

ComEd Midstream/Upstream 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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Table of Contents

Introduction	1
Program Savings Detail	1
Cumulative Persisting Annual Savings	4

List of Figures

Figure 1. Verified Net Savings by Measure – Electric	3
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List of Tables

Table 1. Total Annual Incremental Electric Savings – Total	1
Table 2. Incremental Electric Savings – Income Eligible	2
Table 3. Total Annual Incremental Electric Savings – Non-Income Eligible	2
Table 4. CPAS – Electric	4

Introduction

This report presents the results of the impact evaluation of the Midstream/Upstream Program from the program year from January 1 to December 31, 2024 (CY2024). The program was designed to provide incentives to increase the market share of energy efficient products commonly sold to business customers and has two components Instant Discounts and Commercial Food Service Equipment (CFS). Instant Discounts provides an expedited, simple solution to business customers interested in purchasing high efficiency products by providing instant discounts at the point of sale. CFS works to increase the uptake of energy efficient commercial food service equipment among food service operators through a simplified administrative process, point of sale customer rebates, and upstream incentives.

Program Savings Detail

Table 1 summarizes the incremental energy and demand savings the Midstream/Upstream Program achieved in CY2024. The electrification savings are those resulting from electrification measures.¹

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	181,225,722	1.01	182,521,595	0.86	10,023,068	4,382,000	171,971,146
Electric Energy Savings - Converted from Other Fuel§	kWh							
Electric Energy Savings - Indirect from Electrification (electrification baseline)	kWh	26,880,234		21,936,867	0.80			17,601,596
Electric Energy Savings - Indirect from Electrification (efficiency baseline)	kWh			1,089,268	0.80			871,414
Total Electric Energy Savings#	kWh	208,105,956	0.97	205,547,730	0.86	10,023,068	4,382,000	190,444,155
Total Electric Energy Savings Including Carryover#	kWh	208,105,956	1.06	223,378,351	0.85	10,023,068	4,382,000	190,444,155
Summer Peak** Demand Savings	kW	36,000	1.01	36,306	0.87	2,307	1,046	35,035
Summer Peak** Demand Savings Including Carryover	kW	36,000	1.12	40,460	0.87	2,307	1,046	35,035

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

¹ 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.”

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).² 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.³

Source: Evaluation team analysis

Table 2. Incremental Electric Savings – Income Eligible

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			0				0
Electric Energy Savings - Converted from Other Fuel§	kWh			0				0
Electric Energy Savings - Indirect from Electrification (electrification baseline)	kWh			2,683,595	0.80			2,152,086
Electric Energy Savings - Indirect from Electrification (efficiency baseline)	kWh			0				0
Total Electric Energy Savings#	kWh			2,683,595	0.80			2,152,086
Total Electric Energy Savings Including Carryover#	kWh			2,683,595	0.80			2,152,086
Summer Peak*† Demand Savings	kW			0				0
Summer Peak*† Demand Savings Including Carryover	kW			0				0

Footnotes are defined similarly as found in Table 1.

Source: Evaluation team analysis

Table 3. Total Annual Incremental Electric Savings – Non-Income Eligible

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	181,225,722	1.01	182,521,595	0.86	10,023,068	4,382,000	171,971,146
Electric Energy Savings - Converted from Other Fuel§	kWh							
Electric Energy Savings - Indirect from Electrification (electrification baseline)	kWh	26,880,234		19,253,272	0.80			15,449,510
Electric Energy Savings - Indirect from Electrification (efficiency baseline)	kWh			1,089,268	0.80			871,414
Total Electric Energy Savings#	kWh	208,105,956	0.97	202,864,136	0.86	10,023,068	4,382,000	188,292,069

² 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.”

³ Illinois Energy Efficiency Policy Manual Version 3.0, Section 7.4, available at <https://www.ilsag.info/policy/>

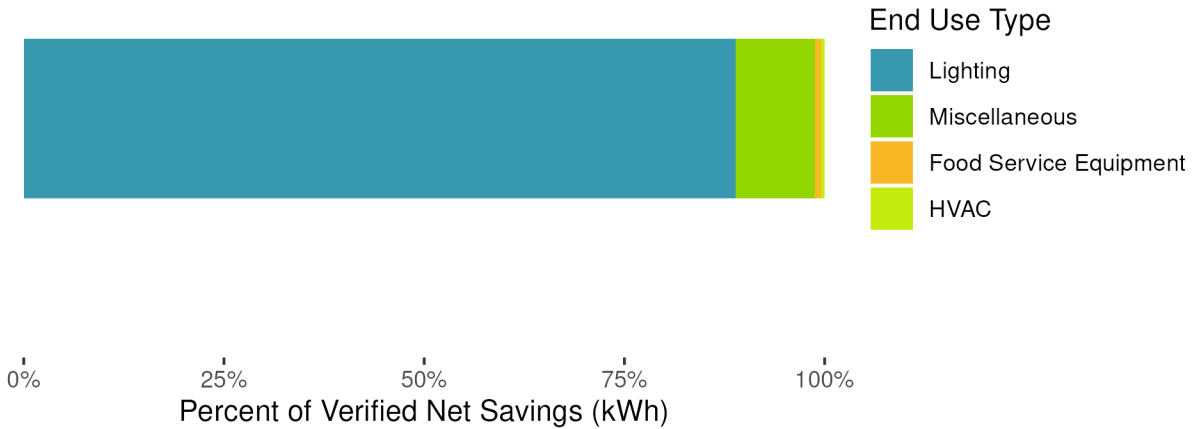
Savings Category	Units	Ex Ante Gross Savings*	Program Gross Realization Rate	Verified Gross Savings*	Program Net-to-Gross Ratio (NTG)	CY2022 Net Carryover Savings	CY2023 Net Carryover Savings	Verified Net Savings†
Total Electric Energy Savings Including Carryover#	kWh	208,105,956	1.06	220,694,756	0.85	10,023,068	4,382,000	188,292,069
Summer Peak** Demand Savings	kW	36,000	1.01	36,306	0.87	2,307	1,046	35,035
Summer Peak** Demand Savings Including Carryover	kW	36,000	1.12	40,460	0.87	2,307	1,046	35,035

Footnotes are defined similarly as found in Table 1.

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.

Figure 1. Verified Net Savings by Measure – Electric



Source: Evaluation team analysis

Cumulative Persisting Annual Savings

Table 4 shows cumulative persisting annual savings (CPAS) for the measures installed in CY2024.

Table 4. 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	223,378,351	2,693,658,737									190,444,155	190,444,155	187,651,058	187,651,058
Historic Program Total Contribution to CPAS‡			253,222,349	494,589,366	703,682,603	879,422,392	1,056,395,177	1,171,753,506	1,094,151,296	957,358,457	805,384,665	741,142,342		
Program Total CPAS	223,378,351	2,693,658,737	253,222,349	494,589,366	703,682,603	879,422,392	1,056,395,177	1,171,753,506	1,284,595,452	1,147,802,613	993,035,723	928,793,400		
CY2024 Program Incremental Expiring Savings§											0	2,793,098		0
Historic Program Incremental Expiring Savings											77,602,210	136,792,839	151,973,792	64,242,323
Program Total Incremental Expiring Savings#											77,602,210	136,792,839	154,766,890	64,242,323

Savings Category	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
CY2024 Program Total Contribution to CPAS	180,667,469	177,575,423	177,575,423	177,575,423	177,575,423	177,516,499	177,511,730	172,716,399	168,327,004	168,325,436	160,114,353	21,757,736	57,499	57,499
Historic Program Total Contribution to CPAS‡	687,997,487	619,002,061	572,404,038	541,218,698	513,388,340	439,643,247	348,837,019	254,262,311	167,240,672	79,921,608	151,867	151,867	151,867	111,866
Program Total CPAS	868,664,956	796,577,484	749,979,461	718,794,121	690,963,763	617,159,745	526,348,748	426,978,710	335,567,676	248,247,044	160,266,220	21,909,603	209,366	169,365
CY2024 Program Incremental Expiring Savings§	6,983,589	3,092,046	0	0	0	58,924	4,769	4,795,331	4,389,395	1,568	8,211,082	138,356,617	21,700,237	0
Historic Program Incremental Expiring Savings	53,144,855	68,995,426	46,598,023	31,185,340	27,830,358	73,745,093	90,806,228	94,574,708	87,021,639	87,319,064	79,769,741	0	0	40,001
Program Total Incremental Expiring Savings#	60,128,444	72,087,472	46,598,023	31,185,340	27,830,358	73,804,017	90,810,997	99,370,039	91,411,034	87,320,632	87,980,824	138,356,617	21,700,237	40,001

Savings Category	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
CY2024 Program Total Contribution to CPAS	57,499	57,499	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS‡	23,897	0	0	0	0	0	0	0	0	0	0	0	0	0
Program Total CPAS	81,396	57,499	0	0	0	0	0	0	0	0	0	0	0	0
CY2024 Program Incremental Expiring Savings§	0	0	57,499	0	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Savings	87,969	23,897	0	0	0	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#	87,969	23,897	57,499	0	0	0	0	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