



Income Eligible Single Family Programs Impact Evaluation Report

**Energy Efficiency Plan Year 2021
(1/1/2021-12/31/2021)**

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Peoples Gas and North Shore Gas

Final

June 14, 2022

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Table of Contents

1. Introduction.....	1
2. Income Eligible Single-Family IHWAP and CBA Programs.....	1
3. Savings Summary	4
4. Program Savings by Measure	5
5. Impact Analysis Findings and Recommendations	7
Appendix A. Impact Analysis Methodology	11
Appendix B. Program-Specific Inputs for the Illinois TRC.....	12

List of Tables, Figures, and Equations

Table 2-1. 2021 Volumetric Summary for PGL	1
Table 2-2. 2021 Volumetric Summary for NSG.....	2
Table 2-3. 2021 Installed Measure Quantities for PGL.....	2
Table 2-4. 2021 Installed Measure Quantities for NSG	3
Table 3-1. 2021 Annual Energy Savings Summary for PGL	4
Table 3-2. 2021 Annual Energy Savings Summary for NSG.....	4
Table 4-1. 2021 Annual Energy Savings by Measure for PGL.....	5
Table 4-2. 2021 Annual Energy Savings by Measure for NSG	6
Table 5-1. Verified Gross Savings Parameters – PGL CBA.....	7
Table 5-2. Verified Gross Savings Parameters – PGL IHWAP	8
Table 5-3. Verified Gross Savings Parameters for NSG IHWAP	9
Table B-1. TRC Inputs for PGL – IHWAP and CBA.....	12
Table B-2. TRC Inputs for NSG – IHWAP	13

1. Introduction

The Peoples Gas (PGL) 2021 Income Eligible Chicago Bungalow Association (CBA) and PGL and North Shore Gas (NSG) Single Family Illinois Home Weatherization Assistance Program (IHWAP) programs are offered jointly to income-eligible single family households served by ComEd, Peoples Gas, and North Shore Gas. This report presents the results of the impact evaluation of the 2021 PGL and NSG programs.

This report summarizes the total energy and demand impacts for each program broken out by relevant measure and program structure details. The appendices provide the impact analysis methodology and details of the total resource cost (TRC) analysis inputs. The 2021 program covers January 1, 2021 through December 31, 2021.

2. Income Eligible Single-Family IHWAP and CBA Programs

The Income Eligible Single-Family Retrofit programs offer installation of energy efficiency measures and replacement of inefficient equipment. Homeowners with a household income at or below 80% of the Area Median Income (AMI) qualify for participation. Eligible measures include programmable thermostats, water efficiency devices, weatherization measures, pipe insulation, heating and cooling equipment, and custom energy-saving measures for eligible properties. The program also offers installation of health and safety measures including vents, electrical repairs, and asbestos and mold remediation.

This program has two components:

- The Income Eligible Single Family Chicago Bungalow Association (CBA) program component is administered by ComEd and Peoples Gas and is implemented by Franklin Energy Services.
- The Single Family – Illinois Home Weatherization Assistance Program (IHWAP) program component is administered by ComEd, Peoples Gas, North Shore Gas, and Nicor Gas and is implemented by Resource Innovations in partnership with IHWAP.

The PGL IHWAP program had 84 participants in 2021 and completed 85 projects, and the PGL CBA program had 736 participants in 2021 and completed 899 projects as shown in Table 2-1.

Table 2-1. 2021 Volumetric Summary for PGL

Participation	IHWAP	CBA	Total
Participants*	84	736	820
Projects†	85	899	984

* Participants are defined as unique site addresses.

† Installed Projects are defined as unique Project IDs.

Source: Peoples Gas tracking data and Guidehouse evaluation team analysis.

The NSG IHWAP program had 30 participants in 2021 and completed 30 projects as shown in Table 2-2.

Table 2-2. 2021 Volumetric Summary for NSG

Participation	IHWAP
Participants*	30
Projects†	30

* Participants are defined as unique site addresses.

† Installed Projects are defined as unique Project IDs.

Source: North Shore Gas tracking data and Guidehouse evaluation team analysis.

Table 2-3 and Table 2-4 summarize the installed measure quantities that are the basis for verified energy savings.

Table 2-3. 2021 Installed Measure Quantities for PGL

Participation	IHWAP	CBA	Total
Advanced Thermostat - Manual	48	2	50
Duct Insulation and Sealing (Projects)	17	0	17
Furnace Tune-Up	18	0	18
Gas High Efficiency Boiler – Early Replacement (ER)	4	0	4
Gas High Efficiency Boiler – Time of Sale (TOS)	4	0	4
Gas High Efficiency Furnace - ER	33	0	33
Gas High Efficiency Furnace - TOS	12	0	12
Programmable Thermostat	7	14	21
Gas Water Heater – ER	25	0	25
Hot Water (HW) Pipe Insulation	75	136	211
Low Flow Faucet Aerator - Bathroom	45	60	105
Low Flow Faucet Aerator - Kitchen	15	65	80
Low Flow Showerhead	34	0	34
Air Sealing (Projects)	82	426	508
Attic Insulation (Projects)	73	426	499
Basement Sidewall Insulation (Projects)	6	0	6
Floor Insulation (Projects)	5	71	76
Rim Insulation (Projects)	12	0	12
Wall Insulation (Projects)	43	661	704

Source: Peoples Gas tracking data and Guidehouse evaluation team analysis.

Table 2-4. 2021 Installed Measure Quantities for NSG

Participation	IHWAP
Advanced Thermostat - Manual	14
Furnace Tune-Up	1
Gas High Efficiency Boiler - TOS	1
Gas High Efficiency Furnace - ER	5
Gas High Efficiency Furnace - TOS	10
Programmable Thermostat	6
Gas Water Heater - ER	14
HW Pipe Insulation	17
Low Flow Faucet Aerator - Bathroom	36
Low Flow Faucet Aerator - Kitchen	8
Low Flow Showerhead	11
Air Sealing	29
Attic Insulation	23
Basement Sidewall Insulation	2
Rim Insulation	9

Source: North Shore Gas tracking data and Guidehouse evaluation team analysis.

3. Savings Summary

Table 3-1 and Table 3-2 summarize the energy savings the PGL IHWAP and CBA programs and the NSG IHWAP program achieved by path in 2021.

Table 3-1. 2021 Annual Energy Savings Summary for PGL

Program Path	Ex Ante Gross Savings (Therms)	Verified Gross RR*	Verified Gross Savings (Therms)	NTG†	Verified Net Savings (Therms)
IHWAP	49,918	100%	49,946	1.00	49,946
CBA	213,031	100%	212,790	1.00	212,790
Total or Weighted Average	262,949	100%	262,736	1.00	262,736

* Realization Rate (RR) is the ratio of verified gross savings to ex ante gross savings, based on evaluation research findings.

† A deemed value. Available on the SAG web site: <https://www.ilsag.info/evaluator-ntg-recommendations-for-2021/>.

Source: Peoples Gas tracking data and Guidehouse evaluation team analysis.

Table 3-2. 2021 Annual Energy Savings Summary for NSG

Program Path	Ex Ante Gross Savings (Therms)	Verified Gross RR*	Verified Gross Savings (Therms)	NTG†	Verified Net Savings (Therms)
IHWAP	8,651	100%	8,651	1.00	8,651
Total or Weighted Average	8,651	100%	8,651	1.00	8,651

* Realization Rate (RR) is the ratio of verified gross savings to ex ante gross savings, based on evaluation research findings.

† A deemed value. Available on the SAG web site: <https://www.ilsag.info/evaluator-ntg-recommendations-for-2021/>.

Source: North Shore Gas tracking data and Guidehouse evaluation team analysis.

4. Program Savings by Measure

The PGL programs included 19 measures as shown in Table 4-1. The air sealing and attic insulation measures in both paths contributed the most savings.

Table 4-1. 2021 Annual Energy Savings by Measure for PGL

Program Path	End Use Type	Research Category	Ex Ante Gross Savings (Therms)	Verified Realization Rate	Verified Gross Savings (Therms)	NTG	Verified Net Savings (Therms)
IHWAP	HVAC	Advanced Thermostat - Manual	4,612	100%	4,612	1.00	4,612
	HVAC	Duct Insulation and Sealing	5,874	100%	5,874	1.00	5,874
	HVAC	Furnace Tune-Up	1,092	100%	1,092	1.00	1,092
	HVAC	Gas High Efficiency Boiler - ER	656	100%	656	1.00	656
	HVAC	Gas High Efficiency Boiler - TOS	783	100%	783	1.00	783
	HVAC	Gas High Efficiency Furnace - ER	4,538	100%	4,538	1.00	4,538
	HVAC	Gas High Efficiency Furnace - TOS	1,364	100%	1,364	1.00	1,364
	HVAC	Programmable Thermostat	528	100%	528	1.00	528
	Hot Water	Gas Water Heater - ER	1,158	100%	1,158	1.00	1,158
	Hot Water	HW Pipe Insulation	746	100%	746	1.00	746
	Hot Water	Low Flow Faucet Aerator - Bathroom	54	100%	54	1.00	54
	Hot Water	Low Flow Faucet Aerator - Kitchen	137	100%	137	1.00	137
	Hot Water	Low Flow Showerhead	111	100%	111	1.00	111
	Shell	Air Sealing	11,696	100%	11,696	1.00	11,696
	Shell	Attic Insulation	12,244	100%	12,272	1.00	12,272
	Shell	Basement Sidewall Insulation	360	100%	360	1.00	360
	Shell	Floor Insulation	57	100%	57	1.00	57
	Shell	Rim Insulation	87	100%	87	1.00	87
	Shell	Wall Insulation	3,821	100%	3,821	1.00	3,821
		IHWAP Subtotal	49,918	100%	49,946	1.00	49,946
CBA	HVAC	Advanced Thermostat - Manual	205	100%	205	1.00	205
	HVAC	Programmable Thermostat	1,291	100%	1,291	1.00	1,291
	Hot Water	HW Pipe Insulation	460	100%	460	1.00	460
	Hot Water	Low Flow Faucet Aerator - Bathroom	52	100%	52	1.00	52
	Hot Water	Low Flow Faucet Aerator - Kitchen	179	100%	179	1.00	179
	Shell	Air Sealing	86,052	100%	86,053	1.00	86,053
	Shell	Attic Insulation	63,501	100%	63,238	1.00	63,238
	Shell	Floor Insulation	1,358	100%	1,358	1.00	1,358
	Shell	Wall Insulation	59,934	100%	59,954	1.00	59,954
		CBA Subtotal	213,031	100%	212,790	1.00	212,790
Total or Weighted Average			262,949	100%	262,736	1.00	262,736

Source: Peoples Gas tracking data and Guidehouse evaluation team analysis.

The NSG IHWAP program included 15 measures as shown in Table 4-2. The air sealing, advanced thermostat, gas high efficiency furnace, and attic insulation measures contributed the most savings.

Table 4-2. 2021 Annual Energy Savings by Measure for NSG

End Use Type	Research Category	Ex Ante Gross Savings (Therms)	Verified Gross Realization Rate	Verified Gross Savings (Therms)	NTG	Verified Net Savings (Therms)
HVAC	Advanced Thermostat - Manual	1,684	100%	1,684	1.00	1,684
HVAC	Furnace Tune-Up	27	100%	27	1.00	27
HVAC	Gas High Efficiency Boiler - TOS	25	100%	25	1.00	25
HVAC	Gas High Efficiency Furnace - ER	531	100%	531	1.00	531
HVAC	Gas High Efficiency Furnace - TOS	1,532	100%	1,532	1.00	1,532
HVAC	Programmable Thermostat	342	100%	342	1.00	342
Hot Water	Gas Water Heater - ER	594	100%	594	1.00	594
Hot Water	HW Pipe Insulation	180	100%	180	1.00	180
Hot Water	Low Flow Faucet Aerator - Bathroom	26	100%	26	1.00	26
Hot Water	Low Flow Faucet Aerator - Kitchen	47	100%	47	1.00	47
Hot Water	Low Flow Showerhead	33	100%	33	1.00	33
Shell	Air Sealing	2,129	100%	2,129	1.00	2,129
Shell	Attic Insulation	1,349	100%	1,349	1.00	1,349
Shell	Basement Sidewall Insulation	68	100%	68	1.00	68
Shell	Rim Insulation	84	100%	84	1.00	84
Total or Weighted Average		8,651	100%	8,651	1.00	8,651

Source: North Shore Gas tracking data and Guidehouse evaluation team analysis.

5. Impact Analysis Findings and Recommendations

5.1.1 Impact Parameter Estimates

Table 5-1, Table 5-2, and Table 5-3 show the unit therm savings and realization rate findings by measure from our review. Following the tables, the evaluation team provides findings and recommendations, including discussion of measures with realization rates above or below 100 percent. Appendix A provides a description of the impact analysis methodology. Appendix B provides the Total Resource Cost (TRC) cost-effectiveness analysis inputs available at the time of drafting this impact evaluation report.

Table 5-1. Verified Gross Savings Parameters – PGL CBA

Program	Measure	Unit Basis	Ex Ante Gross (therms/unit)	Verified Gross (therms/unit)	Realization Rate	Data Source(s)
CBA	Advanced Thermostat - Manual	Each	102.50	102.51	1.00	TRM v9.0† Section 5.3.16 and tracking data*
	Programmable Thermostat	Each	92.21	92.21	1.00	TRM v9.0 Section 5.3.11, tracking data
	HW Pipe Insulation	Lin. Ft.	0.57	0.57	1.00	TRM v9.0 Section 5.4.1, tracking data
	Low Flow Faucet Aerator - Bathroom	Each	0.86	0.86	1.00	TRM v9.0 Section 5.4.4, tracking data
	Low Flow Faucet Aerator - Kitchen	Each	2.75	2.75	1.00	TRM v9.0 Section 5.4.4, tracking data
	Air Sealing	Projects	0.07	0.07	1.00	TRM v9.0 Section 5.6.1, tracking data
	Attic Insulation	Sq. Ft.	0.16	0.16	1.00	TRM v9.0 Section 5.6.5, tracking data
	Floor Insulation	Sq. Ft.	0.13	0.13	1.00	TRM v9.0 Section 5.6.3, tracking data
	Wall Insulation	Sq. Ft.	0.13	0.13	1.00	TRM v9.0 Section 5.6.4, tracking data

* Program Tracking Data (PTD) provided by Peoples Gas; extract dated February 1, 2022.

† State of Illinois Technical Reference Manual version 9.0 from <http://www.ilsag.info/technical-reference-manual.html>.

Source: Peoples Gas and North Shore Gas tracking data and Guidehouse evaluation team analysis

Table 5-2. Verified Gross Savings Parameters – PGL IHWAP

Program	Measure	Unit Basis	Ex Ante Gross (therms/unit)	Verified Gross (therms/unit)	Realization Rate	Data Source(s)
IHWAP	Advanced Thermostat – Manual	Each	83.85	83.85	1.00	TRM v9.0† Section 5.3.16 and tracking data*
	Duct Insulation and Sealing	Each	345.53	345.54	1.00	TRM v9.0 Section 5.3.4 and tracking data
	Furnace Tune-Up	Each	60.65	60.65	1.00	TRM v9.0 Section 5.3.13 and tracking data
	Gas High Efficiency Boiler - ER	Each	164.03	164.03	1.00	TRM v9.0 Section 5.3.6 and tracking data
	Gas High Efficiency Boiler - TOS	Each	195.80	195.80	1.00	TRM v9.0 Section 5.3.6 and tracking data
	Gas High Efficiency Furnace – ER	Each	137.50	137.50	1.00	TRM v9.0 Section 5.3.7 and tracking data
	Gas High Efficiency Furnace – TOS	Each	113.66	113.66	1.00	TRM v9.0 Section 5.3.7 and tracking data
	Programmable Thermostat	Each	65.98	65.98	1.00	TRM v9.0 Section 5.3.11 and tracking data
	Gas Water Heater - ER	Each	46.31	46.31	1.00	TRM v9.0 Section 5.4.2 and tracking data
	HW Pipe Insulation	Lin. Ft.	0.88	0.88	1.00	TRM v9.0 Section 5.4.1 and tracking data
	Low Flow Faucet Aerator - Bathroom	Each	1.20	1.20	1.00	TRM v9.0 Section 5.4.4 and tracking data
	Low Flow Faucet Aerator - Kitchen	Each	9.17	9.17	1.00	TRM v9.0 Section 5.4.4 and tracking data
	Low Flow Showerhead	Each	3.28	3.28	1.00	TRM v9.0 Section 5.4.5 and tracking data
	Air Sealing	Projects	142.63	142.64	1.00	TRM v9.0 Section 5.6.1 and tracking data
	Attic Insulation	Sq. ft.	0.23	0.24	1.00	TRM v9.0 Section 5.6.5 and tracking data
	Basement Sidewall Insul.	Sq. ft.	0.26	0.26	1.00	TRM v9.0 Section 5.6.2 and tracking data
	Floor Insulation	Sq. ft.	0.11	0.11	1.00	TRM v9.0 Section 5.6.3 and tracking data
	Rim Insulation	Sq. ft.	0.11	0.11	1.00	TRM v9.0 Section 5.6.6 and tracking data
Wall Insulation	Sq. ft.	0.09	0.09	1.00	TRM v9.0 Section 5.6.4 and tracking data	

* Program Tracking Data (PTD) provided by Peoples Gas; extract dated February 1, 2022.

† State of Illinois Technical Reference Manual version 9.0 from <http://www.ilsag.info/technical-reference-manual.html>.

Source: Peoples Gas and North Shore Gas tracking data and Guidehouse evaluation team analysis

Table 5-3. Verified Gross Savings Parameters for NSG IHWAP

Measure	Unit Basis	Ex Ante Gross (therms/unit)	Verified Gross (therms/unit)	Realization Rate	Data Source(s)
Advanced Thermostat – Manual	Each	120.29	120.29	1.00	TRM v9.0† Section 5.3.16 and tracking data*
Furnace Tune-Up	Each	26.78	26.78	1.00	TRM v9.0 Section 5.3.13 and tracking data
Gas High Efficiency Boiler – TOS	Each	25	25	1.00	TRM v9.0 Section 5.3.6 and tracking data
Gas High Efficiency Furnace – ER	Each	106.25	106.25	1.00	TRM v9.0 Section 5.3.7 and tracking data
Gas High Efficiency Furnace – TOS	Each	153.21	153.21	1.00	TRM v9.0 Section 5.3.7 and tracking data
Programmable Thermostat	Each	57.01	57.01	1.00	TRM v9.0 Section 5.3.11 and tracking data
Gas Water Heater - ER	Each	42.4	42.4	1.00	TRM v9.0 Section 5.4.2 and tracking data
HW Pipe Insulation	Lin. Ft.	0.88	0.88	1.00	TRM v9.0 Section 5.4.1 and tracking data
Low Flow Faucet Aerator – Bathroom	Each	0.72	0.72	1.00	TRM v9.0 Section 5.4.4 and tracking data
Low Flow Faucet Aerator – Kitchen	Each	5.88	5.88	1.00	TRM v9.0 Section 5.4.4 and tracking data
Low Flow Showerhead	Each	3.02	3.02	1.00	TRM v9.0 Section 5.4.5 and tracking data
Air Sealing	Projects	73.43	73.43	1.00	TRM v9.0 Section 5.6.1 and tracking data
Attic Insulation	Sq. Ft.	0.07	0.07	1.00	TRM v9.0 Section 5.6.5 and tracking data
Basement Sidewall Insulation	Sq. Ft.	0.13	0.13	1.00	TRM v9.0 Section 5.6.2 and tracking data
Rim Insulation	Sq. Ft.	0.06	0.06	1.00	TRM v9.0 Section 5.6.6 and tracking data

* Program Tracking Data (PTD) provided by North Shore Gas; extract dated February 1, 2022.

† State of Illinois Technical Reference Manual version 9.0 from <http://www.ilsag.info/technical-reference-manual.html>.

Source: North Shore Gas tracking data and Guidehouse evaluation team analysis

5.1.2 Findings and Recommendations

5.1.2.1 IHWAP/CBA – Attic Insulation

For IHWAP measure code MEA-2021.06.25-236366, the gross savings realization rate was 110%. It appears that the income eligible correction factor of 1.1 was not applied to the ex ante savings for this one project. For CBA attic insulation, we calculated 242 therms difference between ex ante and verified savings due to rounding error. Overall, the gross realization rates for both measures were very close to 100%.

Recommendation 1. Review and apply the income eligible correction factor of 1.1 to the attic insulation savings for all measures.

5.1.2.2 CBA – Missing Data

The CBA tracking data is missing values to calculate savings. The evaluation team matched the PGL project IDs to the ComEd SFR CBA tracking data. We mapped 1,690 measures to ComEd tracking data and 150 were not mapped. Of these 150 measures, 14 are hot water pipe insulation measures and 136 are programmable thermostat measures. Combined, these unmatched measures account for 0.8% of total ex ante savings. The evaluation team did not adjust the verified savings.

Recommendation 2. Ensure that program data submitted for joint ComEd and PGL evaluation are consistent with the PGL data provided separately to the evaluation team from the Efficiency Manager tracking system platform.

5.1.2.3 CBA – Floor Insulation

In evaluating floor insulation measures for the joint measure implementation for ComEd reporting, we used a derated AFUE for the nHeat values to get a realization rate of 100%. In the case for PGL/NSG, the evaluation team was able to match the implementer's ex ante values in the tracking data using the TRM default nHeat value of 0.72, for a 100% gross savings realization rate.

Appendix A. Impact Analysis Methodology

Guidehouse determined verified gross savings for each program measure by conducting a tracking system review. Guidehouse checked that measure's inputs matched deemed TRM (v9.0) inputs and validated custom inputs or adjusted as necessary. To be eligible, an TRM measure must meet the physical, operational, and baseline characteristics as defined in the applicable version of the TRM.¹ Verified gross realization rates are calculated by dividing the verified gross savings by the ex ante gross savings. In 2021, the NTG estimates used to calculate the net verified savings were defined by a consensus process through the SAG.²

¹ Illinois Statewide Technical Reference Manual for Energy Efficiency Version 9.0 from <http://www.ilsag.info/technical-reference-manual.html>

² Available on the SAG web site: <https://www.ilsag.info/evaluator-ntg-recommendations-for-2021/>

Appendix B. Program-Specific Inputs for the Illinois TRC

Table B-1 and Table B-2 show the Total Resource Cost (TRC) cost-effectiveness analysis inputs available at the time of drafting this impact evaluation report for PGL and NSG.

Table B-1. TRC Inputs for PGL – IHWAP and CBA

Program Path	End Use	Research Category	Units	Quantity	Effective Useful Life	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
IHWAP	HVAC	Advanced Thermostat - Manual	Each	55	11.0	4,612	4,612	4,612
	HVAC	Duct Insulation and Sealing	Each	17	20.0	5,874	5,874	5,874
	HVAC	Furnace Tune-Up	Each	18	3.0	1,092	1,092	1,092
	HVAC	Gas High Efficiency Boiler - ER	Each	4	25.0	656	656	656
	HVAC	Gas High Efficiency Boiler - TOS	Each	4	25.0	783	783	783
	HVAC	Gas High Efficiency Furnace - ER	Each	33	20.0	4,538	4,538	4,538
	HVAC	Gas High Efficiency Furnace - TOS	Each	12	20.0	1,364	1,364	1,364
	HVAC	Programmable Tstat.	Each	8	16.0	528	528	528
	Hot Water	Gas Water Heater - ER	Each	25	13.0	1,158	1,158	1,158
	Hot Water	HW Pipe Insulation	Lin. Ft.	848	15.0	746	746	746
	Hot Water	Low Flow Faucet Aerator – Bathroom	Each	45	10.0	54	54	54
	Hot Water	Low Flow Faucet Aerator - Kitchen	Each	15	10.0	137	137	137
	Hot Water	Low Flow Showerhead	Each	34	10.0	111	111	111
	Shell	Air Sealing	Projects	82	20.0	11,696	11,696	11,696
	Shell	Attic Insulation	Sq. Ft.	52,116	20.0	12,244	12,272	12,272
	Shell	Basement Sidewall Insul.	Sq. Ft.	1,369	20.0	360	360	360
	Shell	Floor Insulation	Sq. Ft.	510	20.0	57	57	57
Shell	Rim Insulation	Sq. Ft.	783	20.0	87	87	87	
Shell	Wall Insulation	Sq. Ft.	43,058	20.0	3,821	3,821	3,821	
CBA	HVAC	Advanced Thermostat - Manual	Each	2	11.0	205	205	205
	HVAC	Programmable Tstat.	Each	14	16.0	1,291	1,291	1,291
	Hot Water	HW Pipe Insulation	Lin. Ft.	807	15.0	460	460	460
	Hot Water	Low Flow Faucet Aerator - Bathroom	Each	60	10.0	52	52	52

Program Path	End Use	Research Category	Units	Quantity	Effective Useful Life	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
	Hot Water	Low Flow Faucet Aerator - Kitchen	Each	65	10.0	179	179	179
	Shell	Air Sealing	Projects	1,245,508	20.0	86,052	86,053	86,053
	Shell	Attic Insulation	Sq. Ft.	385,074	20.0	63,501	63,238	63,238
	Shell	Floor Insulation	Sq. Ft.	10,487	20.0	1,358	1,358	1,358
	Shell	Wall Insulation	Sq. Ft.	477,947	20.0	59,934	59,954	59,954
Total or Weighted Average					19.7	262,949	262,736	262,736

Source: Peoples Gas tracking data and Guidehouse evaluation team analysis.

Table B-2. TRC Inputs for NSG – IHWAP

End Use	Research Category	Units	Quantity	Effective Useful Life	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
HVAC	Advanced Thermostat - Manual	Each	14	11.0	1,684	1,684	1,684
HVAC	Furnace Tune-Up	Each	1	3.0	27	27	27
HVAC	Gas High Efficiency Boiler - TOS	Each	1	25.0	25	25	25
HVAC	Gas High Efficiency Furnace - ER	Each	5	20.0	531	531	531
HVAC	Gas High Efficiency Furnace - TOS	Each	10	20.0	1,532	1,532	1,532
HVAC	Programmable Thermostat	Each	6	16.0	342	342	342
Hot Water	Gas Water Heater - ER	Each	14	13.0	594	594	594
Hot Water	HW Pipe Insulation	Lin. Ft.	204	15.0	180	180	180
Hot Water	Low Flow Faucet Aerator - Bathroom	Each	36	10.0	26	26	26
Hot Water	Low Flow Faucet Aerator - Kitchen	Each	8	10.0	47	47	47
Hot Water	Low Flow Showerhead	Each	11	10.0	33	33	33
Shell	Air Sealing	Projects	29	20.0	2,129	2,129	2,129
Shell	Attic Insulation	Sq. Ft.	18,899	20.0	1,349	1,349	1,349
Shell	Basement Sidewall Insulation	Sq. Ft.	532	20.0	68	68	68
Shell	Rim Insulation	Sq. Ft..	1,312	20.0	84	84	84
Total or Weighted Average				17.3	8,651	8,651	8,651

Source: North Shore Gas tracking data and Guidehouse evaluation team analysis.