



ComEd Assessments 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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Prepared by:
Dustin Bailey
Guidehouse

[guidehouse.com](https://www.guidehouse.com)

Submitted to:

ComEd
2011 Swift Drive
Oak Brook, IL 60523

Submitted by:

Guidehouse Inc.
150 N. Riverside Plaza, Suite 2100
Chicago, IL 60606

Contact:

Charles Maglione, Partner
703.431.1983
cmaglione@guidehouse.com

Jeff Erickson, Director
608.616.4962
jeff.erickson@guidehouse.com

Nishant Mehta, Associate Director
608.616.5823
nishant.mehta@guidehouse.com

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Introduction

This report presents the results of the impact evaluation of the Assessments program for the program year from January 1 to December 31, 2023 (CY2023). The Assessments program consists of low-cost/no-cost and operational measures identified during ComEd engineering commercial and industrial facility assessments. These measures focus on existing equipment and apply maintenance and operational best practices to realize energy savings with little or no investment from the customer. The measures claimed in the Assessments program are not covered by the Incentives Program because of their no-cost/low-cost nature, but they are identified during customer assessments completed by ComEd. Implementation of identified measures can occur at the time of the assessment. If not implemented then, program outreach staff follows up with the customer to check on progress. The program had 62 participants in CY2023.

ComEd staff developed a calculator for each measure to estimate program savings. The measures and operational efficiencies identified through this program include turning off lights and equipment when not needed, addressing air compressor leaks and system pressure, adjusting space temperatures setpoints, and simple heating, ventilation, and air conditioning (HVAC) maintenance.

Program Savings Detail

Table 1 summarizes the incremental energy and demand savings the Assessments 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

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	2,606,766	0.94	2,455,483	0.94	N/A	N/A	2,309,581
Electric Energy Savings - Converted from Other Fuel§	kWh	76,235	0.85	65,170	0.94	N/A	N/A	61,260
Electric Energy Savings - Electrification	kWh	0	N/A	0	N/A	N/A	N/A	0
Total Electric Energy Savings#	kWh	2,683,001	0.94	2,520,654	0.94	N/A	N/A	2,370,841
Total Electric Energy Savings Including Carryover#	kWh							
Summer Peak** Demand Savings	kW	0	N/A	0	N/A	N/A	N/A	0
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, however there are no electrification measures in this program), 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."

§ 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 from electrification measures 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).

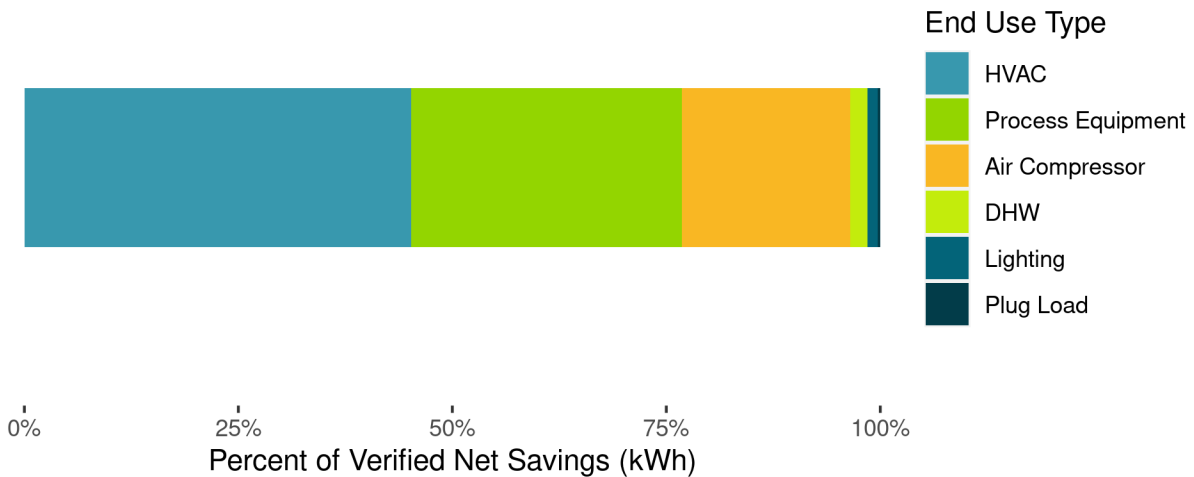
*† The Peak Demand Savings are savings occurring at coincident Summer Peak period, defined as 1:00-5:00 PM Central Prevailing Time on non-holiday weekdays, June through August. This definition is in accordance with PJM requirement.

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 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 to Table 4 show the cumulative persisting annual savings (CPAS) for the measures installed in CY2023. The electric CPAS across all measures installed in 2023 is shown in Table 2. The gas and other fuel contribution to CPAS (converted to equivalent electricity) are shown in Table 3. The combined savings are shown in Table 4.

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	2,455,483	8,316,215							2,309,581	2,309,581	1,623,600	1,160,538	912,916	0	
Historic Program Total Contribution to CPAS‡		68,359,079	3,282,694	6,646,478	10,315,942	11,405,698	12,476,621	10,204,222	6,675,573	5,409,638	1,939,481	2,732	0	0	
Program Total CPAS	2,455,483	76,675,293	3,282,694	6,646,478	10,315,942	11,405,698	12,476,621	12,513,802	8,985,154	7,033,237	3,100,019	915,647	0	0	
CY2023 Program Incremental Expiring Savings§										0	685,981	463,061	247,623	912,916	
Historic Program Incremental Expiring Savings										2,272,399	3,528,649	1,265,935	3,470,157	1,936,749	2,732
Program Total Incremental Expiring Savings#										2,272,399	3,528,649	1,951,916	3,933,218	2,184,372	915,647

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	2,455,483	8,316,215	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS‡		68,359,079	0	0	0	0	0	0	0	0	0	0	0	0
Program Total CPAS	2,455,483	76,675,293	0	0	0	0	0	0	0	0	0	0	0	0
CY2023 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.

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

Source: Evaluation team analysis

Table 3. CPAS – Other Fuel (Gas + Propane)

Savings Category	Verified Gross Savings (Therms)	Lifetime Net Savings†	CPAS Verified Net Therms Savings												
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
CY2023 Program Total Other Fuel Contribution to CPAS (Therms)	2,223	10,268								2,090	2,090	2,090	2,090	1,908	0
CY2023 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	65,170	300,958								61,260	61,260	61,260	61,260	55,917	0
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§		14,634,105	1,522,282	2,478,545	2,748,951	2,590,634	2,501,974	1,600,156	649,139	533,147	9,278	0	0	0	
Program Total Other Fuel CPAS (kWh Equivalent)	65,170	14,935,063	1,522,282	2,478,545	2,748,951	2,590,634	2,501,974	1,661,416	710,399	594,407	70,538	55,917	0	0	
CY2023 Program Incremental Expiring Other Fuel Savings (Therms)										0	0	0	182	1,908	
CY2023 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)										0	0	0	5,343	55,917	
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#										901,818	951,017	115,991	523,869	9,278	0
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†										901,818	951,017	115,991	523,869	14,621	55,917

Savings Category	Verified Gross Savings (Therms)	Lifetime Net Savings†	CPAS Verified Net Therms Savings											
			2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	
CY2023 Program Total Other Fuel Contribution to CPAS (Therms)	2,223	10,268	0	0	0	0	0	0	0	0	0	0	0	0
CY2023 Program Total Other Fuel Contribution to CPAS (kWh Equivalent)‡	65,170	300,958	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Total Other Fuel Contribution to CPAS (kWh Equivalent)§		14,634,105	0	0	0	0	0	0	0	0	0	0	0	0
Program Total Other Fuel CPAS (kWh Equivalent)	65,170	14,935,063	0	0	0	0	0	0	0	0	0	0	0	0
CY2023 Program Incremental Expiring Other Fuel Savings (Therms)			0	0	0	0	0	0	0	0	0	0	0	0
CY2023 Program Incremental Expiring Other Fuel Savings (kWh Equivalent)			0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Incremental Expiring Other Fuel Savings (kWh Equivalent)#			0	0	0	0	0	0	0	0	0	0	0	0
Program Total Incremental Expiring Other Fuel Savings (kWh Equivalent)*†			0	0	0	0	0	0	0	0	0	0	0	0

† Lifetime savings are the sum of CPAS savings through the EUL.

‡ Fossil fuel savings (from natural gas, propane, etc.) are reported in therms. kWh equivalent savings are calculated by multiplying therms savings by 29.31.

§ 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

Table 4. CPAS – Total

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	2,520,654	8,617,173							2,370,841	2,370,841	1,684,860	1,221,798	968,833	0
Historic Program Total Contribution to CPAS‡		82,993,183	4,804,976	9,125,023	13,064,892	13,996,332	14,978,595	11,804,377	7,324,712	5,942,785	1,948,759	2,732		0
Program Total CPAS	2,520,654	91,610,356	4,804,976	9,125,023	13,064,892	13,996,332	14,978,595	14,175,218	9,695,552	7,627,645	3,170,557	971,565		0
CY2023 Program Incremental Expiring Savings§									0	685,981	463,061	252,965	968,833	
Historic Program Incremental Expiring Savings								3,174,217	4,479,666	1,381,927	3,994,026	1,946,027	2,732	
Program Total Incremental Expiring Savings#								3,174,217	4,479,666	2,067,908	4,457,087	2,198,993	971,565	

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	2,520,654	8,617,173	0	0	0	0	0	0	0	0	0	0	0	0
Historic Program Total Contribution to CPAS‡		82,993,183	0	0	0	0	0	0	0	0	0	0	0	0
Program Total CPAS	2,520,654	91,610,356	0	0	0	0	0	0	0	0	0	0	0	0
CY2023 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.

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

Source: Evaluation team analysis