

# Elementary Energy Education Program EPY7-9 Evaluation Plan

*(This version clarifies the ComEd plan for Peoples Gas and North Shore Gas, but is otherwise unchanged for ComEd and Nicor Gas)*

## Introduction

The primary objectives of the evaluation of the Elementary Energy Education (EEE) program offered by ComEd, Nicor Gas, Peoples Gas, and North Shore Gas are to: (1) quantify net and gross savings impacts from the program and (2) identify ways in which the program has changed since EPY6.

The EEE program's primary focus is to produce electricity and natural gas savings in the residential sector by motivating students and their families to take steps through reducing energy consumption for water heating and listing in their home. The program has a new implementation contractor for EPY7, Resource Action Program (RAP), and has changed from a single, contractor-led instruction program model to a teacher-lead instruction program model. The program is offered in service areas for ComEd and Nicor Gas, with Peoples Gas (PG) and North Shore Gas (NSG) joining the program in GPY4/EPY7<sup>1</sup>.

## Evaluation Research Topics

The evaluation will seek to answer the following key researchable questions:

### Impact Evaluation

1. What is the program's verified gross savings?
2. What is the program's verified net savings?
3. What is the level of free ridership associated with this program?
4. What is the level of spillover associated with this program?
5. Did the program meet its energy and demand savings targets? If not, why?

### Process Evaluation and Other Research Topics

1. Has the program changed since EPY6? If so, why and how?

## Evaluation Approach

### Multi-Year Overview

We have prepared a three year evaluation plan summary to identify tasks by year on a preliminary basis (Table 1). Final activities will be determined annually as program circumstances are better known. Program Year (PY) refers to the year of participation that will be researched, not the time that the research will occur.

The primary method to determine net and gross savings will be a program tracking system review and applying a Net-to-Gross Ratio (NTGR) from Net-to-Gross (NTG) research done in EPY4. Navigant will conduct NTG research in EPY7 that can be considered for future use.

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<sup>1</sup> For simplicity, electric program years (EPY) are used in this document in most cases. GPY4 is the same year as EPY7, GPY5 is EPY8, and GPY6 is EPY9.

**Table 1. Three Year Evaluation Plan Summary for EEE**

Activity	EPY7	EPY8	EPY9
Gross Impact Approach	Tracking System Review	Tracking System Review	Tracking System Review
Verified Net Impact Approach	Deemed Value	Deemed Value	Deemed Value
Researched NTG Approach	Participant Survey	None	None
Researched NTG Timing	One Time, EPY7 Participants		
Program Manager and Implementer Interviews/ Review Materials	Yes	Yes	Yes

### Data Collection, Methods, and Sample Sizes

Table 2 below summarizes data collection methods, data sources, timing, and targeted sample sizes that will be used to answer the evaluation research questions.

**Table 2. Core Data Collection Activities and Sample**

EPY	What	Who	Target Completes EPY7	Target Completes EPY8	Target Completes EPY9	When
7,8,9	Tracking System Review	Participating Customers	All	All	All	June – September 2015
7	Participant Survey	Participating Customers	190	-	-	May – June 2015
7,8,9	In Depth Interviews	Program Management	4	4	4	May - June 2015

### Gross Impact Evaluation

Since almost all of the EEE program’s savings are derived based on the Illinois Technical Resources Manual (TRM) and Navigant reviewed the savings calculations for this program in EPY4, the evaluation team will conduct a limited gross impact evaluation in EPY7. For this impact evaluation, gross savings will be evaluated by (1) reviewing the tracking system to be assured that all fields are appropriately populated and (2) cross-checking totals.

### Verified Net Impact Evaluation

The verified net impact evaluation will apply the NTG ratio accepted by Illinois Stakeholders Advisory Group (SAG) consensus to estimate the verified net savings for the Program in GPY4/EPY7 and GPY5/EPY8.

**Table 3. Deemed NTG Values for GPY4/EPY7 and GPY5/EPY8**

Program Path/Measure	GPY4/EPY7	GPY5/EPY8	GPY6/EPY9
	Deemed NTG Value	Deemed NTG Value	Deemed NTG Value
CFL	0.76	0.83	TBD
Showerheads and Aerators (PG and NSG)	0.79	1.05	TBD
Showerheads (ComEd)	0.76	1.05	TBD
Aerators (ComEd)	0.76	1.04	TBD

## Research NTG Impact Evaluation

The evaluation will conduct NTG research in EPY7 to inform NTG recommendations for the future.

Navigant will send a participant survey that will include questions to identify installations that might have occurred if ComEd had not offered the EEE program. The survey will also include questions to help identify participant spillover effects. The sampling and target audience are shown in Table 4 below.

**Table 4. EPY7 NTG Research Sampling and Target Audience**

Service Territory	Classrooms	Total Participants (Students)	Sample Size (Students)	Confidence Level	Response Rate
ComEd/Nicor Gas	318	8,425	68	90/10	40%
ComEd/Peoples Gas	136	4,605	67	90/10	40%
ComEd/ North Shore Gas	22	748	60	90/10	40%

## Process Evaluation

We will conduct in-depth telephone interviews with program managers and implementation contractors to understand changes to the program in EPY7.

## Evaluation Schedule

Table 5 below provides the schedule for key deliverables and data transfer activities. (See Table 2 for other schedule details.) Adjustments will be made as needed as evaluation activities progress.

**Table 5. Schedule – Key Deadlines**

Activity/Deliverables	Responsible Party	Date Delivered
Program tracking data is available for sampling	RAP	June 12, 2015
EPY7 tracking system is final	RAP	June 12, 2015
Early impacts findings memo	Evaluation	August 31, 2015
Draft Report to ComEd, PG, NSG, and SAG	Evaluation	September 30, 2015
Comments on draft (10 Business Days)	ComEd, PG, NSG, SAG	October 14, 2015
Final Report to ComEd, PG, NSG, and SAG	Evaluation	October 29, 2015