

ComEd Behavior Bus/Pub Program Impact Evaluation Report

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

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ComEd

FINAL

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Prepared by:

Dustin Bailey Guidehouse

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

Adam Knickelbein, Director
303.493.5483

Nishant Mehta, Associate Director
608-616-5823

adam.knickelbein@guidehouse.com nishant.mehta@guidehouse.com

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Table of Contents

Introduction	1
Program Savings Detail	1
Cumulative Persisting Annual Savings	2
List of Figures and Tables	
Table 1. Total Annual Incremental Electric Savings - Total	1
Table 2 CPAS - Flectric	9



Introduction

This report presents the results of the impact evaluation of the Behavior Bus/Pub Program for the program year January 1 to December 31, 2022 (CY2022).

The goal of the Behavior Bus/Pub Program is to train participating sites in how to apply a process of continuous energy management improvements that result in energy savings and demand reduction. The program trains participants to identify low-cost and no-cost measures, improve process efficiency, and reduce energy usage and demand through behavioral changes. In CY2022, ComEd, Nicor Gas, Peoples Gas, and North Shore Gas managed the program. This report presents the results just for ComEd. The results for the gas utilities will be in separate reports.

The program achieves energy savings through operational and maintenance (O&M) improvements, incremental increases in capital energy efficiency projects, and the identification of additional capital projects that would not otherwise have been considered (e.g., process changes, consideration of energy efficiency in all capital efforts). The program provides training and implementer support to identify O&M improvements. This training usually lasts for 1 year and occurs monthly or bimonthly.

Program Savings Detail

Table 1 summarizes the incremental energy savings the Behavior Bus/Pub Program achieved in CY2022. All gas savings are claimed by the gas utilities.

Savings Category	Units	Ex Ante Gross Savings*	Program Gross Realization Rate	verified Gross	Program Net-to- Gross Ratio (NTG)	CY2020 Net Carryover Savings	CY2021 Net Carryover Savings	Verified Net Savings†
Electric Energy Savings - Direct‡	kWh	39,733,351	1.19	47,468,176	0.97	N/A	N/A	46,044,131
Electric Energy Savings - Converted from Gas§	kWh	0	N/A	0	N/A	N/A	N/A	0
Electric Energy Savings - Indirect from Fuel Switching (through Electrification)	kWh	0	N/A	0	N/A	N/A	N/A	0
Total Electric Energy Savings#	kWh	39,733,351	1.19	47,468,176	0.97	N/A	N/A	46,044,131
Secondary Water Savings	kWh	0	N/A	0	N/A	N/A	N/A	0
Summer Peak*† Demand Savings	kW	0	N/A	0	N/A	N/A	N/A	0

Table 1. Total Annual Incremental Electric Savings - Total

N/A = not applicable (refers to a piece of data that cannot be produced or does not apply).

Guidehouse Inc. Page 1

^{*} 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) excludes carryover savings as they do not apply to this program.

[‡] 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 savings from an increase in kWh consumption and decrease in gas consumption from fuel switching (kWh

[#] 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 p.m. - 5:00



p.m. 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

Cumulative Persisting Annual Savings

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

Guidehouse Inc. Page 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	2028
CY2022 Program Total Contribution to CPAS	47,468,176	322,308,914			_	_	46,044,131	46,044,131	46,044,131	46,044,131	46,044,131	46,044,131	46,044,131
Historic Program Total Contribution to CPAS‡		366,252,766	14,039,833	37,336,439	70,918,544	105,064,112	105,064,112	91,024,279	67,727,673	34,145,568	34,145,568	34,145,568	0
Program Total CPAS	47,468,176	688,561,680	14,039,833	37,336,439	70,918,544	105,064,112	151,108,242	137,068,409	113,771,803	80,189,698	80,189,698	80,189,698	46,044,131
CY2022 Program Incremental Expiring Savings§								0	0	0	0	0	0
Historic Program Incremental Expiring Savings							0	14,039,833	23,296,606	33,582,105	0	0	34,145,568
Program Total Incremental Expiring Savings#							0	14,039,833	23,296,606	33,582,105	0	0	34,145,568
Savings Category	Verified Gross Savings (kWh)	Lifetime Net Savings (kWh)†	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
CY2022 Program Total Contribution to CPAS	47,468,176	322,308,914	0	2030	2031	0	0	2034	0	2030	0	0	2039
Historic Program Total Contribution to CPAS‡	17,100,170	366,252,766	0	0	0	0	0	0	0	0	0	0	0
Program Total CPAS	47,468,176	688,561,680	0	0	0	0	0	0	0	0	0	0	0
CY2022 Program Incremental Expiring Savings§			46,044,131	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
Program Total Incremental Expiring Savings#			46,044,131	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