



Home Energy Jumpstart Impact Evaluation Report

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

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Peoples Gas and North Shore Gas

Final

May 18, 2022

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1. Introduction

This report presents the results of the impact evaluation of the Peoples Gas (PGL) and North Shore Gas (NSG) 2021 Home Energy Jumpstart (HEJ) Program. It presents a summary of the energy impacts for the total program and broken out by relevant measure and program structure details. The appendix presents the impact analysis methodology. Program year 2021 covers January 1, 2021 through December 31, 2021.

2. Program Description

The 2021 HEJ Program is an assessment and direct install program jointly implemented by ComEd and Peoples Gas and North Shore Gas (PGL and NSG) with Franklin Energy Services (Franklin Energy) operating as implementer of the program. This report focuses solely on the natural gas savings from the program. Savings from electric measures are included in a separate evaluation report delivered to ComEd.

The HEJ Program seeks to secure energy savings through direct installation of low-cost efficiency measures, such as: water efficient showerheads and faucet aerators, pipe insulation, electricity-saving devices, and programmable thermostats at eligible single-family (SF) residences, including condominiums (Condo). The program also secures energy savings through installation of advanced (smart) thermostats with co-pays. In addition, the program performs an assessment of the major retrofit opportunities (e.g., furnace, boiler, air conditioning, insulation, and air sealing) and heightens homeowner awareness about available additional efficiency programs offered by ComEd, Peoples Gas and North Shore Gas. A Virtual Home Assessment (VA) option was added in 2020 and continued in 2021 to adapt to COVID restrictions. The program measures also included Leave-Behind Kits, which are comprised of weather stripping, door sweep, and shower timer measures. If a Leave-Behind Kit is delivered to a home with an electric water heater, there are no natural gas savings for shower timers.

The PGL program had 3,380 participants in 2021 and completed 3,469 projects¹, as shown Table 2-1.

Table 2-1. 2021 Volumetric Summary for PGL

Participation	Field Assessment with Direct- and Self-Install	Virtual Home Assessment with Self-Install	Total
Participants*	3,378	214	3,380
Installed Projects †	3,457	224	3,469

* Participants are defined as the number of distinct Account Names with realized gas savings.

† Installed Projects are defined as the number of distinct project IDs.

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

¹ Project count and 2021 verified savings excludes 398 projects in the tracking data that had the program name “Joint HEA 2021” with a “Date Install Complete” of January 1, 2022 or later.

Table 2-2 summarizes the measure quantities that are the basis for verified energy savings.

Table 2-2. 2021 Measure Quantities for PGL

Program Path	Measure	Quantity Unit	Ex Ante Installed or Distributed Quantity	Verified Installed or Distributed Quantity (no duplicate thermostats)
Field Assessment with Direct- and Self-Install	Advanced Thermostats	Each	314	292
	Advanced Thermostats (Condo)	Each	27	25
	Faucet Aerator - Bathroom	Each	285	285
	Faucet Aerator - Bathroom (Condo)	Each	69	69
	Faucet Aerator - Kitchen	Each	283	283
	Faucet Aerator - Kitchen (Condo)	Each	12	12
	Leave-Behind Kit - Electric DHW	Each	10	10
	Leave-Behind Kit - Gas DHW	Each	2,961	2,961
	Pipe Insulation - DHW Outlet	Linear Feet	4,009	4,009
	Pipe Insulation - HW Space Heat Outlet	Linear Feet	178	178
	Programmable Thermostats (Boiler/Furnace)	Each	273	262
	Reprogram Thermostats (Boiler/Furnace)	Each	478	440
	Showerhead	Each	881	881
	Showerhead (Condo)	Each	139	139
Virtual Home Assessment with Self-Install	Advanced Thermostats - VA	Each	8	8
	Faucet Aerator - Bathroom - VA	Each	213	213
	Faucet Aerator - Bathroom (Condo) - VA	Each	25	25
	Faucet Aerator - Kitchen - VA	Each	58	58
	Faucet Aerator - Kitchen (Condo) - VA	Each	5	5
	Leave-Behind Kit - Electric DHW - VA	Each	0	0
	Leave-Behind Kit - Gas DHW - VA	Each	209	209
	Pipe Insulation - DHW Outlet - VA	Each	728	728
	Pipe Insulation - HW Space Ht. Outlet - VA	Each	424	424
	Programmable Thermostats (Boiler/Furnace) - VA	Each	3	3
	Reprogram Thermostats (Boiler/Furnace) - VA	Each	2	2
	Showerhead - VA	Each	228	228
	Showerhead (Condo) - VA	Each	25	25

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

The NSG program had 1,042 participants in 2021 and completed 1,055 projects², as shown in Table 2-3.

Table 2-3. 2021 Volumetric Summary for NSG

Participation	Field Assessment with Direct- and Self-Install	Virtual Home Assessment with Self-Install	Total
Participants* *	1,041	72	1,042
Installed Projects †	1,050	76	1,055

* Participants are defined as the number of distinct Account Names with realized gas savings.

† Installed Projects are defined as the number of distinct project IDs.

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

² Project count and 2021 verified savings excludes 91 projects in the tracking data that had the program name “Joint HEA 2021” with a “Date Install Complete” of January 1, 2022 or later.

Table 2-4 summarizes the measure quantities that are the basis for verified energy savings.

Table 2-4. 2021 Measure Quantities for NSG

Program Path	Measure	Quantity Unit	Installed or Distributed Quantity	Verified Installed or Distributed Quantity (no duplicated thermostats)
Field Assessment with Direct- and Self-Install	Advanced Thermostats	Each	92	83
	Advanced Thermostats (Condo)	Each	1	1
	Faucet Aerator – Bathroom	Each	306	306
	Faucet Aerator - Bathroom (Condo)	Each	3	3
	Faucet Aerator – Kitchen	Each	65	65
	Leave-Behind Kit - Electric DHW	Each	0	0
	Leave-Behind Kit - Gas DHW	Each	964	964
	Pipe Insulation - DHW Outlet	Linear Feet	1,807	1,807
	Pipe Insulation - HW Space Heat Outlet	Linear Feet	12	12
	Programmable Thermostats (Boiler/Furnace)	Each	67	63
	Reprogram Thermostats (Boiler/Furnace)	Each	109	86
	Showerhead	Each	784	784
	Showerhead (Condo)	Each	5	5
	Virtual Home Assessment with Self-Install	Advanced Thermostats - VA	Each	4
Faucet Aerator - Bathroom - VA		Each	135	135
Faucet Aerator - Bathroom (Condo) - VA		Each	0	0
Faucet Aerator - Kitchen - VA		Each	15	15
Faucet Aerator - Kitchen (Condo) - VA		Each	0	0
Leave-Behind Kit - Gas DHW - VA		Each	69	69
Pipe Insulation - DHW Outlet - VA		Each	280	280
Pipe Insulation - HW Space Heat Outlet - VA		Each	198	198
Programmable Thermostats (Boiler/Furnace) - VA		Each	1	1
Reprogram Thermostats (Boiler/Furnace) - VA		Each	0	0
Showerhead – VA		Each	127	127
Showerhead (Condo) – VA	Each	0	0	

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

3. Savings Summary

Table 3-1 summarizes the PGL HEJ Program energy savings 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)
Field Assessment / Direct- and Self-Install	134,804	100%	134,803	0.88	118,260
Virtual Home Assessment / Self-Install	7,408	100%	7,408	0.92	6,832
Total or Weighted Average	142,212	100%	142,211	0.88	125,092

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

† A weighted average based on measure-level deemed values. Measure-level NTGs provided in Section 4. Deemed values 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 summarizes the energy savings the NSG HEJ Program achieved by path in 2021.

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)
Field Assessment / Direct- and Self-Install	40,192	100%	40,192	0.90	36,105
Virtual Home Assessment / Self-Install	2,888	100%	2,888	0.93	2,694
Total or Weighted Average	43,080	100%	43,080	0.90	38,799

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

† A weighted average based on measure-level deemed values. Measure-level NTGs provided in Section 4. Deemed values 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 program includes 25 measures as shown in Table 4-1. The Advanced Thermostats, Programmable Thermostats, Reprogram Thermostats, and Leave-Behind Gas Kits contributed the most savings.

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

Program Path	Research Category	Ex Ante Gross Savings (Therms)	Verified Gross RR	Verified Gross Savings (Therms)	NTG	Verified Net Savings (Therms)
Field Assessment / Direct- and Self-Install	Advanced Thermostats	25,447	100%	25,447	0.90	22,902
	Advanced Thermostats (Condo)	1,504	100%	1,504	0.90	1,354
	Faucet Aerator – Bathroom	246	100%	246	1.02	251
	Faucet Aerator - Bathroom (Condo)	107	100%	107	1.02	109
	Faucet Aerator – Kitchen	778	100%	778	1.02	794
	Faucet Aerator - Kitchen (Condo)	30	100%	30	1.02	31
	Leave-Behind Kit - Electric DHW	125	100%	125	0.88	110
	Leave-Behind Kit - Gas DHW	47,406	100%	47,406	0.88	41,717
	Pipe Insul. - DHW Outlet	2,212	100%	2,212	0.88	1,947
	Pipe Insul. - HW Space Heat Outlet	242	100%	242	0.88	213
	Programmable Thermostats (Boiler/Furnace)	17,731	100%	17,730	0.88	15,602
	Reprogram Thermostats (Boiler/Furnace)	29,659	100%	29,658	0.80	23,726
	Showerhead	7,745	100%	7,745	1.02	7,900
	Showerhead (Condo)	1,573	100%	1,573	1.02	1,604
	Virtual Home Assessment / Self-Install	Advanced Thermostats	727	100%	727	0.90
Faucet Aerator - Bath – VA		151	100%	151	1.02	154
Faucet Aerator - Bath (Condo) – VA		32	100%	32	1.02	33
Faucet Aerator - Kitchen – VA		128	100%	128	1.02	131
Faucet Aerator - Kitchen (Condo)–VA		10	104%	11	1.02	11
Leave-Behind Kit - Gas DHW – VA		3,346	100%	3,346	0.88	2,944
Pipe Insul.- DHW Outlet – VA		313	100%	313	0.88	275
Pipe Insul.- HW Space Ht. Outlet–VA		449	100%	449	0.88	395
Programmable Thermostats (Boiler/Furnace)		247	100%	247	0.88	217
Reprogram Thermostats (Boiler/Furnace)		125	100%	125	0.80	100
Showerhead - VA	1,643	100%	1,643	1.02	1,676	
Showerhead (Condo) - VA	237	100%	237	1.02	242	
Total or Weighted Average		142,212	100%	142,211	0.88	125,092

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

The NSG program includes 19 measures as shown in Table 4-2. The Advanced Thermostats, Reprogram Thermostats, Showerhead, and Leave-Behind Gas Kits contributed the most savings.

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

Program Path	Research Category	Ex Ante Gross Savings (Therms)	Verified Gross RR	Verified Gross Savings (Therms)	NTG	Verified Net Savings (Therms)
Field Assessment / Direct- and Self- Install	Advanced Thermostats	6,639	100%	6,639	0.90	5,975
	Advanced Thermostats (Condo)	67	100%	67	0.90	60
	Faucet Aerator – Bathroom	265	100%	265	1.02	270
	Faucet Aerator - Bathroom (Condo)	5	100%	5	1.02	5
	Faucet Aerator – Kitchen	179	100%	179	1.02	182
	Leave-Behind Kit - Gas DHW	15,434	100%	15,434	0.88	13,582
	Pipe Insulation - DHW Outlet	997	100%	997	0.88	877
	Pipe Insulation - HW Space Heat Outlet	16	100%	16	0.88	14
	Programmable Thermostats (Boiler/Furnace)	4,224	100%	4,224	0.88	3,717
	Reprogram Thermostats (Boiler/Furnace)	5,418	100%	5,418	0.80	4,334
	Showerhead	6,892	100%	6,893	1.02	7,030
	Showerhead (Condo)	57	100%	57	1.02	58
	Virtual Home Assessment / Self-Install	Advanced Thermostats - VA	317	100%	317	0.90
Faucet Aerator - Bathroom - VA		96	100%	96	1.02	98
Faucet Aerator - Kitchen - VA		33	100%	33	1.02	34
Leave-Behind Kit - Gas DHW - VA		1,105	100%	1,105	0.88	972
Pipe Insulation - DHW Outlet - VA		120	100%	120	0.88	106
Pipe Insulation - HW Space Heat Outlet - VA		210	100%	210	0.88	185
Programmable Thermostats		92	100%	92	0.90	81
Showerhead - VA	915	100%	915	1.02	933	
Total or Weighted Average		43,080	100%	43,080	0.90	38,799

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

5. Impact Analysis Findings and Recommendations

5.1 Impact Parameter Estimates

Table 5-1 shows the unit therm savings and realization rate findings by measure from the evaluation team's review. The realization rate is the ratio of the verified savings to the ex ante savings. Following the table, we provide findings and recommendations, including discussion of all 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 producing this impact evaluation report.

Table 5-1. Verified Gross Savings Parameters

Measure	Unit Basis	Ex Ante Gross (therms/unit)	Verified Gross (therms/unit)	Realization Rate	Data Source(s)
Advanced Thermostats - Manual Baseline (Furnace & AC)	Each	102.51	102.51	100%	TRM v9† - Section 5.3.16, MMDB, PTD*
Advanced Thermostats - Prog Baseline (Furnace & AC)	Each	71.355	71.355	100%	TRM v9 - Section 5.3.16, MMDB, PTD
Advanced Thermostats (Condo) - Manual Baseline	Each	66.63	66.63	100%	TRM v9 - Section 5.3.16, MMDB, PTD
Advanced Thermostats (Condo) - Prog Baseline	Each	46.38	46.38	100%	TRM v9 - Section 5.3.16, MMDB, PTD
Faucet Aerator - Bathroom	Each	0.86	0.86	100%	TRM v9 - Section 5.4.4, MMDB, PTD
Faucet Aerator - Bathroom - VA	Each	0.71	0.71	100%	TRM v9 - Section 5.4.4, MMDB, PTD
Faucet Aerator - Bathroom (Condo)	Each	1.56	1.56	100%	TRM v9 - Section 5.4.4, MMDB, PTD
Faucet Aerator - Bathroom (Condo) - VA	Each	1.28	1.28	100%	TRM v9 - Section 5.4.4, MMDB, PTD
Faucet Aerator - Kitchen	Each	2.75	2.75	100%	TRM v9 - Section 5.4.4, MMDB, PTD
Faucet Aerator - Kitchen - VA	Each	2.21	2.21	100%	TRM v9 - Section 5.4.4, MMDB, PTD
Faucet Aerator - Kitchen (Condo)	Each	2.52	2.52	100%	TRM v9 - Section 5.4.4, MMDB, PTD
Faucet Aerator - Kitchen (Condo) - VA	Each	2.07	2.11	104%	TRM v9 - Section 5.4.4, MMDB, PTD
Leave-Behind Kit - Electric DHW	Each	12.49	12.49	100%	TRM v9 - Section 5.4.9 & 5.6.1, 4.8.16, MMDB
Leave-Behind Kit - Gas DHW	Each	16.01	16.01	100%	TRM v9 - Section 5.4.9 & 5.6.1, 4.8.16, MMDB
Pipe Insulation - DHW Outlet	Linear Ft	0.55	0.55	100%	TRM v9 - Section 5.4.1, MMDB, PTD

Measure	Unit Basis	Ex Ante Gross (therms/unit)	Verified Gross (therms/unit)	Realization Rate	Data Source(s)
Pipe Insulation - DHW Outlet - VA	Linear Ft	0.43	0.43	100%	TRM v9 - Section 5.4.1, MMDB, PTD
Pipe Insulation - HW Space Heat Outlet	Linear Ft	1.36	1.36	100%	TRM v9† - Section 5.3.2, MMDB, PTD*
Pipe Insulation - HW Space Heat Outlet - VA	Linear Ft	1.06	1.06	100%	TRM v9 - Section 5.3.2, MMDB, PTD
Programmable Thermostats (Furnace)	Each	62.31	62.31	100%	TRM v9 - Section 5.3.11, MMDB, PTD
Programmable Thermostats (Boiler)	Each	92.21	92.20	99.98%	TRM v9 - Section 5.3.11, MMDB, PTD
Programmable Thermostats (Furnace) - Condo	Each	62.31	62.31	100%	TRM v9 - Section 5.3.11, MMDB, PTD
Programmable Thermostats (Boiler) - Condo	Each	92.21	92.20	100%	TRM v9 - Section 5.3.11, MMDB, PTD
Reprogram Thermostats (Furnace)	Each	62.31	62.31	100%	TRM v9 - Section 5.3.11, MMDB, PTD
Reprogram Thermostats (Boiler)	Each	92.21	92.20	100%	TRM v9 - Section 5.3.11, MMDB, PTD
Reprogram Thermostats (Furnace) - Condo	Each	62.31	62.31	100%	TRM v9 - Section 5.3.11, MMDB, PTD
Reprogram Thermostats (Boiler) - Condo	Each	92.21	92.20	100%	TRM v9 - Section 5.3.11, MMDB, PTD
Showerhead	Each	8.79	8.79	100%	TRM v9 - Section 5.4.5, MMDB, PTD
Showerhead - VA	Each	7.21	7.21	100%	TRM v9 - Section 5.4.5, MMDB, PTD
Showerhead (Condo)	Each	11.31	11.31	100%	TRM v9 - Section 5.4.5, MMDB, PTD
Showerhead (Condo) - VA	Each	9.46	9.47	100.1%	TRM v9 - Section 5.4.5, MMDB, PTD

* Program Tracking Data (PTD) provided by Peoples Gas and North Shore Gas; extract dated February 7, 2022.

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

COVID-19 lockdowns in 2020 prompted ComEd, Nicor Gas, Peoples Gas, and North Shore Gas to pursue virtual assessment and guided self-installation options for their assessment and direct install programs. The TRM version 9.0 does not prescribe in-service rates (ISRs) for measures installed as part of a virtual assessment channel. In order to estimate program savings for 2020 and beyond, Guidehouse developed custom ISRs for virtual assessment/self-install measures³. These measures include showerheads, kitchen and bathroom aerators, and omnidirectional and specialty LEDs. Guidehouse used a weighted average approach to create the custom virtual assessment ISRs by weighting the efficiency kit ISR (as specified in the TRM) by fifty percent and the direct-install ISR by fifty percent.

³ Guidehouse, *In-Service Rates for CY2020 Single Family Virtual Assessment Measures*, August 20, 2020.

Table 5-2. Virtual Home Assessment In-Service Rates

Measure Category	Prospective Custom ISR for 2021 Single-Family Virtual Assessment Measures
Showerheads	0.795
Aerators – Bathroom	0.780
Aerators – Kitchen	0.765
DHW Pipe Insulation	0.780
Omnidirectional LEDs	0.803
Specialty LEDs	0.803

Source: Guidehouse analysis, IL TRM v9.0

5.2 Findings and Recommendations

5.2.1 Low Flow Showerheads and Kitchen Aerators Installed in Condos

The evaluation team found the gross savings for virtual assessment showerheads and kitchen aerators installed in condos did not match the verified savings when we applied the recommended virtual assessment in-service rate values of 0.795 for condo showerheads and 0.765 for condo kitchen aerators. The gross ex ante unit savings was 9.46, but the verified savings was 9.47 therms. Similarly, for kitchen aerators, the ex ante gross savings was 2.07, but the verified value was 2.11 therms.

Recommendation 1. Include the virtual assessment ISR in the Master Measure Database (MMDB) and calculate savings for virtual install measures similar to the approach for direct install and condo measures.

5.2.2 Historical Realization Rates and Net-to-Gross (NTG) Values

Table 5-3 shows the historical gross realization rates and NTG values for the HEJ Program. Beginning in GPY4, the NTG values shown are a savings weighted average from the various measures, and deemed NTGs that vary by measure and program path.

Table 5-3. Historical Realization Rates and NTG Values

Program Year	PGL Verified Gross RR	NSG Verified Gross RR	PGL NTG	NSG NTG
GPY1 (2011-2012)	100%	100%	0.90	0.90
GPY2 (2012-2015)	100%	98%	0.90	0.90
GPY3 (2013-2014)	100%	100%	0.90	0.90
GPY4 (2014-2015)	100%	102%	0.95	0.92
GPY5 (2015-2016)	103%	100%	0.95	0.95
GPY6 (2016-2017)	100%	100%	0.90	0.92
2018	107%	110%	0.84	0.86
2019	98%	98%	0.89	0.91
2020	99%	100%	0.89	0.91
2021	100%	100%	0.88	0.90

Source: Guidehouse evaluation research.

Appendix A. Impact Analysis Methodology

Guidehouse calculated gross savings by using the methodologies prescribed in the Illinois Technical Reference Manual (TRM) v9.0⁴ and the inputs provided in the program tracking data, when available. The evaluation team compared the TRM and the savings calculation method in the 2021 tracking data to Franklin Energy's MMDB file⁵, which feeds into calculating the tracking data savings. Guidehouse verified that the TRM algorithms were correctly applied in the MMDB and made adjustment where the MMDB assumed custom inputs. Guidehouse developed custom ISRs for virtual assessment/self-install measures⁶.

Guidehouse calculated verified net energy savings by multiplying the verified gross savings estimates by a net-to-gross (NTG) ratio. In 2021, the NTG estimates used to calculate the net verified savings were based on past evaluation research and defined by a consensus process through the Illinois Stakeholder Advisory Group (SAG).

The NTG for the Leave-Behind Kit was not specifically identified in the deemed 2021 NTG values. Instead of the TRM default NTG of 0.80, we assigned a NTG of 0.88 to those measures, which is the NTG used for other self-installable equipment measures in the program, including boiler pipe insulation and DHW pipe insulation.

⁴ State of Illinois Technical Reference Manual version 9.0 from <http://www.ilsag.info/technical-reference-manual.html>

⁵ Franklin Energy Master Measure Database, Excel file 2021 MMDB - Res and MF, provided February 08, 2021.

⁶ Guidehouse, *In-Service Rates for CY2020 Single Family Virtual Assessment Measures*, August 20, 2020.

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 producing this impact evaluation report. Additional required cost data (e.g., measure costs, program level incentive and non-incentive costs) are not included in this table and will be provided to the evaluation team later. Guidehouse will include annual and lifetime water savings, and greenhouse gas reductions in the end of year summary report.

Table B-1. Verified Cost Effectiveness Inputs – PGL

Measure	Units	Quantity	Effective Useful Life	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
Advanced Thermostats	Each	325	11.0	27,677	27,677	24,909
Faucet Aerator - Bathroom	Each	592	10.0	537	537	548
Faucet Aerator - Kitchen	Each	358	10.0	947	948	967
Leave-Behind Kit - Gas/Electric DHW	Each	3,180	12.5	50,877	50,877	44,772
Pipe Insulation - HW/DHW Outlet	Linear Ft	5,339	15.0	3,216	3,216	2,830
Programmable Thermostats (Boiler/Furnace)	Each	265	8.0	17,977	17,977	15,820
Reprogram Thermostats (Boiler/Furnace)	Each	442	2.0	29,783	29,782	23,826
Showerhead	Each	1,273	10.0	11,197	11,198	11,422
Total or Weighted Average			9.3	142,212	142,211	125,092

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

Table B-2. Verified Cost Effectiveness Inputs – NSG

Measure	Units	Quantity	Effective Useful Life	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
Advanced Thermostats	Each	88	11.0	7,022	7,022	6,320
Faucet Aerator - Bathroom	Each	444	10.0	365	365	372
Faucet Aerator - Kitchen	Each	80	10.0	212	212	216
Leave-Behind Kit - Gas/Electric DHW	Each	1,033	12.5	16,538	16,538	14,553
Pipe Insulation - HW/DHW Outlet	Linear Ft	2,297	15.0	1,343	1,343	1,182
Programmable Thermostats (Boiler/Furnace)	Each	64	8.0	4,317	4,317	3,799
Reprogram Thermostats (Boiler/Furnace)	Each	86	2.0	5,418	5,418	4,334
Showerhead	Each	916	10.0	7,864	7,864	8,021
Total or Weighted Average			10.1	43,080	43,080	38,799

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