

# ComEd Behavior - Res/IE Program Impact Evaluation Report

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

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**FINAL**

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# Introduction

This report presents the results of the impact evaluation of the Residential Behavior Program from the program year from January 1 to December 31, 2024 (CY2024). The program was designed to generate energy savings by providing residential customers with information about energy use and conservation strategies. Program participants receive information from regularly mailed and emailed home energy reports.

## Program Savings Detail

Table 1 summarizes the incremental energy and demand savings the Residential Behavior Program achieved in CY2024. Since the randomized control trial (RCT) design of the Residential Behavior Program inherently estimates net savings, neither the evaluation team nor the implementer estimated gross savings and there is no gross realization rate or net-to-gross ratio. Similarly, the RCT cannot identify specific measures that produce savings and so cannot calculate electrification savings, and it is based on electricity consumption and so cannot calculate savings from other fuels.

**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							100,555,672
Electric Energy Savings - Converted from Other Fuels§	kWh							0
Electric Energy Savings - Indirect from Electrification (electrification kWh baseline)								0
Electric Energy Savings - Indirect from Electrification (efficiency kWh baseline)	kWh							0
Total Electric Energy Savings#	kWh							100,555,672
Total Electric Energy Savings Including Carryover#	kWh							N/A
Summer Peak**†† Demand Savings	kW							17,356
Summer Peak**†† Demand Savings Including Carryover	kW							N/A

All gross savings columns are intentionally blank as the RCT design inherently estimates net savings and therefore neither the evaluation team nor the implementer estimated gross savings.

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.

|| 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>1</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.

Source: Evaluation team analysis

Table 2 provides the detailed adjustments made to arrive at the final verified net savings for CY2024 and reports the program net realization rate. Of the modeled savings, 4% are from uplift into other ComEd energy efficiency programs, and over half (57%) are attributable to prior program years. After the uplift and persistence adjustments, the program achieved a net realization rate of 0.99.

**Table 2. Total Program Net Electric Savings - Total**

Savings Category	Energy Savings (kWh)
Ex Ante Savings	101,492,000
Modeled Savings	257,516,041
Current Year Uplift Adjustment	(345,149)
Legacy Uplift Adjustment	(11,100,331)
Verified Unadjusted Net Savings	246,070,561
Persistence Adjustment	(145,514,890)
Final Verified Net Savings	100,555,672
Program Net Realization Rate	0.99

Source: Evaluation team analysis

<sup>1</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."

# Cumulative Persisting Annual Savings

Table 3 shows the cumulative persisting annual savings (CPAS) for the measures installed in CY2024.

**Table 3. CPAS – Electric**

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh) <sup>†</sup>	CPAS Verified Net kWh Savings											
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
CY2024 Program Total Contribution to CPAS		358,650,175								100,555,672	73,528,138	53,909,309	38,942,953	28,744,286
Historic Program Total Contribution to CPAS <sup>‡</sup>			279,539,772	255,950,948	240,435,808	249,725,611	259,799,415	228,488,841	145,460,772	91,482,189	57,945,186	41,797,893	30,247,195	
Program Total CPAS		358,650,175	279,539,772	255,950,948	240,435,808	249,725,611	259,799,415	228,488,841	246,016,444	165,010,327	111,854,495	80,740,846	58,991,481	
CY2024 Program Incremental Expiring Savings <sup>§</sup>											27,027,534	19,618,828	14,966,356	10,198,667
Historic Program Incremental Expiring Savings <sup>  </sup>									83,028,069	53,978,583	33,537,003	16,147,293	11,550,698	
Program Total Incremental Expiring Savings <sup>#</sup>									83,028,069	81,006,117	53,155,831	31,113,649	21,749,365	

  

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh) <sup>†</sup>	CPAS Verified Net kWh Savings										
			2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
CY2024 Program Total Contribution to CPAS		358,650,175	21,124,567	15,710,084	11,529,339	8,409,325	6,196,502	0	0	0	0	0	0
Historic Program Total Contribution to CPAS <sup>‡</sup>			21,918,696	15,731,435	11,301,848	4,948,028	0	0	0	0	0	0	0
Program Total CPAS		358,650,175	43,043,263	31,441,519	22,831,187	13,357,353	6,196,502	0	0	0	0	0	0
CY2024 Program Incremental Expiring Savings <sup>§</sup>			7,619,719	5,414,484	4,180,745	3,120,013	2,212,823	6,196,502	0	0	0	0	0
Historic Program Incremental Expiring Savings <sup>  </sup>			8,328,499	6,187,261	4,429,587	6,353,820	4,948,028	0	0	0	0	0	0
Program Total Incremental Expiring Savings <sup>#</sup>			15,948,218	11,601,745	8,610,332	9,473,833	7,160,851	6,196,502	0	0	0	0	0

  

Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh) <sup>†</sup>	CPAS Verified Net kWh Savings										
			2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
CY2024 Program Total Contribution to CPAS		358,650,175	0	0	0	0	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS <sup>‡</sup>			0	0	0	0	0	0	0	0	0	0	0
Program Total CPAS		358,650,175	0	0	0	0	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Savings <sup>§</sup>			0	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Savings <sup>  </sup>			0	0	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings <sup>#</sup>			0	0	0	0	0	0	0	0	0	0	0

All gross savings columns are intentionally blank as the RCT design inherently estimates net savings and therefore neither the evaluation team nor the implementer estimated gross savings.

<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