



ComEd Midstream/Upstream Program Impact Evaluation Report

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

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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, 2023 (CY2023). 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 (CFSE). Instant Discounts provides an expediated, simple solution to business customers interested in purchasing high efficiency products by providing instant discounts at the point of sale. CFSE 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 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.¹ The electrification savings are those resulting from electrification measures.²

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	112,321,621	1.01	113,180,188	0.88	10,450,223	11,923,148	122,085,232
Electric Energy Savings - Converted from Other Fuel§	kWh							
Electric Energy Savings - Electrification	kWh	6,815,285	1.00	6,816,922	0.86			5,876,429
Total Electric Energy Savings#	kWh	119,136,906	1.01	119,997,111	0.88	10,450,223	11,923,148	127,961,662
Total Electric Energy Savings Including Carryover#	kWh	119,136,906	1.25	148,566,931	0.86	10,450,223	11,923,148	127,961,662
Summer Peak** Demand Savings	kW	25,674	1.01	25,873	0.88	2,386	2,745	27,905
Summer Peak** Demand Savings Including Carryover	kW	25,674	1.26	32,425	0.86	2,386	2,745	27,905

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 include net carryover savings from CY2021 and CY2022 (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.

¹ 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."

² 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."

§ 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, 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).

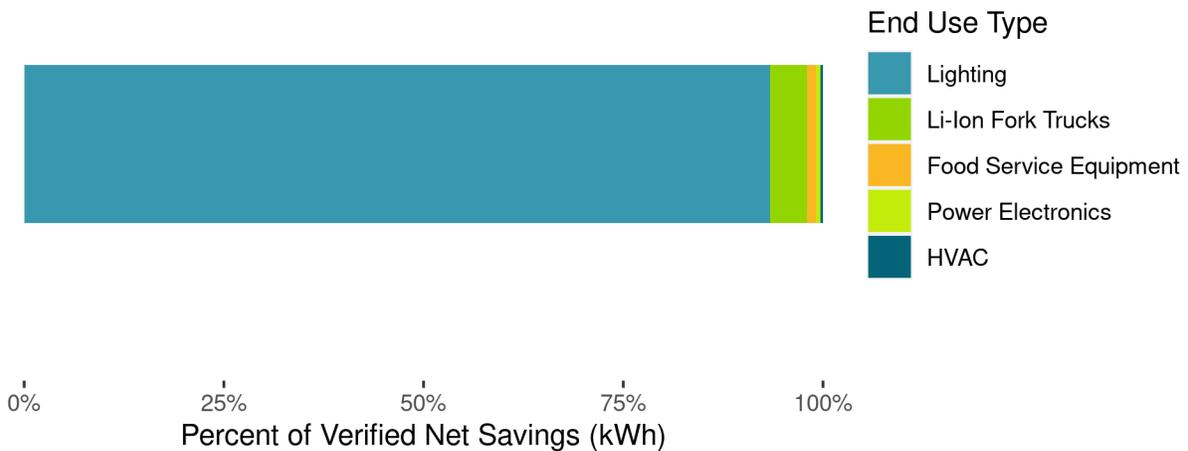
*† The Peak Demand Savings are savings occurring at coincident Summer Peak period, defined as 1:00-5:00 PM Central Prevailing Time on non-holiday weekdays, June through August. This definition is in accordance with PJM requirement.

Note: The program-level NTG values are calculated as Verified Net/Verified Gross. The program-level analysis typically used measure-level deemed NTG values, which are listed here: <https://www.ilsag.info/evaluator-ntg-recommendations-for-2023>.

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 electric 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	148,566,931	1,655,064,450						127,961,662	127,961,662	121,675,746	121,675,746	117,085,532	112,879,276	
Historic Program Total Contribution to CPAS‡			253,222,349	494,589,366	703,682,603	879,422,392	1,056,395,177	1,043,791,844	966,189,634	835,682,711	683,708,918	624,056,811	575,118,211	
Program Total CPAS	148,566,931	1,655,064,450	253,222,349	494,589,366	703,682,603	879,422,392	1,056,395,177	1,171,753,505	1,094,151,296	957,358,457	805,384,664	741,142,342	687,997,487	
CY2023 Program Incremental Expiring Savings§									0	6,285,916	0	4,590,215	4,206,256	
Historic Program Incremental Expiring Savings									12,603,333	77,602,210	130,506,923	151,973,792	59,652,108	48,938,599
Program Total Incremental Expiring Savings#									12,603,333	77,602,210	136,792,839	151,973,792	64,242,322	53,144,855

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	148,566,931	1,655,064,450	112,879,276	112,879,276	112,879,276	112,862,166	107,866,440	98,867,880	93,765,791	93,765,791	79,822,800	53,059	53,059
Historic Program Total Contribution to CPAS‡			506,122,785	459,524,762	428,339,422	400,526,174	331,776,807	249,969,138	160,496,520	73,474,881	98,808	98,808	98,808
Program Total CPAS	148,566,931	1,655,064,450	619,002,061	572,404,037	541,218,698	513,388,340	439,643,247	348,837,018	254,262,310	167,240,672	79,921,608	151,867	151,867
CY2023 Program Incremental Expiring Savings§			0	0	0	17,110	4,995,726	8,998,559	5,102,089	0	13,942,991	79,769,741	0
Historic Program Incremental Expiring Savings			68,995,426	46,598,024	31,185,339	27,813,249	68,749,366	81,807,670	89,472,618	87,021,638	73,376,073	0	0
Program Total Incremental Expiring Savings#			68,995,426	46,598,024	31,185,339	27,830,359	73,745,092	90,806,229	94,574,708	87,021,638	87,319,064	79,769,741	0

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	148,566,931	1,655,064,450	53,059	53,059	23,897	0	0	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS‡			98,808	58,807	0	0	0	0	0	0	0	0	0	0
Program Total CPAS	148,566,931	1,655,064,450	151,867	111,866	23,897	0	0	0	0	0	0	0	0	0
CY2023 Program Incremental Expiring Savings§			0	0	29,162	23,897	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Savings			0	40,001	58,807	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#			0	40,001	87,969	23,897	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.

Portfolio total incremental expiring savings are equal to current year total incremental expiring savings plus historic total incremental expiring savings.

Source: Evaluation team analysis