

Peoples Gas & North Shore Gas Business Program (Direct Install & Standard Incentives) GPY4 –GPY6 Evaluation Plan

Introduction

The Second Triennial Plan¹ of the Peoples Gas (PGL) and North Shore Gas (NSG) comprehensive Business Program bundles existing programs into paths, and allows all eligible customers to access any of the five paths² as a one-stop-shop based on the customer’s needs.³ This evaluation plan covers the GPY4-GPY6 evaluation activities for measures installed and gas savings realized through the Standard Incentives path and the Direct Install path (participants with projects from either or both paths), which together are referred to as “C&I Prescriptive Program”, for evaluation purposes. The comprehensive Business Program is implemented by Franklin Energy Services (FES) with trade ally engagement and technical support for program delivery and marketing.

The Standard Incentives path provides standardized incentives for existing customers and new construction where applicable. Standard incentives are based on approximately 50% of incremental costs. These incentives focus on heating systems, water heating systems, pipe insulation, steam traps, various boiler controls, and food service equipment. The direct installation measures are provided at no cost to the customers, including the direct installation of low flow showerheads, kitchen and faucet aerators, and pre-rinse spray valves for appropriate businesses. The Direct Install path and the Engineering Assistance path (no-cost services) provide a high level assessment of other opportunities that the customer or building owner can implement.

The gross impact evaluation approach for the PGL/NSG Plan 2 cycle (GPY4-GPY6) C&I Prescriptive Program will rely on the Statewide Technical Reference Manual (TRM)⁴ for verification of gross savings for deemed measures, and secondary evaluation research for measures with custom savings variables. The GPY4 verified net impact evaluation approach will apply the Net-to-Gross (NTG) ratio approved through the Illinois State Advisory Group (SAG) consensus. In GPY4, the evaluation team will conduct NTG research through interviews with program participant customers and trade allies to determine free ridership and spillover to inform NTG recommendations for GPY6 and beyond. The NTG survey will include additional process questions to provide feedback on participants’ satisfaction and suggestions for program improvement.

Evaluation Research Topics

The key evaluation objectives for the C&I Prescriptive Program for GPY4 are to: (1) quantify verified gross and net savings impacts from the program, and (2) to determine key process-related program strengths and weaknesses and identify ways in which the program can be improved, specifically how can the implementation contractor increase participation among trade allies and customers in the mid-tier market.

¹ Peoples Gas/North Shore Gas Energy Efficiency Plan for the Second Triennial Plan period of June 1, 2014 – May 31, 2017 (known as —Plan 2)

² The comprehensive business program paths include – Direct Install, Engineering Assistance, Standard Incentives, Custom Incentives, and Gas Optimization.

³ Second Triennial EEP Compliance Filing.pdf

⁴ Illinois Statewide Technical Reference Manual for Energy Efficiency Version 3.0, available at: <http://www.ilsag.info/technical-reference-manual.html>

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 is the researched value for Net-to-Gross (NTG) ratio?
4. What updates are recommended for the Illinois Technical Reference Manual (TRM)?

Process Evaluation and Other Research Topics:

The following research questions will be investigated during GPY4 surveys to determine the key process strengths and weaknesses.

1. Has the program been successful in recruiting additional participants? In what ways can the program increase customer participation? Are customers satisfied with the program?
2. How can the program outreach and marketing strategies be improved to increase program participation from the middle sized market or customers (60K to 500K therms)?
3. Are trade allies satisfied with the program? In what ways can the program increase trade ally participation? How can training opportunities (e.g. Focus Groups discussion) be better to increase trade ally participation?

Evaluation Approach

Data Collection, Methods, and Sample Sizes

Table 1 below summarizes data collection methods, data sources, and timing to answer the evaluation research questions.

Table 1. Core Data Collection Activities

What	Who	Target Completes	When	Comments
In Depth Interviews	Program Management	2-3	March 2015-2017	Interview program staff and IC staff
Tracking System & Engineering Review	Participating Customers	All	Feb – Aug 2015	Gross savings verification using IL-TRM or through research
Project File Reviews	Participating Customers	All	Mar – July 2015	Review sample of projects files with custom inputs where applicable
Telephone Survey	Participating Customers	<=60	May – Aug 2015	FR, SO, Process
Telephone Survey	Influential Trade Allies Triggered by Customer Responses	2-10	May – Aug 2015	Net, Process
Telephone Survey	Trade Ally	<=25	May – Aug 2015	SO and Process

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, for custom input variables or 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 accepted by Illinois Stakeholders Advisory Group (SAG) consensus to estimate the verified net savings for the PGL/NSG C&I Prescriptive Program. The deemed NTG value by program path is provided in Table 2.

Table 2. PGL/NSG Deemed NTG Values for GPY4 & GPY5

Program Path/Measure	Utility	GPY4 Deemed NTG Value	GPY5 Deemed NTG Value
Direct Install	PGL & NSG	0.81	0.82
Standard Incentives	PGL & NSG	0.58	0.63

Source: PGL-NSG Final GPY5 Consensus NTG Values 2015-03-01.xlsx

GPY4 NTG Research Approach

Evaluation will conduct NTG research through interviews with GPY4 program participant customers and trade allies to determine free ridership and spillover to inform NTG recommendations for GPY6 and beyond. The research will provide an adjustment for free ridership (the portion of impact that would have occurred even without the program) and spillover (the portion of impact that occurred outside of the program, but would not have occurred in the absence of the program).

Participant free ridership will be calculated using an algorithm approach based on survey self-report data. The analysis will rely on interview results from at least 60 participant customers who installed measures across the Standard Incentives and Direct Install paths of the C&I Prescriptive Program. We will attempt contact with all participants in the gross impact sample. Projects will be stratified at tracking record level using the population ex ante gross therms savings. Strata will be defined by project size, based on ex-ante gross energy savings boundaries that place about one-third of program-level savings into large, medium and small stratum. Project-level free ridership values will be combined into the various paths of the projects results by weighting with the ex ante gross annual therm savings sampled for each project path, targeting a 90/10 level of confidence and relative precision for each path. Participant

customer spillover research will be quantified using survey self-report data for measure description and quantities, while per unit savings values will be drawn from the Illinois TRM and measure research.

The existence of participating trade ally spillover will be examined using survey self-report data. The evaluation team will attempt a census survey on all trade ally participants in the gross impact sample until we complete the required sample design of at least 25 respondents. The trade allies and other contractors will be asked about their total sales of equipment. This number will be used to calculate an overall increase in the sales of program qualified measures. Spillover will be calculated from the sales of qualifying equipment that does not receive an incentive from PGL/NSG multiplied by the program influence scoring from the survey responses.

In an effort to facilitate survey efforts and ensure a timely completion, the evaluation team will conduct both the participant and trade ally surveys concurrently. Program influence on participating customers through interviews with trade allies will be conducted in GPY4 if triggered by customer NTG responses for the largest projects, or with contacts identified for multiple smaller projects.

The NTG ratio for each program path (Standard Incentives and Direct Install paths) will be calculated using the following algorithm.

$$NTGR = 1 - Participant\ Free\ Ridership + Participant\ Spillover + Trade\ Ally\ Spillover$$

Process Evaluation

The GPY4 process evaluation activities for the C&I Prescriptive Program will involve interviews with program staff and the implementation contractor staff to verify information about marketing and outreach strategies made in GPY4 that impacted customer and trade ally participation and satisfaction. The NTG research survey scheduled for GPY4 will include a set of process questions to provide feedback from participant customers and trade allies about satisfaction with the program, barriers to participation and suggestions for improvement. Details of the proposed process questions are provided in the Evaluation Research Topics section above.

Evaluation Schedule

Table 3 below provides the schedule for the GPY4 evaluation of the C&I Prescriptive Program. Adjustments will be made as needed as program year evaluation activities begin.

Table 3. GPY4 Evaluation Schedule

Activity/Deliverables	Plan Start	Completion/Delivery
Draft Evaluation Plan to PGL/NSG	March 20, 2015	May 22, 2015
Final Evaluation Plan to PGL/NSG		
In-depth Interview with Program Staff	March 1, 2015	April 1, 2015
Early Data Review	May 1, 2015	May 31, 2015
Final Data Delivery	June 1, 2015	July 1, 2015
Participant NTG/Process Survey	May 1, 2015	August 30, 2015
Trade Ally SO/Process Survey	May 1, 2015	August 30, 2015
Engineering File Review	May 1, 2015	August 30, 2015
Gross and Net Savings Verification	May 1, 2015	September 15, 2015
Internal Report for Review	September 15, 2015	September 30, 2015
Draft Report to PGL/NSG and SAG	October 1, 2015	October 15, 2015
Draft Comments in 10 Business Days	October 15, 2015	October 30, 2015
Final Report to PGL/NSG and SAG	November 1, 2015	November 13, 2015

Three Year Evaluation Plan

We have prepared a *proposed* three year evaluation plan summary to identify tasks (Table 4) and allocate budgets by year on a preliminary basis. Plans for GPY5 and GPY6 are subject to future adjustment. Final activities and allocations will be determined annually as program circumstances are better known. Gas Program Year (GPY) refers to the year of participation that will be researched, not the time that the research will occur. Table 4 presents the three year evaluation plan summary to identify tasks by year on a preliminary basis.

Table 4. Proposed Three Year Evaluation Plan Summary for C&I Prescriptive Program

Activity	GPY4	GPY5	GPY6
Gross Impact Approach	Engineering File Review	Engineering File Review	Engineering File review
Gross Sampling Frequency	None	None	None
Net Impact Approach	Deemed Value	Deemed Value	Deemed Value from GPY4 Research
NTG Research Approach	GPY4 Participants	None	None
NTG Research Timing	One Time, GPY4 participants	None	None
Telephone Survey	FR, SO, Process (<=60 interviews)	None	None
Process Research Approach/Timing	One Time, GPY4 Participants	None	None
Program Manager and Implementer Interviews/ Review Materials	Yes	Yes	Yes
Participating Trade Ally Survey	SO, Process (<=25 interviews)	None	None