

ComEd Incentives Program Impact Evaluation Report

Energy Efficiency/Demand Response Plan:
Program Year 2024 (CY2024)
(1/1/2024-12/31/2024)

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ComEd

FINAL

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Introduction

This report presents the results of the impact evaluation of the Incentives program from the program year from January 1 to December 31, 2024 (CY2024). The program was designed to provide monetary incentives to business and public sector customers that installed qualified EE improvements in their facilities. The incentive is offered on either a fixed per-unit basis (“standard”) or determined based on the calculated annual energy savings (“custom”). Standard measures have savings algorithms based on the IL-TRM. Custom measures are not in the IL-TRM and are identified and implemented based on site-specific factors. ComEd provides technical assistance for select projects to assist in the evaluation and implementation of custom EE projects.

Program Savings Detail

Table 1 summarizes the incremental energy and demand savings the Incentives Program achieved in CY2024. The gas or other fuel savings are only those that ComEd may be able to claim, which excludes savings the gas utilities claim, either via joint or non-joint programs.¹ The electrification savings are those resulting from electrification measures.²

Table 1. Total Annual Incremental Electric Savings - Total

Savings Category	Units	Ex Ante Gross Savings*	Program Gross Realization Rate	Verified Gross Savings*	Program Net-to-Gross Ratio (NTG)	CY2022 Net Carryover Savings	CY2023 Net Carryover Savings	Verified Net Savings†
Electric Energy Savings - Direct‡	kWh	244,448,038	0.97	238,176,910	0.87			207,811,945
Electric Energy Savings - Converted from Other Fuels§	kWh	61,115,575	1.24	75,772,603	0.89			67,074,371
Electric Energy Savings - Indirect from Electrification (electrification baseline)	kWh	9,859	1.01	9,979	0.56			5,588
Electric Energy Savings - Indirect from Electrification (efficiency baseline)	kWh							
Total Electric Energy Savings#	kWh	305,573,472	1.03	313,959,491	0.88			274,891,904
Total Electric Energy Savings Including Carryover#	kWh							
Summer Peak** Demand Savings	kW	44,467	0.94	41,823	0.93			38,757
Summer Peak** Demand Savings Including Carryover	kW	44,467	0.94	41,823	0.93			38,757

N/A = not applicable (refers to a piece of data that cannot be produced or does not apply).

* The “Ex Ante Gross Savings” and “Verified Gross Savings” in row one (Electric Energy Savings - Direct) and row seven (Summer Peak Demand Savings) exclude gross carryover savings from CY2022 and CY2023.

† The “Verified Net Savings” in row one (Electric Energy Savings - Direct) and row seven (Summer Peak Demand Savings) include net carryover savings from CY2022 and CY2023 for applicable programs.

‡ The Electric Energy Savings - Direct includes primary kWh savings from efficient measures (excluding electrification savings from both electrification and efficiency baseline), secondary kWh savings from wastewater treatment, and electric heating penalties.

¹ The evaluation will determine which other fuel savings will be counted towards goal while producing the portfolio-wide Summary Report. According to Section 8-103B(b-25) of the Illinois Public Utilities Act, “In no event shall more than 10% of each year’s applicable annual total savings requirement as defined in paragraph (7.5) of subsection (g) of this Section be met through savings of fuels other than electricity.”

² The electrification savings counted toward ComEd’s electric savings goal were determined by the evaluation team’s analysis of portfolio verified savings. According to Section 8-103B(b-27) of the Illinois Public Utilities Act, “In no event shall electrification savings counted toward each year’s applicable annual total savings requirement, as defined in paragraph (7.5) of subsection (g) of this Section, be greater than 5% per year for each year from 2022 through 2025.”

§ Gas savings converted to kWh by multiplying Therms * 29.31 (which is based on 100,000 Btu/Therm and 3,412 Btu/kWh). The evaluation team will determine which gas savings will be converted to kWh and counted toward ComEd's electric savings goal while producing the portfolio-wide Summary Report.

|| Electrification savings excluding direct efficiency savings. Calculated from net electric savings from increase in kWh consumption and decrease in gas consumption from electrification (kWh equivalent). This row calculates savings using electrification baseline. The next row (Electric Energy Savings – Indirect from Electrification (efficiency baseline)) calculates the portion of converted electrification savings to traditional efficiency electric savings using an efficiency baseline, which can be claimable towards ComEd's electric savings goal (applied to only midstream programs).³ The evaluation team determined which electrification savings are allocated toward ComEd's electrification savings goal, and which portion of electrification are converted to traditional efficiency electric savings based on analysis of portfolio-wide verified savings.

Total Electric Energy Savings is the sum of the Electric Energy Savings - Direct, Electric Energy Savings Converted from Other Fuel, Electric Energy Savings - Indirect from Electrification (electrification baseline), and Electric Energy Savings - Indirect from Electrification (efficiency baseline). Note: This row does not include carryover gross savings, but the next row (Total Electric Savings Including Carryover) includes carryover in the gross savings, for the purpose of recalculating the gross realization rate, including carryover savings (same for the peak demand savings).

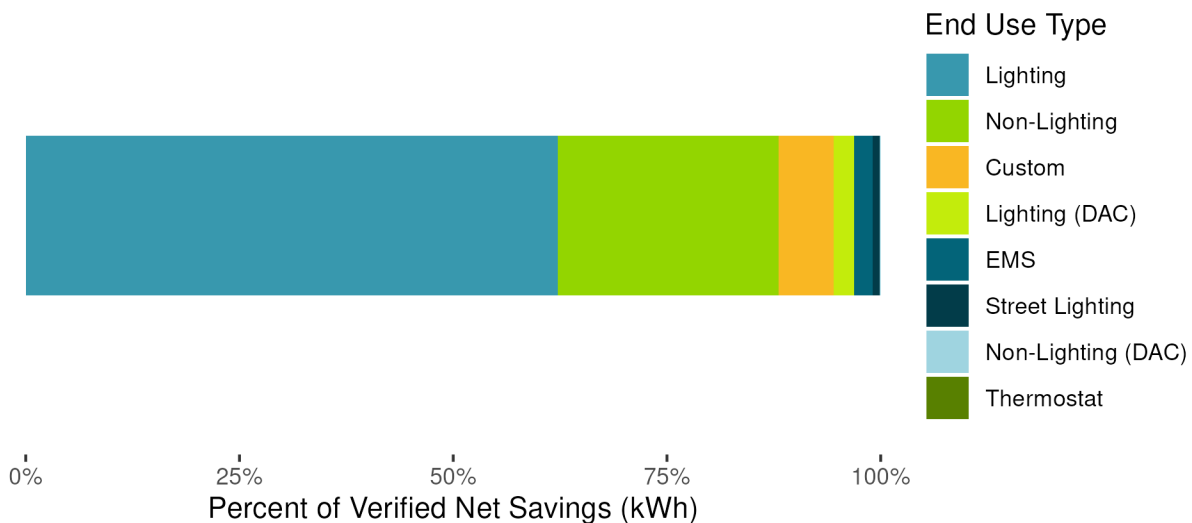
*† The Peak Demand Savings are savings occurring at coincident Summer Peak period, defined as 1:00-5:00 PM Central Prevailing Time on non-holiday weekdays, June through August. This definition is in accordance with PJM requirements.

Note: The program-level NTG values are calculated as Verified Net/Verified Gross. The program-level analysis typically used measure-level deemed NTG values, which are listed here: <https://www.ilsag.info/evaluator-ntg-recommendations-for-2024>. The NTG ratio for eligible business customers in disadvantaged neighborhoods is set to 1.00 as per the "NTG Ratio for Disadvantaged Areas" policy.⁴

Source: Evaluation team analysis

Figure 1 shows the electric energy savings by measure end use. It includes measure efficiency savings, carryover kWh, secondary water kWh, and electrification savings. It does not include other fuel savings converted to kWh.

Figure 1. Verified Net Savings by Measure – Electric



Source: Evaluation team analysis

³ ComEd Electrification Policy Resolutions for 2024 Final Draft. "...the ComEd Energy Efficiency portfolio will use the Electric Point of Sale baseline set by the TRM, without applying the additional electrification ratios, to claim Energy Efficiency savings from heat-pump projects through midstream programs once either of the electrification caps has been reached."

⁴ Illinois Energy Efficiency Policy Manual Version 3.0, Section 7.4, available at <https://www.ilsag.info/policy/>

Cumulative Persisting Annual Savings

Table 2 to Table 4 show the cumulative persisting annual savings (CPAS) for the measures installed in CY2024. The electric CPAS across all measures installed in CY2024 is shown in Table 4. The gas and other fuel contribution to CPAS (converted to equivalent electricity) are shown in Table 3. The combined savings are shown in Table 4.

Table 2. CPAS – Electric

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh)†	CPAS Verified Net kWh Savings											
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
CY2024 Program Total Contribution to CPAS	238,186,888	2,903,841,280									207,817,533	207,791,641	205,975,005	204,430,446
Historic Program Total Contribution to CPAS‡			311,687,673	630,110,771	965,208,602	1,230,883,710	1,457,436,813	1,646,212,181	1,630,183,961	1,619,553,151	1,600,925,378	1,553,823,453		
Program Total CPAS		2,903,841,280	311,687,673	630,110,771	965,208,602	1,230,883,710	1,457,436,813	1,646,212,181	207,817,533	1,827,344,792	1,806,900,383	1,758,253,899		
CY2024 Program Incremental Expiring Savings§											0	25,891	1,816,636	1,544,559
Historic Program Incremental Expiring Savings											0	10,630,811	18,627,773	47,101,925
Program Total Incremental Expiring Savings#											0	10,656,702	20,444,408	48,646,484

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Contribution to CPAS	202,609,738	199,902,799	198,599,937	197,084,284	196,778,747	186,935,337	170,053,663	161,895,431	155,716,625	146,919,776	146,206,591	26,615,086	15,064,589	14,596,882
Historic Program Total Contribution to CPAS‡	1,463,469,826	1,413,381,157	1,246,804,321	1,045,010,529	846,463,699	674,554,570	551,146,810	431,358,514	332,771,977	254,276,455	148,644,716	147,114,208	140,282,981	81,491,437
Program Total CPAS	1,666,079,564	1,613,283,956	1,445,404,258	1,242,094,813	1,043,242,445	861,489,906	721,200,473	593,253,945	488,488,602	401,196,231	294,851,307	173,729,294	155,347,570	96,088,318
CY2024 Program Incremental Expiring Savings§	1,820,708	2,706,940	1,302,861	1,515,654	305,537	9,843,410	16,881,674	8,158,232	6,178,806	8,796,849	713,185	119,591,505	11,550,497	467,707
Historic Program Incremental Expiring Savings	90,353,627	50,088,669	166,576,836	201,793,792	198,546,830	171,909,129	123,407,759	119,788,297	98,586,537	78,495,522	105,631,739	1,530,508	6,831,227	58,791,544
Program Total Incremental Expiring Savings#	92,174,335	52,795,609	167,879,697	203,309,446	198,852,367	181,752,539	140,289,433	127,946,529	104,765,342	87,292,371	106,344,924	121,122,013	18,381,725	59,259,251

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Contribution to CPAS	14,181,416	14,181,416	8,740,237	8,740,237	8,673,485	2,165,189	2,165,189	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS‡	51,425,682	31,754,807	24,150,911	14,647,242	2,166,893	315,657	0	0	0	0	0	0	0	0
Program Total CPAS	65,607,098	45,936,223	32,891,148	23,387,479	10,840,378	2,480,846	2,165,189	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Savings§	415,465	0	5,441,179	0	66,751	6,508,296	0	2,165,189	0	0	0	0	0	0
Historic Program Incremental Expiring Savings	30,065,755	19,670,875	7,603,896	9,503,669	12,480,350	1,851,236	315,657	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#	30,481,221	19,670,875	13,045,075	9,503,669	12,547,101	8,359,532	315,657	2,165,189	0	0	0	0	0	0

† Lifetime savings are the sum of CPAS savings through the EUL.

‡ Historical savings go back to CY2018.

§ Incremental expiring savings are equal to CPAS Yn-1 - CPAS Yn.

|| Historic incremental expiring savings are equal to Historic CPAS Yn-1 – Historic CPAS Yn.

Program total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis

Table 3. CPAS – Other Fuel (Gas + Propane)

Savings Category	Verified Gross Savings (Therms)	Lifetime Net Savings†	CPAS Verified Net Therms Savings												
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027			
CY2024 Program Total Other Fuel Contribution to CPAS (Therms)	2,585,213	34,045,896										2,288,447	2,288,447	2,288,447	2,288,447
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	75,772,603	997,885,211										67,074,371	67,074,371	67,074,371	67,074,371
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§			52,340,931	69,173,843	183,880,111	245,420,589	287,521,815	319,367,944	319,367,944	319,367,944	319,199,702	319,199,554	319,199,182		
Program Total Other Fuel CPAS (kWh Equivalent)	75,772,603	997,885,211	52,340,931	69,173,843	183,880,111	245,420,589	287,521,815	319,367,944	386,442,315	386,274,073	386,273,925	386,273,553			
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)												0	0	0	
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)												0	0	0	
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#												0	168,243	147	373
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†												0	168,243	147	373

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Other Fuel Contribution to CPAS (Therms)	2,288,447	2,286,344	2,286,344	2,286,344	2,286,344	2,286,344	2,234,719	2,234,306	2,234,306	2,234,306	2,234,306	0	0	0
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	67,074,371	67,012,735	67,012,735	67,012,735	67,012,735	67,012,735	65,499,612	65,487,518	65,487,518	65,487,518	65,487,518	0	0	0
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§	317,626,620	316,819,786	316,199,004	315,429,481	314,526,442	262,995,701	246,832,696	133,295,486	73,260,436	33,590,995	2,714,334	2,714,334	2,714,334	1,550,987
Program Total Other Fuel CPAS (kWh Equivalent)	384,700,991	383,832,521	383,211,738	382,442,216	381,539,177	330,008,435	312,332,307	198,783,004	138,747,954	99,078,512	68,201,852	2,714,334	2,714,334	1,550,987
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)	0	2,103	0	0	0	0	51,625	413	0	0	0	2,234,306	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)	0	61,636	0	0	0	0	1,513,123	12,094	0	0	0	65,487,518	0	0
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#	1,572,562	806,834	620,783	769,523	903,039	51,530,742	16,163,005	113,537,210	60,035,050	39,669,442	30,876,661	0	0	1,163,347
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†	1,572,562	868,470	620,783	769,523	903,039	51,530,742	17,676,128	113,549,304	60,035,050	39,669,442	30,876,661	65,487,518	0	1,163,347

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Other Fuel Contribution to CPAS (Therms)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§	23,184	23,184	0	0	0	0	0	0	0	0	0	0	0	0
Program Total Other Fuel CPAS (kWh Equivalent)	23,184	23,184	0	0	0	0	0	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#	1,527,803	0	23,184	0	0	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†	1,527,803	0	23,184	0	0	0	0	0	0	0	0	0	0	0

† Lifetime savings are the sum of CPAS savings through the EUL.

‡ Fossil fuel savings (from natural gas, propane, etc.) are reported in therms. kWh equivalent savings are calculated by multiplying therms savings by 29.31.

§ Historical savings go back to CY2018.

|| Incremental expiring savings are equal to CPAS Yn-1 - CPAS Yn.

Historic incremental expiring savings are equal to Historic CPAS Yn-1 – Historic CPAS Yn.

*† Program total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis

Table 4. CPAS – Total

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh)†	CPAS Verified Net kWh Savings											
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
CY2024 Program Total Contribution to CPAS	313,959,491	3,901,726,492									274,891,904	274,866,012	273,049,376	271,504,817
Historic Program Total Contribution to CPAS‡			364,028,605	699,284,614	1,149,088,713	1,476,304,299	1,744,958,628	1,965,580,125	1,949,551,906	1,938,752,852	1,920,124,932	1,873,022,635		
Program Total CPAS	313,959,491	3,901,726,492	364,028,605	699,284,614	1,149,088,713	1,476,304,299	1,744,958,628	1,965,580,125	2,224,443,809	2,213,618,864	2,193,174,309	2,144,527,452		
CY2024 Program Incremental Expiring Savings§											25,891	1,816,636	1,544,559	
Historic Program Incremental Expiring Savings										16,028,219	10,799,053	18,627,920	47,102,298	
Program Total Incremental Expiring Savings#										16,028,219	10,824,945	20,444,556	48,646,857	

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Contribution to CPAS	269,684,109	266,915,533	265,612,672	264,097,019	263,791,482	253,948,071	235,553,275	227,382,949	221,204,143	212,407,294	211,694,109	26,615,086	15,064,589	14,596,882
Historic Program Total Contribution to CPAS‡	1,781,096,446	1,730,200,943	1,563,003,325	1,360,440,010	1,160,990,141	937,550,270	797,979,506	564,654,000	406,032,413	287,867,449	151,359,050	149,828,542	142,997,315	83,042,424
Program Total CPAS	2,050,780,555	1,997,116,477	1,828,615,997	1,624,537,028	1,424,781,623	1,191,498,342	1,033,532,781	792,036,949	627,236,556	500,274,744	363,053,159	176,443,628	158,061,904	97,639,306
CY2024 Program Incremental Expiring Savings§	1,820,708	2,768,576	1,302,861	1,515,654	305,537	9,843,410	18,394,797	8,170,326	6,178,806	8,796,849	713,185	185,079,023	11,550,497	467,707
Historic Program Incremental Expiring Savings	91,926,189	50,895,503	167,197,618	202,563,315	199,449,869	223,439,871	139,570,764	233,325,506	158,621,586	118,164,964	136,508,400	1,530,508	6,831,227	59,954,891
Program Total Incremental Expiring Savings#	93,746,897	53,664,079	168,500,480	204,078,968	199,755,406	233,283,281	157,965,561	241,495,832	164,800,392	126,961,813	137,221,584	186,609,531	18,381,725	60,422,598

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Contribution to CPAS	14,181,416	14,181,416	8,740,237	8,740,237	8,673,485	2,165,189	2,165,189	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS‡	51,448,866	31,777,991	24,150,911	14,647,242	2,166,893	315,657	0	0	0	0	0	0	0	0
Program Total CPAS	65,630,282	45,959,407	32,891,148	23,387,479	10,840,378	2,480,846	2,165,189	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Savings§	415,465	0	5,441,179	0	66,751	6,508,296	0	2,165,189	0	0	0	0	0	0
Historic Program Incremental Expiring Savings	31,593,559	19,670,875	7,627,080	9,503,669	12,480,350	1,851,236	315,657	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#	32,009,024	19,670,875	13,068,259	9,503,669	12,547,101	8,359,532	315,657	2,165,189	0	0	0	0	0	0

† Lifetime savings are the sum of CPAS savings through the EUL.

‡ Historical savings go back to CY2018.

§ Incremental expiring savings are equal to CPAS Yn-1 - CPAS Yn.

|| Historic incremental expiring savings are equal to Historic CPAS Yn-1 – Historic CPAS Yn.

Program total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis