

ComEd Small Business Program Impact Evaluation Report

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

Prepared for:

ComEd

FINAL

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Introduction

This report presents the results of the impact evaluation of the Small Business program from the program year from January 1 to December 31, 2024 (CY2024). The program was designed to assist qualified ComEd private and public sector non-residential customers¹ in achieving electric energy savings. The program educates these customers about energy efficiency opportunities through no-cost onsite energy assessments conducted by authorized, specially trained Energy Efficiency Service Providers (EESPs) and installs no-cost direct install measures.² Further savings are available to participating customers through incentives of 30%-75% of the project cost offered for select contractor-installed measures.³

Program Savings Detail

Table 1 summarizes the incremental energy and demand savings the Small Business Program achieved in CY2024. The gas or other fuel savings are only those that ComEd may be able to claim as this is a non-joint program.⁴

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	222,088,414	1.01	223,736,089	0.95	133,694		213,715,412
Electric Energy Savings - Converted from Other Fuels§	kWh	7,269,948	1.01	7,312,408	0.98			7,147,185
Electric Energy Savings - Indirect from Electrification (electrification baseline)	kWh							
Electric Energy Savings - Indirect from Electrification (efficiency baseline)	kWh							
Total Electric Energy Savings#	kWh	229,358,363	1.01	231,048,498	0.95			220,862,597
Total Electric Energy Savings Including Carryover#	kWh	229,358,363	1.01	231,190,725	0.96	133,694		220,862,597
Summer Peak** Demand Savings	kW	43,331	1.00	43,204	0.95			41,243
Summer Peak** Demand Savings Including Carryover	kW	43,331	1.00	43,236	0.95	30		41,272

¹ Participants must be ComEd commercial or industrial customers with monthly peak demand levels up to 200 kW for private businesses and 400 kW for the public sector in CY2022. In CY2023 – CY2025, commercial or industrial private business customers with monthly peak demand levels up to 400 kW will be eligible to align with public sector customer eligibility.

² No-cost direct install measures include low flow showerheads and faucet aerators, pre-rinse spray valves, power strips, and controls for novelty coolers, beverage machines, and snack machines. The program also offers kits consisting of a variety of measures including lighting (BR30, PAR30, and candelabra lamps), hot water (bathroom and kitchen aerators, pre-rinse spray valves, and low flow showerheads), and consumer electronics (smart sockets) for fire stations, the general public, or private facilities and restaurants. Kits are offered to customers in CY2022 and will be discontinued in CY2023 – CY2025.

³ Incented measures may include LED retrofits and fixtures, lighting controls, VSDs and HVAC system components, electric water heaters, refrigeration system components, commercial kitchen equipment, compressed air system measures, smart thermostats, and building envelope measures.

⁴ 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."

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.

§ 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).⁵ 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.⁶

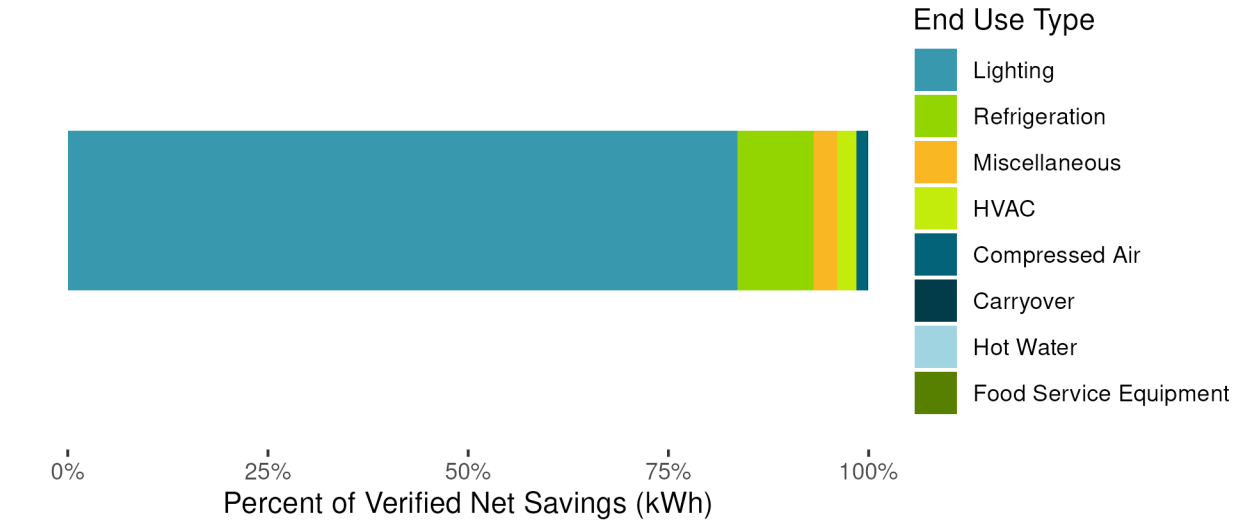
Source: Evaluation team analysis

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

⁵ 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.”

⁶ Illinois Energy Efficiency Policy Manual Version 3.0, Section 7.4, available at <https://www.ilsag.info/policy/>

Figure 1. Verified Net Savings by Measure – Electric



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 2. 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	223,878,317	2,821,464,864									213,715,412	213,665,515	212,334,467	207,106,286
Historic Program Total Contribution to CPAS‡			196,963,232	329,370,837	536,386,617	751,380,221	1,000,715,528	1,216,463,844	1,165,411,225	1,145,072,314	1,112,331,598	1,094,116,990		
Program Total CPAS	223,878,317	2,821,464,864	196,963,232	329,370,837	536,386,617	751,380,221	1,000,715,528	1,216,463,844	1,379,126,637	1,358,737,830	1,324,666,066	1,301,223,276		
CY2024 Program Incremental Expiring Savings§											49,897	1,331,048	5,228,181	
Historic Program Incremental Expiring Savings											51,052,619	20,338,910	32,740,716	18,214,608
Program Total Incremental Expiring Savings#											51,052,619	20,388,807	34,071,764	23,442,790

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Contribution to CPAS	199,934,940	196,346,360	195,244,854	193,285,366	191,980,226	189,351,722	167,603,118	153,985,352	145,340,853	132,593,941	130,232,320	25,452,169	5,921,329	5,921,329
Historic Program Total Contribution to CPAS‡	1,046,100,543	1,028,784,267	894,471,244	814,665,447	706,010,418	597,714,344	418,627,570	318,019,281	213,631,803	110,529,346	74,359	60,478	39,929	2,597
Program Total CPAS	1,246,035,483	1,225,130,626	1,089,716,098	1,007,950,814	897,990,644	787,066,066	586,230,688	472,004,634	358,972,656	243,123,287	130,306,679	25,512,647	5,961,258	5,923,926
CY2024 Program Incremental Expiring Savings§	7,171,346	3,588,580	1,101,505	1,959,488	1,305,140	2,628,505	21,748,604	13,617,766	8,644,499	12,746,912	2,361,620	104,780,151	19,530,840	0
Historic Program Incremental Expiring Savings	48,016,447	17,316,277	134,313,023	79,805,797	108,655,029	108,296,074	179,086,774	100,608,289	104,387,478	103,102,457	110,454,987	13,881	20,549	37,332
Program Total Incremental Expiring Savings#	55,187,793	20,904,857	135,414,528	81,765,285	109,960,169	110,924,579	200,835,378	114,226,054	113,031,977	115,849,370	112,816,607	104,794,032	19,551,389	37,332

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Contribution to CPAS	5,921,329	5,921,329	5,921,329	5,921,329	5,921,329	5,921,329	5,921,329	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS‡	873	873	873	873	873	873	0	0	0	0	0	0	0	0
Program Total CPAS	5,922,202	5,922,202	5,922,202	5,922,202	5,922,202	5,922,202	5,921,329	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Savings§	0	0	0	0	0	0	0	5,921,329	0	0	0	0	0	0
Historic Program Incremental Expiring Savings	1,724	0	0	0	0	0	873	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#	1,724	0	0	0	0	0	873	5,921,329	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)	249,485	2,087,622										243,848	243,848	204,616	204,616
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	7,312,408											7,147,185	7,147,185	5,997,281	5,997,281
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§			9,794,779	21,307,759	33,883,907	44,421,953	67,338,340	75,190,318	74,606,740	74,343,670	73,848,274	72,779,473			
Program Total Other Fuel CPAS (kWh Equivalent)	7,312,408		9,794,779	21,307,759	33,883,907	44,421,953	67,338,340	75,190,318	81,753,925	81,490,855	79,845,555	78,776,755			
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)											0	39,232	0	0	
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)											0	1,149,904	0	0	
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#											583,579	263,070	495,396	1,068,801	
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†											583,579	263,070	1,645,299	1,068,801	

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)	204,616	176,797	176,797	176,797	176,738	176,738	106,353	-1,472	-1,472	-1,472	-1,472	174	174	174
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	5,997,281	5,181,929	5,181,929	5,181,929	5,180,202	5,180,202	3,117,213	-43,133	-43,133	-43,133	-43,133	5,110	5,110	5,110
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§	65,317,073	56,553,380	48,421,761	38,644,596	17,669,079	4,678,023	3,435,041	930,014	913,462	913,462	201,957	201,957	180,907	4,444
Program Total Other Fuel CPAS (kWh Equivalent)	71,314,354	61,735,309	53,603,690	43,826,524	22,849,282	9,858,226	6,552,254	886,881	870,329	870,329	158,824	207,067	186,017	9,553
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)	0	27,818	0	0	59	0	70,385	107,825	0	0	0	-1,646	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)	0	815,353	0	0	1,727	0	2,062,989	3,160,346	0	0	0	-48,243	0	0
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#	7,462,400	8,763,693	8,131,619	9,777,165	20,975,516	12,991,056	1,242,982	2,505,027	16,552	0	711,505	0	21,050	176,463
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†	7,462,400	9,579,045	8,131,619	9,777,165	20,977,243	12,991,056	3,305,972	5,665,373	16,552	0	711,505	-48,243	21,050	176,463

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)	174	174	174	174	174	174	174	0	0	0	0	0	0	0
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)†	5,110	5,110	5,110	5,110	5,110	5,110	5,110	0	0	0	0	0	0	0
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§	4,444	4,444	4,444	4,444	4,444	4,444	0	0	0	0	0	0	0	0
Program Total Other Fuel CPAS (kWh Equivalent)	9,553	9,553	9,553	9,553	9,553	9,553	5,110	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)	0	0	0	0	0	0	0	174	0	0	0	0	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)	0	0	0	0	0	0	0	5,110	0	0	0	0	0	0
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#	0	0	0	0	0	0	4,444	0	0	0	0	0	0	0
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†	0	0	0	0	0	0	4,444	5,110	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	231,190,725	2,882,653,052									220,862,597	220,812,701	218,331,749	213,103,567
Historic Program Total Contribution to CPAS‡			206,758,011	350,678,596	570,270,523	795,802,173	1,068,053,868	1,291,654,162	1,240,017,964	1,219,415,984	1,186,179,872	1,166,896,464		
Program Total CPAS	231,190,725	2,882,653,052	206,758,011	350,678,596	570,270,523	795,802,173	1,068,053,868	1,291,654,162	1,460,880,561	1,440,228,685	1,404,511,621	1,380,000,031		
CY2024 Program Incremental Expiring Savings§											49,897	2,480,952	5,228,181	
Historic Program Incremental Expiring Savings										51,636,198	20,601,980	33,236,111	19,283,409	
Program Total Incremental Expiring Savings#	0	0								51,636,198	20,651,877	35,717,064	24,511,590	

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Contribution to CPAS	205,932,221	201,528,288	200,426,783	198,467,295	197,160,429	194,531,924	170,720,331	153,942,220	145,297,720	132,550,808	130,189,188	25,457,279	5,926,439	5,926,439
Historic Program Total Contribution to CPAS‡	1,111,417,616	1,085,337,647	942,893,005	853,310,043	723,679,497	602,392,367	422,062,611	318,949,295	214,545,265	111,442,808	276,316	262,435	220,836	7,041
Program Total CPAS	1,317,349,837	1,286,865,935	1,143,319,788	1,051,777,338	920,839,926	796,924,291	592,782,942	472,891,515	359,842,985	243,993,616	130,465,504	25,719,714	6,147,275	5,933,480
CY2024 Program Incremental Expiring Savings§	7,171,346	4,403,933	1,101,505	1,959,488	1,306,867	2,628,505	23,811,593	16,778,111	8,644,499	12,746,912	2,361,620	104,731,909	19,530,840	0
Historic Program Incremental Expiring Savings	55,478,847	26,079,970	142,444,642	89,582,962	129,630,546	121,287,130	180,329,756	103,113,316	104,404,030	103,102,457	111,166,492	13,881	41,599	213,795
Program Total Incremental Expiring Savings#	62,650,193	30,483,902	143,546,147	91,542,450	130,937,412	123,915,635	204,141,349	119,891,427	113,048,529	115,849,370	113,528,112	104,745,789	19,572,439	213,795

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Contribution to CPAS	5,926,439	5,926,439	5,926,439	5,926,439	5,926,439	5,926,439	5,926,439	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS‡	5,316	5,316	5,316	5,316	5,316	5,316	0	0	0	0	0	0	0	0
Program Total CPAS	5,931,755	5,931,755	5,931,755	5,931,755	5,931,755	5,931,755	5,926,439	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Savings§	0	0	0	0	0	0	0	5,926,439	0	0	0	0	0	0
Historic Program Incremental Expiring Savings	1,724	0	0	0	0	0	5,316	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#	1,724	0	0	0	0	0	5,316	5,926,439	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