

To: Peoples Gas (PGL) and North Shore Gas (NSG)
CC: Jennifer Morris, ICC Staff; Randy Gunn, Kevin Grabner, Rob Neumann, Laura Agapay-Read, Navigant
From: Cherlyn Seruto, Navigant
Date: (First Draft: July 31, 2019);
 (Revised Draft: August 28, 2019);
 (Final: No changes after August 28, 2019)
Re: Peoples Gas (PGL) and North Shore Gas (NSG) CY2018 Gas Optimization Program Net-to-Gross Research Results

EXECUTIVE SUMMARY

This memo presents the results of the net-to-gross (NTG) research for the 2018 Peoples Gas (PGL) and North Shore Gas (NSG) Gas Optimization (GO) Program. The 2018 program year research focused on study service provider (SP) perspectives. Navigant conducted the participant NTG research in 2018 with PY6 participants.

Navigant staff fielded the SP telephone surveys in Q2 and Q3 2019. Of the eight potential SPs, five responded to NTG survey questions. These five SPs were responsible for 97% of January 2017 through July 2019 program savings. The results of the CY2018 SP research indicate that, although the SPs conducted the Gas Optimization studies, the program implementer recruited the participants. This is relevant because the criteria¹ to include trade ally perspective in a program's NTG estimate is that trade allies must play a prominent role in delivering and promoting the program. These Gas Optimization SP's unanimously stated that they did not recruit the participants². The research also suggests that they were not involved in the participants' decision making regarding the recommended improvements. Therefore, Navigant does not recommend combining this result with the participant result and does not recommend further NTG research with the program's SPs unless they become actively involved with recruiting participants as well as become more familiar with the decision making process to participate in the program. In this instance, Navigant considers the participant perspective of what would have occurred absent the program to be a more reliable source.

CONDITIONS FOR ASSESSING TRADE ALLY NTG PERSPECTIVES

Regarding the combining of participant free ridership with trade allies' perspective (of participant free ridership), the TRM states that "the evaluator's NTG report should present the conditions that support the argument that the combined value is more likely to be reflective of reality" than the participant score alone. The evaluation team recommends that the trade ally perspective not be combined with the participant free ridership due to the following program conditions that Navigant found in analyzing the survey responses:

1. **The trade ally role is such that they are not familiar with customers' decision making to participate:** Navigant designed this trade ally research with the understanding that the program designated to the trade allies a prominent role in both promoting the program and delivering the energy efficiency improvements³. However, open-ended response results from the SP survey indicate that all surveyed trade allies received Gas Optimization leads from the program implementer and that they would not have conducted the work with the Gas Optimization customers without the program. Because the SPs generally did not play a role in promoting the program to these customers, the SPs were not familiar with the customer's decision to participate.

¹ According to the 2019 Illinois Technical Reference Manual (TRM) V 7.0

² Additional rationale is included later in the memo in the following sections: Free Ridership and Spillover Survey Disposition, and **Error! Reference source not found.**

³ Program Implementer Interview

The following are representative responses about how the customer becomes aware of the offering:

- “[Customers] all hear about [Gas Optimization Program] through Franklin. Franklin involved us to execute.”
- “90% of our Gas Optimization calls are from Franklin [outreach]. I can’t think of the last time I got it to work [via my own outreach].”
- “Customers hear about the program from us, and also have someone from Franklin that calls on them. Franklin conducted sizable outreach that caused many to come forward in the last three years”. Follow up: Do customers approach you about the Gas Optimization offering? Answer: “Only if Franklin contacted them first”.
- “More times than not the utility approaches them.”
- “Our company gets leads from Franklin and other companies.”

2. The trade ally role is such that they are not familiar with participants’ decision making to implement recommendations from the GO study. Franklin promotes the program to participants, and the SP provides the GO study and results to participants. Participants then decide whether to update their systems via follow-up installations and services based on the GO study report and their budget. Based on SP responses to our NTG research, the SP does not appear to be involved in the decision making process to implement GO study report recommendations. Here is a representative quote from the SP research:

- “We don’t know which projects customers actually implement, it would be great to get a status update from Franklin so we know when to follow up.”

The criteria⁴ to include trade ally perspective in a program’s NTG estimate is that trade allies must play a prominent role in delivering and promoting the program. As described in item one above the Gas Optimization SP’s unanimously stated that they did not recruit the participants. As described in item two above, the SP research also suggests that the SPs were not involved in the participants’ decision making of the recommended improvements. Therefore, Navigant does not recommend combining the SP free ridership estimate with the participant result and does not recommend further NTG research with the program’s SPs unless they become actively involved with recruiting participants as well as become more familiar with the decision making process to participate in the program. In this instance, Navigant considers the participant perspective of what would have occurred absent the program to be a more reliable source.

Because the data was collected, analyzed, and used in the formulation of the decision not to include the SP perspective, the following sections document how the SP NTG value was ascertained for reference and comparison with future years⁵.

FREE RIDERSHIP AND SPILLOVER SURVEY DISPOSITION

Navigant received the list of eligible Gas Optimization SPs from the program implementer. These SPs have participated in the Gas Optimization program during at least one year from January 2017 through July 2019, but not all SPs participated in 2018. Five of the eight SPs completed the survey, and four of the five responded to NTG questions. The one SP that did not respond to NTG questions said their company was a subcontractor to another SP that did respond to the NTG questions. Therefore, Navigant attributed the savings of the subcontractor SP to the prime SP that did respond to NTG questions. These five SPs represent 97% of January 2017 through July 2019 program savings attributed to the Gas Optimization Study.

⁴ According to the 2019 Illinois Technical Reference Manual (TRM) V 7.0

⁵ Gas Optimization SP perspectives on NTG may be included in the future, pending the SP relationship to acquiring the Gas Optimization projects.

Table 1. Free Ridership Survey Disposition

Audience	Population	Sample	Target Completes	Actual Completes	Analyzed Completes	Share of Program (or Measure) Savings Represented by Analyzed Completes
Program Service Providers	8	8	Census	5	4	97%

Source: Navigant analysis of data from outbound telephone surveys conducted in 2019 with Gas Optimization SPs for Peoples Gas and North Shore Gas

FREE RIDERSHIP AND SPILLOVER PROTOCOLS

Free ridership

The TRM does not specify Trade Ally research as a requirement for any program. Section 4.4 does however suggest an enhanced method which involves trade ally surveys to provide “another quantitative assessment which may be triangulated with the basic method approach.” The TRM recommends a program-level free ridership value that combines participant free ridership with trade allies’ perspective of participant free ridership for programs where “trade allies play a prominent role in delivering the energy efficiency measure and promoting the program”⁶. Navigant designed this NTG trade ally research to be used for a program-level combined triangulation of NTG.

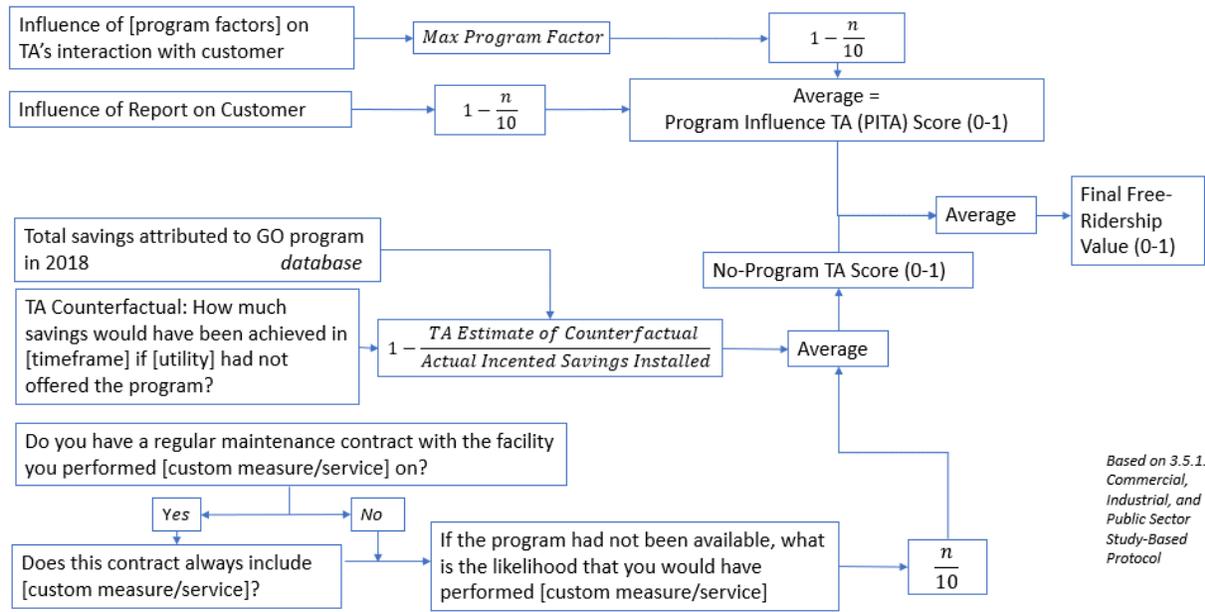
Algorithms for trade ally perspective of participant free ridership are not specified in the TRM, though the TRM suggests an algorithm be designed and implemented in future versions. Therefore, Navigant created the following algorithm for this NTG research. This algorithm mirrors the TRM’s non-residential core free rider protocol by including two sub-scores, each derived from two different lines of questions:

- The program’s influence on the trade ally, hence the customer (The Program Influence Score):
 - the influence of program components on the SP’s ability to sell the Gas Optimization Service to the customer
 - the influence of the report on the customer’s decision to eventually install an item, and
- The SP’s estimate of what would have happened in absence of the program (the counterfactual, or No-Program Score):
 - the SPs’ perspective on how much savings would have been achieved without the program,
 - and the likelihood of the SP to have completed the GO service if the program was not available.

The algorithm is shown below in Figure 1.

⁶ There is another option in the TRM to use trade ally surveys to adjust **project-level** free ridership score, should a given participant rate the vendors influence as the highest program factor, and it not be clear whether the vendor operated under guidance from the program.

Figure 1. Gas Optimization Free Ridership Protocol

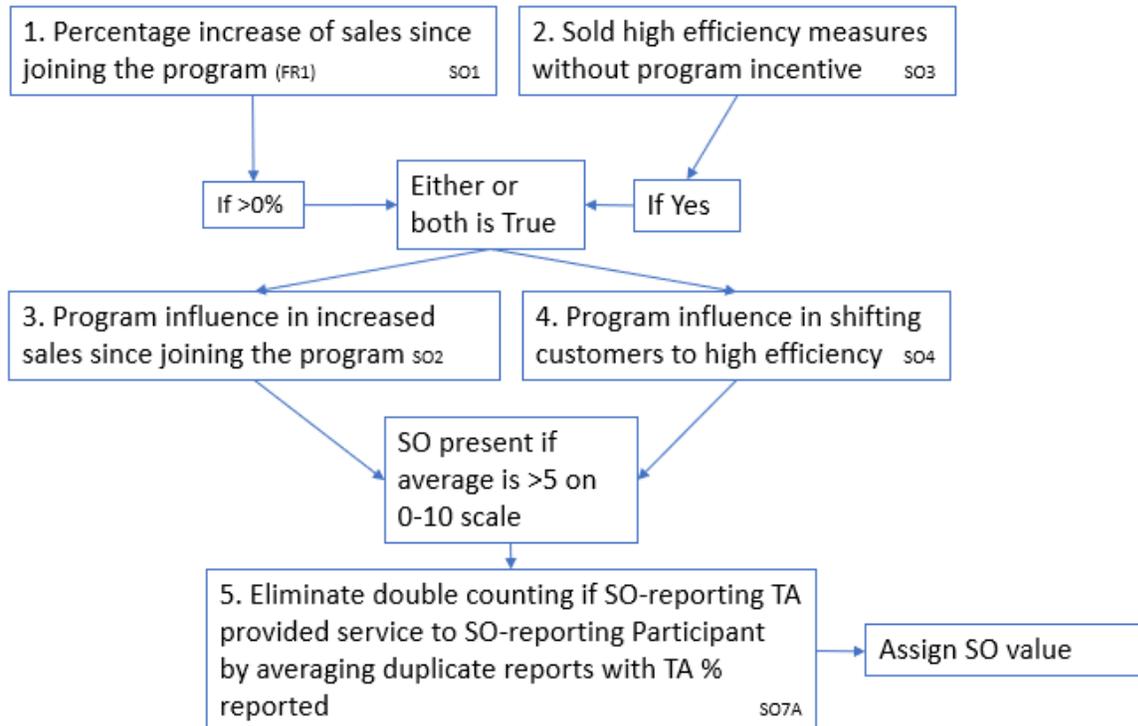


Source: Navigant

Spillover

The trade ally spillover algorithm is clearly defined in the TRM and is shown below in Figure 2.

Figure 2. Gas Optimization Spillover Protocol



The process to calculate spillover contains multiple steps.

- 1) Calculate the % of an individual trade allies high efficiency equipment sales that received an incentive

$$= \frac{\% \text{ of Total Sales that are HE, received incentive}}{\% \text{ of Total Sales that are HE, received incentive} + \text{HE \% that did NOT receive incentive}}$$

- 2) Calculate the savings of the high efficiency equipment sales that did not receive an incentive

$$= \frac{\sum \text{TA savings from Program Database}}{1) \% \text{ of TA's HE Sales that received an incentive}} - \sum \text{TA savings from Program Database} * \text{Size Adjustment}$$

- 3) Develop the spillover ratio for sampled trade allies by summing individual trade ally spillover savings and dividing that total by program-tracked savings associated with the sampled trade allies
- 4) Develop spillover savings for the population of active trade allies by applying the spillover ratio from step 3 to all program savings associated with active trade allies
- 5) Develop the overall spillover ratio for active trade allies by dividing the trade ally spillover estimate from step 4 by total program savings

$$= \frac{4) \text{ Total TA tracked program savings} * 3) \frac{2) \sum_1^n \text{TA reported spillover savings}}{\sum_1^n \text{TA sample tracked program savings}}}{5) \text{ Total Program Savings}}$$

NET TO GROSS RESULTS

Navigant does not recommend combining the SP free ridership result with the participant result and does not recommend further free ridership research with the program's SPs unless they become actively involved with recruiting participants as well as become more familiar with the decision making process to participate in the program. In this instance, Navigant considers the participant perspective of what would have occurred absent the program to be a more reliable source for estimating free ridership. The SP estimates of spillover may be considered in the NTG calculation however the surveyed SPs reported no participant spillover or non-participant spillover.

Because the data was collected, analyzed, and used in the formulation of the decision not to include the SP perspective, the following sections document the SP NTG results for reference and comparison with future years.

Free Ridership

Navigant applied the methodology described by the free ridership algorithm shown in Figure 1 to the SP survey responses collected in 2019, resulting in the scores shown in Table 2. The savings weighted Program Influence score is 0.27, and the savings weighted No-Program score is 0.31.

Table 2. Free Ridership for the Gas Optimization Program

Respondent	Program Influence Score	No Program Score	Free Ridership	Sample(n)
Service Provider	0.27	0.31	0.29	4

Source: Navigant analysis of data from outbound telephone surveys conducted in 2019 with Gas Optimization Service Providers for Peoples Gas and North Shore Gas.

Spillover

The surveyed SPs reported no participant spillover or non-participant spillover.

APPENDIX: GAS OPTIMIZATION NTG HISTORY

	Business and Public Sector Programs Gas Optimization
GPY3	NTG 1.02; Free ridership 0.09; Participant Spillover: 0.11 Method and Source: Evaluation recommendation accepted by SAG based on GPY1 evaluation research of the joint C&I Retro-Commissioning Program (RCx).
GPY4	NTG 1.02; Free ridership 0.09; Participant Spillover 0.11 Method and Source: Deemed by SAG consensus. Values based on GPY1 RCx evaluation research.
GPY5	NTG 1.02; Free ridership 0.09; Participant Spillover 0.11 Method and Source: No new research. Values based on GPY1 RCx evaluation research.
GPY6	NTG 1.02; Free ridership 0.09; Participant Spillover 0.11 Method and Source: No new research. Values based on GPY1 RCx evaluation research.
2018 (GPY7)	NTG: 1.02 Method: No new research. Retained GPY6 final value.
2019	NTG 0.91; Free ridership 0.14; Participant Spillover 0.05 Method: FR and PSO: 2018 Survey of 7 GPY6 participants. Memo: Net-to-Gross Research Results from GPY6 for the Gas Optimization Study Offering, Navigant, 8/29/18, revised 9/13/18.

Source:

http://ilsagfiles.org/SAG_files/NTG/2019_NTG_Meetings/Corrected_NTG_Values/PGL_NSQ_NTG_History_and_2019_Recommendations_Faucet_Aerator_and_Showerhead_Correction_2019-04-12.pdf