Home Energy Jumpstart Program GPY4-GPY6 Evaluation Plan

Introduction

The primary objectives of the evaluation of the Home Energy Jumpstart Program (HEJ) are to: (1) quantify verified gross and net savings impacts from the program, and (2) as the program continues to evolve, make recommendations to enhance the program focused on the current priorities offered by the program managers. The HEJ program seeks to: (1) secure energy savings through direct installation of low-cost efficiency measures, such as water efficient showerheads and faucet aerators, pipe insulation, programmable thermostats, and compact florescent lamps (CFLs) at eligible single family residences, and (2) perform a brief assessment of major retrofit opportunities (e.g., furnace, boiler, air conditioning, insulation and air sealing) and bring heightened awareness to the homeowners about additional efficiency programs.

The basic program concept is currently being offered jointly between ComEd, Peoples Gas (PG)/North Shore Gas (NSG) and Nicor Gas as the Home Energy Jumpstart for PGL/NSG, the Home Energy Assessment program for ComEd and the Home Energy Savings Program for Nicor Gas. Franklin Energy Services LLC (Franklin Energy) is the implementation contractor for the ComEd/PGL/NSG program and CLEAResult is the implementation contractor for the ComEd/Nicor Gas program. The HEJ Program's GPY4 net savings goals are 620,213 therms for PG and 82,695 therms for NSG with a projected participation of 12,500 assessments in PG/NSG territory.

Evaluation Research Topics

The evaluation team has identified the following key topics for evaluation research in GPY4:

Impact Evaluation:

- 1. What are the program's verified gross savings?
- 2. What are the program's verified net savings?
- 3. What updates are recommended for the Illinois Technical Reference Manual (TRM)?

Process Evaluation and Other Research Topics:

 As the program continues to evolve, examine the effects of the changes and make recommendations to enhance the program, focusing on the priorities offered by the program managers.

Evaluation Approach

Data Collection, Methods, and Sample Sizes

Table 1 below summarizes data collection methods, data sources, timing and targeted sample sizes that will be used to answer the evaluation research questions.

Table 1. Core Data Collection Activities

What	Who	Target Completes	When	Comments
Engineering File Review	Participating Customers	15	June – September	Annually
Telephone Survey	Participating Customers	80	April – May 2017	FR, SO, Process
In Depth Interviews	Program Management	4	March - May	Annually

Gross Impact Evaluation

The gross impact evaluation's foundation in each year will be a review of program tracking data that substantiates the type and quantity of measures installed. Navigant will perform independent verification of the program tracking database and determine level of input completeness, outliers, missing values, and potentially missing variables. If necessary, the Navigant team will include recommendations for additional fields to be added to the tracking system for use in the impact evaluation effort as well as program process monitoring.

For measures covered by the TRM, verified gross savings are calculated for each participant using appropriate TRM algorithms and customer-specific data collected in the tracking system, or, where required by the TRM or for measures not yet in the TRM, supplemented by additional research), and then summed across participants to calculate program totals. To be eligible, a TRM measure must meet the physical, operational, and baseline characteristics as defined in the applicable version of the Illinois TRM. Verification that measures were installed and that savings calculations applied the TRM appropriately may involve participant telephone interviews or engineering review of project files for a sample of participants.

Net Impact Evaluation

The GPY4 net impact evaluation will apply the Net-to-Gross (NTG) ratio of 0.96 accepted by Illinois Stakeholders Advisory Group (SAG) consensus to estimate the verified net savings for the PGL/NSG GPY4 HEJ Program.

Table 2. PGL/NSG Deemed NTG Values

Program	Utility	GPY4 and GPY5 Deemed NTG Value
Home Energy Jumpstart	PGL & NSG	0.96

NTG Research Approach

There will be no NTG research conducted in GPY4. Evaluation will conduct NTG research in GPY6 to inform NTG recommendations for GPY8.

Navigant will survey the GPY6 participants of the ComEd/PG/NSG Program to estimate the program's free ridership and spillover using an algorithm approach based on survey self-report data, through computer assisted telephone interviews (CATI) with a sample of participants. Navigant is planning to complete at least 80 CATI interviews from PG/NSG customers. Sampling will be conducted based on a

random, stratified sample selection and weighted by impacts to achieve program level findings producing a ±10 relative precision at a 90% confidence level.

Process Evaluation

The HEJ program is continuing to evolve and expand to include new measures, including LEDs in GPY5 as well as introducing participant co-pays for some measures. Each year GPY4 through GPY6 Navigant will conduct program manager and implementation contractor interviews to determine how the changes to the program have affected the program, and additional topics including program delivery and marketing and outreach.

In conjunction with the NTG research conducted in GPY6, Navigant will also collect participant feedback on sources of program awareness, effectiveness of marketing and outreach materials, motivations for homeowners, program satisfaction, and recommendations for program improvements.

Evaluation Schedule

Table 3 below provides the schedule for the GPY4 evaluation of the HEJ. Adjustments will be made as needed as program year evaluation activities begin.

Table 3. GPY4 Evaluation Schedule

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Activity/Deliverables	Plan Start	Completion/Delivery				
Draft Evaluation Plan to PGL/NSG	March 30, 2015	May 26, 2015				
Final Evaluation Plan to PGL/NSG						
Final Data Delivery		July 1, 2015				
Engineering Review	July 1, 2015	September 14, 2015				
Internal Draft Report for Review	October 1 2015	October 15, 2015				
Draft Report to PGL/NSG and SAG	October 15, 2015	October 30, 2015				
Draft Comments in 10 Business Days	October 30, 2015	November 13, 2015				
Final Report to PGL/NSG and SAG	November 16, 2015	November 30, 2015				

Three Year Evaluation Plan

We have prepared a three year evaluation plan summary to identify tasks (Table 4) and allocate budgets by year on a preliminary basis. Final activities and allocations 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.

In GPY4 and GPY5, we will have a limited scope, and the thrust of our evaluation will be on the impact analysis with a limited process evaluation. In GPY6 we will conduct NTG ratio research as well as gather feedback from participants on program awareness, satisfaction and recommendations for program improvements in conjunction with the surveys conducted for the NTG ratio research.

Table 4. Three Year Evaluation Plan Summary for HEJ

Activity	GPY4	GPY5	GPY6
Gross Impact Approach	Engineering File Review/Tracking Data Review	Engineering File Review/Tracking Data Review	Engineering File Review/Tracking Data Review
Verified Net Impact Approach	Deemed Value	Deemed Value	Deemed Value
Researched NTG Approach	None	None	Participant Survey
Researched NTG Timing	N/A	N/A	One Time, GPY6 Participants
Program Manager and Implementer Interviews/ Review Materials	Yes	Yes	Yes
Process evaluation in conjunction with NTG research to be applied in GPY7	N/A	N/A	Participant