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| ComEd EMS - Small Business - Pilot Program Impact Evaluation ReportEnergy Efficiency/Demand Response Plan: Program Year 2024 (CY2024) (1/1/2024-12/31/2024) |
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# Introduction

This report presents the results of the impact evaluation of the EMS for Small Business Pilot from the program year from January 1 to December 31, 2024 (CY2024). The pilot was designed to test the implementation and performance of energy management systems (EMS) within small business customer facilities. The pilot successfully recruited a participant into the pilot during CY2024 to test the ability of EMS for small business customers to generate cost-effective operational energy savings.

# Program Savings Detail

Table 1 summarizes the incremental energy and demand savings the EMS for Small Business Pilot achieved in CY2024.

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 | 77,710 | 1.00 | 77,710 | 0.80 |  |  | 62,168 |
| Electric Energy Savings - Converted from Other Fuel§ | kWh |  |  |  |  |  |  |  |
| Electric Energy Savings - Indirect from Electrification (electrification baseline)|| | kWh |  |  |  |  |  |  |  |
| Electric Energy Savings - Indirect from Electrification (efficiency baseline)|| | kWh |  |  |  |  |  |  |  |
| Total Electric Energy Savings# | kWh | 77,710 | 1.00 | 77,710 | 0.80 |  |  | 62,168 |
| Total Electric Energy Savings Including Carryover# | kWh | 77,710 | 1.00 | 77,710 | 0.80 |  |  | 62,168 |
| Summer Peak\*† Demand Savings | kW | 0 |  | 0 | 0.80 |  |  | 0 |
| Summer Peak\*† Demand Savings Including Carryover | kW | 0 |  | 0 | 0.80 |  |  | 0 |

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.

# 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).

Note: Guidehouse conducted secondary research to determine an appropriate NTG value. The evaluation team was unable to identify any program that was comparable to this pilot. Therefore, the evaluation team assigned an NTG value of 0.80 for the pilot program in CY2024.

Source: Evaluation team analysis

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# Cumulative Persisting Annual Savings

The electric CPAS across all measures installed in CY2024 is shown in Table 2.

Table 2. CPAS – Electric

|  | CPAS Verified Net kWh Savings |  |
| --- | --- | --- |
| Savings Category | Verified Gross Savings (kWh) | Lifetime Net Savings (kWh)† | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
| CY2024 Program Total Contribution to CPAS | 77,710 | 932,516 |  |  |  |  |  |  | 62,168 | 62,168 | 62,168 | 62,168 |
| Historic Program Total Contribution to CPAS‡ |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Program Total CPAS | 77,710 | 932,516 | 0 | 0 | 0 | 0 | 0 | 0 | 62,168 | 62,168 | 62,168 | 62,168 |
| CY2024 Program Incremental Expiring Savings§ |  | 62,168 |  |  |  |  |  |  | 0 | 0 | 0 | 0 |
| Historic Program Incremental Expiring Savings|| |  | 0 |  |  |  |  |  |  | 0 | 0 | 0 | 0 |
| Program Total Incremental Expiring Savings# |  | 62,168 |  |  |  |  |  |  | 0 | 0 | 0 | 0 |

| Savings Category | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CY2024 Program Total Contribution to CPAS | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 0 | 0 | 0 |
| Historic Program Total Contribution to CPAS‡ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Program Total CPAS | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 62,168 | 0 | 0 | 0 |
| CY2024 Program Incremental Expiring Savings§ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62,168 | 0 | 0 |
| Historic Program Incremental Expiring Savings|| | 0 | 0 | 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 | 62,168 | 0 | 0 |

| Savings Category | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CY2024 Program Total Contribution to CPAS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Historic Program Total Contribution to CPAS‡ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Program Total CPAS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CY2024 Program Incremental Expiring Savings§ | 0 | 0 | 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 | 0 | 0 |
| Program Total Incremental Expiring Savings# | 0 | 0 | 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