



# ComEd Electric Homes New Construction Program Impact Evaluation Report

Energy Efficiency/Demand Response Plan:  
Program Year 2023 (CY2023)  
(1/1/2023-12/31/2023)

Prepared for:

ComEd

**FINAL**

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## Introduction

This report presents the results of the impact evaluation of the Electric Homes New Construction program from the program year from January 1 to December 31, 2023 (CY2023). The program was designed to provide incentives to builders for the construction of energy efficiency all-electric homes. The program targets single-family homes, duplexes, townhomes, 2-4 flats, or accessory dwelling units.

## Program Savings Detail

Table 1 summarizes the incremental energy and demand savings the Electric Homes New Construction Program achieved in CY2023. 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>

**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)	CY2021 Net Carryover Savings	CY2022 Net Carryover Savings	Verified Net Savings†
Electric Energy Savings - Direct‡	kWh	241,946	1.55	374,379	0.90			335,982
Electric Energy Savings - Converted from Other Fuels§	kWh							
Electric Energy Savings - Electrification	kWh	1,213,850	1.03	1,252,874	0.90			1,124,379
Total Electric Energy Savings#	kWh	1,455,797	1.12	1,627,253	0.90			1,460,362
Total Electric Energy Savings Including Carryover#	kWh							
Summer Peak** Demand Savings	kW	49	0.85	42	0.90			37
Summer Peak** Demand Savings Including Carryover	kW							

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 six (Summer Peak Demand Savings) exclude gross carryover savings from CY2021 and CY2022.

† The “Verified Net Savings” in row one and row six excludes carryover savings as they don’t apply to this program.

‡ The Electric Energy Savings - Direct includes primary kWh savings from efficient measures (includes efficiency savings from electrification measures but excludes the electrification savings), 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) and/or propane savings converted to kWh by multiplying Gallons \* 26.77 (which is based on 91,333 Btu/Gallon and 3,412 Btu/kWh). The evaluation team will determine which other fuel 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).

# Total Electric Energy Savings is the sum of the Electric Energy Savings - Direct, the Electric Energy Savings Converted from Other Fuel, and the Electrification Savings. Note: This row does not include carryover gross savings,

<sup>1</sup> The evaluation will determine which other fuel savings will be counted toward 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 evaluation team will determine which electrification savings will be counted toward ComEd’s electric savings goal while producing the portfolio-wide Summary Report. 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.”

but the next one includes carryover verified gross savings, for the purpose of recalculating the gross realization rate resulting from including carryover savings (same for the peak demand savings).

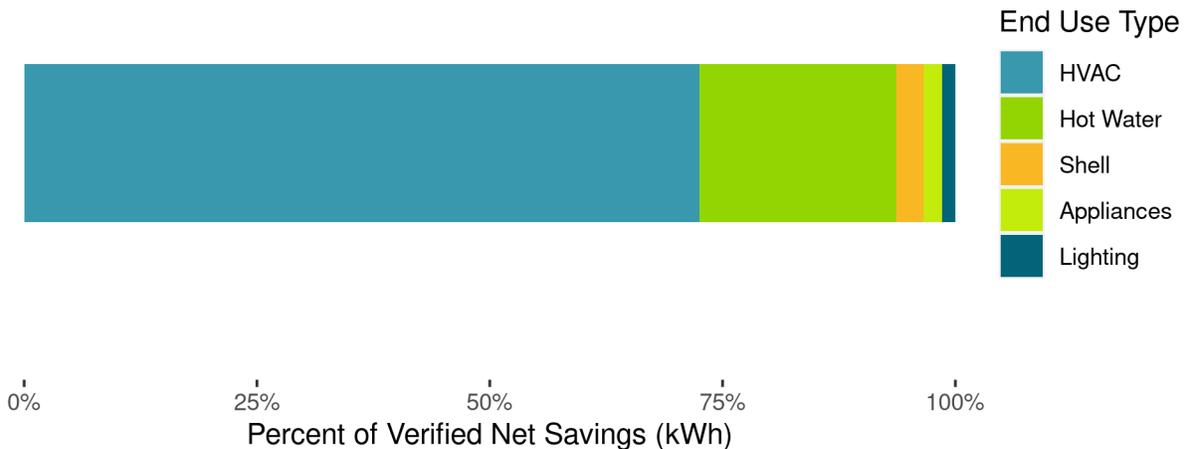
\*† The Peak Demand Savings are savings occurring at coincident Summer Peak period, defined as 1:00-5:00 PM Central Prevailing Time on non-holiday weekdays, June through August. This definition is in accordance with PJM requirement.

Note: The program-level NTG values are calculated as Verified Net/Verified Gross. This program was launched in CY2021 and did not have a net-to-gross (NTG) value deemed through the Illinois Stakeholder Advisory Group (SAG) process. The evaluation team provided a NTG research memo to ComEd in September 2021 that recommended an NTG value of 0.80.

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

## Cumulative Persisting Annual Savings

Table 2 shows the cumulative persisting annual savings (CPAS) for the measures installed in CY2023.

**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	2028
CY2023 Program Total Contribution to CPAS	1,627,253	22,159,682						1,460,362	1,460,362	1,439,576	1,439,576	1,439,576	1,439,576
Historic Program Total Contribution to CPAS‡			0	0	0	153,748	657,695	657,695	657,695	657,695	657,695	657,695	657,695
Program Total CPAS	1,627,253	22,159,682	0	0	0	153,748	657,695	2,118,057	2,118,057	2,097,271	2,097,271	2,097,271	2,097,271
CY2023 Program Incremental Expiring Savings§									0	20,786	0	0	0
Historic Program Incremental Expiring Savings								0	0	0	0	0	0
Program Total Incremental Expiring Savings#								0	0	20,786	0	0	0

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh)†	CPAS Verified Net kWh Savings										
			2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
CY2023 Program Total Contribution to CPAS	1,627,253	22,159,682	1,439,576	1,439,576	1,439,576	1,439,576	1,366,401	1,321,251	1,321,251	1,305,776	1,300,192	861,017	65,496
Historic Program Total Contribution to CPAS‡			657,695	657,695	657,695	645,247	639,165	637,157	634,448	490,423	127,945	14,667	14,667
Program Total CPAS	1,627,253	22,159,682	2,097,271	2,097,271	2,097,271	2,084,823	2,005,566	1,958,408	1,955,699	1,796,199	1,428,137	875,684	80,163
CY2023 Program Incremental Expiring Savings§			0	0	0	0	73,175	45,150	0	15,475	5,584	439,175	795,521
Historic Program Incremental Expiring Savings			0	0	0	12,448	6,082	2,008	2,709	144,025	362,478	113,278	0
Program Total Incremental Expiring Savings#			0	0	0	12,448	79,257	47,158	2,709	159,500	368,062	552,453	795,521

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh)†	CPAS Verified Net kWh Savings										
			2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
CY2023 Program Total Contribution to CPAS	1,627,253	22,159,682	65,496	65,496	49,973	0	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS‡			14,667	13,290									
Program Total CPAS	1,627,253	22,159,682	80,163	78,786	49,973	0	0	0	0	0	0	0	0
CY2023 Program Incremental Expiring Savings§			0	0	15,523	49,973	0	0	0	0	0	0	0
Historic Program Incremental Expiring Savings			0	1,377	13,290	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#			0	1,377	28,813	49,973	0	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