

Plan Years 2018 through 2021 Total Resource Cost (TRC) Test Results and Impact Summary Evaluation Report

Third Energy Efficiency Plan: Gas Plan Years 2018-2021 (1/1/2018-12/31/2021)

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People Gas

Guidehouse.com



Submitted to:

Peoples Gas 200 East Randolph Street Chicago, IL 60601

Submitted by:

Guidehouse 150 N. Riverside Plaza, Suite 2100 Chicago, IL 60606

Contact:

Ed Balbis Partner 561.644.9407 ebalbis@guidehouse.com Stu Slote Director 802.526.5113 stu.slote@guidehouse.com Laura Agapay-Read Associate Director 312-583-4178 laura.agapay.read@guidehouse.com

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Table of Contents

1. Executive Summary	1
1.1 Portfolio Total Resource Cost (TRC) Test Verified Results	1
1.2 Portfolio Net Energy Savings Verified Results	3
1.3 Portfolio Impact Summary Verified Results	3
1.4 Portfolio Economic Impact Summary of Verified Results	5
2. Cost Effectiveness Methodology	7
3. Program Specific Data	12
3.1 Program Specific Cost Effectiveness Results Summary	12
3.2 Program Specific Verified Savings and Costs Summary	27
4. Joint Program Cost Effectiveness Summary	33

List of Tables

Table 1-1. Summary of Peoples Gas 2018-2021 TRC Results by Program – Peoples Ga Specific w/o Electric Data from Joint Programs	
Table 1-2. Peoples Gas Plan 3 Portfolio 2018 through 2021 – Verified Net Energy Savin	
Table 1-3. Summary of Peoples Gas Plan 3 Portfolio 2018-2021 Performance Results	
Table 1-4: Economic Impacts by Time Period (2018, 2019, 2020, 2021)	
Table 1-5: Job-Year Impacts by Time Period (2018, 2019, 2020, 2021)	
Table 2-1. Data Points Needed to Conduct the Illinois TRC Test	
Table 2-2. Summary of Coordinated or Jointly Implemented EEPS Programs	
Table 3-1. Summary of Program Level Benefits, Costs and Illinois TRC Test for 2018-20	
Table 3-2. Summary of Program Level Benefits, Costs and Illinois PACT for 2018-2021.	14
Table 3-3. Summary of Illinois TRC Benefits and Costs for 2018	15
Table 3-4. Summary of Illinois TRC Benefits and Costs for 2019	16
Table 3-5. Summary of Illinois TRC Benefits and Costs for 2020	17
Table 3-6. Summary of Illinois TRC Benefits and Costs for 2021	
Table 3-7. Summary of PACT Benefits and Costs for 2018	
Table 3-8. Summary of PACT Benefits and Costs for 2019	
Table 3-9. Summary of PACT Benefits and Costs for 2020	
Table 3-10. Summary of PACT Benefits and Costs for 2021	22
Table 3-11. Summary of TRC Benefits and Costs for 2020 Plan 4 Avoided Costs	
Table 3-12. Summary of TRC Benefits and Costs for 2021 Plan 4 Avoided Costs	
Table 3-13. Summary of PACT Benefits and Costs for 2020 Plan 4 Avoided Costs	
Table 3-14. Summary of PACT Benefits and Costs for 2021 Plan 4 Avoided Costs	
Table 3-15. Summary of Verified Savings and Program Costs for 2018-2021	
Table 3-16. Summary of Verified Savings and Program Costs for 2018	
Table 3-17. Summary of Verified Savings and Program Costs for 2019	
Table 3-18. Summary of Verified Savings and Program Costs for 2020	
Table 3-19. Summary of Verified Savings and Program Costs for 2021	
Table 4-1. Summary of Jointly Implemented Programs for 2018-2021	
Table 4-2. Summary of TRC Test Values by Program and Utility – CY2018	
Table 4-3. Summary of TRC Test Values by Program and Utility – CY2019	
Peoples Gas 2018 to 2021 Total Resource Cost Test Results and Impact Summary	Page i





1. Executive Summary

This report provides Guidehouse's summary reporting of verified energy savings and cost effectiveness results for the Peoples Gas (PGL) Energy Efficiency Plan (EEPS) portfolio of programs for 2018 through 2021¹ (Plan 3). The verified first-year annual net savings of 42,748,640 therms² exceeded its Plan 3 Approved Net Energy Savings Goal³ of 37,828,462 net therms by 13 percent. Based on the Illinois Total Resource Cost (TRC) calculation, the portfolio is cost-effective with a TRC of 1.8.

This report does not cover program process evaluation results or recommendations. All recommendations and process evaluation results are provided in reports produced annually, and can be found on the Illinois Energy Efficiency Stakeholder Advisory Group (SAG) website⁴.

1.1 Portfolio Total Resource Cost (TRC) Test Verified Results

This section summarizes findings regarding the cost-effectiveness of the Peoples Gas portfolio of energy efficiency programs during the four-year Plan 3 time period from program year 2018 through program year 2021. The cost effectiveness methodology and description of data inputs is provided in Section 2.

Table 1-1 summarizes the four-year combined results for the Peoples Gas portfolio at the program, sector, and portfolio levels. The results presented in this table are based on the Illinois TRC test, which includes benefits from avoided environmental damages, and is the primary test utilized by Guidehouse for ascertaining the portfolio's cost effectiveness. The results show that across the entire four program-year period, the Plan 3 portfolio was cost effective with a TRC ratio of 1.8.

¹ Each Gas Program Year starting with 2018 begins on January 1 and ends on December 31.

² Unless noted, therm values are first year annual savings.

³ The Approved Net Energy Savings Goal (Approved Goal) refers to the most updated portfolio-level savings goal. In the case of Section 8-104 programs, the values match the Adjusted Energy Savings Goal contained in the Program Administrator's updated 2021 Adjustable Savings Goal Template. The Original Plan Savings Goal (Compliance Goal) approved in the Commission's Final Order submitted in Docket 17-0309 for 2018 through 2021 is 38,325,354 annual net therm savings.

⁴ http://www.ilsag.info/evaluation-documents.html



Table 1-1. Summary of Peoples Gas 2018-2021 TRC Results by Program – Peoples Gas Specific w/o Electric Data from Joint Programs

	Ben	efits		Costs		IL Total Resource Cost (TRC) Test				
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)	IL TRC Benefits	IL TRC Costs	IL TRC Test Net Benefits	IL TRC Test	
(a)	(b)	(c)	(d)	(e)	(f)	(g) =	(h) =	(i) =	(k) =	
		* *****	A4 047 500	* 4 400 005	* 4 400 005	(b+c)	(d+f)	(g-h)	(g/h)	
Home Energy Jumpstart	\$1,911,619				\$1,126,035	\$4,560,947	\$2,343,563		1.9	
Home Energy Rebate	\$12,742,033	. , ,	. , ,	. , ,	\$6,496,373	\$18,391,533	\$9,767,820	. , ,	1.9	
Multi-Family	\$37,558,559	. , ,	\$5,009,745		\$16,753,263	\$54,989,965	\$21,763,009		2.5	
Home Energy Reports	\$5,934,649				\$0	\$8,160,258	\$1,948,223	\$6,212,035	4.2	
Elementary Energy Education	\$2,971,641	\$14,050,073			\$955,479	\$17,021,714	\$962,469		17.7	
Residential Total	\$61,118,501	\$42,005,916	\$11,453,932	\$13,451,127	\$25,331,151	\$103,124,417	\$36,785,083	\$66,339,334	2.8	
C&I and PS Prescriptive	\$15,697,226	\$8,227,833	\$4,933,082	\$8,353,338	\$7,995,330	\$23,925,059	\$12,928,412	\$10,996,648	1.9	
C&I and PS Custom	\$8,932,673	\$3,580,538	\$1,159,934	\$1,951,798	\$7,826,531	\$12,513,211	\$8,986,465	\$3,526,746	1.4	
Gas Optimization	\$5,150,178	\$2,086,084	\$560,056	\$790,944	\$2,171,766	\$7,236,262	\$2,731,822	\$4,504,440	2.6	
Strategic Energy Management	\$2,537,254	\$1,034,458	\$481,726	\$796,791	\$516,531	\$3,571,712	\$998,257	\$2,573,455	3.6	
C&I and PS Joint Retro-Commissioning	\$4,913,670	\$1,886,223	\$920,312	\$1,424,475	\$1,605,961	\$6,799,893	\$2,526,273	\$4,273,620	2.7	
C&I and PS Joint New Construction	\$10,549,107	\$4,227,680	\$1,072,294	\$1,719,941	\$7,976,666	\$14,776,787	\$9,048,961	\$5,727,827	1.6	
Commercial Food Service	\$265,802	\$123,107	\$28,501	\$64,966	\$150,044	\$388,909	\$178,545	\$210,363	2.2	
Small Business	\$12,257,367	\$7,994,401	\$3,615,144	\$3,109,317	\$5,923,857	\$20,251,768	\$9,539,001	\$10,712,767	2.1	
C&I and Public Sector Total	\$60,303,278	\$29,160,324	\$12,771,048	\$18,211,571	\$34,166,686	\$89,463,601	\$46,937,734	\$42,525,867	1.9	
Income Eligible - CBA	\$8,739,499	\$3,694,340	\$1,615,214	\$12,758,479	\$13,678,134	\$12,433,839	\$15,293,348	-\$2,859,509	0.0	
Income Eligible - IHWAP-SF	\$1,113,038	\$489,285	\$681,359	\$1,938,402	\$3,876,804	\$1,602,323	\$4,558,163	-\$2,955,840	0.4	
Income Eligible - IHWAP-MF	\$1,035,249	\$467,454	\$464,706	\$1,633,942	\$3,267,884	\$1,502,703	\$3,732,590	-\$2,229,888	0.4	
Income Eligible - MF LIHEAP Kits	\$6,199,324	\$7,609,756	\$581,049	\$2,759,256	\$2,759,256	\$13,809,080	\$3,340,306	\$10,468,774	4.1	
Income Eligible - IEMS	\$2,852,305	\$2,224,375	\$1,926,948	\$2,629,712	\$4,438,708	\$5,076,680	\$6,365,656	-\$1,288,976	0.8	
Income Eligible - PTA	\$18,877,668	\$7,923,615	\$431,148	\$3,488,056	\$7,632,044	\$26,801,284	\$8,063,193	\$18,738,091	3.3	
Income Eligible - PHES	\$409,037	\$349,033			\$1,028,711	\$758,071	\$1,480,810		0.5	
Income Eligible - AHNC	\$1,450,530	\$588,340		\$863,865	\$1,122,334	\$2,038,870	\$1,244,105	-	1.6	
Income Eligible Total	\$40,676,651	\$23,346,199			\$37,803,875	\$64,022,849	\$44,078,171	\$19,944,678	1.5	
EEPS Portfolio Costs			\$16,281,557			\$0	\$16,281,557	-\$16,281,557		
EEPS Portfolio	\$162,098,429	\$94,512,438		\$58,496,659	\$97,301,712	\$256,610,867	\$144,082,545		1.8	
EEPS Portfolio without Income Eligible	\$121,421,779				\$59,497,837	\$192,588,018	\$100,004,374	\$92,583,644	1.9	



1.2 Portfolio Net Energy Savings Verified Results

This section summarizes verified numerical results of Guidehouse's impact evaluation of the energy efficiency programs offered by Peoples Gas in Plan 3 program years 2018 through 2021. Verified savings⁵ results are used to determine compliance with statutory goals and are provided in this section. Verified net energy savings are documented in Table 1-2. Detailed tables with verified program savings and costs are provided in Section 3.

Table 1-2. Peoples Gas Plan 3 Portfolio 2018 through 2021 – Verified Net Energy Savings

Program Year	Verified Net Energy Savings (Annual Therms)
Program Year 2018	7,347,414
Program Year 2019	10,073,462
Program Year 2020	14,054,624
Program Year 2021	11,273,139
Plan 3 Portfolio Verified Total	42,748,640
Plan 3 Compliance Goal	38,325,354
Plan 3 Approved Goal	37,828,462
Portfolio Percent of Approved Go	al 113%

Source: Guidehouse research and analysis

1.3 Portfolio Impact Summary Verified Results

Table 1-3 summarizes energy savings and additional performance metrics of verified results from Guidehouse's impact evaluation of the energy efficiency programs offered by Peoples Gas in 2018 through 2021.

⁵ All savings shown exclude interactive effects of electric energy efficiency that reduce natural gas savings.



Table 1-3. Summary of Peoples Gas Plan 3 Portfolio 2018-2021 Performance Results

						Peo	ples Gas 2018	2021 Verified S	avings Summa	iry							
	Ex Ante Gross	Realization Rate	Verified	l Gross	Deemed / Used		Ver	ified Net		Actual Costs	Parti	cipation	GHG	Savings	Water	Savings	Verified Gross Weighted Average Measure Life
	Annual Energy Savings	Energy Savings (Verified Gross / Ex Ante Gross)	Annual Energy Savings	Lifetime Savings	Net-to-Gross Ratio	Annual Energy Savings	Lifetime Savings	First Year Cost per First Year Annual Savings	First Year Cost per Lifetime Savings	Utility Program Costs	# Units	Units Definition	Annual Verified Net CO2 Savings	Lifetime Verified Net CO2 Savings	Annual Verified Net Water Savings	Lifetime Verified Net Water Savings	Years
	Therms	%	Therms	Therms	%	Therms	Therms	\$/Therms	\$/Therms	\$			metric tons CO2	metric tons CO2	Gallons	Gallons	
(a)	(b)	(c=d/b)	(d)	(e)	(f=g/d)	(g)	(h)	(i=k/g)	(j=k/h)	(k)	(I)	(m)	(n)	(o)	(p)	(q)	(r=e/d)
Home Energy Jumpstart	705,791	101%	714,168	5,541,671	91%	652,078	5,137,554	\$ 3.59				Participants	3,450		27,765,352	250,616,523	7.8
Home Energy Rebate	2,978,879	102%	3,037,978	41,639,836	88%	2,658,642	34,630,004	\$ 2.09				Participants	14,067	183,227	-	-	13.7
Multi-Family	9,776,383	101%	9,898,101	118,522,293	86%	8,522,229	101,475,692	\$ 1.66				Projects	45,091	536,908	33,462,511	301,110,159	12.0
Home Energy Reports	2,513,842	124%	3,126,378	15,631,890	100%	3,126,378	15,631,890					Participants	16,542	82,708	-	-	5.0
Elementary Energy Education	726,487	117%	849,751	7,978,123	100%	849,752	7,978,133					Kits Distributed		42,212	173,205,496	1,662,072,065	9.4
Residential Total		106%	17,626,376	189,313,813	90%	15,809,079	164,853,274	\$ 1.58		\$ 24,905,060	NA		83,646	872,239	234,433,359	2,213,798,747	10.7
C&I and PS Prescriptive	9,299,278	100%	9,302,749	49,769,713	83%	7,761,816	41,569,011	\$ 1.71				Projects	41,068	219,942	12,934,428	77,606,569	5.4
C&I and PS Custom	2,187,309	100%	2,196,125	33,432,732	72%	1,575,732	23,988,112					Projects	8,337	126,921	-	-	15.2
Gas Optimization	1,176,921	100%	1,179,719	14,885,596	92%	1,082,183	13,679,905					Projects	5,726		-	-	12.6
Strategic Energy Management	1,029,728	97%	996,923	6,657,933	100%	996,923	6,657,933	\$ 1.28				Projects	5,275	35,227	-	-	6.7
C&I and PS Joint Retro-Commissioning	1,731,082	90%	1,566,318	12,814,020	96%	1,506,548	12,301,749	\$ 1.56				Projects	7,971	65,089	-	-	8.2
C&I and PS Joint New Construction	2,245,371	93%	2,096,599	43,189,939	66%	1,384,948	28,529,922	\$ 2.02			85	Projects	7,328	150,952	-	-	20.6
Commercial Food Service	63,948	106%	67,786	816,240	86%	58,578	705,267	\$ 1.60				Projects	310		107,073	1,554,058	12.0
Small Business	4,701,842	100%	4,700,924	35,513,918	92%	4,326,578	32,684,829				1,405	Projects	22,892	172,935	20,613,668	123,859,214	7.6
C&I and Public Sector Total	22,435,479	99%	22,107,143	197,080,090	85%	18,693,306	160,116,729	\$ 1.66	\$ 0.19	\$ 30,982,619	NA		98,906	847,178	33,655,169	203,019,842	8.9
Income Eligible - CBA	1,216,382	101%	1,226,861	24,086,762	100%	1,226,861	24,086,762					Participants	6,491	127,443	2,759,630	27,521,056	19.6
Income Eligible - IHWAP-SF	167,233	103%	172,498	3,027,402	100%	172,498	3,027,402			\$ 2,619,761	319	Participants	913		470,190	4,603,529	17.6
Income Eligible - IHWAP-MF	300,492	48%	144,989	2,872,606	100%	144,989	2,872,606	\$ 14.47	\$ 0.73	\$ 2,098,648	21	Projects	767	15,199	835,658	8,242,846	19.8
Income Eligible - MF LIHEAP Kits	1,523,228	106%	1,609,429	16,663,828	100%	1,609,429	16,663,828	\$ 2.08	\$ 0.20	\$ 3,340,306	42,466	Kits Distributed	8,515	88,168	63,770,475	622,265,849	10.4
Income Eligible - IEMS	549,942	100%	551,416	7,776,675	100%	551,416	7,776,675	\$ 8.26	\$ 0.59	\$ 4,556,660	3,391	Projects	2,918	41,146	15,391,009	141,856,758	14.1
Income Eligible - PTA	4,155,219	100%	4,163,269	50,341,618	100%	4,163,269	50,341,618	\$ 0.94		\$ 3,919,204		Projects	22,028	266,358	1,435,703	8,614,218	12.1
Income Eligible - PHES	153,303	102%	156,101	1,092,264	100%	156,101	1,092,264	\$ 7.78				Projects	826		2,919,482	24,858,585	7.0
Income Eligible - AHNC	221,821	100%	221,691	3,831,892	100%	221,691	3,831,892				19	Projects	1,173	20,275	-	-	17.3
Income Eligible Total	8,287,620	100%	8,246,255	109,693,046	100%	8,246,255	109,693,046	\$ 4.01	\$ 0.30	\$ 33,108,256	NA		43,631	580,386	87,582,147	837,962,841	13.3
EEPS Program Total	47,424,481	101%	47,979,773	496.086.950	89%	42.748.640	434.663.049	\$ 2.08	\$ 0.20	\$ 88,995,935			226.183	2,299,802	355.670.676	3.254.781.430	10.3
Other FEPS Portfolio Costs	47,424,401	10176	41,919,113	450,000,950	03%	42,740,040	434,003,049	÷ 2.00	φ 0.20	\$ 16.281.557			220,103	2,299,602	333,870,876	3,234,701,430	10.3
EEPS Portfolio Costs	47.424.481	101%	47.979.773	496.086.950	89%	42.748.640	434.663.049	\$ 2.46	\$ 0.24	\$ 105,277,492	NA		226.183	2.299.802	355.670.676	3.254.781.430	10.3
EEPS Portiolio Total	47,424,401	101%	41,919,113	430,000,950	03%	+2,740,040	+34,003,049	<i>♀</i> 2.40	φ 0.24	\$ 100,277,492	NA		220,103	2,299,002	333,370,876	3,204,701,430	10.3



1.4 Portfolio Economic Impact Summary of Verified Results

Table 1-4 and Table 1-5 present results of the Guidehouse analysis of the economic and employment impacts produced by the Plan 3 Peoples Gas energy efficiency portfolio. Figure 1 below summarizes the methodology for estimating economic impacts and jobs resulting from the Plan 3 portfolio.

			Job Years		L	abor Incom	e	Industry Output			
Time Period	Impact Type	Utility Territory	Rest of State	State Total	Utility Territory	Rest of State	State Total	Utility Territory	Rest of State	State Total	
2021 - 2045	Direct	221	0	221	\$20.7M	\$0.0M	\$20.7M	\$48.6M	\$0.0M	\$48.6M	
2021 - 2045	Indirect	97	15	112	\$7.2M	\$1.0M	\$8.2M	\$17.5M	\$3.9M	\$21.5M	
2021 - 2045	Induced	394	14	408	\$22.1M	\$0.8M	\$23.0M	\$91.8M	\$3.0M	\$94.9M	
2021 - 2045	Total	712	29	741	\$50.0M	\$1.8M	\$51.9M	\$158.0M	\$6.9M	\$164.9M	
2020 - 2044	Direct	189	0	189	\$15.2M	\$0.0M	\$15.2M	\$41.2M	\$0.0M	\$41.2M	
2020 - 2044	Indirect	83	15	97	\$6.1M	\$0.9M	\$7.0M	\$14.8M	\$3.6M	\$18.4M	
2020 - 2044	Induced	241	10	251	\$13.5M	\$0.6M	\$14.1M	\$53.7M	\$2.1M	\$55.7M	
2020 - 2044	Total	513	25	538	\$34.8M	\$1.5M	\$36.3M	\$109.6M	\$5.7M	\$115.3M	
2019 - 2043	Direct	177	0	177	\$13.9M	\$0.0M	\$13.9M	\$38.3M	\$0.0M	\$38.3M	
2019 - 2043	Indirect	76	14	90	\$5.7M	\$0.8M	\$6.5M	\$13.7M	\$3.4M	\$17.1M	
2019 - 2043	Induced	169	8	177	\$9.5M	\$0.5M	\$9.9M	\$36.0M	\$1.6M	\$37.6M	
2019 - 2043	Total	423	22	445	\$29.1M	\$1.3M	\$30.4M	\$88.0M	\$5.0M	\$93.0M	
2018 - 2042	Direct	133	0	133	\$10.8M	\$0.0M	\$10.8M	\$30.3M	\$0.0M	\$30.3M	
2018 - 2042	Indirect	60	11	71	\$4.5M	\$0.6M	\$5.1M	\$10.8M	\$2.6M	\$13.4M	
2018 - 2042	Induced	112	6	118	\$6.3M	\$0.3M	\$6.6M	\$20.7M	\$1.1M	\$21.8M	
2018 - 2042	Total	305	17	321	\$21.6M	\$1.0M	\$22.6M	\$61.9M	\$3.7M	\$65.6M	
2018 - 2045	Sum Total	1,953	93	2,045	\$135.5M	\$5.6M	\$141.2M	\$417.5M	\$21.3M	\$438.8M	

Table 1-4: Economic Impacts by Time Period (2018, 2019, 2020, 2021)

Source: Guidehouse analysis of Peoples Gas Tracking data

Table 1-5: Job-Year Impacts by Time Period (2018, 2019, 2020, 2021)

	Direct Jo	b-Years	Indirect J	ob-Years	Induced .	Job-Years	
Time Period	Utility Territory	Rest of State	Utility Territory	Rest of State	Utility Territory	Rest of State	State Total
2021 - 2045	221	0	97	15	394	14	741
2020 - 2044	189	0	83	15	241	10	538
2019 - 2043	177	0	76	14	169	8	445
2018 - 2042	133	0	60	11	112	6	321
2018 - 2045	720	0	316	55	916	38	2,045

Source: Guidehouse analysis of Peoples Gas Tracking data

The economic impact assessment for energy efficiency programs follows a three-step process (depicted in Figure 1)⁶:

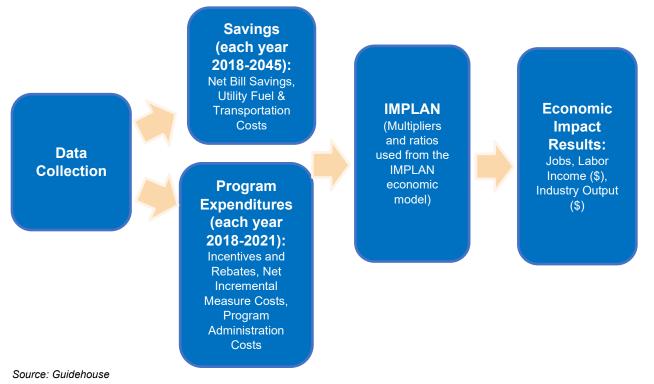
1) Data collection of the economic activities of the energy efficiency programs

⁶ Methodology details can be found on the SAG web site at https://www.ilsag.info/evaluation-documents/



- Economic modeling of these activities using IMPLAN (Impact Analysis for Planning software, an industry standard economic input-output modeling tool). IMPLAN is a rigorous and in-depth approach to assessing these impacts, and uses annually updated economic data to reflect changes in the Illinois economy.
- 3) Analysis of the results summarizing and assessing the economic measures (e.g. industry output, labor income, and jobs).

Figure 1. Economic Impact Assessment Methodology





2. Cost Effectiveness Methodology

As part of Guidehouse's evaluation of PGL and NSG energy efficiency programs for gas program years 2018 to 2021, we performed benefit-cost calculations based upon a combination of data provided by PGL and NSG, evaluated program results, and other available resources. The focus of this review is on the basis and calculations used to conduct the Illinois TRC test. The Illinois TRC test is defined in 220 ILCS 5/8-104(b)⁷ as follows:

"Cost-effective" means that the measures satisfy the total resource cost test which, for purposes of this Section, means a standard that is met if, for an investment in energy efficiency, the benefit-cost ratio is greater than one. The benefit-cost ratio is the ratio of the net present value of the total benefits of the measures to the net present value of the total costs as calculated over the lifetime of the measures. The total resource cost test compares the sum of avoided natural gas utility costs, representing the benefits that accrue to the system and the participant in the delivery of those efficiency measures, as well as other quantifiable societal benefits, including avoided electric utility costs, to the sum of all incremental costs of end use measures (including both utility and participant contributions), plus costs to administer, deliver, and evaluate each demand-side measure, to quantify the net savings obtained by substituting demand-side measures for supply resources. In calculating avoided costs, reasonable estimates shall be included for financial costs likely to be imposed by future regulation of emissions of greenhouse gases. The low-income programs described in item (4) of subsection (f) of this Section shall not be required to meet the total resource cost test.

The Illinois TRC test differs from traditional TRC tests in its requirement to include a reasonable estimate of the financial costs associated with future regulations and legislation on the emissions of greenhouse gases (GHG). Additional benefits included in the calculation are the non-energy benefits and water savings. This difference adds an additional benefit to investments in efficiency programs that typically are included in the Societal Test in other jurisdictions.

The results of the Program Administrator Cost Test (PACT) are also presented⁸. The PACT approaches cost-effectiveness from the perspective of the utility as program administrator. It determines whether the energy supply costs avoided by the utility exceed the overhead and cost outlays that the utility incurred to implement energy efficiency programs. Since the PACT is primarily focused on utility outlays, incentives paid by the utility to either participants or third-party implementers are included in the calculation, rather than incremental or participant costs. Additionally, since non-energy benefits accrue to society rather than to the utility implementing energy efficiency programs, these benefits are not included in the PACT formula.

⁷ Public Utilities Act, Illinois Compiled Statutes maintained by the Legislative Reference Bureau, <u>http://www.ilga.gov/legislation/ilcs/fulltext.asp?DocName=022000050K8-104</u>.

⁸ Also referred to as the Utility Cost Test (UCT), which assumes utilities are the program administrators.



Incremental Measure Cost Approach

Incremental cost means the difference between the cost of the efficient measure and the cost of the most relevant baseline measure that would have been installed (if any) in the absence of the efficiency program. The Illinois Energy Efficiency Policy Manual⁹ instructs that installation costs (material and labor) and Operations and Maintenance (O&M) costs shall be included if there is a difference between the efficient measure and the baseline measure. In cases where the efficient measure has a significantly shorter or longer life than the relevant baseline measure, the avoided baseline replacement measure costs should be accounted for in the TRC analysis. The incremental cost input in the TRC analysis is not reduced by the amount of any incentives.

Data Assumptions in the Cost-Effectiveness Calculations

The data points needed to conduct the Illinois TRC test are identified in Table 2-1 and are divided into generic and program-specific categories. The program-specific data points are further subdivided into those provided by the utility, those that are a result of evaluation activities, and those from multiple sources.

⁹ Illinois Energy Efficiency Policy Manual, available at: https://www.ilsag.info/policy/



Table 2-1. Data Points Needed to Conduct the Illinois TRC Test

Category	Data Point	Source
Generic	 Avoided Natural Gas Costs: Plan 3 and Plan 4 Avoided Electricity Costs Loss Factor (Unaccounted-for-Gas Factor) Plan 3 Non-Energy Benefits (NEBs) Adder Plan 4 Non-Energy Impacts Additional Quantifiable Benefit Weighted Average Cost of Capital 	PGL and NSG / ComEd
Generic	Societal Discount RateGreenhouse Gas (GHG) Adder	Illinois TRM ¹⁰ and Energy Efficiency Stakeholders Advisory Group
	 Verified Participants / Measure Count Verified Gross and Net Energy Savings Realization Rate Net-to-Gross Ratio 	Final Evaluation Reports ¹¹
Program Specific	Non-Incentive CostsUtility Incentive Costs	PGL and NSG
	Incremental Measure CostsMeasure LifeWater Gallon Savings and Avoided Costs	PGL and NSG / Evaluation / Illinois TRM / Other

Source: Evaluation Research

The values for the generic data points used in the cost-effectiveness calculations for all programs and the portfolio are summarized below.

- For the TRC, a discount rate of 2.38 percent was applied, based on guidance in TRM version 9.0.
- For the PACT, the discount rate was a weighted average cost of capital (WACC) for PGL (5.85%) and NSG (5.88%).
- Natural gas avoided costs are based on two sets of values provided by PGL and NSG:

¹⁰ Illinois Statewide Technical Reference Manual (Illinois TRM). Available at: <u>https://www.ilsag.info/technical-reference-manual/</u>

¹¹ Evaluation documents are available at: <u>https://www.ilsag.info/evaluation-documents/final-evaluation-reports/</u>



- Plan 3: For the years 2018 and beyond, avoided costs were forecast values from PGL and NSG. A GHG adder of \$0.13 per therm is included starting in 2020 for the TRC analysis and escalating at 1.91 percent. A Non-Energy Benefits adder of 7.5% is included and the GHG adder is zero prior to 2020. The loss factor was 1.0358 for PGL and 1.0214 for NSG.
- Plan 4: For the years 2020 and beyond, avoided costs were forecast values from PGL and NSG. A GHG adder of \$0.253 per therm is included starting in 2020 and escalating thereafter. Additional Quantifiable Benefits (Non-Energy) are included based on research conducted by Guidehouse¹². The loss factor was 1.0276 for PGL and 1.0080 for NSG. Plan 4 avoided costs were only available for 2020 and 2021.

The following points are noted for the program-specific data used in the cost-benefit calculations.

Benefits

- Energy saving benefits represent natural gas only taken from final evaluation verified results from 2018 through 2021.
- For all joint and coordinated programs with ComEd, the interactive energy effects (resulting in negative gas savings) and costs due to electric saving measures were not included in our analysis. The impact of electric interactive savings effects and costs are analyzed separately and presented in a joint electric-gas TRC memo. Coordinated or joint programs in the Plan 3 portfolio include:

Table 2-2. Summary of Coordinated or Jointly Implemented EEPS Programs

Program	ComEd	PGL and NSG
Income Eligible Programs, except LIHEAP Kits	Х	Х
Home Energy Assessment / Home Energy Jumpstart	Х	Х
Multi-Family Retrofit	Х	Х
Elementary Energy Education	Х	Х
Coordinated Retro-Commissioning	Х	Х
Coordinated Non-Residential New Construction	Х	Х
Strategic Energy Management	Х	Х
Commercial Food Service	Х	Х

Source: Guidehouse analysis

 For programs that are not joint with ComEd, some measures implemented by PGL and NSG have electricity savings that are not claimed by ComEd. These electricity savings are credited to the gas company in the TRC cost-effectiveness calculation as an "Other Benefit". Most electric benefits are generated from thermostats rebated or installed through non-joint offerings, demand-controlled ventilation, and non-joint kits and weatherization measures.

¹² Guidehouse, *Recommended Non-Energy Impacts for Peoples Gas' Cost-Effectiveness Tests*, and *Recommended Non-Energy Impacts for North Shore Gas' Cost-Effectiveness Tests*, December 17, 2020, available at https://www.ilsag.info/evaluation-documents/evaluation-research/



- For early replacement measures, Guidehouse calculated the savings for the remaining life of the existing equipment and the savings for the remaining measure life per the algorithms deemed in the TRM, and the future avoided replacement costs. This analysis is not included in the evaluation reports as these only list the first-year savings value for each measure. The dual baseline adjustment has a minor impact on the PGL and NSG TRCs.
- Water saving benefits from water saving measures rely upon the Illinois TRM to estimate
 gallons of water saved per device. Water avoided costs were estimated using evaluator
 assumptions developed for PGL and NSG based on secondary research. Water savings
 have a substantial impact to increase the benefits and TRC for programs that include
 water saving measures prominently, such as kit and direct installation programs for the
 residential sector, and steam traps for the non-residential sector.

Costs

- Incentives and non-incentive program costs were provided by PGL and NSG. For some programs, incentive amounts are tracked by program path, while non-incentive costs are tracked and bundled to include multiple paths. We present results at the path level by allocating bundled costs on the basis of weighting by ex ante annual gross therm savings. Although this may distort the costs and TRCs for individual program paths, the sector level costs and TRCs will be accurately represented.
- For joint programs with ComEd, the measure costs are the PGL and NSG share of full incremental costs. Incentives and non-incentive costs are the PGL and NSG share of costs.
- For incremental measure costs, in cases where PGL and NSG do not provide the installation costs or the data is not tracked, we use the TRM and other sources. Professional judgement was used for reviewing and identifying the appropriate incremental measure costs (IMC). Incremental measure costs are twice the utility incentive for IHWAP programs.
- Excess Incentives are the amount that incentives are greater than estimated incremental measure costs, and if present, should be added to non-incentive costs. Since IMCs are estimated using TRM, planning, and secondary research, the IMC estimates may not include all relevant and up-to-date installation and equipment costs for some programs. We set IMC to be not less than incentives for programs (twice the incentive for IHWAP) if incentives were greater than the initial IMC estimate. Incentives are allocated to C&I and Public Sector programs by gross therms and some programs appear to have excess incentives, however overall IMCs are greater than overall incentives for C&I and PS programs prior to allocating.
- For Home Energy Reports, all program costs are recorded as non-incentive costs. For Elementary Energy Education, all program costs are recorded as incentive costs with IMCs equal to incentives.



3. Program Specific Data

3.1 Program Specific Cost Effectiveness Results Summary

A summary of the components of the cost effectiveness calculations for each program are shown in Table 3-1 for the Illinois TRC calculations and Table 3-2 for the Program Administrator Cost Test calculations. The tables include the value of each benefit and cost component for each program totaled over four years, as well as portfolio level totals for each component.

A summary of the components of the Illinois TRC benefits and costs for each program are shown in Table 3-3 through Table 3-6 for each program year. The tables include the component values for each program, as well as portfolio level totals for each component.

A summary of the components of the PACT benefits and costs for each program are shown in Table 3-7 through Table 3-10 for each program year. The tables include the component values for each program, as well as portfolio level totals for each component.

A summary of the 2020 and 2021 TRC and PACT results using Plan 4 avoided costs are shown in Table 3-11 through Table 3-14. The tables include the component values for each program, as well as portfolio level totals for each component.



Table 3-1. Summary of Program Level Benefits, Costs and Illinois TRC Test for 2018-2021

Total Resou	rce Cost Test	(TRC) Results	for Peoples O	Gas, 2018-2021	Programs, Societ	al Discount R	ate, Plan 3 Avo	ided Costs	
	Ben	efits		Costs		I	L Total Resource	e Cost (TRC) Test	
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)	IL TRC Benefits	IL TRC Costs	IL TRC Test Net Benefits	IL TRC Test
(a)	(b)	(c)	(d)	(e)	(f)	(g) = (b+c)	(h) = (d+f)	(i) = (g-h)	(k) = (g/h)
Home Energy Jumpstart	\$1,911,619	\$2,649,328	\$1,217,528	\$1,126,035	\$1,126,035	\$4,560,947	\$2,343,563	\$2,217,384	1.9
Home Energy Rebate	\$12,742,033	\$5,649,500	\$3,271,447	\$2,272,479	\$6,496,373	\$18,391,533	\$9,767,820	\$8,623,713	1.9
Multi-Family	\$37,558,559	\$17,431,407	\$5,009,745	\$9,113,990	\$16,753,263	\$54,989,965	\$21,763,009	\$33,226,957	2.5
Home Energy Reports	\$5,934,649	\$2,225,609	\$1,948,223	\$0	\$0	\$8,160,258	\$1,948,223	\$6,212,035	4.2
Elementary Energy Education	\$2,971,641	\$14,050,073	\$6,989	\$938,624	\$955,479	\$17,021,714	\$962,469	\$16,059,245	17.7
Residential Total	\$61,118,501	\$42,005,916	\$11,453,932	\$13,451,127	\$25,331,151	\$103,124,417	\$36,785,083	\$66,339,334	2.8
C&I and PS Prescriptive	\$15,697,226	\$8,227,833	\$4,933,082	\$8,353,338	\$7,995,330	\$23,925,059	\$12,928,412	\$10,996,648	1.9
C&I and PS Custom	\$8,932,673	\$3,580,538	\$1,159,934	\$1,951,798	\$7,826,531	\$12,513,211	\$8,986,465	\$3,526,746	1.4
Gas Optimization	\$5,150,178	\$2,086,084	\$560,056	\$790,944	\$2,171,766	\$7,236,262	\$2,731,822	\$4,504,440	2.6
Strategic Energy Management	\$2,537,254	\$1,034,458	\$481,726	\$796,791	\$516,531	\$3,571,712	\$998,257	\$2,573,455	3.6
C&I and PS Joint Retro-Commissioning	\$4,913,670	\$1,886,223	\$920,312	\$1,424,475	\$1,605,961	\$6,799,893	\$2,526,273	\$4,273,620	2.7
C&I and PS Joint New Construction	\$10,549,107	\$4,227,680	\$1,072,294	\$1,719,941	\$7,976,666	\$14,776,787	\$9,048,961	\$5,727,827	1.6
Commercial Food Service	\$265,802	\$123,107	\$28,501	\$64,966	\$150,044	\$388,909	\$178,545	\$210,363	2.2
Small Business	\$12,257,367	\$7,994,401	\$3,615,144	\$3,109,317	\$5,923,857	\$20,251,768	\$9,539,001	\$10,712,767	2.1
C&I and Public Sector Total	\$60,303,278	\$29,160,324	\$12,771,048	\$18,211,571	\$34,166,686	\$89,463,601	\$46,937,734	\$42,525,867	1.9
Income Eligible - CBA	\$8,739,499	\$3,694,340	\$1,615,214	\$12,758,479	\$13,678,134	\$12,433,839	\$15,293,348	-\$2,859,509	0.8
Income Eligible - IHWAP-SF	\$1,113,038	\$489,285	\$681,359	\$1,938,402	\$3,876,804	\$1,602,323	\$4,558,163	-\$2,955,840	0.4
Income Eligible - IHWAP-MF	\$1,035,249	\$467,454	\$464,706	\$1,633,942	\$3,267,884	\$1,502,703	\$3,732,590	-\$2,229,888	0.4
Income Eligible - MF LIHEAP Kits	\$6,199,324	\$7,609,756	\$581,049	\$2,759,256	\$2,759,256	\$13,809,080	\$3,340,306	\$10,468,774	4.1
Income Eligible - IEMS	\$2,852,305	\$2,224,375	\$1,926,948	\$2,629,712	\$4,438,708	\$5,076,680	\$6,365,656	-\$1,288,976	0.8
Income Eligible - PTA	\$18,877,668	\$7,923,615	\$431,148	\$3,488,056	\$7,632,044	\$26,801,284	\$8,063,193	\$18,738,091	3.3
Income Eligible - PHES	\$409,037	\$349,033	\$452,099	\$762,248	\$1,028,711	\$758,071	\$1,480,810	-\$722,739	0.5
Income Eligible - AHNC	\$1,450,530	\$588,340	\$121,771	\$863,865	\$1,122,334	\$2,038,870	\$1,244,105	\$794,765	1.6
Income Eligible Total	\$40,676,651	\$23,346,199	\$6,274,295	\$26,833,961	\$37,803,875	\$64,022,849	\$44,078,171	\$19,944,678	1.5
EEPS Portfolio Costs			\$16,281,557			\$0	\$16,281,557	-\$16,281,557	
EEPS Portfolio	\$162,098,429	\$94,512,438	\$46,780,833	\$58,496,659	\$97,301,712	\$256,610,867	\$144,082,545	\$112,528,322	1.8
EEPS Portfolio without Income Eligible	\$121,421,779	\$71,166,240	\$40,506,538	\$31,662,698	\$59,497,837	\$192,588,018	\$100,004,374	\$92,583,644	1.9



Table 3-2. Summary of Program Level Benefits, Costs and Illinois PACT for 2018-2021

Program Administra	ator Cost Test	(PACT) Resul	ts for People	s Gas, 2018-20	21 Programs, WA	CC Discount	Rate, Plan 3	Avoided Cost	s
	Ben	efits		Costs		Progra	am Administrat	tor Cost Test (F	PACT)
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)	PACT Benefits	PACT Costs	PACT Test Net Benefits	PACT Test
(a)	(b)	(c)	(d)	(e)	(f)	(g) = (b)	(h) = (d+e)	(i) = (g-h)	(k) = (g/h)
Home Energy Jumpstart	\$1,637,837	\$0	\$1,217,528	\$1,126,035	\$1,126,035	\$1,637,837	\$2,343,563	-\$705,726	0.7
Home Energy Rebate	\$10,822,537	\$0	\$3,271,447	\$2,272,479	\$6,571,921	\$10,822,537	\$5,543,925	\$5,278,611	2.0
Multi-Family	\$30,494,122	\$0	\$5,009,745	\$9,113,990	\$16,753,263	\$30,494,122	\$14,123,735	\$16,370,387	2.2
Home Energy Reports	\$5,508,096	\$0	\$1,948,223	\$0	\$0	\$5,508,096	\$1,948,223	\$3,559,873	2.8
Elementary Energy Education	\$2,635,042	\$0	\$6,989	\$938,624	\$955,479	\$2,635,042	\$945,613	\$1,689,429	2.8
Residential Subtotal	\$51,097,633	\$0	\$11,453,932	\$13,451,127	\$25,406,699	\$51,097,633	\$24,905,060	\$26,192,573	2.1
C&I and PS Prescriptive	\$14,335,582	\$0	\$4,933,082	\$8,353,338	\$7,995,330	\$14,335,582	\$13,286,420	\$1,049,162	1.1
C&I and PS Custom	\$7,452,721	\$0	\$1,159,934	\$1,951,798	\$7,826,531	\$7,452,721	\$3,111,732	\$4,340,989	2.4
Gas Optimization	\$4,124,750	\$0	\$560,056	\$790,944	\$2,171,766	\$4,124,750	\$1,351,000	\$2,773,750	3.1
Strategic Energy Management	\$2,249,087	\$0	\$481,726	\$796,791	\$516,531	\$2,249,087	\$1,278,517	\$970,570	1.8
C&I and PS Joint Retro-Commissioning	\$4,385,157	\$0	\$920,312	\$1,424,475	\$1,605,961	\$4,385,157	\$2,344,787	\$2,040,370	1.9
C&I and PS Joint New Construction	\$8,175,640	\$0	\$1,072,294	\$1,719,941	\$7,976,666	\$8,175,640	\$2,792,235	\$5,383,405	2.9
Commercial Food Service	\$216,509	\$0	\$28,501	\$64,966	\$150,044	\$216,509	\$93,467	\$123,042	2.3
Small Business	\$10,690,644	\$0	\$3,615,144	\$3,109,317	\$5,923,857	\$10,690,644	\$6,724,461	\$3,966,184	1.6
Total C&I and Public Sector	\$51,630,091	\$0	\$12,771,048	\$18,211,571	\$34,166,686	\$51,630,091	\$30,982,619	\$20,647,472	1.7
Income Eligible - CBA	\$7,137,271	\$0	\$1,615,214	\$12,758,479	\$13,678,134	\$7,137,271	\$14,373,693	-\$7,236,423	0.5
Income Eligible - IHWAP-SF	\$845,488	\$0	\$681,359	\$1,938,402	\$3,876,804	\$845,488	\$2,619,761	-\$1,774,274	0.3
Income Eligible - IHWAP-MF	\$911,138	\$0	\$464,706	\$1,633,942	\$3,267,884	\$911,138	\$2,098,648	-\$1,187,510	0.4
Income Eligible - MF LIHEAP Kits	\$4,731,820	\$0	\$581,049	\$2,759,256	\$2,759,256	\$4,731,820	\$3,340,306	\$1,391,514	1.4
Income Eligible - IEMS	\$2,265,569	\$0	\$1,926,948	\$2,629,712	\$4,438,708	\$2,265,569	\$4,556,660	-\$2,291,091	0.5
Income Eligible - PTA	\$14,946,856	\$0	\$431,148	\$3,488,056	\$7,632,044	\$14,946,856	\$3,919,204	\$11,027,652	3.8
Income Eligible - PHES	\$352,917	\$0	\$452,099	\$762,248	\$1,028,711	\$352,917	\$1,214,347	-\$861,430	0.3
Income Eligible - AHNC	\$1,179,458	\$0	\$121,771	\$863,865	\$1,122,334	\$1,179,458	\$985,636	\$193,822	1.2
Income Eligible Total	\$32,370,517	\$0	\$6,274,295	\$26,833,961	\$37,803,875	\$32,370,517	\$33,108,256	-\$737,739	1.0
EEPS Portfolio Costs			\$16,281,557			\$0	\$16,281,557	-\$16,281,557	
EEPS Portfolio	\$135,098,241	\$0	\$46,780,833	\$58,496,659	\$97,377,260	\$135,098,241	\$105,277,492	\$29,820,749	1.3
EEPS Portfolio without Income Eligible	\$102,727,724	\$0	\$40,506,538	\$31,662,698	\$59,573,385	\$102,727,724	\$72,169,236	\$30,558,488	1.4



Table 3-3. Summary of Illinois TRC Benefits and Costs for 2018

т	otal Resource	Cost Test (T	RC) Results f	or Peoples Gas	, 2018 Programs,	Societal Dis	count Rate		
	Bene	efits		Costs		IL	Total Resource	e Cost (TRC) T	est
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)	IL TRC Benefits	IL TRC Costs	IL TRC Test Net Benefits	IL TRC Test
(a)	(b)	(c)	(d)	(e)	(f)	(g) = (b+c)	(h) = (d+f)	(i) = (g-h)	(k) = (g/h)
Home Energy Jumpstart	\$468,788	\$968,682	\$162,762	\$288,646	\$288,646	\$1,437,470	\$451,409	\$986,061	3.2
Home Energy Rebate	\$3,895,604	\$1,390,221	\$950,345	\$791,280	\$1,755,593	\$5,285,825	\$2,705,938	\$2,579,887	2.0
Multi-Family	\$4,974,023	\$2,383,767	\$1,261,525	\$1,467,929	\$2,263,959	\$7,357,790	\$3,525,485	\$3,832,305	2.1
Home Energy Reports	\$1,022,732	\$284,029	\$533,244	\$0	\$0	\$1,306,760	\$533,244	\$773,517	2.5
Elementary Energy Education	\$830,601	\$3,664,631	\$6,983	\$285,816	\$285,817	\$4,495,232	\$292,800	\$4,202,432	15.4
Residential Subtotal	\$11,191,747	\$8,691,330	\$2,914,859	\$2,833,671	\$4,594,016	\$19,883,077	\$7,508,875	\$12,374,202	2.6
C&I and PS Prescriptive	\$3,695,670	\$1,085,623	\$1,647,997	\$1,724,061	\$1,642,391	\$4,781,293	\$3,290,388	\$1,490,905	1.5
C&I and PS Custom	\$2,261,377	\$845,974	\$371,230	\$399,591	\$1,788,775	\$3,107,350	\$2,160,006	\$947,345	1.4
Gas Optimization	\$446,817	\$165,419	\$32,696	\$63,925	\$168,849	\$612,236	\$201,545	\$410,692	3.0
Strategic Energy Management									
C&I and PS Joint Retro-Commissioning	\$1,278,875	\$420,548	\$304,095	\$348,350	\$460,904	\$1,699,423	\$765,000	\$934,423	2.2
C&I and PS Joint New Construction	\$2,274,014	\$868,150	\$186,203	\$364,055	\$1,956,298	\$3,142,165	\$2,142,500	\$999,664	1.5
Commercial Food Service									
Small Business	\$1,890,532	\$680,113	\$697,895	\$464,008	\$792,408	\$2,570,646	\$1,490,303	\$1,080,342	1.7
Business and Public Sector Subtotal	\$11,847,285	\$4,065,828	\$3,240,116	\$3,363,990	\$6,809,625	\$15,913,113	\$10,049,742	\$5,863,371	1.6
Income Eligible - CBA	\$2,900,539	\$1,197,566	\$532,727	\$5,214,051	\$5,214,051	\$4,098,105	\$5,746,778	-\$1,648,673	0.7
Income Eligible - IHWAP-SF	\$95,557	\$45,110	\$18,543	\$54,345	\$108,690	\$140,667	\$127,233	\$13,434	1.1
Income Eligible - IHWAP-MF	\$615,952	\$277,687	\$318,195	\$932,547	\$1,865,093	\$893,639	\$2,183,289	-\$1,289,649	0.4
Income Eligible - MF LIHEAP Kits									
Income Eligible - IEMS	\$420,855	\$598,203	\$464,402	\$613,427	\$822,553	\$1,019,058	\$1,286,955	-\$267,897	0.8
Income Eligible - PTA									
Income Eligible - PHES	\$40,083	\$93,987	\$124,058	\$163,868	\$163,868	\$134,070	\$287,926	-\$153,857	0.5
Income Eligible - AHNC	\$368,732	\$139,150	\$71,760	\$410,528	\$505,945	\$507,882	\$577,704	-\$69,823	0.9
Income Eligible Total	\$4,441,718	\$2,351,703	\$1,529,685	\$7,388,765	\$8,680,200	\$6,793,421	\$10,209,885	-\$3,416,465	0.7
EEPS Portfolio Costs			\$3,375,412			\$0	\$3,375,412	-\$3,375,412	
EEPS Portfolio	\$27,480,750	\$15,108,861	\$11,060,073	\$13,586,426	\$20,083,841	\$42,589,610	\$31,143,914	\$11,445,696	1.4
EEPS Portfolio without Income Eligible	\$23,039,032	\$12,757,158	\$9,530,388	\$6,197,661	\$11,403,641	\$35,796,190	\$20,934,029	\$14,862,161	1.7



Table 3-4. Summary of Illinois TRC Benefits and Costs for 2019

Total Resource Cost Test (TRC) Results for Peoples Gas, 2019 Programs, Societal Discount Rate												
	Ben	efits		Costs		1	L Total Resource	e Cost (TRC) Test				
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)*	IL TRC Benefits	IL TRC Costs	IL TRC Test Net Benefits	IL TRC Test			
(a)	(b)	(c)	(d)	(e)	(f)	(g) =	(h) =	(i) =	(k) =			
(-)	(-)	(-)	(-)	(-)	(1)	(b+c)	(d+f)	(g-h)	(g/h)			
Home Energy Jumpstart	\$521,817	\$805,563	\$247,702	\$305,356	\$305,356	\$1,327,381	\$553,057	\$774,323	2.4			
Home Energy Rebate	\$4,596,593	\$1,968,906	\$1,024,767	\$772,961	\$2,003,719	\$6,565,500	\$3,028,485	\$3,537,014	2.2			
Multi-Family	\$12,641,299	\$5,560,466	\$1,263,725	\$2,745,423	\$5,452,136	\$18,201,765	\$6,715,861	\$11,485,904	2.7			
Home Energy Reports	\$1,454,780	\$503,226	\$505,241	\$0	\$0	\$1,958,006	\$505,241	\$1,452,765	3.9			
Elementary Energy Education	\$1,015,290	\$4,726,432	\$6	\$301,347	\$301,347	\$5,741,722	\$301,353	\$5,440,369	19.1			
Residential Total	\$20,229,780	\$13,564,593	\$3,041,441	\$4,125,086	\$8,062,557	\$33,794,374	\$11,103,998	\$22,690,375	3.0			
C&I and PS Prescriptive	\$2,395,677	\$1,019,807	\$740,143	\$867,169	\$975,010	\$3,415,484	\$1,715,153	\$1,700,331	2.0			
C&I and PS Custom	\$1,585,543	\$618,619	\$249,587	\$292,422	\$1,553,455	\$2,204,162	\$1,803,042	\$401,120	1.2			
Gas Optimization	\$793,919	\$294,128	\$160,941	\$188,562	\$547,710	\$1,088,048	\$708,651	\$379,397	1.5			
Strategic Energy Management	\$301,901	\$104,431	\$85,734	\$100,448	\$80,132	\$406,332	\$165,866	\$240,466	2.4			
C&I and PS Joint Retro-Commissioning	\$1,182,326	\$445,317	\$238,312	\$279,212	\$352,634	\$1,627,643	\$590,946	\$1,036,696	2.8			
C&I and PS Joint New Construction	\$4,795,075	\$1,911,656	\$497,309	\$582,660	\$3,400,163	\$6,706,730	\$3,897,472	\$2,809,258	1.7			
Commercial Food Service												
Small Business	\$3,244,523	\$1,448,396	\$1,233,796	\$832,213	\$2,034,325	\$4,692,919	\$3,268,121	\$1,424,797	1.4			
C&I and Public Sector Total	\$14,298,964	\$5,842,354	\$3,205,824	\$3,142,688	\$8,943,429	\$20,141,318	\$12,149,253	\$7,992,065	1.7			
Income Eligible - CBA	\$2,559,215	\$1,066,743	\$549,663	\$4,637,626	\$4,637,626	\$3,625,958	\$5,187,289	-\$1,561,331	0.7			
Income Eligible - IHWAP-SF	\$292,038	\$125,193	\$61,498	\$659,738	\$1,319,476	\$417,231	\$1,380,975	-\$963,744	0.3			
Income Eligible - IHWAP-MF	\$179,313	\$87,309	\$28,749	\$308,408	\$616,817	\$266,622	\$645,566	-\$378,944	0.4			
Income Eligible - MF LIHEAP Kits	\$701,694	\$828,636	\$275,866	\$588,056	\$588,056	\$1,530,330	\$863,922	\$666,408	1.8			
Income Eligible - IEMS	\$1,368,868	\$736,657	\$595,594	\$1,161,955	\$1,356,146	\$2,105,525	\$1,951,740	\$153,785	1.1			
Income Eligible - PTA												
Income Eligible - PHES	\$193,462	\$132,033	\$116,798	\$227,864	\$227,864	\$325,496	\$344,662	-\$19,167	0.9			
Income Eligible - AHNC	\$44,596	\$17,659	\$10,588	\$10,402	\$20,322	\$62,255	\$30,909	\$31,346	2.0			
Income Eligible Total	\$5,339,185	\$2,994,232	\$1,638,756	\$7,594,050	\$8,766,307	\$8,333,417	\$10,405,062	-\$2,071,645	0.8			
EEPS Portfolio Costs			\$4,170,337			\$0	\$4,170,337	-\$4,170,337				
EEPS Portfolio	\$39,867,929	\$22,401,179	\$12,056,357	\$14,861,824	\$25,772,293	\$62,269,108	\$37,828,651	\$24,440,458	1.6			
EEPS Portfolio w/o Income Eligible	\$34,528,744	\$19,406,948		\$7,267,775	\$17,005,987	\$53,935,691	\$27,423,588	\$26,512,103	2.0			



Table 3-5. Summary of Illinois TRC Benefits and Costs for 2020

Total Resource Cost Test (TRC) Results for Peoples Gas, 2020 Programs, Societal Discount Rate, Plan 3 Avoided Costs												
	Ben	efits		Costs		I	L Total Resource	e Cost (TRC) Test				
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)*	IL TRC Benefits	IL TRC Costs	IL TRC Test Net Benefits	IL TRC Test			
(a)	(b)	(c)	(d)	(e)	(f)	(g) =	(h) =	(i) =	(k) =			
						(b+c)	(d+f)	(g-h)	(g/h)			
Home Energy Jumpstart	\$364,826	\$394,625	\$386,126	\$165,370	\$165,370	\$759,450	\$551,496	\$207,954	1.4			
Home Energy Rebate	\$1,258,285	\$754,712	\$643,984	\$307,180	\$1,289,775	\$2,012,997	\$1,933,758	\$79,239	1.0			
Multi-Family	\$12,883,274	\$5,788,121	\$1,261,608	\$3,043,139	\$5,071,964	\$18,671,396	\$6,333,573	\$12,337,823	2.9			
Home Energy Reports	\$1,980,290	\$823,906	\$636,189	\$0	\$0	\$2,804,196	\$636,189	\$2,168,007	4.4			
Elementary Energy Education	\$377,017	\$1,737,687	\$0	\$107,039	\$123,893	\$2,114,703	\$123,893	\$1,990,810	17.1			
Residential Total	\$16,863,691	\$9,499,051	\$2,927,907	\$3,622,728	\$6,651,002	\$26,362,742	\$9,578,909	\$16,783,834	2.8			
C&I and PS Prescriptive	\$3,088,054	\$1,705,003	\$1,046,424	\$1,387,024	\$2,059,030	\$4,793,057	\$3,105,454	\$1,687,603	1.5			
C&I and PS Custom	\$1,815,897	\$755,510	\$197,114	\$261,273	\$1,583,468	\$2,571,408	\$1,780,582	\$790,826	1.4			
Gas Optimization	\$3,454,509	\$1,437,260	\$333,314	\$441,805	\$1,317,090	\$4,891,770	\$1,650,405	\$3,241,365	3.0			
Strategic Energy Management	\$1,486,827	\$618,600	\$288,433	\$382,315	\$313,115	\$2,105,427	\$601,548	\$1,503,879	3.5			
C&I and PS Joint Retro-Commissioning	\$1,342,530	\$558,564	\$192,219	\$254,784	\$392,295	\$1,901,094	\$584,514	\$1,316,580	3.3			
C&I and PS Joint New Construction	\$1,968,800	\$819,126	\$227,001	\$300,887	\$1,540,747	\$2,787,926	\$1,767,748	\$1,020,178	1.6			
Commercial Food Service	\$102,718	\$46,564	\$11,446	\$15,171	\$44,136	\$149,283	\$55,582	\$93,701	2.7			
Small Business	\$4,650,084	\$4,249,353	\$1,043,869	\$1,200,187	\$2,100,874	\$8,899,438	\$3,144,743	\$5,754,695	2.8			
C&I and Public Sector Total	\$17,909,420	\$10,189,981	\$3,339,821	\$4,243,446	\$9,350,755	\$28,099,401	\$12,690,576	\$15,408,826	2.2			
Income Eligible - CBA	\$1,714,151	\$773,997	\$18,385	\$2,328,758	\$2,328,758	\$2,488,148	\$2,347,143	\$141,006	1.1			
Income Eligible - IHWAP-SF	\$405,719	\$179,484	\$506,435	\$692,840	\$1,385,680	\$585,203	\$1,892,115	-\$1,306,912	0.3			
Income Eligible - IHWAP-MF	\$53,671	\$22,330	\$62,987	\$86,171	\$172,343	\$76,001	\$235,330	-\$159,329	0.3			
Income Eligible - MF LIHEAP Kits	\$2,955,946	\$3,552,057	\$55,956	\$1,425,209	\$1,425,209	\$6,508,003	\$1,481,165	\$5,026,838	4.4			
Income Eligible - IEMS	\$643,785	\$443,555	\$699,340	\$532,470	\$1,185,391	\$1,087,340	\$1,884,732	-\$797,391	0.6			
Income Eligible - PTA	\$11,546,970	\$4,851,424	\$209,494	\$3,219,670	\$4,675,000	\$16,398,394	\$4,884,494	\$11,513,900	3.4			
Income Eligible - PHES	\$28,995	\$12,063	\$30,309	\$23,077	\$62,129	\$41,058	\$92,439	-\$51,381	0.4			
Income Eligible - AHNC	\$476,913	\$198,421	\$5,868	\$342,496	\$342,496	\$675,334	\$348,364	\$326,971	1.9			
Income Eligible Total	\$17,826,150	\$10,033,332	\$1,588,774	\$8,650,691	\$11,577,007	\$27,859,482	\$13,165,781	\$14,693,701	2.1			
EEPS Portfolio Costs			\$4,864,282			\$0	\$4,864,282	-\$4,864,282				
EEPS Portfolio	\$52,599,261	\$29,722,365	\$12,720,783	\$16,516,865	\$27,578,764	\$82,321,626	\$40,299,547	\$42,022,079	2.0			
EEPS Portfolio without Income Eligible	\$34,773,111	\$19,689,032	\$11,132,009	\$7,866,174	\$16,001,757	\$54,462,144	\$27,133,766		2.0			



Table 3-6. Summary of Illinois TRC Benefits and Costs for 2021

Total Resource Cost Test (TRC) Results for Peoples Gas, 2021 Programs, Societal Discount Rate, Plan 3 Avoided Costs												
	Ben	efits		Costs		I	L Total Resource	e Cost (TRC) Test				
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)	IL TRC Benefits	IL TRC Costs	IL TRC Test Net Benefits	IL TRC Test			
(a)	(b)	(c)	(d)	(e)	(f)	(g) = (b+c)	(h) = (d+f)	(i) = (g-h)	(k) = (g/h)			
Home Energy Jumpstart	\$556,189	\$480,458	\$420,938	\$366,663	\$366,663	\$1,036,646	\$787,601	\$249,045	(9/1)			
Home Energy Rebate	\$2,991,551	\$1,535,660	\$652,351	\$401,057	\$1,447,287	\$4,527,211	\$2,099,638	. ,	2.2			
Multi-Family	\$7,059,962	\$3,699,053	\$1,222,887	\$1,857,500	\$3,965,203	\$10,759,015	\$5,188,090		2.1			
Home Energy Reports	\$1,476,848	\$614,447	\$273,549	\$0	\$0	\$2,091,295	\$273,549		7.6			
Elementary Energy Education	\$748,733	\$3,921,323	\$0	\$244,422	\$244,422	\$4,670,056	\$244,422	\$4,425,634	19.1			
Residential Total	\$12,833,283	\$10,250,941	\$2,569,726	\$2,869,642	\$6,023,575	\$23,084,224	\$8,593,301	\$14,490,923	2.7			
C&I and PS Prescriptive	\$6,517,825	\$4,417,400	\$1,498,517	\$4,375,084	\$3,318,899	\$10,935,225	\$4,817,416	\$6,117,809	2.3			
C&I and PS Custom	\$3,269,856	\$1,360,435	\$342,002	\$998,511	\$2,900,833	\$4,630,291	\$3,242,835	\$1,387,457	1.4			
Gas Optimization	\$454,932	\$189,276	\$33,104	\$96,652	\$138,117	\$644,208	\$171,221	\$472,987	3.8			
Strategic Energy Management	\$748,526	\$311,427	\$107,558	\$314,028	\$123,284	\$1,059,953	\$230,842	\$829,111	4.6			
C&I and PS Joint Retro-Commissioning	\$1,109,939	\$461,794	\$185,685	\$542,129	\$400,127	\$1,571,733	\$585,813	\$985,921	2.7			
C&I and PS Joint New Construction	\$1,511,219	\$628,748	\$161,782	\$472,340	\$1,079,458	\$2,139,966	\$1,241,240	\$898,726	1.7			
Commercial Food Service	\$163,084	\$76,542	\$17,055	\$49,795	\$105,908	\$239,626	\$122,963	\$116,663	1.9			
Small Business	\$2,472,228	\$1,616,539	\$639,584	\$612,908	\$996,250	\$4,088,766	\$1,635,833	\$2,452,933	2.5			
C&I and Public Sector Total	\$16,247,609	\$9,062,161	\$2,985,288	\$7,461,446	\$9,062,876	\$25,309,769	\$12,048,164	\$13,261,605	2.1			
Income Eligible - CBA	\$1,565,594	\$656,033	\$514,438	\$578,045	\$1,497,699	\$2,221,628	\$2,012,138	\$209,490	1.1			
Income Eligible - IHWAP-SF	\$319,724	\$139,498	\$94,883	\$531,479	\$1,062,957	\$459,222	\$1,157,841	-\$698,619	0.4			
Income Eligible - IHWAP-MF	\$186,313	\$80,127	\$54,775	\$306,816	\$613,631	\$266,440	\$668,406	-\$401,966	0.4			
Income Eligible - MF LIHEAP Kits	\$2,541,684	\$3,229,063	\$249,228	\$745,991	\$745,991	\$5,770,747	\$995,219	\$4,775,528	5.8			
Income Eligible - IEMS	\$418,797	\$445,960	\$167,613	\$321,860	\$1,074,617	\$864,757	\$1,242,230	-\$377,473	0.7			
Income Eligible - PTA	\$7,330,698	\$3,072,191	\$221,655	\$268,386	\$2,957,044	\$10,402,889	\$3,178,699	\$7,224,191	3.3			
Income Eligible - PHES	\$146,497	\$110,950	\$180,933	\$347,439	\$574,850	\$257,447	\$755,783	-\$498,335	0.3			
Income Eligible - AHNC	\$560,289	\$233,110	\$33,556	\$100,440	\$253,572	\$793,399	\$287,128	\$506,271	2.8			
Income Eligible Total	\$13,069,597	\$7,966,932	\$1,517,081	\$3,200,455	\$8,780,361	\$21,036,529	\$10,297,442	\$10,739,088	2.0			
EEPS Portfolio Costs			\$3,871,526			\$0	\$3,871,526	-\$3,871,526				
EEPS Portfolio	\$42,150,489	\$27,280,034	\$10,943,620	\$13,531,543	\$23,866,813	\$69,430,523	\$34,810,433	\$34,620,089	2.0			
EEPS Portfolio without Income Eligible	\$29,080,892	\$19,313,102	\$9,426,540	\$10,331,088	\$15,086,452	\$48,393,993	\$24,512,991	\$23,881,002	2.0			



Table 3-7. Summary of PACT Benefits and Costs for 2018

Program Administrator Cost Test (PACT) Results for Peoples Gas, 2018 Programs													
	Bene	efits		Costs		Progra	am Administrat	or Cost Test (F	PACT)				
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)	PACT Benefits	PACT Costs	PACT Test Net Benefits	PACT Ratio				
(a)	(b)	(c)	(d)	(e)	(f)	(g) = (b)	(h) = (d+e)	(i) = (g-h)	(k) = (g/h)				
Home Energy Jumpstart	\$468,788		\$162,762	\$288,646	\$288,646	\$468,788	\$451,409	\$17,379	1.0				
Home Energy Rebate	\$3,895,604		\$950,345	\$791,280	\$1,755,593	\$3,895,604	\$1,741,625	\$2,153,979	2.2				
Multi-Family	\$4,974,023		\$1,261,525	\$1,467,929	\$2,263,959	\$4,974,023	\$2,729,454	\$2,244,569	1.8				
Home Energy Reports	\$1,022,732		\$533,244	\$0	\$0	\$1,022,732	\$533,244	\$489,488	1.9				
Elementary Energy Education	\$830,601		\$6,983	\$285,816	\$285,817	\$830,601	\$292,799	\$537,802	2.8				
Residential Subtotal	\$11,191,747	\$0	\$2,914,859	\$2,833,671	\$4,594,016	\$11,191,747	\$5,748,531	\$5,443,216	1.9				
C&I and PS Prescriptive	\$3,695,670		\$1,647,997	\$1,724,061	\$1,642,391	\$3,695,670	\$3,372,058	\$323,612	1.1				
C&I and PS Custom	\$2,261,377		\$371,230	\$399,591	\$1,788,775	\$2,261,377	\$770,822	\$1,490,555	2.9				
Gas Optimization	\$446,817		\$32,696	\$63,925	\$168,849	\$446,817	\$96,621	\$350,196	4.6				
Strategic Energy Management													
C&I and PS Joint Retro-Commissioning	\$1,278,875		\$304,095	\$348,350	\$460,904	\$1,278,875	\$652,445	\$626,430	2.0				
C&I and PS Joint New Construction	\$2,274,014		\$186,203	\$364,055	\$1,956,298	\$2,274,014	\$550,257	\$1,723,757	4.1				
Commercial Food Service													
Small Business	\$1,890,532		\$697,895	\$464,008	\$792,408	\$1,890,532	\$1,161,903	\$728,629	1.6				
Business and Public Sector Subtotal	\$11,847,285	\$0	\$3,240,116	\$3,363,990	\$6,809,625	\$11,847,285	\$6,604,106	\$5,243,179	1.8				
Income Eligible - CBA	\$2,900,539		\$532,727	\$5,214,051	\$5,214,051	\$2,900,539	\$5,746,778	-\$2,846,240	0.5				
Income Eligible - IHWAP-SF	\$95,557		\$18,543	\$54,345	\$108,690	\$95,557	\$72,888	\$22,669	1.3				
Income Eligible - IHWAP-MF	\$615,952		\$318,195	\$932,547	\$1,865,093	\$615,952	\$1,250,742	-\$634,790	0.5				
Income Eligible - MF LIHEAP Kits													
Income Eligible - IEMS	\$420,855		\$464,402	\$613,427	\$822,553	\$420,855	\$1,077,829	-\$656,974	0.4				
Income Eligible - PTA													
Income Eligible - PHES	\$40,083		\$124,058	\$163,868	\$163,868	\$40,083	\$287,926	-\$247,843	0.1				
Income Eligible - AHNC	\$368,732		\$71,760	\$410,528	\$505,945	\$368,732	\$482,287	-\$113,555	0.8				
Income Eligible Total	\$4,441,718	\$0	\$1,529,685	\$7,388,765	\$8,680,200	\$4,441,718	\$8,918,450	-\$4,476,732	0.5				
EEPS Portfolio Costs			\$3,375,412			\$0	\$3,375,412	-\$3,375,412					
EEPS Portfolio with Income Eligible	\$27,480,750	\$0	\$11,060,073	\$13,586,426	\$20,083,841	\$27,480,750	\$24,646,499	\$2,834,251	1.1				
EEPS Portfolio w/o Income Eligible	\$23,039,032	\$0	\$9,530,388	\$6,197,661	\$11,403,641	\$23,039,032	\$15,728,049	\$7,310,983	1.5				



Table 3-8. Summary of PACT Benefits and Costs for 2019

Progr	ram Administra	tor Cost Test	(PACT) Resu	Its for Peoples	Gas, 2019 Progr	ams, WACC I	Discount Rate	•	
	Bene	efits		Costs		Progra	am Administrat	or Cost Test (F	PACT)
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)	PACT Benefits	PACT Costs	PACT Test Net Benefits	PACT Ratio
(a)	(b)	(c)	(d)	(e)	(f)	(g) =	(h) =	(i) =	(k) =
		r				(b)	(d+e)	(g-h)	(g/h)
Home Energy Jumpstart	\$446,778		\$247,702	\$305,356	\$305,356	\$446,778	\$553,057	-\$106,279	0.8
Home Energy Rebate	\$3,661,300		\$1,024,767	\$772,961	\$2,033,303	\$3,661,300		. , ,	2.0
Multi-Family	\$9,719,173		\$1,263,725	\$2,745,423	\$5,452,136	\$9,719,173	\$4,009,148	\$5,710,025	2.4
Home Energy Reports	\$1,328,446		\$505,241	\$0	\$0	\$1,328,446	\$505,241	\$823,205	2.6
Elementary Energy Education	\$855,423		\$6	\$301,347	\$301,347	\$855,423	\$301,353	\$554,070	2.8
Residential Subtotal	\$16,011,121	\$0	\$3,041,441	\$4,125,086	\$8,092,142	\$16,011,121	\$7,166,527	\$8,844,594	2.2
C&I Prescriptive	\$2,119,765		\$740,143	\$867,169	\$975,010	\$2,119,765	\$1,607,313	\$512,453	1.3
C&I Custom	\$1,254,987		\$249,587	\$292,422	\$1,553,455	\$1,254,987	\$542,010	\$712,977	2.3
Gas Optimization	\$691,364		\$160,941	\$188,562	\$547,710	\$691,364	\$349,503	\$341,861	2.0
Strategic Energy Management	\$275,684		\$85,734	\$100,448	\$80,132	\$275,684	\$186,183	\$89,501	1.5
C&I and PS Joint Retro-Commissioning	\$1,010,411		\$238,312	\$279,212	\$352,634	\$1,010,411	\$517,525	\$492,886	2.0
C&I and PS Joint New Construction	\$3,419,748		\$497,309	\$582,660	\$3,400,163	\$3,419,748	\$1,079,969	\$2,339,779	3.2
Commercial Food Service									
Small Business	\$2,788,045		\$1,233,796	\$832,213	\$2,034,325	\$2,788,045	\$2,066,010	\$722,035	1.3
Total C&I and Public Sector	\$11,560,004	\$0	\$3,205,824	\$3,142,688	\$8,943,429	\$11,560,004	\$6,348,512	\$5,211,492	1.8
Income Eligible - CBA	\$1,858,456		\$549,663	\$4,637,626	\$4,637,626	\$1,858,456	\$5,187,289	-\$3,328,833	0.4
Income Eligible - IHWAP-SF	\$214,931		\$61,498	\$659,738	\$1,319,476	\$214,931	\$721,236	-\$506,305	0.3
Income Eligible - IHWAP-MF	\$122,755		\$28,749	\$308,408	\$616,817	\$122,755	\$337,157	-\$214,402	0.4
Income Eligible - MF LIHEAP Kits	\$534,878		\$275,866	\$588,056	\$588,056	\$534,878	\$863,922	-\$329,044	0.6
Income Eligible - IEMS	\$1,077,411		\$595,594	\$1,161,955	\$1,356,146	\$1,077,411	\$1,757,549	-\$680,138	0.6
Income Eligible - PTA									
Income Eligible - PHES	\$159,842		\$116,798	\$227,864	\$227,864	\$159,842	\$344,662	-\$184,821	0.5
Income Eligible - AHNC	\$32,943		\$10,588	\$10,402	\$20,322	\$32,943	\$20,989	\$11,954	1.6
Income Eligible Total	\$4,001,216	\$0	\$1,638,756	\$7,594,050	\$8,766,307	\$4,001,216	\$9,232,805	-\$5,231,589	0.4
EEPS Portfolio Costs			\$4,170,337			\$0	\$4,170,337	-\$4,170,337	
EEPS Portfolio	\$31,572,340	\$0	\$12,056,357	\$14,861,824	\$25,801,878	\$31,572,340	\$26,918,182	\$4,654,159	1.2
EEPS Portfolio w/o Income Eligible	\$27,571,124	\$0	\$10,417,602	\$7,267,775	\$17,035,571	\$27,571,124	\$17,685,376	\$9,885,748	1.6



Table 3-9. Summary of PACT Benefits and Costs for 2020

Program Administrator Cost Test (PACT) Results for Peoples Gas, 2020 Programs, WACC Discount Rate, Plan 3 Avoided Costs													
	Bene	efits		Costs		Progra	am Administrat	tor Cost Test (I	PACT)				
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)	PACT Benefits	PACT Costs	PACT Test Net Benefits	PACT Test				
(a)	(b)	(c)	(d)	(e)	(f)	(g) = (b)	(h) = (d+e)	(i) = (g-h)	(k) = (g/h)				
Home Energy Jumpstart	\$292,136		\$386,126	\$165,370	\$165,370	\$292,136	\$551,496	-\$259,360	0.5				
Home Energy Rebate	\$914,147		\$643,984	\$307,180	\$1,313,010	\$914,147	\$951,164	-\$37,017	1.0				
Multi-Family	\$10,283,898		\$1,261,608	\$3,043,139	\$5,071,964	\$10,283,898	\$4,304,747	\$5,979,151	2.4				
Home Energy Reports	\$1,808,320		\$636,189	\$0	\$0	\$1,808,320	\$1,808,320 \$636,189		2.8				
Elementary Energy Education	\$318,648		\$0	\$107,039	\$123,893	\$318,648	\$318,648 \$107,039		3.0				
Residential Subtotal	\$13,617,149	\$0	\$2,927,907	\$3,622,728	\$6,674,238	\$13,617,149	\$13,617,149 \$6,550,634		2.1				
C&I and PS Prescriptive	\$2,808,293		\$1,046,424	\$1,387,024	\$2,059,030	\$2,808,293 \$2,433,4		\$374,845	1.2				
C&I and PS Custom	\$1,392,798		\$197,114	\$261,273	\$1,583,468	\$1,392,798	\$458,388	\$934,410	3.0				
Gas Optimization	\$2,647,200		\$333,314	\$441,805	\$1,317,090	\$2,647,200	\$775,119	\$1,872,080	3.4				
Strategic Energy Management	\$1,312,593		\$288,433	\$382,315	\$313,115	\$1,312,593	\$670,748	\$641,845	2.0				
C&I and PS Joint Retro-Commissioning	\$1,147,321		\$192,219	\$254,784	\$392,295	\$1,147,321	\$447,003	\$700,318	2.6				
C&I and PS Joint New Construction	\$1,404,107		\$227,001	\$300,887	\$1,540,747	\$1,404,107	\$527,887	\$876,220	2.7				
Commercial Food Service	\$83,626		\$11,446	\$15,171	\$44,136	\$83,626	\$26,617	\$57,009	3.1				
Small Business	\$3,915,158		\$1,043,869	\$1,200,187	\$2,100,874	\$3,915,158	\$2,244,056	\$1,671,102	1.7				
Total C&I and Public Sector	\$14,711,096	\$0	\$3,339,821	\$4,243,446	\$9,350,755	\$14,711,096	\$7,583,267	\$7,127,829	1.9				
Income Eligible - CBA	\$1,244,831		\$18,385	\$2,328,758	\$2,328,758	\$1,244,831	\$2,347,143	-\$1,102,311	0.5				
Income Eligible - IHWAP-SF	\$299,212		\$506,435	\$692,840	\$1,385,680	\$299,212	\$1,199,275	-\$900,063	0.2				
Income Eligible - IHWAP-MF	\$39,273		\$62,987	\$86,171	\$172,343	\$39,273	\$149,159	-\$109,886	0.3				
Income Eligible - MF LIHEAP Kits	\$2,257,708		\$55,956	\$1,425,209	\$1,425,209	\$2,257,708	\$1,481,165	\$776,543	1.5				
Income Eligible - IEMS	\$462,319		\$699,340	\$532,470	\$1,185,391	\$462,319	\$1,231,810	-\$769,490	0.4				
Income Eligible - PTA	\$9,207,372		\$209,494	\$3,219,670	\$4,675,000	\$9,207,372	\$3,429,164	\$5,778,209	2.7				
Income Eligible - PHES	\$20,977		\$30,309	\$23,077	\$62,129	\$20,977	\$53,387	-\$32,410	0.4				
Income Eligible - AHNC	\$360,475		\$5,868	\$342,496	\$342,496	\$360,475	\$348,364	\$12,111	1.0				
Income Eligible Total	\$13,892,168	\$0	\$1,588,774	\$8,650,691	\$11,577,007	\$13,892,168	\$10,239,465	\$3,652,703	1.4				
EEPS Portfolio Costs			\$4,864,282			\$0	\$4,864,282	-\$4,864,282					
EEPS Portfolio	\$42,220,413	\$0	\$12,720,783	\$16,516,865	\$27,601,999	\$42,220,413	\$29,237,648	\$12,982,765	1.4				
EEPS Portfolio without Income Eligible	\$28,328,245	\$0	\$11,132,009	\$7,866,174	\$16,024,992	\$28,328,245	\$18,998,183	\$9,330,062	1.5				



Table 3-10. Summary of PACT Benefits and Costs for 2021

Program Administrator Cost Test (PACT) Results for Peoples Gas, 2021 Programs, WACC Discount Rate, Plan 3 Avoided Costs													
	Bene	efits		Costs		Progra	am Administrat	tor Cost Test (F	PACT)				
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)	PACT Benefits	PACT Costs	PACT Test Net Benefits	PACT Test				
(a)	(b)	(c)	(d)	(e)	(f)	(g) = (b)	(h) = (d+e)	(i) = (g-h)	(k) = (g/h)				
Home Energy Jumpstart	\$430,136		\$420,938	\$366,663	\$366,663	\$430,136	\$787,601	-\$357,466	0.5				
Home Energy Rebate	\$2,351,486		\$652,351	\$401,057	\$1,470,015	\$2,351,486	\$1,053,409	\$1,298,078	2.2				
Multi-Family	\$5,517,027		\$1,222,887	\$1,857,500	\$3,965,203	\$5,517,027	\$3,080,386	\$2,436,641	1.8				
Home Energy Reports	\$1,348,597		\$273,549	\$0	\$0	\$1,348,597	\$273,549	\$1,075,048	4.9				
Elementary Energy Education	\$630,371		\$0	\$244,422	\$244,422	\$630,371	\$244,422	\$385,948	2.6				
Residential Subtotal	\$10,277,617	\$0	\$2,569,726	\$2,869,642	\$6,046,304	\$10,277,617	\$5,439,368	\$4,838,249	1.9				
C&I and PS Prescriptive	\$5,711,853		\$1,498,517	\$4,375,084	\$3,318,899	\$5,711,853	\$5,873,601	-\$161,747	1.0				
C&I and PS Custom	\$2,543,561		\$342,002	\$998,511	\$2,900,833	\$2,543,561	\$1,340,513	\$1,203,047	1.9				
Gas Optimization	\$339,370		\$33,104	\$96,652	\$138,117	\$339,370	\$129,756	\$209,613	2.6				
Strategic Energy Management	\$660,810		\$107,558	\$314,028	\$123,284	\$660,810	\$421,586	\$239,224	1.6				
C&I and PS Joint Retro-Commissioning	\$948,550		\$185,685	\$542,129	\$400,127	\$948,550	\$727,814	\$220,736	1.3				
C&I and PS Joint New Construction	\$1,077,770		\$161,782	\$472,340	\$1,079,458	\$1,077,770	\$634,121	\$443,649	1.7				
Commercial Food Service	\$132,883		\$17,055	\$49,795	\$105,908	\$132,883	\$66,850	\$66,033	2.0				
Small Business	\$2,096,909		\$639,584	\$612,908	\$996,250	\$2,096,909	\$1,252,492	\$844,417	1.7				
Total C&I and Public Sector	\$13,511,706	\$0	\$2,985,288	\$7,461,446	\$9,062,876	\$13,511,706	\$10,446,734	\$3,064,972	1.3				
Income Eligible - CBA	\$1,133,445		\$514,438	\$578,045	\$1,497,699	\$1,133,445	\$1,092,483	\$40,962	1.0				
Income Eligible - IHWAP-SF	\$235,787		\$94,883	\$531,479	\$1,062,957	\$235,787	\$626,362	-\$390,575	0.4				
Income Eligible - IHWAP-MF	\$133,158		\$54,775	\$306,816	\$613,631	\$133,158	\$361,590	-\$228,432	0.4				
Income Eligible - MF LIHEAP Kits	\$1,939,234		\$249,228	\$745,991	\$745,991	\$1,939,234	\$995,219	\$944,015	1.9				
Income Eligible - IEMS	\$304,984		\$167,613	\$321,860	\$1,074,617	\$304,984	\$489,473	-\$184,489	0.6				
Income Eligible - PTA	\$5,739,484		\$221,655	\$268,386	\$2,957,044	\$5,739,484	\$490,041	\$5,249,443	11.7				
Income Eligible - PHES	\$132,016		\$180,933	\$347,439	\$574,850	\$132,016	\$528,372	-\$396,356	0.2				
Income Eligible - AHNC	\$417,308		\$33,556	\$100,440	\$253,572	\$417,308	\$133,996	\$283,312	3.1				
Income Eligible Total	\$10,035,416	\$0	\$1,517,081	\$3,200,455	\$8,780,361	\$10,035,416	\$4,717,536	\$5,317,880	2.1				
EEPS Portfolio Costs			\$3,871,526			\$0	\$3,871,526	-\$3,871,526					
EEPS Portfolio	\$33,824,738	\$0	\$10,943,620	\$13,531,543	\$23,889,542	\$33,824,738	\$24,475,164	\$9,349,575	1.4				
EEPS Portfolio without Income Eligible	\$23,789,323	\$0	\$9,426,540	\$10,331,088	\$15,109,181	\$23,789,323	\$19,757,628	\$4,031,695	1.2				



Table 3-11. Summary of TRC Benefits and Costs for 2020 Plan 4 Avoided Costs

Total Resource Cost Test (TRC) Results for Peoples Gas, 2020 Programs, Societal Discount Rate, Plan 4 Avoided Costs												
	Ben	efits		Costs		I	L Total Resource	e Cost (TRC) Test				
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)*	IL TRC Benefits	IL TRC Costs	IL TRC Test Net Benefits	IL TRC Test			
(a)	(b)	(c)	(d)	(e)	(f)	(g) =	(h) =	(i) =	(k) =			
(4)	(5)	(0)	(4)	(0)	(1)	(b+c)	(d+f)	(g-h)	(g/h)			
Home Energy Jumpstart	\$283,497	\$689,256	\$386,126	\$165,370	\$165,370	\$972,752	\$551,496	\$421,256	1.8			
Home Energy Rebate	\$989,341	\$1,768,870	\$643,984	\$307,180	\$1,289,775	\$2,758,211	\$1,933,758	\$824,453	1.4			
Multi-Family	\$10,018,346	\$16,207,988	\$1,261,608	\$3,043,139	\$5,071,964	\$26,226,334	\$6,333,573	\$19,892,761	4.1			
Home Energy Reports	\$1,438,859	\$2,350,429	\$636,189	\$0	\$0	\$3,789,288	\$636,189	\$3,153,099	6.0			
Elementary Energy Education	\$293,456	\$2,036,921	\$0	\$107,039	\$123,893	\$2,330,378	\$123,893	\$2,206,485	18.8			
Residential Total	\$13,023,499	\$23,053,464	\$2,927,907	\$3,622,728	\$6,651,002	\$36,076,963	\$9,578,909	\$26,498,055	3.8			
C&I and PS Prescriptive	\$2,263,680	\$4,136,113	\$1,046,424	\$1,387,024	\$2,059,030	\$6,399,793	\$3,105,454	\$3,294,339	2.1			
C&I and PS Custom	\$1,432,367	\$2,241,571	\$197,114	\$261,273	\$1,583,468	\$3,673,938	\$1,780,582	\$1,893,356	2.1			
Gas Optimization	\$2,698,094	\$4,250,903	\$333,314	\$441,805	\$1,317,090	\$6,948,996	\$1,650,405	\$5,298,591	4.2			
Strategic Energy Management	\$1,113,232	\$1,777,120	\$288,433	\$382,315	\$313,115	\$2,890,351	\$601,548	\$2,288,803	4.8			
C&I and PS Joint Retro-Commissioning	\$1,037,283	\$1,618,282	\$192,219	\$254,784	\$392,295	\$2,655,565	\$584,514	\$2,071,051	4.5			
C&I and PS Joint New Construction	\$1,547,260	\$2,458,145	\$227,001	\$300,887	\$1,540,747	\$4,005,405	\$1,767,748	\$2,237,657	2.3			
Commercial Food Service	\$80,882	\$129,229	\$11,446	\$15,171	\$44,136	\$210,111	\$55,582	\$154,529	3.8			
Small Business	\$3,534,020	\$8,305,445	\$1,043,869	\$1,200,187	\$2,100,874	\$11,839,464	\$3,144,743	\$8,694,721	3.8			
C&I and Public Sector Total	\$13,706,817	\$24,916,807	\$3,339,821	\$4,243,446	\$9,350,755	\$38,623,625	\$12,690,576	\$25,933,049	3.0			
Income Eligible - CBA	\$1,349,517	\$2,195,893	\$18,385	\$2,328,758	\$2,328,758	\$3,545,410	\$2,347,143	\$1,198,267	1.5			
Income Eligible - IHWAP-SF	\$318,395	\$514,501	\$506,435	\$692,840	\$1,385,680	\$832,896	\$1,892,115	-\$1,059,220	0.4			
Income Eligible - IHWAP-MF	\$42,313	\$66,794	\$62,987	\$86,171	\$172,343	\$109,107	\$235,330	-\$126,223	0.5			
Income Eligible - MF LIHEAP Kits	\$2,309,921	\$5,973,631	\$55,956	\$1,425,209	\$1,425,209	\$8,283,552	\$1,481,165	\$6,802,387	5.6			
Income Eligible - IEMS	\$504,529	\$975,025	\$699,340	\$532,470	\$1,185,391	\$1,479,554	\$1,884,732	-\$405,177	0.8			
Income Eligible - PTA	\$8,997,896	\$14,196,236	\$209,494	\$3,219,670	\$4,675,000	\$23,194,132	\$4,884,494	\$18,309,638	4.7			
Income Eligible - PHES	\$22,831	\$36,138	\$30,309	\$23,077	\$62,129	\$58,969	\$92,439	-\$33,470	0.6			
Income Eligible - AHNC	\$376,840	\$590,674	\$5,868	\$342,496	\$342,496	\$967,514	\$348,364	\$619,150	2.8			
Income Eligible Total	\$13,922,241	\$24,548,892	\$1,588,774	\$8,650,691	\$11,577,007	\$38,471,133	\$13,165,781	\$25,305,352	2.9			
EEPS Portfolio Costs			\$4,864,282			\$0	\$4,864,282	-\$4,864,282				
EEPS Portfolio	\$40,652,557	\$72,519,164	\$12,720,783	\$16,516,865	\$27,578,764	\$113,171,721	\$40,299,547	\$72,872,174	2.8			
EEPS Portfolio without Income Eligible	\$26,730,316	\$47,970,272	1		\$16,001,757	\$74,700,588	\$27,133,766	\$47,566,822	2.8			



Table 3-12. Summary of TRC Benefits and Costs for 2021 Plan 4 Avoided Costs

Total Resource Cost Test (TRC) Results for Peoples Gas, 2021 Programs, Societal Discount Rate, Plan 4 Avoided Costs													
	Ben	efits		Costs		I	L Total Resource	e Cost (TRC) Test					
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)	IL TRC Benefits	IL TRC Costs	IL TRC Test Net Benefits	IL TRC Test				
(a)	(b)	(c)	(d)	(e)	(f)	(g) = (b+c)	(h) = (d+f)	(i) = (g-h)	(k) = (g/h)				
Home Energy Jumpstart	\$435,957	\$934,527	\$420,938	\$366,663	\$366,663	\$1,370,484	\$787,601	\$582,882	1.7				
Home Energy Rebate	\$2,350,280	\$3,929,203	\$652,351	\$401,057	\$1,447,287	\$6,279,484	\$2,099,638	\$4,179,846	3.0				
Multi-Family	\$5,523,497	\$9,467,012	\$1,222,887	\$1,857,500	\$3,965,203	\$14,990,509	\$5,188,090	\$9,802,419	2.9				
Home Energy Reports	\$1,073,063	\$1,752,888	\$273,549	\$0	\$0	\$2,825,951	\$273,549	\$2,552,402	10.3				
Elementary Energy Education	\$584,148	\$4,516,246	\$0	\$244,422	\$244,422	\$5,100,394	\$244,422	\$4,855,972	20.9				
Residential Total	\$9,966,946	\$20,599,875	\$2,569,726	\$2,869,642	\$6,023,575	\$30,566,821	\$8,593,301	\$21,973,520	3.6				
C&I and PS Prescriptive	\$4,839,922	\$9,713,351	\$1,498,517	\$4,375,084	\$3,318,899	\$14,553,273	\$4,817,416	\$9,735,857	3.0				
C&I and PS Custom	\$2,584,780	\$4,029,517	\$342,002	\$998,511	\$2,900,833	\$6,614,298	\$3,242,835	\$3,371,463	2.0				
Gas Optimization	\$358,879	\$564,403	\$33,104	\$96,652	\$138,117	\$923,283	\$171,221	\$752,062	5.4				
Strategic Energy Management	\$560,444	\$894,671	\$107,558	\$314,028	\$123,284	\$1,455,114	\$230,842	\$1,224,272	6.3				
C&I and PS Joint Retro-Commissioning	\$857,576	\$1,337,918	\$185,685	\$542,129	\$400,127	\$2,195,494	\$585,813	\$1,609,681	3.7				
C&I and PS Joint New Construction	\$1,187,651	\$1,886,832	\$161,782	\$472,340	\$1,079,458	\$3,074,484	\$1,241,240	\$1,833,244	2.5				
Commercial Food Service	\$128,404	\$207,751	\$17,055	\$49,795	\$105,908	\$336,156	\$122,963	\$213,192	2.7				
Small Business	\$1,872,712	\$3,616,493	\$639,584	\$612,908	\$996,250	\$5,489,205	\$1,635,833	\$3,853,372	3.4				
C&I and Public Sector Total	\$12,390,369	\$22,250,937	\$2,985,288	\$7,461,446	\$9,062,876	\$34,641,306	\$12,048,164	\$22,593,142	2.9				
Income Eligible - CBA	\$1,232,693	\$1,955,756	\$514,438	\$578,045	\$1,497,699	\$3,188,449	\$2,012,138	\$1,176,312	1.6				
Income Eligible - IHWAP-SF	\$251,015	\$403,503	\$94,883	\$531,479	\$1,062,957	\$654,518	\$1,157,841	-\$503,323	0.6				
Income Eligible - IHWAP-MF	\$146,263	\$234,538	\$54,775	\$306,816	\$613,631	\$380,801	\$668,406	-\$287,605	0.6				
Income Eligible - MF LIHEAP Kits	\$1,986,289	\$5,289,295	\$249,228	\$745,991	\$745,991	\$7,275,583	\$995,219	\$6,280,365	7.3				
Income Eligible - IEMS	\$328,678	\$791,133	\$167,613	\$321,860	\$1,074,617	\$1,119,811	\$1,242,230	-\$122,418	0.9				
Income Eligible - PTA	\$5,761,221	\$9,041,340	\$221,655	\$268,386	\$2,957,044	\$14,802,561	\$3,178,699	\$11,623,862	4.7				
Income Eligible - PHES	\$107,558	\$224,360	\$180,933	\$347,439	\$574,850	\$331,918	\$755,783	-\$423,865	0.4				
Income Eligible - AHNC	\$442,351	\$695,527	\$33,556	\$100,440	\$253,572	\$1,137,879	\$287,128	\$850,751	4.0				
Income Eligible Total	\$10,256,068	\$18,635,450	\$1,517,081	\$3,200,455	\$8,780,361	\$28,891,519	\$10,297,442	\$18,594,077	2.8				
EEPS Portfolio Costs			\$3,871,526			\$0	\$3,871,526	-\$3,871,526					
EEPS Portfolio	\$32,613,384	\$61,486,262	\$10,943,620	\$13,531,543	\$23,866,813	\$94,099,646	\$34,810,433	\$59,289,213	2.7				
EEPS Portfolio without Income Eligible	\$22,357,315	\$42,850,812	\$9,426,540	\$10,331,088	\$15,086,452	\$65,208,127	\$24,512,991	\$40,695,136	2.7				



Table 3-13. Summary of PACT Benefits and Costs for 2020 Plan 4 Avoided Costs

Program Administrator Cost Test (PACT) Results for Peoples Gas, 2020 Programs, WACC Discount Rate, Plan 4 Avoided Costs													
	Bene	efits		Costs		Progra	am Administrat	or Cost Test (F	PACT)				
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)	PACT Benefits	PACT Costs	PACT Test Net Benefits	PACT Test				
(a)	(b)	(c)	(d)	(e)	(f)	(g) = (b)	(h) = (d+e)	(i) = (g-h)	(k) = (g/h)				
Home Energy Jumpstart	\$225,263		\$386,126	\$165,370	\$165,370	\$225,263	\$551,496	-\$326,233	0.4				
Home Energy Rebate	\$715,159		\$643,984	\$307,180	\$1,313,010	\$715,159	\$951,164	-\$236,005	0.8				
Multi-Family	\$7,933,704		\$1,261,608	\$3,043,139	\$5,071,964	\$7,933,704	\$4,304,747	\$3,628,957	1.8				
Home Energy Reports	\$1,311,990		\$636,189	\$0	\$0	\$1,311,990	\$636,189	\$675,801	2.1				
Elementary Energy Education	\$246,120		\$0	\$107,039	\$123,893	\$246,120	\$107,039	\$139,081	2.3				
Residential Subtotal	\$10,432,234	\$0	\$2,927,907	\$3,622,728	\$6,674,238	\$10,432,234	\$6,550,634	\$3,881,600	1.6				
C&I and PS Prescriptive	\$2,052,002		\$1,046,424	\$1,387,024	\$2,059,030	\$2,052,002	\$2,433,449	-\$381,447	0.8				
C&I and PS Custom	\$1,091,375		\$197,114	\$261,273	\$1,583,468	\$1,091,375	\$458,388	\$632,987	2.4				
Gas Optimization	\$2,055,897		\$333,314	\$441,805	\$1,317,090	\$2,055,897	\$775,119	\$1,280,778	2.7				
Strategic Energy Management	\$979,064		\$288,433	\$382,315	\$313,115	\$979,064	\$670,748	\$308,316	1.5				
C&I and PS Joint Retro-Commissioning	\$880,572		\$192,219	\$254,784	\$392,295	\$880,572	\$447,003	\$433,569	2.0				
C&I and PS Joint New Construction	\$1,098,805		\$227,001	\$300,887	\$1,540,747	\$1,098,805	\$527,887	\$570,918	2.1				
Commercial Food Service	\$65,334		\$11,446	\$15,171	\$44,136	\$65,334	\$26,617	\$38,717	2.5				
Small Business	\$2,953,906		\$1,043,869	\$1,200,187	\$2,100,874	\$2,953,906	\$2,244,056	\$709,850	1.3				
Total C&I and Public Sector	\$11,176,955	\$0	\$3,339,821	\$4,243,446	\$9,350,755	\$11,176,955	\$7,583,267	\$3,593,688	1.5				
Income Eligible - CBA	\$975,055		\$18,385	\$2,328,758	\$2,328,758	\$975,055	\$2,347,143	-\$1,372,087	0.4				
Income Eligible - IHWAP-SF	\$233,489		\$506,435	\$692,840	\$1,385,680	\$233,489	\$1,199,275	-\$965,786	0.2				
Income Eligible - IHWAP-MF	\$30,792		\$62,987	\$86,171	\$172,343	\$30,792	\$149,159	-\$118,366	0.2				
Income Eligible - MF LIHEAP Kits	\$1,751,181		\$55,956	\$1,425,209	\$1,425,209	\$1,751,181	\$1,481,165	\$270,016	1.2				
Income Eligible - IEMS	\$361,047		\$699,340	\$532,470	\$1,185,391	\$361,047	\$1,231,810	-\$870,763	0.3				
Income Eligible - PTA	\$7,117,814		\$209,494	\$3,219,670	\$4,675,000	\$7,117,814	\$3,429,164	\$3,688,650	2.1				
Income Eligible - PHES	\$16,436		\$30,309	\$23,077	\$62,129	\$16,436	\$53,387	-\$36,951	0.3				
Income Eligible - AHNC	\$282,956		\$5,868	\$342,496	\$342,496	\$282,956	\$348,364	-\$65,407	0.8				
Income Eligible Total	\$10,768,770	\$0	\$1,588,774	\$8,650,691	\$11,577,007	\$10,768,770	\$10,239,465	\$529,305	1.1				
EEPS Portfolio Costs			\$4,864,282			\$0	\$4,864,282	-\$4,864,282					
EEPS Portfolio	\$32,377,959	\$0	\$12,720,783	\$16,516,865	\$27,601,999	\$32,377,959	\$29,237,648	\$3,140,311	1.1				
EEPS Portfolio without Income Eligible	\$21,609,189	\$0	\$11,132,009	\$7,866,174	\$16,024,992	\$21,609,189	\$18,998,183	\$2,611,006	1.1				



Table 3-14. Summary of PACT Benefits and Costs for 2021 Plan 4 Avoided Costs

Program Administrator Cost Test (PACT) Results for Peoples Gas, 2021 Programs, WACC Discount Rate, Plan 4 Avoided Costs													
	Bene	efits		Costs		Progra	am Administrat	tor Cost Test (F	PACT)				
Program	Avoided Gas Savings	Other Benefits	Non-Incentive Costs	Incentive Costs	Incremental Costs (Net)	PACT Benefits	PACT Costs	PACT Test Net Benefits	PACT Test				
(a)	(b)	(c)	(d)	(e)	(f)	(g) = (b)	(h) = (d+e)	(i) = (g-h)	(k) = (g/h)				
Home Energy Jumpstart	\$334,721		\$420,938	\$366,663	\$366,663	\$334,721	\$787,601	-\$452,881	0.4				
Home Energy Rebate	\$1,834,805		\$652,351	\$401,057	\$1,470,015	\$1,834,805	\$1,053,409	\$781,396	1.7				
Multi-Family	\$4,285,027		\$1,222,887	\$1,857,500	\$3,965,203	\$4,285,027	\$3,080,386	\$1,204,641	1.4				
Home Energy Reports	\$978,448		\$273,549	\$0	\$0	\$978,448	\$273,549	\$704,898	3.6				
Elementary Energy Education	\$488,078		\$0	\$244,422	\$244,422	\$488,078	\$244,422	\$243,656	2.0				
Residential Subtotal	\$7,921,079	\$0	\$2,569,726	\$2,869,642	\$6,046,304	\$7,921,079	\$5,439,368	\$2,481,711	1.5				
C&I and PS Prescriptive	\$4,218,817		\$1,498,517	\$4,375,084	\$3,318,899	\$4,218,817	\$5,873,601	-\$1,654,783	0.7				
C&I and PS Custom	\$1,995,867		\$342,002	\$998,511	\$2,900,833	\$1,995,867	\$1,340,513	\$655,354	1.5				
Gas Optimization	\$266,121		\$33,104	\$96,652	\$138,117	\$266,121	\$129,756	\$136,365	2.1				
Strategic Energy Management	\$492,898		\$107,558	\$314,028	\$123,284	\$492,898	\$421,586	\$71,312	1.2				
C&I and PS Joint Retro-Commissioning	\$728,015		\$185,685	\$542,129	\$400,127	\$728,015	\$727,814	\$201	1.0				
C&I and PS Joint New Construction	\$843,425		\$161,782	\$472,340	\$1,079,458	\$843,425	\$634,121	\$209,303	1.3				
Commercial Food Service	\$103,808		\$17,055	\$49,795	\$105,908	\$103,808	\$66,850	\$36,958	1.6				
Small Business	\$1,577,994		\$639,584	\$612,908	\$996,250	\$1,577,994	\$1,252,492	\$325,502	1.3				
Total C&I and Public Sector	\$10,226,945	\$0	\$2,985,288	\$7,461,446	\$9,062,876	\$10,226,945	\$10,446,734	-\$219,789	1.0				
Income Eligible - CBA	\$887,970		\$514,438	\$578,045	\$1,497,699	\$887,970	\$1,092,483	-\$204,514	0.8				
Income Eligible - IHWAP-SF	\$184,079		\$94,883	\$531,479	\$1,062,957	\$184,079	\$626,362	-\$442,283	0.3				
Income Eligible - IHWAP-MF	\$104,135		\$54,775	\$306,816	\$613,631	\$104,135	\$361,590	-\$257,456	0.3				
Income Eligible - MF LIHEAP Kits	\$1,504,289		\$249,228	\$745,991	\$745,991	\$1,504,289	\$995,219	\$509,070	1.5				
Income Eligible - IEMS	\$238,357		\$167,613	\$321,860	\$1,074,617	\$238,357	\$489,473	-\$251,116	0.5				
Income Eligible - PTA	\$4,476,288		\$221,655	\$268,386	\$2,957,044	\$4,476,288	\$490,041	\$3,986,248	9.1				
Income Eligible - PHES	\$96,707		\$180,933	\$347,439	\$574,850	\$96,707	\$528,372	-\$431,665	0.2				
Income Eligible - AHNC	\$327,450		\$33,556	\$100,440	\$253,572	\$327,450	\$133,996	\$193,454	2.4				
Income Eligible Total	\$7,819,275	\$0	\$1,517,081	\$3,200,455	\$8,780,361	\$7,819,275	\$4,717,536	\$3,101,739	1.7				
EEPS Portfolio Costs			\$3,871,526			\$0	\$3,871,526	-\$3,871,526					
EEPS Portfolio	\$25,967,298	\$0	\$10,943,620	\$13,531,543	\$23,889,542	\$25,967,298	\$24,475,164	\$1,492,134	1.1				
EEPS Portfolio without Income Eligible	\$18,148,023	\$0	\$9,426,540	\$10,331,088	\$15,109,181	\$18,148,023	\$19,757,628	-\$1,609,605	0.9				



3.2 Program Specific Verified Savings and Costs Summary

A summary of the components of the verified savings and costs for each program are shown in Table 3-15 through Table 3-19 for each program year and the total over four years. The tables include the component values for each program, as well as portfolio level totals for each component.



Table 3-15. Summary of Verified Savings and Program Costs for 2018-2021

Peoples Gas 2018-2021 Verified Savings Summary																	
	Ex Ante Gross	Realization Rate	Verified	l Gross	Deemed / Used		Verified Net		Actual Costs	Part	icipation	GHG	Savings		Savings	Verified Gross Weighted Average Measure Life	
	Annual Energy Savings	Energy Savings (Verified Gross / Ex Ante Gross)	Annual Energy Savings	Lifetime Savings	Net-to-Gross Ratio	Annual Energy Savings	Lifetime Savings	First Year Cost per First Year Annual Savings	First Year Cost per Lifetime Savings	Utility Program Costs	# Units	Units Definition	Annual Verified Net CO2 Savings	Lifetime Verified Net CO2 Savings	Annual Verified Net Water Savings	Lifetime Verified Net Water Savings	Years
	Therms	%	Therms	Therms	%	Therms	Therms	\$/Therms	\$/Therms	\$			metric tons CO2	metric tons CO2	Gallons	Gallons	
(a)	(b)	(c=d/b)	(d)	(e)	(f=g/d)	(g)	(h)	(i=k/g)	(j=k/h)	(k)	(I)	(m)	(n)	(o)	(p)	(q)	(r=e/d)
Home Energy Jumpstart	705,791	101%	714,168	5,541,671	91%	652,078	5,137,554	\$ 3.59			15,592	Participants	3,450	27,183	27,765,352	250,616,523	7.8
Home Energy Rebate	2,978,879	102%	3,037,978	41,639,836	88%	2,658,642	34,630,004	\$ 2.09			34,698	Participants	14,067	183,227	-	-	13.7
Multi-Family	9,776,383	101%	9,898,101	118,522,293	86%	8,522,229	101,475,692				20,199		45,091	536,908	33,462,511	301,110,159	12.0
Home Energy Reports	2,513,842	124%	3,126,378	15,631,890	100%	3,126,378	15,631,890				305,104	Participants	16,542	82,708	-	-	5.0
Elementary Energy Education	726,487	117%	849,751	7,978,123	100%	849,752	7,978,133					Kits Distributed		42,212		1,662,072,065	9.4
Residential Total		106%	17,626,376	189,313,813	90%	15,809,079	164,853,274				NA		83,646	872,239	234,433,359	2,213,798,747	10.7
C&I and PS Prescriptive	9,299,278	100%	9,302,749	49,769,713	83%	7,761,816	41,569,011				836		41,068	219,942	12,934,428	77,606,569	5.4
C&I and PS Custom	2,187,309	100%	2,196,125	33,432,732	72%	1,575,732	23,988,112				104	Projects	8,337	126,921	-	-	15.2
Gas Optimization	1,176,921	100%	1,179,719	14,885,596	92%	1,082,183	13,679,905					Projects	5,726	72,380	-	-	12.6
Strategic Energy Management	1,029,728	97%	996,923	6,657,933	100%	996,923	6,657,933			+ .,=,		Projects	5,275	35,227	-	-	6.7
C&I and PS Joint Retro-Commissioning	1,731,082	90%	1,566,318	12,814,020	96%	1,506,548	12,301,749					Projects	7,971	65,089	-	-	8.2
C&I and PS Joint New Construction	2,245,371	93%	2,096,599	43,189,939	66%	1,384,948	28,529,922					Projects	7,328	150,952	-	-	20.6
Commercial Food Service	63,948	106%	67,786	816,240	86%	58,578	705,267				85	Projects	310	3,732	107,073	1,554,058	12.0
Small Business	4,701,842	100%	4,700,924	35,513,918	92%	4,326,578	32,684,829			\$ 6,724,461	1,405	Projects	22,892	172,935	20,613,668	123,859,214	7.6
C&I and Public Sector Total	22,435,479	99%	22,107,143	197,080,090	85%	18,693,306	160,116,729			\$ 30,982,619	NA		98,906	847,178		203,019,842	8.9
Income Eligible - CBA	1,216,382	101%	1,226,861	24,086,762	100%	1,226,861	24,086,762	\$ 11.72	\$ 0.60	\$ 14,373,693	3,570	Participants	6,491	127,443	2,759,630	27,521,056	19.6
Income Eligible - IHWAP-SF	167,233	103%	172,498	3,027,402	100%	172,498	3,027,402	\$ 15.19			319	Participants	913	16,018	470,190	4,603,529	17.6
Income Eligible - IHWAP-MF	300,492	48%	144,989	2,872,606	100%	144,989	2,872,606	\$ 14.47	\$ 0.73	\$ 2,098,648	21	Projects	767	15,199	835,658	8,242,846	19.8
Income Eligible - MF LIHEAP Kits	1,523,228	106%	1,609,429	16,663,828	100%	1,609,429	16,663,828				42,466	Kits Distributed	8,515	88,168	63,770,475	622,265,849	10.4
Income Eligible - IEMS	549,942	100%	551,416	7,776,675	100%	551,416	7,776,675	\$ 8.26	\$ 0.59	\$ 4,556,660	3,391	Projects	2,918	41,146	15,391,009	141,856,758	14.1
Income Eligible - PTA	4,155,219	100%	4,163,269	50,341,618	100%	4,163,269	50,341,618	\$ 0.94	\$ 0.08	\$ 3,919,204	1,650	Projects	22,028	266,358	1,435,703	8,614,218	12.1
Income Eligible - PHES	153,303	102%	156,101	1,092,264	100%	156,101	1,092,264			\$ 1,214,347	100	Projects	826	5,779	2,919,482	24,858,585	7.0
Income Eligible - AHNC	221,821	100%	221,691	3,831,892	100%	221,691	3,831,892	\$ 4.45	\$ 0.26	\$ 985,636	19	Projects	1,173	20,275	-	-	17.3
Income Eligible Total	8,287,620	100%	8,246,255	109,693,046	100%	8,246,255	109,693,046	\$ 4.01	\$ 0.30	\$ 33,108,256	NA		43,631	580,386	87,582,147	837,962,841	13.3
EEPS Program Total	47.424.481	101%	47.979.773	496.086.950	89%	42.748.640	434.663.049	\$ 2.08	\$ 0.20	\$ 88,995,935			226.183	2.299.802	355.670.676	3.254.781.430	10.3
Other EEPS Portfolio Costs	47,424,401	10170	-1,313,113	430,000,930	0370	42,740,040	404,000,049	φ 2.00	φ 0.20	\$ 16.281.557			220,103	2,233,002	000,070,070	0,204,701,400	10.5
EEPS Portfolio Total	47.424.481	101%	47.979.773	496.086.950	89%	42.748.640	434.663.049	\$ 2.46	\$ 0.24	\$ 105,277,492	NA		226,183	2,299,802	355.670.676	3.254.781.430	10.3
	47,424,401	10176	41,319,113	430,000,950	03%	42,140,040	+34,003,049	φ 2.40	φ 0.24	\$ 105,277,492	NA		220,103	2,299,002	333,370,676	3,234,701,430	10.3



Table 3-16. Summary of Verified Savings and Program Costs for 2018

						Peo	ples Gas 2018 \	erified Saving	s Summary								
	Ex Ante Gross	Realization Rate	Verified	Gross	Deemed / Used		Verifie			Actual Costs	Pi	articipation	GHG S	avings	Water S		Verified Gross Weighted Average Measure Life
	Annual Energy Savings	Energy Savings (Verified Gross / Ex Ante Gross)	Annual Energy Savings	Lifetime Savings	Net-to-Gross Ratio	Annual Energy Savings	Lifetime Savings	First Year Cost per First Year Annual Savings	First Year Cost per Lifetime Savings	Utility Program Costs	# Units	Units Definition	Annual Verified Net CO2 Savings	Lifetime Verified Net CO2 Savings	Annual Verified Net Water Savings	Lifetime Verified Net Water Savings	Years
	Therms	%	Therms	Therms	%	Therms	Therms	\$/Therms	\$/Therms	\$			metric tons CO2	metric tons CO2	Gallons	Gallons	
(a)	(b)	(c=d/b)	(d)	(e)	(f=g/d)	(g)	(h)	(i=k/g)	(j=k/h)	(k)	(I)	(m)	(n)	(o)	(p)	(q)	(r=e/d)
Home Energy Jumpstart	216,845	106%	230,407	1,318,202	97%	222,431	1,277,459				4,699		1,177	6,759	11,086,256	109,461,090	5.7
Home Energy Rebate	974,670	101%	988,725	12,511,566	91%	901,631	10,767,150					Participants	4,771	56,969	-	-	12.7
Multi-Family	1,367,532	107%	1,460,200	16,644,075	84%	1,224,083	13,766,855					Projects	6,477	72,840	8,511,149	82,647,515	11.4
Home Energy Reports	523,780	106%	553,286	2,766,430	100%	553,286	2,766,430	\$ 0.96				Participants	2,927	14,637	-	-	5.0
Elementary Energy Education	201,099	126%	252,589	2,275,092	100%	252,590	2,275,102					Kits Distributed	1,336	12,038	47,451,261	445,621,314	9.0
Residential Total	3,283,926	106%	3,485,207	35,515,364	90%	3,154,021	30,852,996	\$ 1.82			NA		16,688	163,243	67,048,667	637,729,919	10.2
C&I and PS Prescriptive	2,237,342	100%	2,237,350	12,735,359	79%	1,767,507	10,060,931			3,372,058		Projects	9,352	53,232	-	-	5.7
C&I and PS Custom	518,485	104%	537,740	8,798,352	69%	371,041	6,070,869	\$ 2.08		770,822		Projects	1,963	32,121	-	-	16.4
Gas Optimization	82,768	95%	78,520	1,218,025	102%	80,091	1,242,404	\$ 1.21	\$ 0.08	96,621	6	Projects	424	6,574	-	-	15.5
Strategic Energy Management												NA	-	-			
C&I and PS Joint Retro-Commissioning	451,867	95%	427,611	3,207,083	102%	436,163	3,271,224	\$ 1.50		652,445		Projects	2,308	17,308	-		7.5
C&I and PS Joint New Construction	471,363	84%	395,945	8,156,467	77%	304,878	6,280,480	\$ 1.80	\$ 0.09	550,257	21	Projects	1,613	33,230	-		20.6
Commercial Food Service												NA	-	-			
Small Business	596,577	101%	601,191	5,632,039	92%	553,096	5,181,472	\$ 2.10		1,161,903	230	Projects	2,926	27,415	590,512	4,591,567	9.4
C&I and Public Sector Total	4,358,402	98%	4,278,357	39,747,324	82%	3,512,776	32,107,380				NA		18,586	169,880	590,512	4,591,567	9.3
Income Eligible - CBA	411,482	101%	417,067	8,169,067	100%	417,067	8,169,067			\$ 5,746,778	980	Participants	2,207	43,223	1,291,780	12,842,557	19.6
Income Eligible - IHWAP-SF	14,288	101%	14,500	268,425	100%	14,500	268,425	\$ 5.03	\$ 0.27	\$ 72,888	30	Participants	77	1,420	129,064	1,192,268	18.5
Income Eligible - IHWAP-MF	245,179	37%	91,433	1,726,821	100%	91,433	1,726,821	\$ 13.68	\$ 0.72	\$ 1,250,742	1	Participants	484	9,137	601,732	5,903,583	18.9
Income Eligible - MF LIHEAP Kits												NA	-	-			
Income Eligible - IEMS	82,621	97%	80,427	1,175,201	100%	80,427	1,175,201	\$ 13.40	\$ 0.92	\$ 1,077,829	2,487	Participants	426	6,218	5,951,517	58,468,190	14.6
Income Eligible - PTA												NA	-	-			
Income Eligible - PHES	22,071	97%	21,414	108,941	100%	21,414	108,941	\$ 13.45	\$ 2.64	\$ 287,926	20	Projects	113	576	1,096,941	10,912,916	5.1
Income Eligible - AHNC	55,293	101%	55,776	1,033,031	100%	55,776	1,033,031	\$ 8.65	\$ 0.47	\$ 482,287	6	Projects	295	5,466	-	-	18.5
Income Eligible Total	830,934	82%	680,617	12,481,486	100%	680,617	12,481,486	\$ 13.10	\$ 0.71	\$ 8,918,450	NA		3,601	66,040	9,071,033	89,319,514	18.3
EEPS Program Total	8,473,262	100%	8,444,181	87,744,174	87%	7,347,414	75,441,861	\$ 2.90	\$ 0.28	21,271,087			38,875	399,163	76,710,212	731,640,999	10.4
Other EEPS Portfolio Costs										\$ 3,375,412							
EEPS Portfolio Total	8,473,262	100%	8,444,181	87,744,174	87%	7,347,414	75,441,861	\$ 3.35	\$ 0.33	24,646,499	NA		38,875	399,163	76,710,212	731,640,999	10.4



Table 3-17. Summary of Verified Savings and Program Costs for 2019

Peoples Gas 2019 Verified Savings Summary																	
	Ex Ante Gross	Realization Rate	Verified	l Gross	Deemed / Used		Verifi	ed Net		Actual Costs	Pa	rticipation	GHG S	avings		Savings	Verified Gross Weighted Average Measure Life
	Annual Energy Savings	Energy Savings (Verified Gross / Ex Ante Gross)	Annual Energy Savings	Lifetime Savings	Net-to-Gross Ratio	Annual Energy Savings	Lifetime Savings	First Year Cost per First Year Annual Savings	First Year Cost per Lifetime Savings	Utility Program Costs	# Units	Units Definition	Annual Verified Net CO2 Savings	Lifetime Verified Net CO2 Savings	Annual Verified Net Water Savings	Lifetime Verified Net Water Savings	Years
	Therms	%	Therms	Therms	%	Therms	Therms	\$/Therms	\$/Therms	\$			metric tons CO2	metric tons CO2	Gallons	Gallons	
(a)	(b)	(c=d/b)	(d)	(e)	(f=g/d)	(g)	(h)	(i=k/g)	(j=k/h)	(k)	(I)	(m)	(n)	(o)	(p)	(q)	(r=e/d)
Home Energy Jumpstart	227,584	98%	223,209	1,490,561	89%	199,408	1,399,854					Participants	1,055	7,407	7,953,520	79,535,202	6.7
Home Energy Rebate	1,085,278	100%	1,089,060	14,537,916	90%	982,753	12,478,673					Participants	5,200	66,025	-	-	13.3
Multi-Family	3,176,318	100%	3,176,409	40,882,647	85%	2,708,575	34,528,780					Projects	14,331	182,692	8,348,711	78,520,037	12.9
Home Energy Reports	688,083	112%	772,269	3,861,345	100%	772,269	3,861,345					Participants	4,086	20,430	-	-	5.0
Elementary Energy Education	266,315	107%	285,128	2,731,441	100%	285,128	2,731,441	\$ 1.06				Kits Distributed	1,509	14,452	58,050,276	561,534,183	9.6
Residential Total	5,443,578	102%	5,546,075	63,503,910	89%	4,948,133	55,000,093				NA		26,181	291,005	74,352,507	719,589,422	11.5
C&I and PS Prescriptive	1,354,774	100%	1,354,741	8,093,041	79%	1,070,244	6,393,497					Projects	5,663	33,828	3,508,720	21,052,322	6.0
C&I and PS Custom	456,850	99%	450,276	6,243,774	69%	310,691	4,308,211					Projects	1,644	22,795	-	-	13.9
Gas Optimization	294,590	102%	300,940	2,196,380	91%	273,855	1,998,703					Projects	1,449	10,575	-	-	7.3
Strategic Energy Management	156,930	102%	160,264	801,320	100%	160,264	801,320					Projects	848	4,240	-	-	5.0
C&I and PS Joint Retro-Commissioning	436,212	86%	375,142	3,151,193	94%	352,634	2,962,126					Projects	1,866	15,673	-	-	8.4
C&I and PS Joint New Construction	910,286	99%	901,183	18,564,370	70%	630,828	12,995,057	\$ 1.71	\$ 0.08	\$ 1,079,969	23	Projects	3,338	68,757	-	-	20.6
Commercial Food Service												NA	-	-			
Small Business	1,448,325	100%	1,446,078	9,457,196	92%	1,330,647	8,702,470	\$ 1.55	\$ 0.24	\$ 2,066,010	355	Projects	7,040	46,045	4,221,645	26,574,191	6.5
C&I and Public Sector Total	5,057,967	99%	4,988,624	48,507,274	83%	4,129,163	38,161,383	\$ 1.54	\$ 0.17	\$ 6,348,512	NA		21,847	201,912	7,730,365	47,626,513	9.7
Income Eligible - CBA	356,427	101%	360,147	7,050,121	100%	360,147	7,050,121	\$ 14.40	\$ 0.74	\$ 5,187,289	998	Participants	1,906	37,302	641,127	6,411,268	19.6
Income Eligible - IHWAP-SF	39,878	113%	44,903	802,701	100%	44,903	802,701	\$ 16.06	\$ 0.90	\$ 721,236	87	Participants	238	4,247	124,490	1,244,903	17.9
Income Eligible - IHWAP-MF	18,642	115%	21,409	498,849	100%	21,409	498,849			\$ 337,157		Projects	113	2,639	200,962	2,009,619	23.3
Income Eligible - MF LIHEAP Kits	178,884	100%	178,884	1,918,503	100%	178,884	1,918,503	\$ 4.83	\$ 0.45	\$ 863,922	4,946	Kits Distributed	946	10,151	7,427,325	72,475,083	10.7
Income Eligible - IEMS	318,512	101%	320,708	3,725,199	100%	320,708	3,725,199	\$ 5.48	\$ 0.47	\$ 1,757,549	327	Projects	1,697	19,710	2,902,758	27,071,904	11.6
Income Eligible - PTA												NA	-	-			
Income Eligible - PHES	62,461	101%	63,341	522,451	100%	63,341	522,451	\$ 5.44	\$ 0.66	\$ 344,662	41	Projects	335	2,764	789,625	7,748,171	8.2
Income Eligible - AHNC	6,865	99%	6,774	121,067	100%	6,774	121,067	\$ 3.10	\$ 0.17	\$ 20,989	1	Project	36	641	-		17.9
Income Eligible Total	981,670	101%	996,166	14,638,892	100%	996,166	14,638,892	\$ 9.27	\$ 0.63	\$ 9,232,805	NA		5,271	77,454	12,086,286	116,960,947	14.7
EEPS Program Total	11,483,215	100%	11,530,865	126,650,075	87%	10,073,462	107,800,368	\$ 2.26	\$ 0.21	\$ 22,747,844			53,299	570,372	94,169,159	884,176,883	11.0
Other EEPS Portfolio Costs										\$ 4,170,337							
EEPS Portfolio Total	11,483,215	100%	11,530,865	126,650,075	87%	10,073,462	107,800,368	\$ 2.67	\$ 0.25	\$ 26,918,182	NA		53,299	570,372	94,169,159	884,176,883	11.0



Table 3-18. Summary of Verified Savings and Program Costs for 2020

						Pe	oples Gas 2020	Verified Saving	s Summary								
	Ex Ante Gross	Realization Rate	Verified	l Gross	Deemed / Used		Verifi	ed Net		Actual Costs	Pa	rticipation	GHG S	Savings		Savings	Verified Gross Weighted Average Measure Life
	Annual Energy Savings	Energy Savings (Verified Gross / Ex Ante Gross)	Annual Energy Savings	Lifetime Savings	Net-to-Gross Ratio	Annual Energy Savings	Lifetime Savings	First Year Cost per First Year Annual Savings	First Year Cost per Lifetime Savings	Utility Program Costs	# Units	Units Definition	Annual Verified Net CO2 Savings	Lifetime Verified Net CO2 Savings	Annual Verified Net Water Savings	Lifetime Verified Net Water Savings	Years
	Therms	%	Therms	Therms	%	Therms	Therms	\$/Therms	\$/Therms	\$			metric tons CO2	metric tons CO2	Gallons	Gallons	
(a)	(b)	(c=d/b)	(d)	(e)	(f=g/d)	(g)	(h)	(i=k/g)	(j=k/h)	(k)	(I)	(m)	(n)	(0)	(p)	(q)	(r=e/d)
Home Energy Jumpstart	119,151	99%	118,340	1,062,654	89%	105,145	971,330					Participants	556	5,139	3,960,898	30,487,293	9.0
Home Energy Rebate	259,736	101%	261,252	5,023,970	68%	177,342	3,398,258			\$ 951,164		Participants	938	17,980	-	-	19.2
Multi-Family	3,530,357	101%	3,549,624	39,390,732	87%	3,093,220	34,315,508					Projects	16,366	181,563	6,165,553	53,983,615	11.1
Home Energy Reports	656,325	157%	1,031,533	5,157,665	100%	1,031,533	5,157,665					Participants	5,458	27,289	-	-	5.0
Elementary Energy Education	99,775	110%	109,459	994,755	100%	109,459	994,755					Kits Distributed	579	5,263	20,619,485	199,457,203	9.1
Residential Total		109%	5,070,208	51,629,775	89%	4,516,699	44,837,516				NA		23,898	237,235	30,745,936	283,928,110	10.2
C&I and PS Prescriptive C&I and PS Custom	2,271,939 427,964	100%	2,271,948	10,183,453	79%	1,794,837	8,044,919			\$ 2,433,449		Projects	9,496	42,566	3,726,538	22,359,227	4.5
		99% 100%	421,766	6,576,779	74%	312,107	4,866,818					Projects	1,651	25,750	-	-	15.6
Gas Optimization	723,674		724,031	10,125,509	91%	658,870	9,214,237			\$ 775,119		Projects	3,486	48,753	-	-	14.0
Strategic Energy Management C&I and PS Joint Retro-Commissioning	626,230 417,335	89% 100%	556,497 417,990	3,895,479 3,552,915	100% 94%	556,497 392,911	3,895,479 3.339,744					Projects Projects	2,944 2.079	20,611 17.671	-	-	7.0
															-	-	20.6
C&I and PS Joint New Construction	492,851	89%	438,201	9,026,941	58%	254,156	5,235,614					Projects	1,345	27,702	- 32,739	-	20.6
Commercial Food Service		114%		340,824	80%	22,586 1.607.461	272,655					Projects	120	1,443		491,078	
Small Business C&I and Public Sector Total	1,750,240	100%	1,746,774	13,346,472	92%		12,280,905					Projects	29.627	64,978	7,050,499	38,651,429	7.6
Income Eligible - CBA	6,735,083 235,441	98% 101%	6,605,440 236,857	57,048,371 4.633.617	85% 100%	5,599,425 236.857	47,150,370 4.633.617				NA	Participants	29,627	249,473 24,516	10,809,775 767.859	61,501,733 7.678,586	8.6
Income Eligible - CBA	235,441 63.148	101%	236,857	4,633,617	100%	236,857	4,633,617					Participants Participants	1,253	24,516	134.874	1.348.740	19.6
Income Eligible - IHWAP-SF Income Eligible - IHWAP-MF	53,148 7.854	96%	7,543	1,094,063	100%	63,149 7.543	1,094,063					Participants Proiects	334 40	5,789	134,874	1,348,740	17.3
	716.565	108%	7,543	7.927.585	100%	7,543	7.927.585					Kits Distributed	40	41.945	- 30.032.160	293.050.787	10.0
Income Eligible - MF LIHEAP Kits Income Eligible - IEMS	88.661	108%	89.294	1,744,187	100%	89.294	1,744,187					Rits Distributed Projects	4,081	41,945 9.228	2.527.931	293,050,787	10.3
Income Eligible - IENS Income Eligible - PTA	2.682.756	101%	2.691.118	1,744,187	100%	2.691.118	1,744,187					Projects Projects	472	9,228	2,527,931 976,485	5.858.911	19.5
Income Eligible - PTA Income Eligible - PHES	2,682,756	100%	2,691,118	30,759,641	100%	2,691,118	30,759,641 78,420			\$ 3,429,164 \$ 53.387		Projects Projects	14,239	162,749	976,485	5,858,911	20.0
Income Eligible - AHNC	75.139	102%	75.345	1.228.124	100%	75.345	1.228.124					Projects	399	6.498	-	-	20.0
Income Eligible - AFINC		100%	3.938.500	47.607.553	100%	3.938.500	47.607.553					Projects	20.839	251.892	34,439,310	330.061.110	10.3
Income Eligible Total	3,873,407	102%	3,938,500	47,607,553	100%	3,938,500	47,607,553	ə 2.60	φ <u>0.22</u>	\$ 10,239,465	NA		20,839	251,892	34,439,310	330,061,110	12.1
EEPS Program Total	15.273.834	102%	15.614.148	156.285.698	90%	14.054.624	139.595.439	\$ 1.73	\$ 0.17	\$ 24.373.366			74,363	738.599	75.995.021	675.490.954	10.0
Other FEPS Portfolio Costs	13,273,034	102 /0	13,014,140	130,203,090	5078	14,004,024	153,555,455	÷ 1.75	φ 0.17	\$ 4.864.282			74,303	730,355	75,395,021	070,490,904	10.0
EEPS Portfolio Costs	15.273.834	102%	15.614.148	156.285.698	90%	14.054.624	139.595.439	\$ 2.08	\$ 0.21		NA		74.363	738,599	75.995.021	675.490.954	10.0
EEFS FOILIDIIO TOLAI	15,275,654	102 /0	10,014,140	100,200,090	50 /0	14,004,024	100,090,409	¥ 2.00	ψ 0.21	¥ 23,237,040	MA		74,303	130,355	10,355,021	010,450,504	10.0



Table 3-19. Summary of Verified Savings and Program Costs for 2021

						Pe	oples Gas 2021	Verified Saving	s Summary								
	Ex Ante Gross	Realization Rate	Verified	l Gross	Deemed / Used		Verifi	ed Net		Actual Costs	Pa	rticipation	GHG S	Savings		Savings	Verified Gross Weighted Average Measure Life
	Annual Energy Savings	Energy Savings (Verified Gross / Ex Ante Gross)	Annual Energy Savings	Lifetime Savings	Net-to-Gross Ratio	Annual Energy Savings	Lifetime Savings	First Year Cost per First Year Annual Savings	First Year Cost per Lifetime Savings	Utility Program Costs	# Units	Units Definition	Annual Verified Net CO2 Savings	Lifetime Verified Net CO2 Savings	Annual Verified Net Water Savings	Lifetime Verified Net Water Savings	Years
	Therms	%	Therms	Therms	%	Therms	Therms	\$/Therms	\$/Therms	\$			metric tons CO2	metric tons CO2	Gallons	Gallons	
(a)	(b)	(c=d/b)	(d)	(e)	(f=g/d)	(g)	(h)	(i=k/g)	(j=k/h)	(k)	(I)	(m)	(n)	(o)	(p)	(q)	(r=e/d)
Home Energy Jumpstart	142,211	100%	142,212	1,670,254	88%	125,094	1,488,911					Participants	662	7,878	4,764,677	31,132,939	11.7
Home Energy Rebate	659,195	106%	698,941	9,566,386	85%	596,916	7,985,923					Participants	3,158	42,254	-	-	13.7
Multi-Family	1,702,176	101%	1,711,868	21,604,840	87%	1,496,351	18,864,550					Projects	7,917	99,812	10,437,098	85,958,992	12.6
Home Energy Reports	645,654	119%	769,290	3,846,450	100%	769,290	3,846,450					Participants	4,070	20,352	-	-	5.0
Elementary Energy Education	159,298	127%	202,574	1,976,836	100%	202,574	1,976,836				13,959	Kits Distributed	1,072	10,459	47,084,474	455,459,365	9.8
Residential Total	3,308,534	107%	3,524,885	38,664,765	91%	3,190,225	34,162,669						16,879	180,755	62,286,250	572,551,295	11.0
C&I and PS Prescriptive	3,435,223	100%	3,438,710	18,757,860	91%	3,129,228	17,069,664					Projects	16,557	90,316	5,699,170	34,195,020	5.5
C&I and PS Custom	784,010	100%	786,343	11,813,827	74%	581,893	8,742,214					Projects	3,079	46,255	-	-	15.0
Gas Optimization	75,889	100%	76,228	1,345,682	91%	69,367	1,224,562					Projects	367	6,479	-	-	17.7
Strategic Energy Management	246,568	114%	280,162	1,961,134	100%	280,162	1,961,134			\$ 421,586		Projects	1,482	10,376	-	-	7.0
C&I and PS Joint Retro-Commissioning	425,668	81%	345,575	2,902,830	94%	324,840	2,728,656			\$ 727,814		Projects	1,719	14,437	-		8.4
C&I and PS Joint New Construction	370,871	97%	361,270	7,442,162	54%	195,086	4,018,772					Projects	1,032	21,263	-	-	20.6
Commercial Food Service	39,098	101%	39,553	475,416	91%	35,992	432,612					Projects	190	2,289	74,334	1,062,981	12.0
Small Business	906,700	100%	906,881	7,078,212	92%	835,374	6,519,983				346	Projects	4,420	34,497	8,751,013	54,042,028	7.8
C&I and Public Sector Total	6,284,027	99%	6,234,722	51,777,122	87%	5,451,942	42,697,596						28,846	225,913	14,524,517	89,300,029	8.3
Income Eligible - CBA	213,032	100%	212,790	4,233,956	100%	212,790	4,233,956			\$ 1,092,483		Participants	1,126	22,402	58,864	588,645	19.9
Income Eligible - IHWAP-SF	49,918	100%	49,946	862,212	100%	49,946	862,212					Participants	264	4,562	81,762	817,618	17.3
Income Eligible - IHWAP-MF	28,817	85%	24,604	505,020	100%	24,604	505,020					Projects	130	2,672	32,965	329,645	20.5
Income Eligible - MF LIHEAP Kits	627,779	105%	659,273	6,817,740	100%	659,273	6,817,740	\$ 1.51	\$ 0.15	\$ 995,219		Kits Distributed	3,488	36,073	26,310,990	256,739,979	10.3
Income Eligible - IEMS	60,148	101%	60,987	1,132,088	100%	60,987	1,132,088	\$ 8.03	\$ 0.43	\$ 489,473	385	Projects	323	5,990	4,008,803	34,192,579	18.6
Income Eligible - PTA	1,472,463	100%	1,472,151	19,581,977	100%	1,472,151	19,581,977	\$ 0.33	\$ 0.03	\$ 490,041		Projects	7,789	103,608	459,218	2,755,307	13.3
Income Eligible - PHES	64,928	104%	67,425	382,452	100%	67,425	382,452			\$ 528,372		Projects	357	2,024	1,032,916	6,197,498	5.7
Income Eligible - AHNC	84,524	99%	83,796	1,449,671	100%	83,796	1,449,671				5	Projects	443	7,670	-	-	17.3
Income Eligible Total	2,601,609	101%	2,630,972	34,965,116	100%	2,630,972	34,965,116	\$ 1.79	\$ 0.13	\$ 4,717,536			13,920	185,000	31,985,518	301,621,270	13.3
EEPS Program Total	12.194.170	102%	12.390.579	125.407.003	91%	11.273.139	111.825.381	\$ 1.83	\$ 0.18	\$ 20.603.637			59.646	591.668	108.796.284	963.472.594	10.1
Other EEPS Portfolio Costs	12,101,110	10270	,000,010	,101,000	0170	,210,100	,020,001	• 1.00	÷ 0.10	\$ 3,871,526			00,010	001,000			10.1
EEPS Portfolio Total	12,194,170	102%	12,390,579	125,407,003	91%	11,273,139	111,825,381	\$ 2.17	\$ 0.22		NA		59,646	591,668	108,796,284	963,472,594	10.1



4. Joint Program Cost Effectiveness Summary

In 2018-2021, there were 10 programs and one pilot (referred to collectively as "programs") that were jointly implemented by ComEd, Nicor Gas, Peoples Gas (PGL), and North Shore Gas (NSG). Guidehouse used ComEd's and the gas utilities' cost-effectiveness test information each program year to prepare annual memos on cost-effectiveness test results of jointly implemented programs.¹³

Table 4-1 lists the programs jointly implemented by ComEd and the gas utilities and indicates which utilities jointly implemented the programs in 2018-2021.

Sector	Program	ComEd	Nicor Gas	PGL	NSG
Income Eligible	Single-Family Retrofits - CBA and IHWAP*	х			
	Illinois Home Weatherization Assistance Program (IHWAP)**		x	х	х
	Chicago Bungalow Association (CBA)**			х	
Income Eligible	Multi-Family Retrofits - IEMS and IHWAP*	х			
	Multi-Family IHWAP**		х	х	х
	Income Eligible Multifamily Savings (IEMS)**			х	х
Income Eligible	Public Housing Energy Savings	х	х	х	х
Income Eligible	Affordable Housing New Construction	х	х	х	х
Business & Public Sector	Coordinated Non-Residential New Construction	x	х	х	x
Business & Public Sector	Coordinated Retro Commissioning	x	х	x	х
Business & Public Sector	Upstream Commercial Food Service Equipment (Pilot)	x	х	х	x
Residential	Single Family Assessment	х	х	х	х
Residential	Elementary Education Kits	х	х	х	х
Residential	Multi-Family Assessments	х	х	х	х

Table 4-1. Summary of Jointly Implemented Programs for 2018-2021

* Programs reported by ComEd as combined.

** Programs reported by gas utilities individually

A summary of the TRC calculations for each joint program for each program year is shown in Table 4-2 through Table 4-5. The tables include values of each benefit and cost component for each program, when aggregated across all utilities that were involved in its joint implementation.

¹³ Annual memos are available on the SAG web site at: https://www.ilsag.info/evaluation-documents/trc_reports/



	•	,				
Sector	Program	All	ComEd	Nicor Gas	PG	NSG
Income Eligible	Single Family Retrofits – Illinois Home Weatherization Assistance Program (IHWAP)	0.49	0.38	0.65	0.70	0.76
Income Eligible	Multi-Family Retrofits - IHWAP	0.45	0.24	0.67	0.71	0.60
Income Eligible	Single Family Retrofits - Chicago Bungalow Association (CBA)	0.70	0.68	NA	0.71	NA
Income Eligible	Multi-Family Savings- IEMS	0.76	0.75	NA	0.79	4.73
Income Eligible	Public Housing Energy Savings	0.79	1.22	0.48	0.47	1.48
Income Eligible	Affordable Housing New Construction (AHNC)	0.62	0.53	0.82	0.88	NA
Income Eligible	Coordinated Non-Residential New Construction	2.00	2.03	2.52	1.47	1.37
Business & Public Sector	Coordinated Retro Commissioning	1.99	2.01	2.45	1.49	1.48
Business & Public Sector	Strategic Energy Management (SEM)	1.70	1.68	3.42	NA	NA
Residential	Home Energy Savings/HEA/Home Energy Jumpstart	1.40	1.01	2.17	3.18	3.83
Residential	Elementary Education Kits (EEE)	8.43	8.21	5.55	14.88	15.90
Residential	Multi-Family Assessments	1.80	1.36	2.31	2.09	1.27
Residential	Residential New Construction	2.02	0.99	2.61	NA	NA

Table 4-2. Summary of TRC Test Values by Program and Utility – CY2018

Source: Guidehouse analysis

Table 4-3. Summary of TRC Test Values by Program and Utility – CY2019

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Sector	Program	All	ComEd	Nicor Gas	PG	NSG
Income Eligible	Single Family Retrofits – Illinois Home Weatherization Assistance Program (IHWAP)	0.54	0.30	0.88	0.58	0.50
Income Eligible	Multi-Family Retrofits - IHWAP	0.47	0.44	0.25	0.79	0.64
Income Eligible	Single Family Retrofits - Chicago Bungalow Association (CBA)	0.45	0.34	NA	0.70	NA
Income Eligible	Multi-Family Savings– IEMS	0.49	0.37	NA	1.08	0.36
Income Eligible	Public Housing Energy Savings	0.61	0.30	0.91	0.94	0.81
Income Eligible	Affordable Housing New Construction (AHNC)	0.57	0.50	1.48	2.01	NA
Income Eligible	Coordinated Non-Residential New Construction	1.23	1.05	3.36	1.72	1.83
Business & Public Sector	Coordinated Retro Commissioning	1.11	0.94	3.92	2.75	3.40
Residential	Home Energy Savings/HEA/Home Energy Jumpstart	0.99	0.68	1.58	2.40	2.63
Residential	Elementary Education Kits (EEE)	6.06	3.55	6.86	18.31	20.39
Residential	Multi-Family Assessments	2.01	1.06	2.09	2.65	1.50
Residential	Residential New Construction	1.17	0.58	1.52	NA	NA

Source: Guidehouse analysis

Table 4-4. Summary of TRC Test Values by Program and Utility – CY2020

Sector	Program	All	ComEd	Nicor Gas	PGL	NSG



Income Eligible	Single-Family Retrofits - CBA and IHWAP	0.66	0.68	0.59	0.72	0.28
Income Eligible	Multi-Family Retrofits - IEMS and IHWAP	0.65	0.72	0.27	0.55	0.40
Income Eligible	Public Housing Energy Savings	0.40	0.31	0.78	0.44	
Income Eligible	Affordable Housing New Construction	1.07	0.67	2.72	1.94	
Business & Public Sector	Coordinated Non-Residential New Construction	2.16	2.19	2.52	1.58	1.67
Business & Public Sector	Coordinated Retro Commissioning	2.88	2.86	2.64	3.25	3.76
Business & Public Sector	Upstream Commercial Food Service Equipment (Pilot)	1.56	0.35	2.24	2.69	1.60
Residential	Single Family Assessment	1.30	0.90	1.96	1.38	2.44
Residential	Elementary Education Kits	6.49	4.56	7.20	17.07	21.84
Residential	Multi-Family Assessments	2.27	0.79	4.34	2.95	1.68

Source: Guidehouse analysis

Table 4-5. Summary of TRC Test Values by Program and Utility – CY2021

Sector	Program	All	ComEd	Nicor Gas	PGL	NSG
Income Eligible	Single-Family Retrofits - CBA and IHWAP	0.74	0.76	0.62	0.85	1.42
Income Eligible	Multi-Family Retrofits - IEMS and IHWAP	0.77	0.84	0.28	0.59	1.27
Income Eligible	Public Housing Energy Savings	0.55	0.61	0.70	0.34	*
Income Eligible	Affordable Housing New Construction	1.14	0.81	1.93	2.76	*
Business & Public Sector	Coordinated Non-Residential New Construction	2.09	2.07	2.68	1.72	1.82
Business & Public Sector	Coordinated Retro-Commissioning	4.04	4.36	2.81	2.68	3.07
Business & Public Sector	Upstream Commercial Food Service Equipment (Pilot)	1.89	1.39	2.40	1.95	1.49
Residential	Single Family Assessment	2.45	2.64	2.44	1.32	2.88
Residential	Elementary Education Kits	8.86	6.52	7.30	19.11	19.78
Residential	Multi-Family Assessments	1.87	1.37	2.56	2.09	1.10

* NSG did not implement projects in CY2021.