



ComEd Midstream/Upstream Program Impact Evaluation Report

Energy Efficiency/Demand Response Plan:
Program Year 2022 (CY2022)
(1/1/2022-12/31/2022)

Prepared for:

ComEd

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Introduction

This report presents the results of the impact evaluation of the Midstream/Upstream Program for the program year January 1 to December 31, 2022 (CY2022). The Midstream/Upstream Program provides incentives to increase the market share of energy efficient products commonly sold to business customers. The program is designed to provide an expedited, simple solution to business customers interested in purchasing high efficiency products by providing instant discounts at the point of sale. The program provides incentives for energy efficient LED lamps (screw-based, pin-based, and tubular), Energy Star® (ES) and DesignLights Consortium (DLC) fixtures, and exit signs. Three-phase, high frequency battery chargers and commercial HVAC equipment are also offered through the program.

Program Savings Detail

Table 1 summarizes the incremental energy and demand savings the Midstream/Upstream Program achieved in CY2022. The gas 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 fuel switching 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)	CY2020 Net Carryover Savings	CY2021 Net Carryover Savings	Verified Net Savings†
Electric Energy Savings - Direct‡	kWh	190,634,910	1.00	190,626,948	0.81	12,522,882	12,407,216	180,047,539
Electric Energy Savings - Converted from Gas§	kWh							
Electric Energy Savings - Indirect from Fuel Switching (through Electrification)	kWh							
Total Electric Energy Savings#	kWh	190,634,910	1.00	190,626,948	0.81	12,522,882	12,407,216	180,047,539
Secondary Water Savings	kWh							
Summer Peak** Demand Savings	kW	43,315	1.00	43,368	0.81	2,870	2,823	40,965

* Ex ante and verified gross savings exclude gross carryover savings from CY2020 and CY2021.

† The “Verified Net Savings” in row one (Electric Energy Savings - Direct) includes net carryover savings from CY2020 and CY2021.

‡ The Electric Energy Savings - Direct includes primary kWh savings from efficient measures (includes efficiency savings from fuel switching measures but excludes the fuel switching 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). 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 from fuel switching measures excluding direct efficiency savings. Calculated from net electric

¹ The evaluation will determine which gas 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 from fuel switching 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.”

savings from increase in kWh consumption and decrease in gas consumption from fuel switching (kWh equivalent). # Total Electric Energy Savings is the sum of the Electric Energy Savings - Direct, the Electric Energy Savings Converted from Gas, and the Electrification Savings from fuel switching.

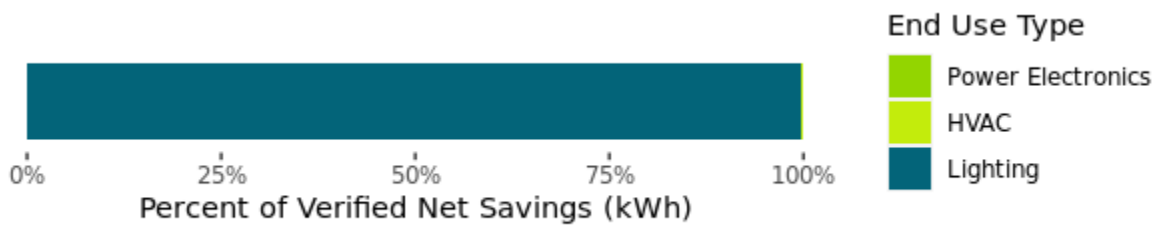
*† The Peak Demand Savings are savings occurring at coincident Summer Peak period, defined as 1:00-5:00 PM Central Prevailing Time on non-holiday weekdays, June through August. This definition is in accordance with PJM requirement.

- 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-2022>.

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 End Use Type – Electric



Source: Evaluation team analysis.

CPAS Savings

Table 2 shows the cumulative persisting annual savings (CPAS) for the measures installed in CY2022.

Table 2. Cumulative Persisting Annual Savings (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	
CY2022 Program Total Contribution to CPAS	222,354,690	1,810,104,179					180,047,539	180,047,539	180,047,539	180,047,539	133,447,600	127,652,843	125,429,413	
Historic Program Total Contribution to CPAS‡			253,222,349	494,589,366	703,615,299	879,075,367	874,765,489	862,162,157	784,559,947	654,053,024	548,679,171	494,821,912	448,106,743	
Program Total CPAS			253,222,349	494,589,366	703,615,299	879,075,367	1,054,813,029	1,042,209,696	964,607,486	834,100,563	682,126,771	622,474,755	573,536,155	
CY2022 Program Incremental Expiring Savings§									0	0	0	46,599,940	5,794,757	2,223,430
Historic Program Incremental Expiring Savings							4,309,877	12,603,333	77,602,210	130,506,923	105,373,853	53,857,259	46,715,169	
Program Total Incremental Expiring Savings#							4,309,877	12,603,333	77,602,210	130,506,923	151,973,792	59,652,016	48,938,599	

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
CY2022 Program Total Contribution to CPAS	222,354,690	1,810,104,179	101,549,950	101,538,282	101,505,518	88,394,647	79,177,737	79,133,565	78,727,838	73,356,628	0	0	0
Historic Program Total Contribution to CPAS‡			402,994,452	356,417,742	325,278,314	310,643,438	251,331,731	170,709,205	81,642,314				
Program Total CPAS			504,544,402	457,956,024	426,783,832	399,038,085	330,509,468	249,842,770	160,370,152	73,356,628	0	0	0
CY2022 Program Incremental Expiring Savings§			23,879,463	11,668	32,764	13,110,872	9,216,909	44,172	405,727	5,371,210	73,356,628	0	0
Historic Program Incremental Expiring Savings			45,112,291	46,576,710	31,139,428	14,634,876	59,311,707	80,622,526	89,066,891	81,642,314	0	0	0
Program Total Incremental Expiring Savings#			68,991,753	46,588,378	31,172,192	27,745,747	68,528,616	80,666,698	89,472,618	87,013,524	73,356,628	0	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	
CY2022 Program Total Contribution to CPAS	222,354,690	1,810,104,179	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS‡														
Program Total CPAS			0	0	0	0	0	0	0	0	0	0	0	0
CY2022 Program Incremental Expiring Savings§			0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Savings			0	0	0	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Savings#			0	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.

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

Source: Evaluation team analysis