA	2,821	Measures	9.6
IPA	Third Party IPA	Matrix School Direct Install	84%	\$178.00	\$12.34	\$32,218	NA	718	Measures	14.4
IPA	Third Party IPA	Matrix Demand Control Ventilation	100%	\$248.44	\$24.84	\$2,099	NA	2	Measures	10.0
IPA	Third Party IPA	Weidt Group New Construction	92%	\$10,367.41	\$10,367.41	\$433,876	NA	1	Project	1.0
IPA	Third Party IPA	<b>Third Party IPA Total</b>	<b>117%</b>	<b>\$320.86</b>	<b>\$102.73</b>	<b>\$4,207,896</b>		<b>37,365</b>		<b>3.1</b>
IPA		<b>IPA Total</b>	<b>108%</b>	<b>\$125.45</b>	<b>\$20.89</b>	<b>\$86,036,670</b>	<b>1.48</b>	<b>13,710,711</b>		<b>6.0</b>
All	All	<b>EEPS and IPA Total</b>	<b>112%</b>	<b>\$134.35</b>	<b>\$18.22</b>	<b>\$181,689,626</b>	<b>2.29</b>	<b>18,777,863</b>		<b>7.4</b>

NA = Not Applicable

\* Includes the part use factor

† Savings from the Meter Genius pilot and Energy Stewards program were not statistically significant, which means they cannot be causally attributed to the program.

‡ With interactive effects

§ There were no EEPS savings reported for the Residential Lighting program (only carry over savings).

Source: Evaluation Analysis. Costs data from Utility Cost Test (UCT), sourced from PY8 TRC Reports.

**Table 4-7. EEPS Verified First Year and Lifetime MWh Savings in PY9**

Portfolio	Sector	ComEd PY9 Program	Verified Gross Savings			Verified Net Savings		
			Verified Gross Realization Rate (%)	First Year Annual Energy Savings (MWh) - Gross	Lifetime Savings (MWh) - Gross	NTG (%)	First Year Annual Energy Savings (MWh) - Net	Lifetime Savings (MWh) - Net
EEPS	Business	AirCare Plus	100%	14,149	52,516	0.90	12,734	47,265
EEPS	Business	C&I New Construction	79%	64,300	1,093,093	0.77	49,511	841,681
EEPS	Business	Custom	86%	41,746	536,183	0.58	24,213	310,986
EEPS	Business	Data Center Efficiency	102%	47,112	690,756	0.64	30,152	442,084
EEPS	Business	Industrial Systems Optimization	84%	32,524	272,893	0.80	26,019	218,315
EEPS	Business	Instant Discounts	92%	220,479	2,263,404	0.78	171,805	1,763,724
EEPS	Business	Operational Savings	95%	4,128	47,593	0.95	3,922	45,213
EEPS	Business	Retrocommissioning (RCx)	104%	35,156	191,393	0.95	33,398	181,823
EEPS	Business	Standard	95%	380,839	4,509,841	0.70	265,810	3,147,687
EEPS	Business	Strategic Energy Management (SEM)	122%	15,978	79,890	1.00	15,978	79,890
<b>EEPS</b>	<b>Business</b>	<b>Subtotal</b>	<b>93%</b>	<b>856,411</b>	<b>9,737,562</b>	<b>0.74</b>	<b>633,542</b>	<b>7,078,668</b>
EEPS	Pilot Business	Business Energy Analyzer		-	-		276,462	276,462
EEPS	Pilot Business	Multi-family Common Area Pilot	101%	4,622	53,624	0.95	4,391	50,943
<b>EEPS</b>	<b>Pilot Business</b>	<b>Subtotal</b>	<b>101%</b>	<b>4,622</b>	<b>53,624</b>	<b>0.95</b>	<b>280,853</b>	<b>327,405</b>
EEPS	Residential	Appliance Rebates	99%	44,175	436,857	0.92	40,743	402,912
EEPS	Residential	Elementary Education Kits	72%	4,377	39,712	1.00	4,377	39,712
EEPS	Residential	Fridge Freezer Recycling	104%	66,334	528,008	0.52	34,336	273,304
EEPS	Residential	Heating, Cooling & Weatherization Rebates (HVAC)	99%	19,607	365,646	0.99	19,421	362,177
EEPS	Residential	Heating, Cooling & Weatherization Rebates (Wx)	116%	1,410	25,935	1.01	1,425	26,194
EEPS	Residential	Home Energy Assessments	100%	30,688	304,484	0.82	25,223	250,263
EEPS	Residential	Multi-Family Comprehensive EE	100%	5,665	45,297	0.97	5,491	43,907
EEPS	Residential	Residential New Construction	102%	1,450	26,103	0.65	943	16,967
<b>EEPS</b>	<b>Residential</b>	<b>Subtotal</b>	<b>100%</b>	<b>173,707</b>	<b>1,772,042</b>	<b>0.76</b>	<b>131,958</b>	<b>1,415,438</b>
EEPS	Pilot Residential	Bigdely		-	-		100	100
EEPS	Pilot Residential	Nest Seasonal Savings*		-	-		3,522	3,522
<b>EEPS</b>	<b>Pilot Residential</b>	<b>Subtotal</b>		-	-		<b>3,621</b>	<b>3,621</b>
EEPS	EEPS Carryover	Instant Discounts (carryover)	100%	15,998	143,980	0.69	11,007	99,066
EEPS	EEPS Carryover	Lighting Discounts (carryover)	85%	41,575	176,198	0.63	26,095	110,594
<b>EEPS</b>	<b>EEPS Carryover</b>	<b>Subtotal</b>	<b>89%</b>	<b>57,573</b>	<b>320,177</b>	<b>0.64</b>	<b>37,103</b>	<b>209,660</b>
<b>EEPS</b>		<b>Portfolio Total</b>	<b>94%</b>	<b>1,092,312</b>	<b>11,883,406</b>	<b>1.73</b>	<b>1,087,076</b>	<b>9,034,792</b>

Source: Evaluation Analysis.

**Table 4-8. EEPS Verified First Year and Lifetime MW Savings in PY9**

Portfolio	Sector	ComEd PY9 Program	Verified Gross Savings				Verified Net Savings	
			Verified Gross Realization Rate (%)	First Year Peak Demand Savings (MW) - Gross	Lifetime Savings (MW) - Gross	NTG (%)	First Year Peak Demand Savings (MW) - Net	Lifetime Savings (MW) - Net
EEPS	Business	AirCare Plus	NA	1.9	7.0	0.90	1.7	6.3
EEPS	Business	C&I New Construction	68%	11.1	189.4	0.77	8.6	145.8
EEPS	Business	Custom	NA	5.6	71.9	0.58	3.3	41.7
EEPS	Business	Data Center Efficiency	NA	4.5	65.7	0.64	2.9	42.1
EEPS	Business	Industrial Systems Optimization	NA	4.2	35.4	0.80	3.4	28.3
EEPS	Business	Instant Discounts	90%	43.7	450.3	0.78	34.1	350.9
EEPS	Business	Operational Savings	NA	-	-	-	-	-
EEPS	Business	Retrocommissioning (RCx)	138%	2.3	12.5	0.95	2.2	11.9
EEPS	Business	Standard	NA	44.0	519.3	0.70	30.7	362.7
EEPS	Business	Strategic Energy Management (SEM)	NA	-	-	-	-	-
<b>EEPS</b>	<b>Business</b>	<b>Subtotal</b>	<b>198%</b>	<b>117.4</b>	<b>1,351.5</b>	<b>0.74</b>	<b>86.8</b>	<b>989.7</b>
EEPS	Pilot Business	Business Energy Analyzer	NA	-	-	-	-	-
EEPS	Pilot Business	Multi-family Common Area Pilot	NA	0.5	6.0	0.95	0.5	5.7
<b>EEPS</b>	<b>Pilot Business</b>	<b>Subtotal</b>	<b>NA</b>	<b>0.5</b>	<b>6.0</b>	<b>0.95</b>	<b>0.5</b>	<b>5.7</b>
EEPS	Residential	Appliance Rebates	NA	10.1	100.0	0.96	9.7	95.8
EEPS	Residential	Elementary Education Kits	NA	0.4	4.0	1.00	0.4	4.0
EEPS	Residential	Fridge Freezer Recycling	103%	9.0	72.0	0.52	4.6	37.1
EEPS	Residential	Heating, Cooling & Weatherization Rebates (HVAC)	NA	7.6	142.1	0.99	7.6	140.7
EEPS	Residential	Heating, Cooling & Weatherization Rebates (Wx)	NA	0.6	10.5	1.01	0.6	10.6
EEPS	Residential	Home Energy Assessments	NA	3.6	35.5	0.83	3.0	29.5
EEPS	Residential	Multi-Family Comprehensive EE	NA	0.6	4.4	0.98	0.5	4.3
EEPS	Residential	Residential New Construction	NA	0.7	12.8	0.65	0.5	8.3
<b>EEPS</b>	<b>Residential</b>	<b>Subtotal</b>	<b>1189%</b>	<b>32.6</b>	<b>381.3</b>	<b>0.82</b>	<b>26.9</b>	<b>330.4</b>
EEPS	Pilot Residential	Bidgely	NA	-	-	-	-	-
EEPS	Pilot Residential	Nest Seasonal Savings*	NA	-	-	-	5.2	5.2
<b>EEPS</b>	<b>Pilot Residential</b>	<b>Subtotal</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5.2</b>	<b>5.2</b>
EEPS	EEPS Carryover	Instant Discounts (carryover)	100%	3.2	28.6	0.69	2.2	19.7
EEPS	EEPS Carryover	Lighting Discounts (carryover)	NA	4.6	19.4	0.63	2.9	12.2
<b>EEPS</b>	<b>EEPS Carryover</b>	<b>Subtotal</b>	<b>1040%</b>	<b>7.8</b>	<b>48.0</b>	<b>0.65</b>	<b>5.1</b>	<b>31.9</b>
<b>EEPS</b>		<b>Portfolio Total</b>	<b>342%</b>	<b>158.3</b>	<b>1,786.9</b>	<b>0.79</b>	<b>124.5</b>	<b>1,362.9</b>

NA = programs did not report ex ante kW or there was no realization of kW savings, as such realization rates were not determined.

Source: Evaluation Analysis.

**Table 4-9. EEPS Participation and Acquisition Costs in PY9**

Portfolio	Sector	ComEd PY9 Program	Cost				Participation			
			Verified Gross Realization Rate (%)	First Year Cost per First Year Net Annual Savings	First Year Cost per Net Lifetime Savings	Program Costs	IL UCT Test	# Units	Units Definition	Weighted Average Measure Life
EEPS	Business	AirCare Plus	100%	\$143.30	\$38.61	\$1,824,775	0.80	2,313	Measures	3.7
EEPS	Business	C&I New Construction	79%	\$280.70	\$16.51	\$13,897,869	2.71	99	Projects	17.0
EEPS	Business	Custom	86%	\$200.90	\$15.64	\$4,864,340	2.87	123	Projects	12.8
EEPS	Business	Data Center Efficiency	102%	\$113.66	\$7.75	\$3,427,001	4.99	19	Projects	14.7
EEPS	Business	Industrial Systems Optimization	84%	\$236.16	\$28.15	\$6,144,704	1.77	231	Projects	8.4
EEPS	Business	Instant Discounts	92%	\$71.34	\$6.95	\$12,256,983	4.43	2,053,383	Bulbs	10.3
EEPS	Business	Operational Savings	95%	\$501.32	\$43.49	\$1,966,166	0.68	235	Measures	11.5
EEPS	Business	Retrocommissioning (RCx)	104%	\$246.80	\$45.33	\$8,242,643	0.97	124	Projects	5.4
EEPS	Business	Standard	95%	\$194.89	\$16.46	\$51,802,794	2.62	7,671	Measures	11.8
EEPS	Business	Strategic Energy Management (SEM)	122%	\$33.11	\$6.62	\$529,026	4.81	21	Participants	5.0
<b>EEPS</b>	<b>Business</b>	<b>Subtotal</b>	<b>93%</b>	<b>\$165.67</b>	<b>\$14.83</b>	<b>\$104,956,303</b>	<b>2.64</b>			<b>11.4</b>
EEPS	Pilot Business	Business Energy Analyzer		\$3.06	\$3.06	\$847,323	NA	2,666	Participants	1.0
EEPS	Pilot Business	Multi-family Common Area Pilot	101%	\$509.67	\$43.93	\$2,237,844	NA	35,183	Measures	11.6
<b>EEPS</b>	<b>Pilot Business</b>	<b>Subtotal</b>	<b>101%</b>	<b>\$10.99</b>	<b>\$9.42</b>	<b>\$3,085,166</b>	<b>NA</b>			<b>11.6</b>
EEPS	Residential	Appliance Rebates	99%	\$520.21	\$52.60	\$21,194,729	1.12	228,774	Appliances	9.9
EEPS	Residential	Elementary Education Kits	72%	\$221.85	\$24.45	\$970,943	2.05	376,758	Kits	9.1
EEPS	Residential	Fridge Freezer Recycling	104%	\$392.69	\$49.33	\$13,483,282	0.97	81,633	Appliances	8.0
EEPS	Residential	Heating, Cooling & Weatherization Rebates (HVAC)	99%	\$675.05	\$36.20	\$13,109,913	1.62	32,825	Projects	18.6
EEPS	Residential	Heating, Cooling & Weatherization Rebates (Wx)	116%	\$703.13	\$38.24	\$1,001,656	1.74	5,863	Projects	18.4
EEPS	Residential	Home Energy Assessments	100%	\$450.41	\$45.40	\$11,360,766	0.47	664,112	Measures	9.9
EEPS	Residential	Multi-Family Comprehensive EE	100%	\$173.65	\$21.72	\$953,581	1.02	164,740	Measures	8.0
EEPS	Residential	Residential New Construction	102%	\$597.21	\$33.18	\$562,944	2.42	1,209	Homes	18.0
<b>EEPS</b>	<b>Residential</b>	<b>Subtotal</b>	<b>100%</b>	<b>\$474.68</b>	<b>\$44.25</b>	<b>\$62,637,814</b>	<b>1.16</b>			<b>10.2</b>
EEPS	Pilot Residential	Bidgely		\$30,628.50	\$30,628.50	\$3,050,170	NA	1,218	Participants	1.0
EEPS	Pilot Residential	Nest Seasonal Savings*		\$ -	\$ -	NA	NA	56,166	Thermostats	1.0
<b>EEPS</b>	<b>Pilot Residential</b>	<b>Subtotal</b>		<b>\$842.26</b>	<b>\$842.26</b>	<b>\$3,050,170</b>	<b>NA</b>			<b>1.0</b>
EEPS	EEPS Carryover	Instant Discounts (carryover)	100%	\$ -	\$ -	\$ -	NA	69,010	Bulbs	9.0
EEPS	EEPS Carryover	Lighting Discounts (carryover)	85%	\$ -	\$ -	\$ -	NA	1,317,793	Bulbs	4.2
<b>EEPS</b>	<b>EEPS Carryover</b>	<b>Subtotal</b>	<b>89%</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>NA</b>			<b>3.1</b>
<b>EEPS</b>		<b>Portfolio Total</b>	<b>94%</b>	<b>\$159.81</b>	<b>\$19.23</b>	<b>\$173,729,452</b>	<b>2.10</b>			<b>10.9</b>

\*Costs included in all the other programs that distribute smartthermostat as a measure.

NAs means evaluation did not perform UCT test.

Source: Evaluation Analysis. Costs data from Utility Cost Test (UCT), sourced from PY9 TRC Reports.

**Table 4-10. IPA and DCEO Verified First Year and Lifetime MWh Savings in PY9**

Portfolio	Sector	ComEd PY9 Program	Verified Gross Realization Rate (%)	Verified Gross Savings		NTG (%)	Verified Net Savings	
				First Year Annual Energy Savings (MWh) - Gross	Lifetime Savings (MWh) - Gross		First Year Annual Energy Savings (MWh) - Net	Lifetime Savings (MWh) - Net
IPA	IPA Business	Agriculture Energy Efficiency	99%	700	7,185	0.90	630	6,466
IPA	IPA Business	AirCare Plus	99%	11,706	43,447	0.90	10,535	39,103
IPA	IPA Business	CLEAResult LLLC	99%	8,993	98,118	0.90	8,094	88,306
IPA	IPA Business	CLEAResult Schools DI	122%	1,352	5,713	0.95	1,285	5,427
IPA	IPA Business	Elevate Energy Assisted & Senior Housing	107%	1,286	13,802	0.95	1,222	13,112
IPA	IPA Business	Energy Advisor MBCx	120%	2,021	10,103	1.00	2,021	10,103
IPA	IPA Business	LED Street Lighting	100%	4,497	52,807	1.00	4,497	52,807
IPA	IPA Business	Matrix DCV	100%	828	8,283	0.89	737	7,372
IPA	IPA Business	Matrix K-12 Private Schools DI	100%	801	11,827	0.95	761	11,236
IPA	IPA Business	New Construction Small Buildings	83%	1,112	19,350	0.77	856	14,899
IPA	IPA Business	Rural Small Business EE Kits	164%	3,612	25,704	0.90	3,251	23,134
IPA	IPA Business	SEDAC Enhanced Building Optimization	99%	2,230	14,589	0.95	2,119	13,860
IPA	IPA Business	Small Business	100%	281,829	4,085,613	0.91	256,465	3,717,908
IPA	IPA Business	Small Commercial Lit Signage	101%	18,329	186,634	0.90	16,496	167,971
<b>IPA</b>	<b>IPA Business</b>	<b>Subtotal</b>	<b>101%</b>	<b>339,298</b>	<b>4,583,174</b>	<b>0.91</b>	<b>308,969</b>	<b>4,171,702</b>
IPA	IPA Residential	CLEAResult Community-based CFL Distribution	100%	21,383	101,993	1.00	21,383	101,993
IPA	IPA Residential	CUB Energy Saver					2,191	2,191
IPA	IPA Residential	Elevate Energy MF All Electric	70%	1,305	5,270	0.86	1,127	4,551
IPA	IPA Residential	Home Energy Reports					442,029	442,029
IPA	IPA Residential	Lighting Discounts	99%	745,030	6,666,107	0.59	443,105	3,964,648
IPA	IPA Residential	Low-income Kits (UIC ERC)	87%	5,581	38,891	1.00	5,581	38,891
IPA	IPA Residential	NTC Gas & Electric Water Heater Kits	89%	2,232	13,124	1.00	2,232	13,124
IPA	IPA Residential	Shelton Solutions Great Energy Stewards†					530	530
<b>IPA</b>	<b>IPA Residential</b>	<b>Subtotal</b>	<b>99%</b>	<b>775,533</b>	<b>6,825,386</b>	<b>0.61</b>	<b>918,179</b>	<b>4,567,957</b>
IPA	IPA Carryover	Lighting Discounts (carryover)	100%	34,429	145,913	0.60	20,775	88,047
<b>IPA</b>	<b>IPA Carryover</b>	<b>Subtotal</b>	<b>100%</b>	<b>34,429</b>	<b>145,913</b>	<b>0.60</b>	<b>20,775</b>	<b>88,047</b>
<b>IPA</b>		<b>Portfolio Total</b>	<b>100%</b>	<b>1,149,259</b>	<b>11,554,473</b>	<b>1.78</b>	<b>1,247,922</b>	<b>8,827,706</b>
DCEO Transition	Income Eligible	Affordable Housing New Construction	66%	40	566	1.00	40	566
DCEO Transition	Income Eligible	Illinois Home Weatherization Assistance Program (IHW)	113%	802	10,526	1.00	802	10,526
DCEO Transition	Income Eligible	Residential Retrofit: Energy Savers Multi-Family	81%	1,006	11,983	1.00	1,006	11,983
DCEO Transition	Income Eligible	Residential Retrofit: Single Family Retrofits (CBA)	96%	614	9,850	1.00	614	9,850
<b>DCEO Transition Income Eligible</b>		<b>Subtotal</b>	<b>92%</b>	<b>2,461</b>	<b>32,925</b>	<b>1.00</b>	<b>2,461</b>	<b>32,925</b>
DCEO Transition	Public Sector	C&I New Construction (DCEO)	81%	2,451	41,667	0.77	1,887	32,084
DCEO Transition	Public Sector	Custom (DCEO)	96%	447	5,924	0.83	371	4,917
DCEO Transition	Public Sector	Free Lights (DCEO)	103%	4,788	71,815	0.96	4,596	68,943
DCEO Transition	Public Sector	LED Street Lighting (DCEO)	100%	12,955	150,534	1.00	12,955	150,534
DCEO Transition	Public Sector	PHA Efficient Living (DCEO)	96%	435	5,090	1.00	435	5,090
DCEO Transition	Public Sector	Retrocommissioning (DCEO)	82%	201	1,404	0.95	191	1,334
DCEO Transition	Public Sector	Savings Through Efficient Products (STEP), DCEO	99%	1,837	20,125	0.96	1,763	19,320
DCEO Transition	Public Sector	Standard (DCEO)	88%	16,651	207,499	0.65	10,823	134,874
<b>DCEO Transition Public Sector</b>		<b>Subtotal</b>	<b>93%</b>	<b>39,763</b>	<b>504,058</b>	<b>0.83</b>	<b>33,021</b>	<b>417,095</b>
<b>DCEO Transition</b>		<b>Portfolio Total</b>	<b>93%</b>	<b>42,225</b>	<b>536,983</b>	<b>1.68</b>	<b>35,482</b>	<b>450,020</b>
<b>All</b>		<b>PY9 Grand Total (EEPS+IPA+DCEO)</b>	<b>97%</b>	<b>2,283,796</b>	<b>23,974,863</b>	<b>0.72</b>	<b>2,370,481</b>	<b>18,312,518</b>

Source: Evaluation Analysis.

**Table 4-11. IPA and DCEO Verified First Year and Lifetime MW Savings in PY9**

Portfolio	Sector	ComEd PY9 Program	Verified Gross Savings				Verified Net Savings	
			Verified Gross Realization Rate (%)	First Year Peak Demand Savings (MW) - Gross	Lifetime Savings (MW) - Gross	NTG (%)	First Year Peak Demand Savings (MW) - Net	Lifetime Savings (MW) - Net
IPA	IPA Business	Agriculture Energy Efficiency	NA	0.1	1.1	0.90	0.1	1.0
IPA	IPA Business	AirCare Plus	NA	2.1	7.8	0.90	1.9	7.0
IPA	IPA Business	CLEAResult LLLC	NA	1.8	19.2	0.90	1.6	17.3
IPA	IPA Business	CLEAResult Schools DI	NA	0.3	1.1	0.95	0.2	1.0
IPA	IPA Business	Elevate Energy Assisted & Senior Housing	NA	0.1	1.4	0.95	0.1	1.4
IPA	IPA Business	LED Street Lighting	NA	0.7	8.3	1.00	0.7	8.3
IPA	IPA Business	Matrix K-12 Private Schools DI	NA	0.2	3.1	0.95	0.2	2.9
IPA	IPA Business	New Construction Small Buildings	76%	0.1	2.2	0.77	0.1	1.7
IPA	IPA Business	Rural Small Business EE Kits	NA	0.5	3.2	0.90	0.4	2.9
IPA	IPA Business	SEDAC Enhanced Building Optimization	NA	0.3	2.0	0.95	0.3	1.9
IPA	IPA Business	Small Business	NA	39.1	566.5	0.91	35.6	515.5
<b>IPA</b>	<b>IPA Business</b>	<b>Subtotal</b>	<b>40652%</b>	<b>45.3</b>	<b>616.0</b>	<b>0.91</b>	<b>41.2</b>	<b>561.0</b>
IPA	IPA Residential	CLEAResult Community-based CFL Distribution	NA	2.1	10.3	1.00	2.1	10.3
IPA	IPA Residential	Elevate Energy MF All Electric	NA	0.1	0.6	0.86	0.1	0.5
IPA	IPA Residential	Lighting Discounts	NA	87.6	779.5	0.60	52.1	464.1
IPA	IPA Residential	Low-income Kits (UIC ERC)	NA	0.6	4.1	1.00	0.6	4.1
IPA	IPA Residential	NTC Gas & Electric Water Heater Kits	NA	0.3	1.6	1.00	0.3	1.6
<b>IPA</b>	<b>IPA Residential</b>	<b>Subtotal</b>	<b>NA</b>	<b>90.7</b>	<b>796.1</b>	<b>0.61</b>	<b>55.3</b>	<b>480.6</b>
IPA	IPA Carryover	Lighting Discounts (carryover)	0%	4.0	16.9	0.60	2.4	10.2
<b>IPA</b>	<b>IPA Carryover</b>	<b>Subtotal</b>	<b>NA</b>	<b>4.0</b>	<b>16.9</b>	<b>0.60</b>	<b>2.4</b>	<b>10.2</b>
<b>IPA</b>		<b>Portfolio Total</b>	<b>377033%</b>	<b>140.0</b>	<b>1,428.9</b>	<b>0.71</b>	<b>98.9</b>	<b>1,051.8</b>
DCEO Transition	Income Eligible	Affordable Housing New Construction	NA	0.0	0.1	1.00	0.0	0.1
DCEO Transition	Income Eligible	Illinois Home Weatherization Assistance Program (IHW)	NA	0.2	2.4	1.00	0.2	2.4
DCEO Transition	Income Eligible	Residential Retrofit: Energy Savers Multi-Family	NA	0.2	1.9	1.00	0.2	1.9
DCEO Transition	Income Eligible	Residential Retrofit: Single Family Retrofits (CBA)	NA	0.1	2.1	1.00	0.1	2.1
<b>DCEO Transition</b>	<b>Income Eligible</b>	<b>Subtotal</b>	<b>NA</b>	<b>0.5</b>	<b>6.6</b>	<b>1.00</b>	<b>0.5</b>	<b>6.6</b>
DCEO Transition	Public Sector	Custom (DCEO)	NA	0.1	0.9	0.82	0.1	0.8
DCEO Transition	Public Sector	Free Lights (DCEO)	NA	0.8	11.5	0.96	0.7	11.1
DCEO Transition	Public Sector	LED Street Lighting (DCEO)	100%	2.0	23.7	1.00	2.0	23.7
DCEO Transition	Public Sector	PHA Efficient Living (DCEO)	NA	0.1	0.9	1.00	0.1	0.9
DCEO Transition	Public Sector	Retrocommissioning (DCEO)	50%	0.0	0.1	0.91	0.0	0.1
DCEO Transition	Public Sector	Savings Through Efficient Products (STEP), DCEO	NA	0.7	7.6	0.96	0.7	7.3
DCEO Transition	Public Sector	Standard (DCEO)	NA	1.8	22.6	0.65	1.2	14.7
<b>DCEO Transition</b>	<b>Public Sector</b>	<b>Subtotal</b>	<b>290%</b>	<b>5.5</b>	<b>67.4</b>	<b>0.87</b>	<b>4.8</b>	<b>58.6</b>
<b>DCEO Transition</b>		<b>Portfolio Total</b>	<b>352%</b>	<b>6.0</b>	<b>74.0</b>	<b>0.88</b>	<b>5.3</b>	<b>65.2</b>
<b>All</b>		<b>PY9 Grand Total (EEPS+IPA+DCEO)</b>	<b>1208%</b>	<b>304.3</b>	<b>1,503.0</b>	<b>0.75</b>	<b>228.7</b>	<b>1,117.0</b>

NA = programs did not report ex ante kW or there was no realization of kW savings, as such realization rates were not determined.

Source: Evaluation Analysis.

**Table 4-12. IPA and DCEO Participation and Acquisition Costs in PY9**

Portfolio	Sector	ComEd PY9 Program	Verified Gross Realization Rate (%)	Cost			ILUCT Test	Participation		Weighted Average Measure Life
				First Year Cost per First Year Net Annual Savings	First Year Cost per Net Lifetime Savings	Program Costs		# Units	Units Definition	
IPA	IPA Business	Agriculture Energy Efficiency	99%	\$137.32	\$13.38	\$85,522	NA	564 Measures	10.3	
IPA	IPA Business	AirCare Plus	99%	\$339.73	\$91.53	\$3,579,146	0.80	1,310 Measures	3.7	
IPA	IPA Business	CLEARResultLLCO	99%	\$360.70	\$33.06	\$2,919,562	NA	20,700 Measures	10.9	
IPA	IPA Business	CLEARResultSchools DI	122%	\$290.18	\$68.68	\$372,766	NA	1,895 Measures	4.2	
IPA	IPA Business	Elevate Energy Assisted & Senior Housing	107%	\$459.58	\$42.82	\$501,424	NA	2,603 Measures	10.7	
IPA	IPA Business	Energy Advisor MIS/Cx	120%	\$425.10	\$85.02	\$858,965	NA	79 Project	5.0	
IPA	IPA Business	LED Street Lighting	100%	\$265.51	\$22.61	\$1,194,068	NA	6,536 Bulbs	11.7	
IPA	IPA Business	Matrix DCV	100%	\$220.00	\$22.00	\$162,178	NA	177 Measures	10.0	
IPA	IPA Business	Matrix K-12 Private Schools DI	100%	\$161.02	\$10.91	\$122,560	NA	4,362 Bulbs	14.8	
IPA	IPA Business	New Construction Small Buildings	83%	-\$20.19	-\$1.16	-\$17,290	NA	11 Project	17.4	
IPA	IPA Business	Rural Small Business EE Kib	104%	\$272.31	\$38.27	\$885,310	NA	45,700 Kib	7.1	
IPA	IPA Business	SEDAC Enhanced Building Optimization	99%	\$219.49	\$33.55	\$465,058	NA	287 Project	6.5	
IPA	IPA Business	Small Business	100%	\$262.96	\$18.14	\$67,441,078	1.86	9,808 Project	14.5	
IPA	IPA Business	Small Commercial Lit/Signage	101%	\$262.41	\$25.77	\$4,328,704	NA	61,975 Measures	10.2	
IPA	IPA Business	Subtotal	101%	\$288.61	\$19.89	\$82,880,068			13.6	
IPA	IPA Residential	CLEARResultCommunity-based CFL Distribution	100%	\$104.66	\$21.94	\$2,237,962	NA	1,329,057 Bulbs	4.8	
IPA	IPA Residential	CUB Energy Saver		\$69.16	\$69.16	\$151,519	NA	8,329 Participants	1.0	
IPA	IPA Residential	Elevate Energy M/F All Electric	70%	\$383.68	\$95.01	\$432,355	NA	17,716 Measures	4.0	
IPA	IPA Residential	Home Energy Reports		\$25.80	\$25.80	\$11,405,061	1.45	1,995 Participants	1.0	
IPA	IPA Residential	Lighting Discounts	99%	\$122.23	\$13.66	\$54,158,878	2.27	20,060,412 Bulbs	8.9	
IPA	IPA Residential	Low-Income Kib (UIC ERC)	87%	\$390.06	\$55.98	\$2,177,120	NA	183,179 Kib	7.0	
IPA	IPA Residential	NTC Gas & Electric Water Heater Kib	89%	\$453.24	\$77.09	\$1,011,762	NA	55,530 Measures	5.9	
IPA	IPA Residential	Shelton Solutions GreatEnergy Stewardst		\$ -	\$ -	NA	NA -	NA	1.0	
IPA	IPA Residential	Subtotal	99%	\$77.95	\$16.87	\$71,574,857			8.8	
IPA	IPA Carryover	Lighting Discounts (carryover)	100%	\$ -	\$ -	\$ -	NA	1,055,558 Bulbs	4.2	
IPA	IPA Carryover	Subtotal	100%	\$ -	\$ -	\$ -			4.2	
IPA		Portfolio Total	100%	\$128.83	\$17.61	\$164,694,714	2.02		10.1	
DCEO Transition	Income Eligible	Affordable Housing New Construction	66%	\$42,783.54	\$3,008.04	\$1,702,357	0.02	28,588 Measures	14.2	
DCEO Transition	Income Eligible	Illinois Home Weatherization Assistance Program (IHW)	113%	\$1,576.56	\$120.11	\$1,264,202	0.40	410,097 Measures	13.1	
DCEO Transition	Income Eligible	Residential Retrofit: Energy Savers Multi-Family	81%	\$1,262.59	\$105.99	\$1,270,089	0.35	10,952 Measures	11.9	
DCEO Transition	Income Eligible	Residential Retrofit: Single Family Retrofits (CBA)	96%	\$1,576.56	\$98.21	\$967,386	0.43	178,452 Measures	16.1	
DCEO Transition	Income Eligible	Subtotal	92%	\$2,114.48	\$168.09	\$6,204,033	0.27		13.4	
DCEO Transition	Public Sector	CS1 New Construction (DCEO)	81%	\$902.02	\$53.06	\$1,702,357	0.48	9 Project	17.0	
DCEO Transition	Public Sector	Custom (DCEO)	96%	\$502.53	\$37.93	\$186,483	0.90	8 Project	13.2	
DCEO Transition	Public Sector	Free Lights (DCEO)	103%	\$449.69	\$29.98	\$2,066,878	0.49	47 Project	15.0	
DCEO Transition	Public Sector	LED Street Lighting (DCEO)	100%	\$167.67	\$14.43	\$2,172,196	3.36	14,303 Bulbs	11.6	
DCEO Transition	Public Sector	PHA Efficient Living (DCEO)	96%	\$1,829.21	\$156.35	\$795,813	0.28	2,414 Measures	11.7	
DCEO Transition	Public Sector	Retrocommissioning (DCEO)	82%	\$11,145.12	\$1,592.16	\$2,123,280	0.02	4 Project	7.0	
DCEO Transition	Public Sector	Savings Through Efficient Products (STEP), DCEO	99%	\$302.79	\$27.63	\$533,838	2.29	7,980 Measures	11.0	
DCEO Transition	Public Sector	Standard (DCEO)	88%	\$641.09	\$51.49	\$6,044,956	0.36	701 Project	12.5	
DCEO Transition	Public Sector	Subtotal	93%	\$500.48	\$39.82	\$18,526,901	0.80		12.7	
DCEO Transition		Portfolio Total	93%	\$812.42	\$48.29	\$21,729,834			12.7	
All		PY9 Grand Total (EEP8 +IPA+DCEO)	97%	\$898	\$86	\$349,994,001	1.97		10.6	

Note: The PY9 CUB cost is prorated using the \$/kWh for PY8 and multiply it with PY9 kWh. Costs were not available during final TRC analysis.

NAs means evaluation did not perform UCT test.

Source: Evaluation Analysis. Costs data from Utility Cost Test (UCT), sourced from PY9 TRC Reports.

**Table 4-13. Cost Effectiveness (TRC) 3-Year Summary Results – ComEd Only**

Portfolio	Sector	Program	TRC Benefits	TRC Costs	Net TRC Benefits	TRC Ratio
EEPS	Business	Strategic Energy Management (SEM)	\$3,931,157	\$798,389	\$3,132,767	4.92
EEPS	Business	Energy Analyzer	\$2,148,837	\$525,000	\$1,623,837	4.09
EEPS	Business	Instant Discounts	\$231,537,562	\$60,530,130	\$171,007,432	3.83
EEPS	Business	Industrial Systems Optimization	\$33,555,596	\$14,983,017	\$18,572,579	2.24
EEPS	Business	Standard	\$425,170,660	\$212,533,895	\$212,636,765	2.00
EEPS	Business	Custom	\$48,185,547	\$27,407,591	\$20,777,956	1.76
EEPS	Business	LED Streetlighting*	\$250,328	\$149,389	\$100,939	1.68
EEPS	Business	C&I New Construction	\$100,233,436	\$63,269,943	\$36,963,492	1.58
EEPS	Business	AirCare Plus (EEPS + IPA)*	\$5,640,981	\$4,237,574	\$1,403,407	1.33
EEPS	Business	Data Center Efficiency	\$33,887,213	\$26,337,516	\$7,549,697	1.29
EEPS	Business	Retrocommissioning	\$21,043,114	\$16,740,349	\$4,302,765	1.26
EEPS	Business	Operational Savings	\$1,381,879	\$1,893,926	-\$512,047	0.73
EEPS	Business	<b>Subtotal</b>	<b>\$906,966,308</b>	<b>\$429,406,720</b>	<b>\$477,559,587</b>	<b>2.11</b>
EEPS	EEPS Carryover	Lighting Discounts	\$82,736,682	\$3,250,502	\$79,486,180	25.45
EEPS	Residential	Elementary Education Kits	\$12,596,004	\$1,415,807	\$11,180,196	8.90
EEPS	Residential	Multi-Family Comprehensive EE	\$4,719,235	\$2,392,507	\$2,326,727	1.97
EEPS	Residential	Fridge Freezer Recycling	\$33,015,199	\$20,486,750	\$12,528,449	1.61
EEPS	Residential	Heating, Cooling & Weatherization Rebates (Wx)	\$1,792,828	\$1,266,054	\$526,773	1.42
EEPS	Residential	Appliance Rebates	\$43,585,795	\$39,876,836	\$3,708,958	1.09
EEPS	Residential	Heating, Cooling & Weatherization Rebates (HVAC)	\$39,525,373	\$43,818,840	-\$4,293,466	0.90
EEPS	Residential	Residential New Construction	\$3,329,090	\$4,249,386	-\$920,296	0.78
EEPS	Residential	Home Energy Assessments	\$13,743,544	\$19,226,816	-\$5,483,272	0.71
EEPS	Residential	Meter Genius Pilot	\$281	\$71,474	-\$71,193	0.00
EEPS	Residential	<b>Subtotal</b>	<b>\$235,044,029</b>	<b>\$136,054,973</b>	<b>\$98,989,057</b>	<b>1.73</b>
EEPS		<b>Portfolio Total</b>	<b>1,142,010,337</b>	<b>565,461,693</b>	<b>576,548,644</b>	<b>2.02</b>
IPA	IPA Business	Small Business (EEPS + IPA)*	\$225,144,142	\$117,949,010	\$107,195,132	1.91
IPA	IPA Business	<b>Subtotal</b>	<b>225,144,142</b>	<b>117,949,010</b>	<b>107,195,132</b>	<b>1.91</b>
IPA	IPA Residential	Lighting Discounts	\$305,446,942	\$198,719,225	\$106,727,717	1.54
IPA	IPA Residential	Home Energy Reports	\$15,852,511	\$10,969,244	\$4,883,267	1.45
IPA	IPA Residential	<b>Subtotal</b>	<b>321,299,454</b>	<b>209,688,469</b>	<b>111,610,984</b>	<b>1.53</b>
IPA	IPA Carryover	Instant Discounts	\$8,415,217	\$0	\$8,415,217	NA
IPA	IPA Carryover	Lighting Discounts	\$7,338,070	\$0	\$7,338,070	NA
IPA	IPA Carryover	<b>Subtotal</b>	<b>15,753,287</b>	<b>0</b>	<b>15,753,287</b>	<b>NA</b>
IPA		<b>Portfolio Total</b>	<b>562,196,883</b>	<b>327,637,479</b>	<b>234,559,404</b>	<b>1.72</b>
DCEO Transition	Income Eligible	Illinois Home Weatherization Assistance Program (IHWAP)	\$546,833	\$474,956	\$71,878	1.15
DCEO Transition	Income Eligible	Residential Retrofit: Single Family Retrofits (CBA)	\$450,740	\$488,751	-\$38,011	0.92
DCEO Transition	Income Eligible	Residential Retrofit: Energy Savers Multi-Family	\$486,807	\$917,353	-\$430,546	0.53
DCEO Transition	Income Eligible	Affordable Housing New Construction	\$34,646	\$379,505	-\$344,859	0.09
DCEO Transition	Income Eligible	<b>Subtotal</b>	<b>\$1,519,026</b>	<b>\$2,260,565</b>	<b>-\$741,539</b>	<b>0.67</b>
DCEO Transition	Public Sector	Savings Through Efficient Products (STEP)	\$1,247,442	\$559,920	\$687,522	2.23
DCEO Transition	Public Sector	Free Lights	\$1,030,067	\$603,038	\$427,029	1.71
DCEO Transition	Public Sector	LED Street Lighting	\$7,464,889	\$5,988,827	\$1,476,061	1.25
DCEO Transition	Public Sector	C&I New Construction	\$872,519	\$1,340,195	-\$467,675	0.65
DCEO Transition	Public Sector	Standard	\$4,013,190	\$6,748,717	-\$2,735,527	0.59
DCEO Transition	Public Sector	Custom	\$173,716	\$361,018	-\$187,302	0.48
DCEO Transition	Public Sector	PHA Efficient Living	\$230,720	\$795,813	-\$565,093	0.29
DCEO Transition	Public Sector	Retrocommissioning	\$50,923	\$626,241	-\$575,318	0.08
DCEO Transition	Public Sector	<b>Subtotal</b>	<b>\$15,083,466</b>	<b>\$17,023,770</b>	<b>-\$1,940,303</b>	<b>0.89</b>
DCEO Transition		<b>Portfolio Total</b>	<b>\$16,602,493</b>	<b>\$19,284,335</b>	<b>-\$2,681,842</b>	<b>0.86</b>
All		<b>Grand Total</b>	<b>\$1,720,809,713</b>	<b>\$912,383,507</b>	<b>\$808,426,206</b>	<b>1.89</b>

Note: The net TRC benefit is the difference between the TRC benefit and the TRC cost. These results are ComEd only TRCs, and excluded benefits and costs related to gas companies for the joint programs. The TRC ratio is the sum of the TRC benefits divided by sum of the total costs in 3 years.

\* AirCare Plus TRC value reflects both the EEPS and IPA portions of the program. SBES program had EEPS and IPA savings in PY7 until the program became fully IPA in PY8 and PY9. The combined TRC value for SBES is shown in the IPA section. LED Streetlighting (excluding DCEO transition program) and NC Small Buildings (called Weidt Group NC in PY8) were IPA in PY8 and PY9, but had relatively small savings and weren't included in the TRC Analysis. The focus of the TRC analysis was on EEPS and Large IPA programs which contributed to majority of the portfolio savings. Source: Evaluation PY7-PY9 TRC Reports-06-26-2019.

**Table 4-14. Cost Effectiveness (TRC) 3-Year Summary Results – Joint**

Portfolio	Sector	Program	PY7-PY9 Total Costs and Benefits			TRC Ratio
			TRC Benefits	TRC Costs	Net TRC Benefits	
EEPS	Business	Strategic Energy Management (SEM)	\$10,327,242	\$1,615,475	\$8,711,767	6.39
EEPS	Business	C&I New Construction	\$129,223,272	\$72,637,446	\$56,585,826	1.78
EEPS	Business	Retrocommissioning	\$26,088,437	\$19,829,435	\$6,259,002	1.32
<b>EEPS</b>	<b>Business</b>	<b>Subtotal</b>	<b>\$165,638,951</b>	<b>\$94,082,356</b>	<b>\$71,556,595</b>	<b>1.76</b>
EEPS	Residential	Elementary Education Kits	\$26,624,482	\$3,690,422	\$22,934,060	7.21
EEPS	Residential	Multi-Family Comprehensive EE	\$74,474,046	\$29,180,794	\$45,293,252	2.55
EEPS	Residential	Residential New Construction	\$17,831,759	\$9,519,361	\$8,312,398	1.87
EEPS	Residential	Home Energy Assessments	\$32,921,134	\$34,885,256	-\$1,964,122	0.94
<b>EEPS</b>	<b>Residential</b>	<b>Subtotal</b>	<b>\$151,851,421</b>	<b>\$77,275,833</b>	<b>\$74,575,588</b>	<b>1.97</b>
	<b>All</b>	<b>Grand Total</b>	<b>\$317,490,372</b>	<b>\$171,358,189</b>	<b>\$146,132,183</b>	<b>1.85</b>

Note: The net TRC benefit is the difference between the TRC benefit and the TRC cost. These results represent the joint TRCs including benefits and costs related to gas companies for the joint programs.

Source: Evaluation - Joint PY7-PY9 and GPY4-GPY6 TRC Report 2019-07-25 Final.

## 5. HIGH IMPACT PROGRAMS

Table 5-1 outlines the top ten business and residential programs with the highest net savings. The top 10 business programs produced 96 percent of the business portfolio savings (including public sector programs) with 4 percent from other business programs. The top 10 residential programs produced 99 percent with one percent from other residential programs, including income eligible programs.

**Table 5-1. High Impact Business and Residential Programs**

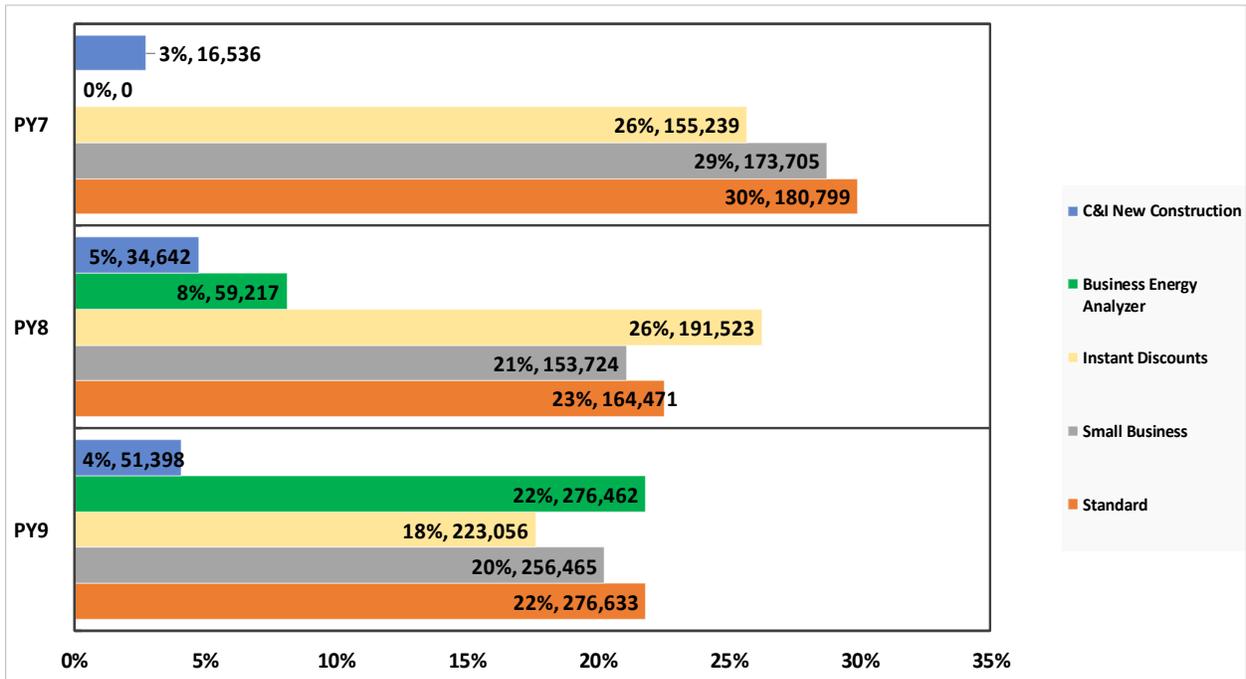
Sector	Program	PY7 Verified Net Savings (MWh)	PY8 Verified Net Savings (MWh)	PY9 Verified Net Savings (MWh)	Total Verified Net Savings (MWh)	Percent Sector Savings (%)	Percent Portfolio Savings (%)
Business	Standard	180,799	164,471	276,633	621,903	24%	13%
IPA Business	Small Business	173,705	153,724	256,465	583,894	22%	12%
Business	Instant Discounts	155,239	191,523	223,056	569,818	22%	12%
Pilot Business	Business Energy Analyzer	-	59,217	276,462	335,679	13%	7%
Business	C&I New Construction	16,536	34,642	51,398	102,576	4%	2%
Business	Retrocommissioning	21,703	23,955	33,589	79,247	3%	2%
Business	Industrial Systems Optimization	10,261	29,576	26,019	65,856	3%	1%
Business	Custom	18,788	18,173	24,584	61,545	2%	1%
Business	Data Center Efficiency	6,599	11,492	30,152	48,243	2%	1%
Business	AirCare Plus	-	9,417	23,269	32,686	1%	1%
	Other Business	21,017	33,572	45,765	100,354	4%	2%
<b>Business Total</b>		<b>604,647</b>	<b>729,762</b>	<b>1,267,391</b>	<b>2,601,800</b>	<b>100%</b>	<b>54%</b>
IPA Residential	Lighting Discounts	276,521	313,360	489,975	1,079,856	48%	22%
IPA Residential	Home Energy Reports	205,278	252,036	442,029	899,343	40%	19%
Residential	Fridge Freezer Recycling	18,885	14,221	34,336	67,442	3%	1%
Residential	Appliance Rebates	4,697	4,446	40,743	49,886	2%	1%
Residential	Heating, Cooling & Weatherization Rebate	-	18,743	20,845	39,588	2%	1%
Residential	Home Energy Assessments	4,283	7,316	25,223	36,822	2%	1%
IPA Residential	CLEARresult Community-based CFL Dis	-	-	21,383	21,383	1%	0%
Residential	Multi-Family Comprehensive EE	3,963	3,123	5,491	12,577	1%	0%
Residential	Elementary Education Kits	1,537	1,700	4,377	7,614	0%	0%
IPA Residential	Low-income Kits (UIC ERC)	-	-	5,581	5,581	0%	0%
	Other Residential	2,846	7,632	13,105	23,583	1%	0%
<b>Residential Total</b>		<b>518,010</b>	<b>622,577</b>	<b>1,103,090</b>	<b>2,243,677</b>	<b>100%</b>	<b>46%</b>
<b>Grand Total</b>		<b>1,122,657</b>	<b>1,352,339</b>	<b>2,370,481</b>	<b>4,845,477</b>		

Source: Evaluation Analysis.

Figure 5-1 and Figure 5-2 compare the top 5 programs with the highest net savings in the business and residential portfolios. The top 5 business programs represent 87%, 83%, and 86% respectively from PY7 to PY9 of the business sector savings, with an average 85 percent year over year savings contribution.

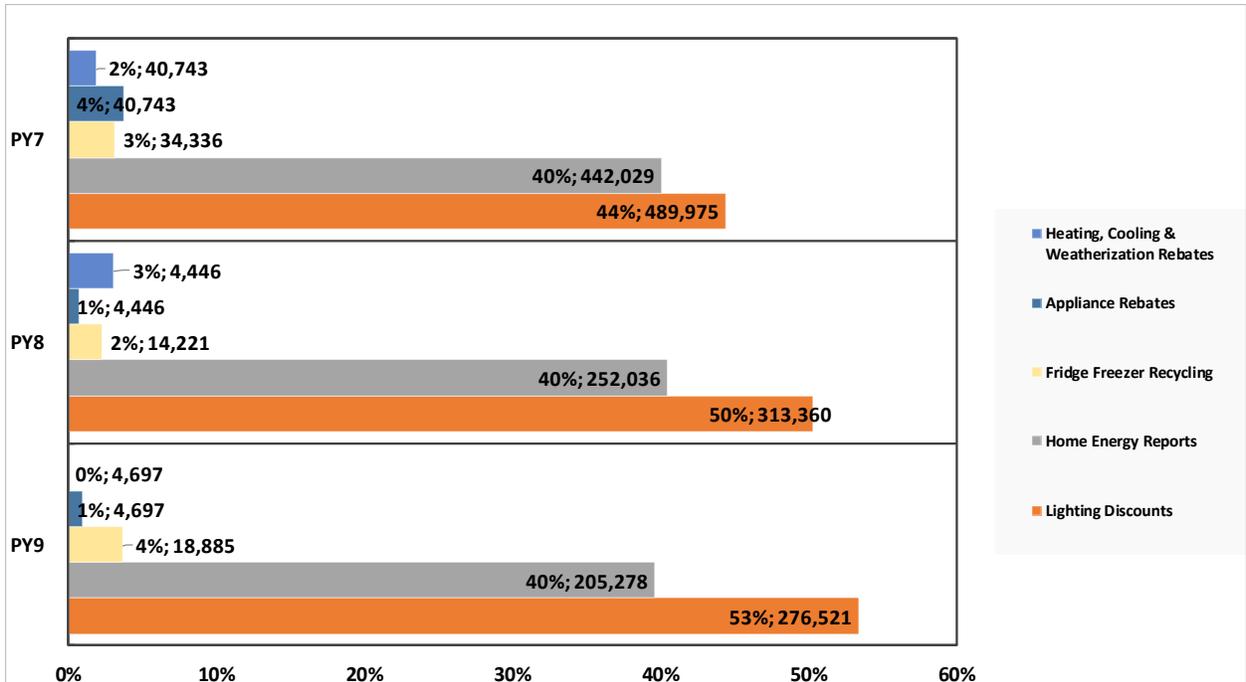
The top 5 residential programs represent 93%, 97%, and 98% respectively from PY7 to PY9 of the residential sector savings, with an average 95 percent year over year savings contribution. The Lighting Discount and Home Energy Report represent 88%. Lighting Discount is almost 50% of the residential portfolio savings year over year.

Figure 5-1. Top 5 Business Programs Net MWh Savings Comparison



Source: Evaluation Analysis

Figure 5-2. Top 5 Residential Programs Net MWh Savings Comparison



Source: Evaluation Analysis