

# ComEd New Construction - IE 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 impact evaluation results of the New Construction-IE program for the program year from January 1 to December 31, 2024 (CY2024). The New Construction-IE program offers technical assistance and incentive funding to building developers for new construction or major renovation of affordable housing, including single-family, low-rise, mid-rise, and high-rise multifamily buildings. Bundled energy conservation measures and custom or prescriptive approaches for specific building types are designed to result in significant energy savings over the current Illinois energy code. The program targets affordable housing developers and owners who are construction housing for households with incomes at or below 80% of the area median income. The program also aims to educate housing developers on cost-effective energy efficient building practices.

The program is offered jointly to customers served by ComEd and Nicor Gas. This report presents the results just for ComEd. The results for the gas utilities will be in a separate report.

## Program Savings Detail

Table 1 summarizes the incremental energy and demand savings the New Construction-IE 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.<sup>1</sup> The electrification savings are those resulting from electrification measures.<sup>2</sup> All included savings for the New Construction-IE program are income-eligible savings.

**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		3,152,758	0.96	3,017,075	1.00	0	0	3,017,075
Electric Energy Savings - Converted from Other Fuels§	kWh	3,746,822	1.00	3,748,021	1.00			3,748,021
Electric Energy Savings - Indirect from Electrification (electrification baseline)	kWh	4,593,363	1.00	4,616,017	1.00			4,616,017
Electric Energy Savings - Indirect from Electrification (efficiency baseline)	kWh	0		0	1.00			0
Total Electric Energy Savings#	kWh	11,492,943	0.99	11,381,113	1.00			11,381,113
Total Electric Energy Savings Including Carryover#	kWh	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Summer Peak*† Demand Savings	kW	456	0.97	442	1.00	0	0	442
Summer Peak*† Demand Savings Including Carryover	kW	N/A	N/A	N/A	N/A	N/A	N/A	N/A

<sup>1</sup> 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."

<sup>2</sup> 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."

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).<sup>3</sup> 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.<sup>4</sup>

Source

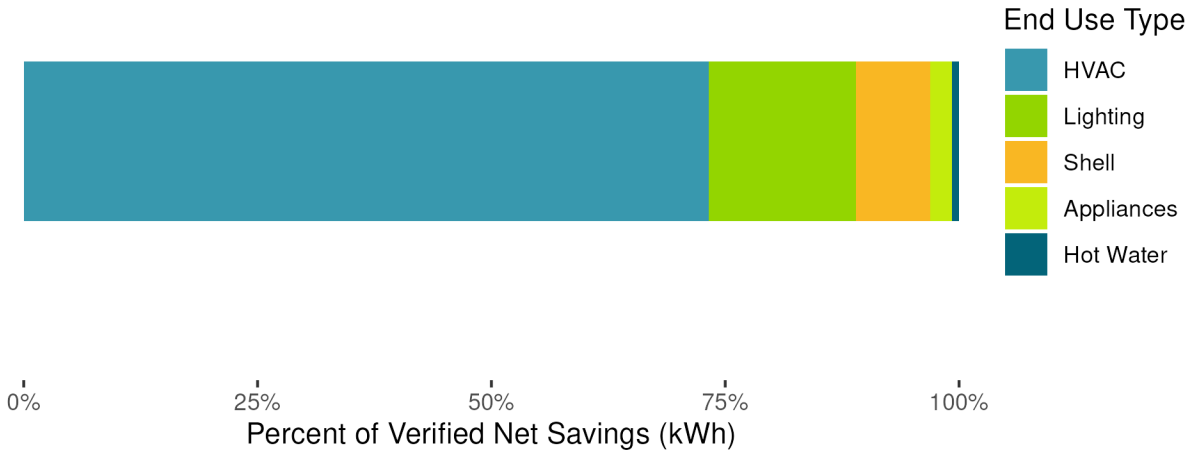
Figure 1 shows the electric energy savings by measure end use. It includes measure efficiency savings, carryover kWh, secondary water kWh, and electrification savings. It does not include other fuel savings converted to kWh.

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<sup>3</sup> 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.”

<sup>4</sup> 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**



Source: Evaluation team analysis

# 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) <sup>†</sup>	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
CY2024 Program Total Contribution to CPAS	7,633,092	113,376,311							7,633,092	7,633,092	7,633,092	7,633,092
Historic Program Total Contribution to CPAS <sup>‡</sup>			1,935,089	4,227,324	5,896,588	6,916,634	12,096,347	15,132,150	15,132,150	15,132,150	15,132,150	14,400,718
Program Total CPAS	7,633,092	265,655,423	1,935,089	4,227,324	5,896,588	6,916,634	12,096,347	15,132,150	7,633,092	22,765,242	22,765,242	22,033,810
CY2024 Program Incremental Expiring Savings <sup>§</sup>									0	0	0	0
Historic Program Incremental Expiring Savings <sup>  </sup>									0	0	0	731,432
Program Total Incremental Expiring Savings <sup>#</sup>									0	0	0	731,432

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Contribution to CPAS	7,633,092	7,633,092	7,633,092	7,633,092	7,633,092	7,567,890	7,518,703	7,353,165	7,248,151	7,215,886	3,483,049	1,617,360	718,859	675,121
Historic Program Total Contribution to CPAS <sup>‡</sup>	13,407,078	12,429,112	12,092,305	12,084,310	11,961,663	11,543,118	11,195,056	9,255,359	4,940,290	2,865,648	1,326,854	1,071,531	1,023,044	933,106
Program Total CPAS	21,040,170	20,062,204	19,725,397	19,717,402	19,594,755	19,111,008	18,713,759	16,608,524	12,188,441	10,081,534	4,809,903	2,688,891	1,741,903	1,608,227
CY2024 Program Incremental Expiring Savings <sup>§</sup>	0	0	0	0	0	65,202	49,188	165,538	105,014	32,265	3,732,837	1,865,689	898,501	43,738
Historic Program Incremental Expiring Savings <sup>  </sup>	993,640	977,966	336,807	7,995	122,647	418,545	348,062	1,939,697	4,315,069	2,074,642	1,538,794	255,323	48,487	89,938
Program Total Incremental Expiring Savings <sup>#</sup>	993,640	977,966	336,807	7,995	122,647	483,747	397,250	2,105,235	4,420,083	2,106,907	5,271,631	2,121,012	946,988	133,676

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Contribution to CPAS	675,121	605,176	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS <sup>‡</sup>	855,276	498,960	131,384	0	0	0	0	0	0	0	0	0	0	0
Program Total CPAS	1,530,397	1,104,136	131,384	0	0	0	0	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Savings <sup>§</sup>	0	69,945	605,176	0	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Savings <sup>  </sup>	77,830	356,316	367,576	131,384	0	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings <sup>#</sup>	77,830	426,261	972,752	131,384	0	0	0	0	0	0	0	0	0	0

<sup>†</sup> Lifetime savings are the sum of CPAS savings through the EUL.

<sup>‡</sup> Historical savings go back to CY2018.

<sup>§</sup> Incremental expiring savings are equal to CPAS Yn-1 - CPAS Yn.

<sup>||</sup> Historic incremental expiring savings are equal to Historic CPAS Yn-1 – Historic CPAS Yn.

<sup>#</sup> 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†	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
CY2024 Program Total Other Fuel Contribution to CPAS (Therms)	127,875	2,134,890							127,875	127,875	127,875	127,875
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	3,748,021	62,573,626							3,748,021	3,748,021	3,748,021	3,748,021
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§			0	672,456	672,456	672,456	1,970,236	3,046,742	3,046,742	3,046,742	3,046,742	3,046,742
Program Total Other Fuel CPAS (kWh Equivalent)	3,748,021	62,573,626	0	672,456	672,456	672,456	1,970,236	3,046,742	6,794,763	6,794,763	6,794,763	6,794,763
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	0	0	0
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†									0	0	0	0

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)	127,875	127,875	127,875	127,875	127,875	127,875	107,465	99,832	99,832	99,832	94,847	68,868	68,868	68,868
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	3,748,021	3,748,021	3,748,021	3,748,021	3,748,021	3,748,021	3,149,800	2,926,071	2,926,071	2,926,071	2,779,956	2,018,529	2,018,529	2,018,529
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§	3,038,255	2,961,874	2,961,874	2,923,506	2,077,240	1,849,633	1,678,599	1,671,833	1,669,664	1,251,786	1,142,884	1,142,884	1,142,884	954,768
Program Total Other Fuel CPAS (kWh Equivalent)	6,786,276	6,709,895	6,709,895	6,671,527	5,825,261	5,597,654	4,828,399	4,597,904	4,595,735	4,177,857	3,922,840	3,161,413	3,161,413	2,973,297
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)	0	0	0	0	0	0	20,410	7,633	0	0	4,985	25,978	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)	0	0	0	0	0	0	598,221	223,728	0	0	146,116	761,427	0	0
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#	8,487	76,381	0	38,368	846,266	227,607	171,034	6,766	2,169	417,878	108,902	0	0	188,116
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†	8,487	76,381	0	38,368	846,266	227,607	769,255	230,494	2,169	417,878	255,018	761,427	0	188,116

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)	68,868	68,868	9,990	0	0	0	0	0	0	0	0	0	0	0
CY2024 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	2,018,529	2,018,529	292,803	0	0	0	0	0	0	0	0	0	0	0
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§	758,918	145,588	0	0	0	0	0	0	0	0	0	0	0	0
Program Total Other Fuel CPAS (kWh Equivalent)	2,777,447	2,164,117	292,803	0	0	0	0	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (Therms)	0	0	58,878	9,990	0	0	0	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)	0	0	1,725,726	292,803	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#	195,850	613,330	145,588	0	0	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†	195,850	613,330	1,871,314	292,803	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) <sup>†</sup>	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
CY2024 Program Total Contribution to CPAS	11,381,113	175,949,937							11,381,113	11,381,113	11,381,113	11,381,113
Historic Program Total Contribution to CPAS <sup>‡</sup>			1,935,089	4,899,780	6,569,044	7,589,090	14,066,583	18,178,891	18,178,891	18,178,891	18,178,891	17,447,459
Program Total CPAS	11,381,113	175,949,937	1,935,089	4,899,780	6,569,044	7,589,090	14,066,583	18,178,891	29,560,004	29,560,004	29,560,004	28,828,572
CY2024 Program Incremental Expiring Savings <sup>§</sup>										0	0	0
Historic Program Incremental Expiring Savings <sup>  </sup>									0	0	0	731,432
Program Total Incremental Expiring Savings <sup>#</sup>									0	0	0	731,432

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Contribution to CPAS	11,381,113	11,381,113	11,381,113	11,381,113	11,381,113	11,315,911	10,668,503	10,279,236	10,174,222	10,141,958	6,263,005	3,635,889	2,737,388	2,693,650
Historic Program Total Contribution to CPAS <sup>‡</sup>	16,445,332	15,390,985	15,054,179	15,007,817	14,038,902	13,392,752	12,873,654	10,927,192	6,609,954	4,117,435	2,469,738	2,214,415	2,165,928	1,887,875
Program Total CPAS	27,826,445	26,772,098	26,435,292	26,388,930	25,420,015	24,708,663	23,542,157	21,206,428	16,784,176	14,259,393	8,732,743	5,850,304	4,903,316	4,581,525
CY2024 Program Incremental Expiring Savings <sup>§</sup>	0	0	0	0	0	65,202	647,408	389,266	105,014	32,265	3,878,952	2,627,116	898,501	43,738
Historic Program Incremental Expiring Savings <sup>  </sup>	1,002,127	1,054,347	336,806	46,362	968,915	646,150	519,098	1,946,462	4,317,238	2,492,519	1,647,697	255,323	48,487	278,053
Program Total Incremental Expiring Savings <sup>#</sup>	1,002,127	1,054,347	336,806	46,362	968,915	711,352	1,166,506	2,335,728	4,422,252	2,524,784	5,526,649	2,882,439	946,988	321,791

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Contribution to CPAS	2,693,650	2,623,705	292,803	0	0	0	0	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS <sup>‡</sup>	1,614,194	644,548	131,384	0	0	0	0	0	0	0	0	0	0	0
Program Total CPAS	4,307,844	3,268,253	424,187	0	0	0	0	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Savings <sup>§</sup>	0	69,945	2,330,902	292,803	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Savings <sup>  </sup>	273,681	969,646	513,164	131,384	0	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings <sup>#</sup>	273,681	1,039,591	2,844,066	424,187	0	0	0	0	0	0	0	0	0	0

<sup>†</sup> Lifetime savings are the sum of CPAS savings through the EUL.

<sup>‡</sup> Historical savings go back to CY2018.

<sup>§</sup> Incremental expiring savings are equal to CPAS Y<sub>n-1</sub> - CPAS Y<sub>n</sub>.

<sup>||</sup> Historic incremental expiring savings are equal to Historic CPAS Y<sub>n-1</sub> – Historic CPAS Y<sub>n</sub>.

<sup>#</sup> Program total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis