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Attorneys and Counselors at Law
123 South Calhoun Street
P.O. Box 391 32302
Tallahassee, FL 32301
P: (850) 224-9115
F: (850) 222-7560
ausley.com

March 28, 2024

VIA ELECTRONIC FILING

Mr. Adam J. Teitzman
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket No. 20240018-EG;
Commission Review of Numeric Conservation Goals (Peoples Gas System, Inc.)

Dear Mr. Teitzman:

Attached for filing on behalf of Peoples Gas System, Inc. is the company's Petition for Approval of Demand Side Management Goals.

Thank you for your assistance in connection with this matter.

Sincerely,

A handwritten signature in blue ink that reads 'V. Ponder'.

Virginia Ponder

VLP/ne
Attachment

cc: All Parties

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Approval of Numeric)
Conservation Goals for Peoples)
Gas System, Inc.)
_____)

DOCKET NO. 20240018-EG

FILED: March 28, 2024

PETITION

Pursuant to Sections 366.81 and 366.82, Florida Statutes, and Rules 25-17.001 and 25-17.0021, Florida Administrative Code, Peoples Gas System Inc. (“Peoples” or the “company”) petitions the Florida Public Service Commission ("Commission") to approve the company's proposed numeric conservation goals for the years 2025 through 2034. In support of this petition, the company states:

1. Peoples is a natural gas distribution public utility who provides service to over 460,000 customers in 39 of Florida’s 67 counties and is subject to the Commission’s jurisdiction under Chapter 366, Florida Statutes.

2. Peoples' address is 702 North Franklin Street, Tampa, Florida 33601. Correspondence, notices, orders, and other documents concerning this petition should be sent to:

J. Jeffry Wahlen
Virginia L. Ponder
Malcolm N. Means
Ausley McMullen
123 S. Calhoun St.
Tallahassee, FL 32301-1517
jwahlen@ausley.com
vponder@ausley.com
mmeans@ausley.com

Paula K. Brown
regdept@tecoenergy.com
Manager, Regulatory Coordination
Peoples Gas System, Inc.
Post Office Box 111
Tampa, Florida 33601-0111

Karen L. Bramley
klbramley@tecoenergy.com
Director, Regulatory Affairs
Peoples Gas System, Inc.
Post Office Box 2562
Tampa, FL 33601-2562

3. Peoples is subject to the Florida Energy Efficiency and Conservation Act ("FEECA"), Sections 366.80-83 and 403.519, Florida Statutes. FEECA requires the Commission to establish numeric conservation goals for each affected utility to increase the efficiency of energy consumption, increase the development of demand-side renewable energy systems, reduce and control the growth rates of electric consumption and weather-sensitive peak demand, and increase the conservation of expensive resources, such as petroleum fuels. Pursuant to Section 366.82(6), Florida Statutes, the Commission must review a utility's conservation goals no less than every five years.

4. FEECA is implemented by Rules 25-17.001, General Information, and 25-17.0021, Goals for Electric Utilities, Florida Administrative Code (the "FEECA Electric Rules"). Peoples is the only natural gas utility subject to FEECA and there are no regulations to date addressing goals for natural gas utilities. Accordingly, to fully meet FEECA's statutory requirements, Peoples develops and submits for approval, its proposed natural gas demand side management ("DSM") goals under the FEECA Electric Rules.

5. As a result of Peoples' evaluations, the company proposes the following numeric conservation goals for the 2025 to 2034 goals period which the company has determined to be reasonably achievable in the residential and commercial classes within Peoples' service area over a ten-year period:

Year	Residential Annual	Residential Cumulative	Commercial Annual	Commercial Cumulative	Total Annual	Total Cumulative
2025	344,604	344,604	434,348	434,348	778,952	778,952
2026	349,768	694,372	443,868	878,216	793,636	1,572,588
2027	355,274	1,049,646	412,777	1,290,993	768,051	2,340,639
2028	359,537	1,409,183	419,761	1,710,754	779,298	3,119,937
2029	362,084	1,771,267	427,445	2,138,198	789,529	3,909,465
2030	366,351	2,137,618	434,429	2,572,627	800,780	4,710,245
2031	370,926	2,508,543	441,413	3,014,040	812,339	5,522,584
2032	374,198	2,882,741	451,291	3,465,331	825,488	6,348,072
2033	375,107	3,257,848	458,275	3,923,606	833,382	7,181,454
2034	376,334	3,634,182	465,259	4,388,865	841,593	8,023,047

6. The testimony of Charles T. Morgan II is filed contemporaneously with this petition, along with the exhibit and schedules attached thereto which sets forth the company's ten-year projections of the total cost-effective therm savings reasonably achievable through DSM programs in the company's service area over a ten-year period.

7. As demonstrated by the testimony of witness Morgan, Peoples' proposed numeric conservation goals for the period 2025 through 2034 are reasonable, consistent with the requirements of section 366.82, Florida Statutes, and appropriately conform to Rule 25-17.0021, Florida Administrative Code.

8. Peoples is not aware of any disputed issues of material fact regarding the matters asserted herein.

9. Peoples is entitled to relief pursuant to Sections 366.81 and 366.82, Florida Statutes, and Rule 25-17.0021, Florida Administrative Code.

WHEREFORE, for the reasons above and more fully supported by the testimony and exhibits filed herewith, Peoples respectfully requests the Commission approve the company's proposed numeric conservations goals as set forth in this filing pursuant to section 366.82, Florida Statues and Rule 25-17.0021, Florida Administrative Code, and grant such other relief as is just and reasonable under the facts and law as determined by the Commission.

DATED this 28th day of March, 2024.

Respectfully submitted,



J. JEFFRY WAHLEN
jwahlen@ausley.com
VIRGINIA PONDER
vponder@ausley.com
MALCOLM N. MEANS

mmeans@ausley.com
Ausley McMullen
Post Office Box 391
Tallahassee, Florida 32302
(850) 224-9115

ATTORNEYS FOR PEOPLES GAS SYSTEM, INC.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Petition filed on behalf of Peoples Gas System, Inc., has been furnished by electronic mail on this 28th day of March, 2024 to the following:

Jacob Imig
Jonathan Rubottom
Office of General Counsel
Florida Public Service Commission
Room 390L – Gerald L. Gunter Building
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850
jimig@psc.state.fl.us
jrubotto@psc.state.fl.us

Walt L. Trierweiler
Patricia A. Christensen
Office of Public Counsel
111 West Madison Street – Room 812
Tallahassee, FL 32399-1400
trierweiler.walt@leg.state.fl.us
christensen.patty@leg.state.fl.us



ATTORNEY



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 20240018-EG

IN RE: COMMISSION REVIEW OF NUMERIC
CONSERVATION GOALS
PEOPLES GAS SYSTEM, INC.

TESTIMONY AND EXHIBIT
OF
CHARLES T. MORGAN II

FILED: March 28, 2024

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **CHARLES T. MORGAN II**

5
6 **Q.** Please state your name, business address, by whom you are
7 employed, and in what capacity.

8
9 **A.** My name is Charles T. Morgan II. My business address is
10 702 North Franklin Street, Tampa, Florida 33602. I am
11 employed by Peoples Gas System, Inc. ("Peoples" or "the
12 company") as the Supervisor of Conservation Programs in
13 the Regulatory Affairs Department.

14
15 **Q.** Please describe your educational and employment
16 background.

17
18 **A.** I graduated from Florida State University in 2009 with a
19 Bachelor of Science in Social Science. My work experience
20 includes seven years of utility regulatory experience,
21 including three years with the Florida Public Service
22 Commission ("Commission") as a Public Utility Analyst and
23 four years as a Regulatory Analyst with Peoples before
24 beginning my current role in 2024. In my current position,
25 I am responsible for Peoples' Natural Gas Conservation Cost

1 Recovery ("NGCCR") Clause and other Conservation and
2 demand-side management ("DSM") activities.

3
4 **Q.** What is the purpose of your direct testimony in this
5 docket?

6
7 **A.** The purpose of my direct testimony is to present for
8 Commission review and approval Peoples' proposed DSM
9 goals for the 2025-2034 period. The company's proposed
10 goals are based on analytical work performed by the
11 company. My testimony demonstrates that the proposed
12 goals are based on an adequate assessment of the full
13 technical potential of all available demand-side and
14 supply-side conservation and efficiency measures in
15 reasonable conformance with Rule 25-17.0021, Florida
16 Administrative Code, Goals for Electric Utilities. ("the
17 Goals for Electric Utilities Rule").

18
19 **Q.** Are you sponsoring any exhibits with your direct
20 testimony?

21
22 **A.** Yes. I am sponsoring Exhibit No. CTM-1, entitled "Exhibit
23 of Charles Morgan", which was prepared under my direction
24 and supervision and accompanies my prepared direct
25 testimony. My exhibit consists of six (6) documents

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entitled:

Document No. 1 - 2025 Technical Potential Measure List

Document No. 2 - Technical Potential Summary by End-use Category and Customer Segment

Document No. 3 - 2025 Technical Potential - Measure Data

Document No. 4 - Cost-Effectiveness Results of Proposed DSM Programs

Document No. 5 - Achievable Potential Measure List

Document No. 6 - Breakdown of Estimated Costs by Program and Year

PROCESS TO DEVELOP DSM GOALS

Q. Please provide an overview of Peoples' overall process used to develop the DSM goals for this proceeding.

A. The development of Peoples' DSM goals involved six distinct steps:

1. Development of a measure list.
2. Performance of a technical potential study.
3. Placement of measures from the technical potential study into the company's current Commission-approved DSM

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programs.

4. Performance of the Participants and the Gas Rate Impact Measure ("GRIM") cost-effectiveness tests on the company's programs in conformance with the Commission's Cost Effectiveness Manual for Natural Gas Utility Demand Side Management Programs.

5. Projection of the participation in each DSM program based on historical participation, expected market forces, and proposed changes to the programs.

6. The summation of therm savings for each measure projected to be installed to arrive at the company's Achievable Potential.

MEASURE LIST AND PERFORMANCE OF TECHNICAL POTENTIAL STUDY

- Q.** Please describe the process Peoples used to develop its technical potential study for this proceeding in more detail.

- A.** In building its technical potential, Peoples sought to find the therm savings realized if each of its customers replaced a baseline piece of equipment according to the Florida Building Code, Federal Appliance Standard, or typical model (if building codes or appliance standards do not apply) with the most efficient model on the market. First, Peoples

1 established baseline conditions over the 2025-2034 DSM
2 goals period by extending its most recent load forecast
3 through 2034. The company then developed a measure list for
4 each customer segment (Residential, Commercial, and
5 Industrial), beginning with the measure list from our
6 previous DSM goalsetting proceeding in Docket No. 20180186-
7 EG. The company researched Technical Reference Manuals from
8 other states and Energy Star developments and consulted
9 with internal natural gas technology experts to determine
10 the measures that should be added to its new measure list.

11
12 Next, Peoples conducted a survey on a sample of its
13 residential customers to determine what percentage of
14 customers had each type of gas equipment. The study found
15 that 89.74 percent of residential customers have gas water
16 heating (78 percent of those had tank water heaters versus
17 22 percent tankless), 80.34 percent of customers have gas
18 cooking equipment, 42.74 percent have gas clothes drying,
19 and 55.56 percent have gas heating.

20
21 In developing its 2025 technical potential, Peoples
22 examined the technical potential from its last DSM
23 goalsetting proceeding. The company researched each measure
24 individually and updated the usage assumptions, Florida
25 Building Code requirements, Federal Appliance Standard

1 requirements, and applicable population. For each measure,
2 Peoples found the efficiency of the most efficient model on
3 the market, primarily using the U.S. Energy Information
4 Administration's ("EIA") Updated Buildings Sector Appliance
5 and Equipment Costs and Efficiencies, published March 2023
6 ("EIA Report") or the most efficient model listed by Energy
7 Star. The difference in therm usage between the baseline
8 appliance and the most efficient model on the market
9 represents the technical potential of each measure.

10
11 The individual measures were examined to determine which
12 provided the greatest energy savings. Any measure surpassed
13 by another with greater efficiency was eliminated from the
14 technical potential study. The therm savings from the most
15 efficient measures were totaled to arrive at the technical
16 potential for each customer segment and end-use category.
17 The overall technical potential was then found by summing
18 up all customer segments and equipment categories.

19
20 **Q.** Please identify how many DSM measures were included in the
21 technical potential.

22
23 **A.** The company's DSM measure list was comprised of the
24 following:

25 Residential Energy Efficiency Measures: 33

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Commercial Energy Efficiency Measures: 31

Industrial Energy Efficiency Measures: 25

A comprehensive list of all the DSM measures the company used in the development of its technical potential study is included in Document No. 1 of my exhibit.

Q. How does this measure list compare to Peoples' prior DSM goalsetting proceeding in Docket No. 20180186-EG?

A. Peoples added Energy Star Tankless Water Heaters to the measure lists of each customer segment and Energy Star Furnaces to its Residential Measure List. These are new additions to the Energy Star portfolio since Peoples last filed DSM Goals. Otherwise, the company's research indicated that Peoples' previous measure list was comprehensive.

Q. Does the measure list contain demand-side renewable energy systems?

A. Yes. Section 366.82, Florida Statutes, defines the term "demand-side renewable energy" to mean a system located on a customer's premises generating thermal or electric energy using Florida renewable energy resources and primarily

1 intended to offset all or part of the customer's electricity
2 requirements provided such system does not exceed 2
3 megawatts." Peoples included the demand-side renewable
4 thermal energy systems that it is aware of that reduce
5 natural gas usage.

6
7 **Q.** What were the primary sources of information used in the
8 technical potential study?

9
10 **A.** The following publications and websites represent the
11 primary sources of information:

- 12 • Updated Buildings Sector Appliance and Equipment Costs
13 and Efficiencies, published March 2023
- 14 • ECFR.gov (Electronic Code of Federal Regulations).
- 15 • EnergyStar.gov.
- 16 • Energy.gov/FEMP (Federal Energy Management Program).
- 17 • Estimating Daily Domestic Hot-Water Use in North American
18 Homes (Florida Solar Energy Center).

19
20 **Q.** What is the company's technical potential?

21
22 **A.** Peoples' total technical potential is 304,020,082 therms.
23 Document No. 2 of my exhibit provides a breakdown of the
24 technical potential by customer segment and end-use
25 category. Document No. 3 of my exhibit provides the measure

1 data for each measure that contributed to Peoples' final
2 Technical Potential.

3

4 **Q.** Did the company ensure the technical potential study
5 considered the market segments specified in the Goals for
6 Electric Utilities Rule?

7

8 **A.** Yes. Peoples performed its technical potential study using
9 each of the market segments specified in the Goals for
10 Electric Utilities Rule - Residential, Commercial, and
11 Industrial.

12

13 **Q.** Did the company perform the technical potential study in
14 consideration of each major end-use category as specified
15 in the Goals for Electric Utilities Rule?

16

17 **A.** No. The company considered only those end-use categories
18 that apply to the natural gas industry in its technical
19 potential study. Specifically, the following end-use
20 categories within the Goals for Electric Utilities Rule do
21 not apply to the natural gas industry and were not
22 considered by the company:

23

- lighting efficiencies;

24

- peak load shaving;

25

- refrigeration/freezing equipment; and

- power equipment/motor efficiency.

THE PARTICIPANT AND GRIM COST-EFFECTIVENESS TESTS AND DEVELOPMENT OF THE ACHIEVABLE POTENTIAL

Q. Please describe the process Peoples used in conducting the Participants and GRIM cost-effectiveness tests.

A. Peoples placed the measures from its technical potential study into the company's current Commission-approved DSM programs. Peoples' Commission-approved programs include: (1) Residential New Construction; (2) Residential Retrofit; (3) Residential Retention; (4) Commercial New Construction; (5) Commercial Retrofit; (6) Commercial Retention; (7) Commercial Electric Replacement; and (8) Commercial Retrofit Combined Heat and Power. The term "Retrofit" refers to electric-to-gas DSM programs and the term "Retention" refers to gas-to-gas DSM programs. The company compiled the measures into programs to run the Participants and GRIM cost-effectiveness testing on a program level. The company then input all the costs associated with each measure to arrive at GRIM and Participants cost-effectiveness scores.

The therm savings for each measure were calculated using

1 the same baseline from the technical potential study, but
2 the company replaced the most efficient model on the market
3 with (1) models that Peoples' customers commonly install
4 when participating in its DSM programs; (2) appliances that
5 meet Energy Star requirements; or (3) the typical installed
6 appliance per the EIA Report. Participation was projected
7 for the full 20-year term to complete cost-effectiveness
8 testing.

9
10 **Q.** What are the results of the Participants and GRIM cost-
11 effectiveness tests?

12
13 **A.** All of Peoples' proposed DSM programs pass the Participants
14 and GRIM tests with scores of at least 1.0 or greater.
15 Peoples also ran cost-effectiveness testing on a Retention
16 application of the Commercial Combined Heat and Power
17 program, which did not pass the GRIM or Participant tests.
18 This program was eliminated from Peoples' last DSM Plan in
19 Docket No. 20190210-EG due to failure to achieve cost-
20 effectiveness. The company is not proposing to offer this
21 program in this proceeding. The cost-effectiveness results
22 for all of Peoples' proposed DSM programs can be found in
23 Document No. 4 of my exhibit.

24
25 **Q.** Please describe the company's development of its Achievable

1 Potential.

2

3 A. The calculated therm savings for each measure projected to
4 be installed over the 10-year DSM goals period was
5 aggregated to arrive at Peoples' Achievable Potential. The
6 company used the same therm savings it calculated for cost-
7 effectiveness testing as the therm savings for each
8 appliance installed in its Achievable Potential. Peoples
9 considered the customer growth in the company's long-term
10 forecast and consulted with customer-facing personnel on
11 factors concerning DSM program participation going forward.
12 The company then reviewed historical participation in its
13 DSM programs since the inception of its current DSM goals
14 and considered how proposed changes to its DSM programs
15 will impact participation. Taking these considerations into
16 account, Peoples projected participation for the future.

17

18 Q. What is Peoples' total Achievable Potential under the
19 Participants and GRIM cost-effectiveness tests?

20

21 A. Peoples' total Achievable Potential for 2025-2034 is
22 8,023,047 therms.

23

24 Q. Are the company's Interruptible and Wholesale customers
25 included in Peoples' Achievable Potential?

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A. No. Peoples' Interruptible and Wholesale customers are not included in the company's Achievable Potential because they are not subject to the Natural Gas Conservation Cost Recovery Clause and are not eligible to participate in the company's DSM programs, pursuant to Order No. 23576, issued on October 3, 1990, in Docket No. 1990002-EG. These customers are, however, included in the company's technical potential study.

Q. Did building codes and appliance standards have an impact on Peoples' Achievable Potential?

A. Yes, Peoples is aware of four new final rules from the U.S. Department of Energy ("DOE") that address appliance standards for gas equipment. The DOE's residential gas furnace rule takes effect in 2028 and will require an annual fuel utilization efficiency of at least 95 percent. The DOE's final rule for commercial water heaters requires tank models to reach 95 percent thermal efficiency and tankless models to reach 96 percent thermal efficiency starting in 2026. On February 29, 2024, DOE announced a final rule for residential clothes dryers, which requires a minimum Combined Energy Factor of 3.48 for standard sized gas clothes dryers. The company adjusted the efficiencies for

1 these measures beginning on the effective dates of these
2 final rules in its cost-effectiveness testing and its DSM
3 goals. The company plans to petition the Commission for
4 approval of changes to its affected DSM programs prior to
5 these rules going into effect.

6
7 DOE also issued a final rule on gas cooktops to take effect
8 in 2028. However, according to DOE, 97 percent of gas
9 cooktop models on the market will be unaffected by the new
10 standard. Therefore, Peoples does not anticipate this rule
11 impacting its DSM goals or programs.

12
13 **Q.** Will you provide a list of cost-effective measures per the
14 Participants and GRIM tests that contributed to the
15 Achievable Potential?

16
17 **A.** Yes, the list of measures included in Peoples' DSM programs
18 that supported the Participant and GRIM Tests and
19 contributed to the Achievable Potential are included in
20 Document No. 5 of my exhibit.

21
22 OTHER CONSIDERATIONS UNDER THE GOALS FOR ELECTRIC UTILITIES RULE

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24 **Q.** How did the company's analysis take into consideration free
25 riders?

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A. Peoples considered free riders by developing the proposed natural gas DSM goals based upon current Commission-approved DSM programs. In the company's current DSM portfolio, incentive rates were initially designed to minimize, as much as practical, the potential for free riders.

Q. How did the company's analysis take into consideration overlapping measures and rebound effects?

A. Peoples accounted for overlapping effects by only counting the measures that provided the maximum technical potential. Less efficient measures were not included in the final technical potential. Peoples did not find substantial evidence in its analysis that rebound effects occur when customers install a new energy-efficient gas measure.

REASONABLY ACHIEVABLE DSM GOALS

Q. What are Peoples' DSM goals that are appropriate and reasonably achievable for the period 2025-2034 based upon the Participants and GRIM cost-effectiveness tests, under the Goals for Electric Utilities Rule?

1 **A.** The appropriate and reasonable DSM goals for each year
2 2025-2034 are as follows:

Year	Residential Annual	Residential Cumulative	Commercial Annual	Commercial Cumulative	Total Annual	Total Cumulative
2025	344,604	344,604	434,348	434,348	778,952	778,952
2026	349,768	694,372	443,868	878,216	793,636	1,572,588
2027	355,274	1,049,646	412,777	1,290,993	768,051	2,340,639
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2033	375,107	3,257,848	458,275	3,923,606	833,382	7,181,454
2034	376,334	3,634,182	465,259	4,388,865	841,593	8,023,047

10
11 **Q.** How do the company's proposed DSM goals for the upcoming
12 period of 2025-2034 compare to the company's proposed DSM
13 goals for the 2019-2028 period, as submitted in Docket
14 No. 20180186-EG?

15
16 **A.** Peoples' proposed residential DSM goals for 2025-2029 are
17 similar to those set for 2019-2024 in the company's prior
18 goalsetting docket. Over the past four years, participation
19 in Peoples' Residential Retrofit and Retention DSM programs
20 has not kept pace with the company's projections in our
21 2019-2028 DSM goals. Participation in these residential
22 programs has trended downward since 2019. In contrast,
23 participation in the company's Residential New Construction
24 program has been strong in recent years and continues to
25 trend upward. The increase in Residential New Construction

1 activity somewhat offsets the decrease in activity in
2 Peoples' other residential programs to arrive at similar
3 goals. The appliance mix has also shifted toward more
4 tankless water heaters and fewer furnaces, ranges, and
5 dryers, resulting in greater therm savings.

6
7 Peoples' proposed commercial DSM goals are significantly
8 higher than those currently in place. Over the past few
9 years, participation in the company's commercial DSM
10 programs increased substantially. Thus, the company's
11 participation projections are much higher than those made
12 in the company's 2019-2028 DSM goals. The company believes
13 that this increase in participation can be attributed to
14 the current economic climate in Florida and a rebound from
15 the COVID-19 Pandemic. Beginning in 2027, the new Federal
16 Appliance Standards begin to have an impact with a
17 noticeable decrease in Peoples' commercial goals.

18
19 **Q.** What are the overall estimated annual program costs for the
20 upcoming period of 2025-2034?

21
22 **A.** The overall estimated program costs for the programs
23 contributing to Peoples' 2025-2034 DSM Goals are
24 \$184,552,309. Please see Document No. 6 of my Exhibit for
25 a full breakdown of the costs by program and year.

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Q. Are Peoples' proposed goals based on an adequate assessment of the full technical potential of all available demand-side and supply-side conservation and efficiency measures, including demand-side renewable energy systems?

A. Yes. The company's proposed goals are based on an adequate assessment of the full technical potential of all available demand-side and supply-side conservation and efficiency measures, including demand-side renewable energy systems. Peoples' technical potential includes a comprehensive measure list of demand-side conservation measures and renewable energy systems. Supply-side efficiencies include improvements in the transmission and delivery of natural gas. Therefore, Peoples' motivation to deliver natural gas service to its customers in the most economical and efficient manner possible makes executing supply-side efficiencies a naturally occurring result.

Q. Does this conclude your direct testimony?

A. Yes, it does.

**Peoples Gas System, Inc.
2025 Technical Potential Measure List**

Residential	
Category	Measure
<i>Water Heating</i>	
	Tank Water Heater
	Tankless Water Heater
	Condensing Water Heater
	Energy Star Tank Water Heater
	Energy Star Tankless Water Heater
	Solar Water Heater
	Low Flow Shower Head
	Low Flow Faucet Aerator
	Water Heater Temperature Check Card
	Energy Star Dishwasher
	Energy Star Clothes Washer
	Front-Loading Clothes Washer
	Pipe Insulation
<i>Cooking</i>	
	Range/Cooktop
	Oven
<i>Pool Heating</i>	
	Pool Heater
	Solar Pool Heater
	Insulating Pool Cover
<i>Space Conditioning</i>	
	HVAC Tune-up
	Furnace
	Energy Star Furnace
	Hydronic Heating
	Gas Heat Pump
	Programmable Thermostat
	Duct Repair
	Ceiling Insulation
	Wall Insulation
	Fireplace Ignition Control
	Fireplace Pilotless Ignition
	Weather Stripping
	Energy Star Windows
<i>Clothes Drying</i>	
	Clothes Dryer
	Energy Star Clothes Dryer

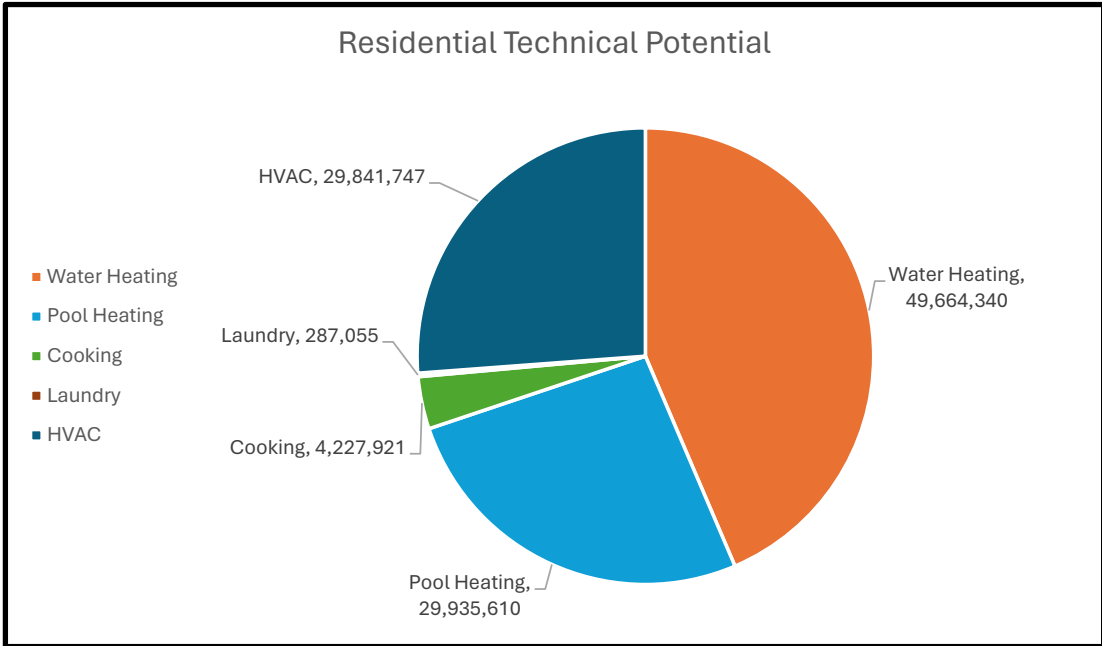
Peoples Gas System, Inc.
2025 Technical Potential Measure List

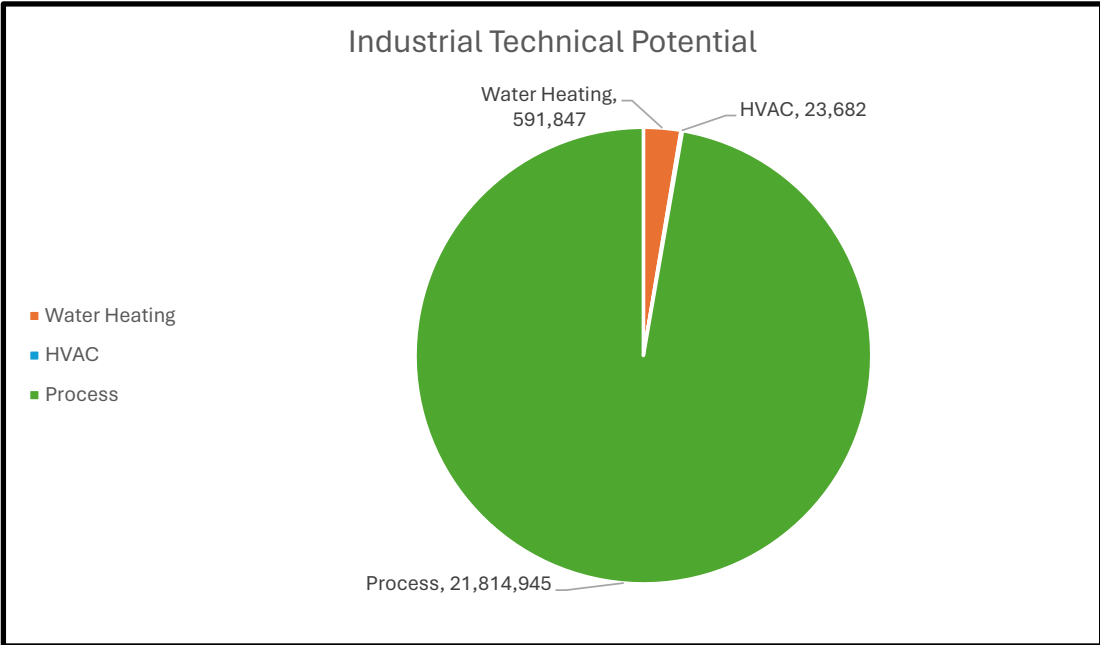
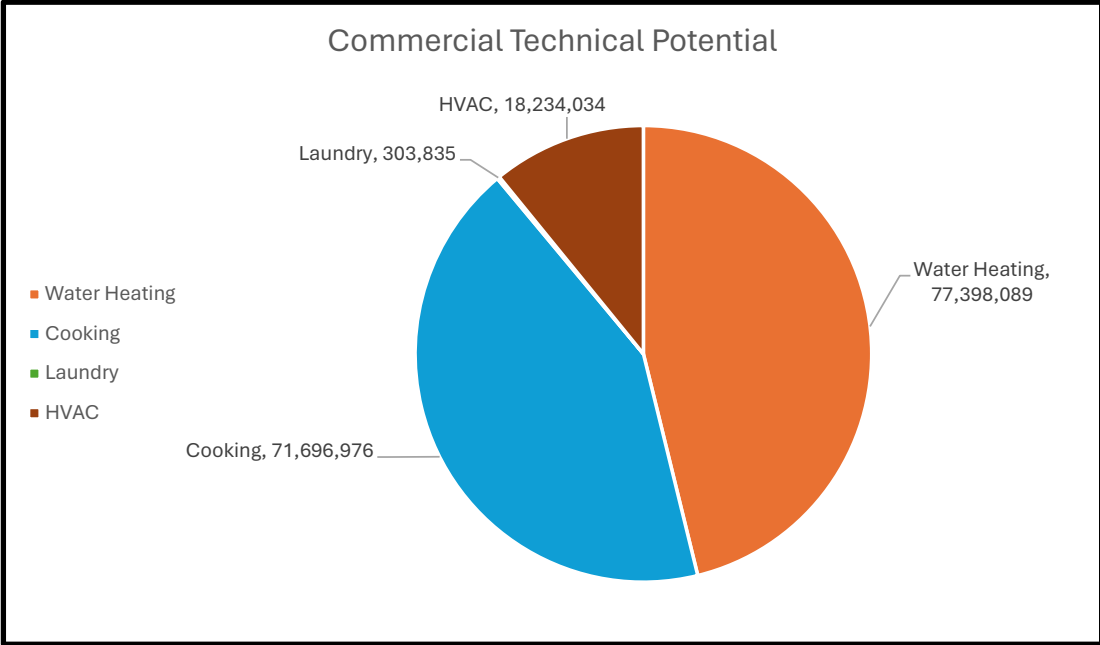
Commercial	
Category	Measure
<i>Water Heating</i>	
	Tank Water Heater
	Tankless Water Heater
	Condensing Water Heater
	Energy Star Tank Water Heater
	Energy Star Tankless Water Heater
	Low Flow Faucet Aerator
	Low Flow Shower Head
	Water Heater Temperature Check Card
	Pipe Insulation
	Energy Star Clothes Washer
	Energy Star Dishwasher
<i>Cooking</i>	
	Range/Cooktop
	Convection Oven
	Energy Star Convection Oven
	Fryer
	Energy Star Fryer
	Griddle
	Energy Star Griddle
	Steam Cooker
	Energy Star Steam Cooker
<i>Space Conditioning</i>	
	Furnace
	Gas Heat Pump
	Demand Control Ventilation
	Programmable Thermostat
	Duct Repair
	Ceiling Insulation
	Wall Insulation
<i>Laundry</i>	
	Clothes Dryer
<i>Other</i>	
	BAS Controller
	Drain Water Heat Recovery
	Combined Heat and Power

Peoples Gas System, Inc.
2025 Technical Potential Measure List

Industrial	
Category	Measure
Water Heating	
	Tank Water Heater
	Energy Star Tank Water Heater
	Tankless Water Heater
	Energy Star Tankless Water Heater
	Condensing Boiler/Water Heater
	Boiler Tune-up
	Boiler Advanced Controls
	Boiler Blowdown Recovery
	Boiler Combustion Air Preheat
	Boiler Feedwater Economizer
	Boiler High Efficiency Burner
	Condensate Return
Space Conditioning	
	Duct Repair
	Furnace
	Energy Star Furnace
	Gas Heat Pump
	Programmable Thermostat
	Ceiling Insulation
	Wall Insulation
	BAS Controller
Other	
	Infrared Heating Process
	Direct Heating Process
	Exhaust Gas Heat Recovery
	Combined Heat and Power
	Dryer

Peoples Gas System, Inc.	
Technical Potential Summary	
<i>By End-use Category and Customer Segment</i>	
End-use Category	Technical Potential (Therms)
Residential	
Cooking	4,227,921
HVAC	29,841,747
Laundry	287,055
Pool Heating	29,935,610
Water Heating	49,664,340
Total	113,956,673
Commercial	
Cooking	71,696,976
HVAC	18,234,034
Laundry	303,835
Water Heating	77,398,089
Total	167,632,935
Industrial	
HVAC	23,682
Process	21,814,945
Water Heating	591,847
Total	22,430,474
Overall Total	304,020,082





Peoples Gas System, Inc.		
2025 Technical Potential Measure Data		
Residential		
Measure	Data Category	Value
Low Flow Shower Head	Base GPM	2.5
	New GPM	1
	Shower Time (Min.)	7.8
	Number of People	2.57
	Showers/Person/Day	0.7
	Delta T	24
	Applicable Population	409,608
	Therm Savings/Install	19.2
Low Flow Faucet	Base GPM	2.2
	New GPM	1
	Wash Time (Min.)	0.33
	Number of People	2.57
	Washes/Person/Day	7.8
	Delta T	24
	Applicable Population	409,608
	Therm Savings/Install	7.2
Water Heater Temp. Check Card	Base Gallons/Day	56.42
	Number of People	2.57
	Delta T	5
	Applicable Population	388,049
	Therm Savings/Install	27.6
Hot Water Pipe Insulation	R Value Initial	1
	R Value New	3
	Length of Pipe (ft.)	6
	Diameter	0.75
	Pi	3.14
	Delta T	39
	Applicable Population	43,117
	Therm Savings/Install	2.5

Peoples Gas System, Inc.			
2025 Technical Potential Measure Data			
Residential (Cont.)			
Measure	Data Category	Value	
Tankless Energy Star Water Heater	Base Efficiency (tank)	0.61	
	Base Efficiency (tankless)	0.81	
	New Efficiency	0.97	
	Gallons per Day	56.42	
	Delta T	39	
	Applicable Population		
	from Tank	217,308	
	from Tankless	84,509	
	Therm Savings/Install		
Solar Water Heater	Base Efficiency (tank)	0.61	
	Base Efficiency (tankless)	0.81	
	Gallons per Day	56.42	
	Delta T	39	
	Applicable Population		
	from Tank	93,132	
	from Tankless	36,218	
	Therm Savings/Install		
Energy Star Dishwasher	Gal/Cycle Base	5	
	Gal/Cycle New	2.36	
	Loads per Day	0.46	
	Delta T	39	
	Applicable Population	232,830	
	Therm Savings/Install	1.8	
Front Loading Washer	Base IWF	4.7	
	New IWF	2.7	
	Annual Loads	280	
	Size of Washer (CF)	4.5	
	Delta T	39	
	Applicable Population	431,166	
	Therm Savings/Install	10.233	

Peoples Gas System, Inc.		
2025 Technical Potential Measure Data		
Residential (Cont.)		
Measure	Data Category	Value
Gas Pool Heating	Base Efficiency	0.82
	New Efficiency	0.96
	Hours per Year	720
	Heater Rating	250,000
	Applicable Population	23,543
	Therm Savings/Install	320
Solar Pool Heating	Base Efficiency	0.82
	Hours per Year	720
	Heater Rating	250,000
	Applicable Population	10,090
	Therm Savings/Install	1,800
Insulating Pool Cover	Base Efficiency	0.82
	Hours per Year	720
	Heater Rating	250,000
	Therm Savings/Install	180
Cooktop	Base Efficiency	0.4
	New Efficiency	0.52
	Cook Time per Day (Min.)	30
	Cooktop Rating	10,000
	Applicable Population	386,003
	Therm Savings/Install	10.529
Oven	Base Efficiency	6.6
	New Efficiency	7.3
	Cook Time per Day (Min.)	30
	Cooktop Rating	16,000
	Applicable Population	385,561
	Therm Savings/Install	0.424
Energy Star Dryer	Base Efficiency	3.3
	New Efficiency	3.5
	Loads per Year	280
	Pounds per Load	8.45
	Applicable Population	205,349
	Therm Savings/Install	1.398

Peoples Gas System, Inc.		
2025 Technical Potential Measure Data		
Residential (Cont.)		
Measure	Data Category	Value
Energy Star Furnace	Base Efficiency	0.8
	New Efficiency	0.99
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	45
	Applicable Population	262,433
	Therm Savings/Install	68.389
Gas Heat Pump	Base Efficiency	0.8
	New Efficiency	1.4
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	120
	Applicable Population	407.250
	Therm Savings/Install	4,511
Programmable Thermostat	Base Efficiency	0.8
	Avg. Home Size	1,648
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	45
	Delta T Adjust	5
	Applicable Population	157,497
Duct Repair	Therm Savings/Install	0.007
	Base Efficiency	0.78
	Efficiency Restored	0.8
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	45
	Applicable Population	213,555
	Therm Savings/Install	7.127

Peoples Gas System, Inc.		
2025 Technical Potential Measure Data		
Residential (Cont.)		
Measure	Data Category	Value
Ceiling Insulation	Base Efficiency (R Value)	10
	New Efficiency (R Value)	
	Flat to Low Pitch	49
	Regular Pitch	60
	Avg. Home Size	1,648
	Hours per Year	633.5
	Delta T	2.2
	Applicable Population	
	Flat to Low Pitch	24,025
	Regular Pitch	216,225
	Therm Savings/Install	
	Flat to Low Pitch	1.816
Regular Pitch	1.901	
Wall Insulation	Base Efficiency (R Value)	5
	New Efficiency (R Value)	20
	Avg. Home Size	1,648
	Hours per Year	633.5
	Wall Size	412
	Delta T	4.4
	Applicable Population	240,250
	Therm Savings/Install	1.711
Weather Stripping	Base Efficiency	0.8
	Energy Savings	0.04
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	45
	Applicable Population	240,250
	Therm Savings/Install	10.69
Energy Star Windows	Base Efficiency	0.8
	Energy Savings	0.12
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	45
	Applicable Population	133,472
Therm Savings/Install	34.2	
Fireplace Pilotless Ignition	Btu/hr	600
	Operating Hours	8,126.5
	Applicable Population	21,105
	Therm Savings/Install	44.958

Peoples Gas System, Inc.		
2025 Technical Potential Measure Data		
Commercial		
Measure	Data Category	Value
Low Flow Shower Head	Base GPM	2.5
	New GPM	1
	Shower Time (Min.)	7.8
	Number of People	72
	Showers/Person/Day	0.7
	Delta T	24
	Days in Year	305
	Applicable Population	6,223
	Therm Savings/Install	448.2
	Low Flow Faucet	Base GPM
New GPM		1
Wash Time (Min.)		0.33
Number of People		40
Washes/Person/Faucet		5
Delta T		24
Days in Year		305
Applicable Population		33,079
Therm Savings/Install		60.8
Water Heater Temp. Check Card		Gallons per Day
	Delta T	5
	Days in Year	305
	Applicable Population	13,232
	Therm Savings/Install	242.5
Hot Water Pipe Insulation	R Value Initial	1
	R Value New	3
	Length of Pipe (ft.)	15
	Diameter	0.75
	Pi	3.14
	Delta T	59
	Time in Year	1,534
	Applicable Population	2,646
Therm Savings/Install	53.3	

Peoples Gas System, Inc.		
2025 Technical Potential Measure Data		
Commercial (Cont.)		
Measure	Data Category	Value
Energy Star Tankless Water Heater	Base Efficiency	0.8
	New Efficiency	0.99
	Base Gallons/Day	1,527
	Delta T	59
	Days in Year	305
	Applicable Population	33,079
	Therm Savings/Install	549.1
Energy Star Dishwasher	Gallons per Rack Base	1.29
	Gallons per Rack New	0.2
	Racks per Day	280
	Delta T	59
	Days in Year	305
	Applicable Population	23,261
	Therm Savings/Install	571.9
Drain Water Recovery	Savings Factor	0.2
	Gallons per Year	110,166
	Delta T	59
	Applicable Population	23,261
Energy Star Front Loading Washer	Therm Savings/Install	135.4
	Base IWF	4.1
	New IWF	3.3
	Loads per Year	1,246
	Size of Washer (CF)	4
	Delta T	59
	Applicable Population	10,257
Combined Heat and Power	Therm Savings/Install	24.5
	Operating Hours	8,000
	Heat Output	204,040
	Thermal Utilization	0.75
	Applicable Population	2,996
	Therm Savings/Install	11,477.3

Peoples Gas System, Inc.		
2025 Technical Potential Measure Data		
Commercial (Cont.)		
Measure	Data Category	Value
Cooktop	Base Efficiency	0.3
	New Efficiency	0.4
	Cook Time per Day (Hr.)	8.25
	Rating	90,000
	Days in Year	365
	Applicable Population	5,972
	Therm Savings/Install	2,258
Energy Star Convection Oven	Base Efficiency	0.44
	New Efficiency	0.72
	Cook Time per Day (Hr.)	8.25
	Rating	45,000
	Days in Year	365
	Applicable Population	5,233
	Therm Savings/Install	1,198
Energy Star Fryer	Base Efficiency	0.35
	New Efficiency	0.72
	Cook Time per Day (Hr.)	8.25
	Rating	120,000
	Days in Year	365
	Applicable Population	5,569
	Therm Savings/Install	5,306
Energy Star Griddle	Base Efficiency	0.3
	New Efficiency	0.69
	Cook Time per Day (Hr.)	8.25
	Cooktop Rating	30,000
	Days in Year	365
	Applicable Population	5,972
	Therm Savings/Install	1,702
Energy Star Steam Cooker	Base Efficiency	0.24
	New Efficiency	0.49
	Cook Time per Day (Hr.)	8.25
	Cooktop Rating	32,000
	Days in Year	365
	Applicable Population	5,972
	Therm Savings/Install	2,048

Peoples Gas System, Inc.		
2025 Technical Potential Measure Data		
Commercial (Cont.)		
Measure	Data Category	Value
Dryer	Base Efficiency	3.1
	New Efficiency	4.4
	Loads per Year	1,246
	Pounds per Load	20
	Applicable Population	3,749
	Therm Savings/Install	81
Gas Heat Pump	Base Efficiency	0.81
	New Efficiency	1.4
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	450
	Applicable Population	7,094
	Therm Savings/Install	1,483
Programmable Thermostat	Base Efficiency	0.81
	Avg. Building Size	15,505
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	450
	Delta T Adjust	5
	Applicable Population	7,094
Duct Repair	Therm Savings/Install	0.07
	Base Efficiency	0.76
	Efficiency Restored	0.81
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	450
	Applicable Population	1,774
Ceiling Insulation	Therm Savings/Install	231.5
	Base Efficiency (R Value)	10
	New Efficiency (R Value)	60
	Avg. Building Size	15,505
	Heating Hours	633.5
	Delta T	2.2
	Applicable Population	1,774
	Therm Savings/Install	18.008

Peoples Gas System, Inc.		
2025 Technical Potential Measure Data		
Commercial (Cont.)		
Measure	Data Category	Value
Wall Insulation	Base Efficiency (R Value)	5
	New Efficiency (R Value)	20
	Avg. Building Size	15,505
	Wall Size	3,876
	Heating Hours	633.5
	Delta T	4.4
	Applicable Population	1,763
	Therm Savings/Install	16.095
BAS Controller	Base Efficiency	0.81
	Energy Savings	0.17
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	450
	Applicable Population	7,094
	Therm Savings/Install	598
Demand Control Ventilation	Base Efficiency	0.81
	Energy Savings	0.15
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	450
	Applicable Population	5,675
	Therm Savings/Install	527.9

Peoples Gas System, Inc.		
2025 Technical Potential Measure Data		
Industrial		
Measure	Data Category	Value
Condensing Boiler	Base Efficiency	0.84
	New Efficiency	0.99
	Base Gallons/Day	7,750
	Delta T	169
	Days in Year	365
	Applicable Population	44
	Therm Savings/Install	7,183

Peoples Gas System, Inc.		
2025 Technical Potential Measure Data		
Industrial (Cont.)		
Measure	Data Category	Value
Boiler Blowdown Recovery	Heat Recovery Efficiency	0.05
	Base Gallons/Day	7,750
	Delta T	119
	Days in Year	365
	Applicable Population	44
	Therm Savings/Install	1,514
Boiler Combustion Air-Preheat	Efficiency Improvement	0.02
	Base Gallons/Day	7,750
	Delta T	80
	Days in Year	365
	Applicable Population	44
	Therm Savings/Install	377
Boiler Feedwater Economizer	Heat Recovery Efficiency	0.075
	Base Gallons/Day	7,750
	Delta T	119
	Days in Year	365
	Applicable Population	44
	Therm Savings/Install	2,103
Condensate Return	Heat Recovery Efficiency	0.1
	Base Gallons/Day	7,750
	Delta T	97
	Days in Year	365
	Applicable Population	44
	Therm Savings/Install	2,274
Gas Heat Pump	Base Efficiency	0.81
	New Efficiency	1.4
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	450
	Applicable Population	11
	Therm Savings/Install	1,483
Programmable Thermostat	Base Efficiency	0.81
	Avg. Building Size	15,505
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	450
	Delta T Adjust	5
	Applicable Population	11
	Therm Savings/Install	0.07

Peoples Gas System, Inc.		
2025 Technical Potential Measure Data		
Industrial (Cont.)		
Measure	Data Category	Value
Duct Repair	Base Efficiency	0.76
	Efficiency Restored	0.81
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	450
	Applicable Population	3
	Therm Savings/Install	231.5
Ceiling Insulation	Base Efficiency (R Value)	10
	New Efficiency (R Value)	60
	Avg. Building Size	15,505
	Heating Hours	633.5
	Delta T	2.2
	Applicable Population	3
	Therm Savings/Install	18
Wall Insulation	Base Efficiency (R Value)	5
	New Efficiency (R Value)	20
	Avg. Building Size	15,505
	Wall Size	3,876
	Heating Hours	633.5
	Delta T	4.4
	Applicable Population	3
Therm Savings/Install	16.1	
BAS Controller	Base Efficiency	0.8
	Energy Savings	0.17
	Hours per Year	633.5
	Size of Unit (MBtu/hr)	450
	Applicable Population	11
	Therm Savings/Install	605.8
Infrared Heating	Operating Hours per Year	8,000
	MMBtu/hr Rating	5
	Improvement Reduction	0.068
	Applicable Population	13
	Therm Savings/Install	27,200

Peoples Gas System, Inc.		
2025 Technical Potential Measure Data		
Industrial (Cont.)		
Measure	Data Category	Value
Industrial Dryers	Operating Hours per Year	8,000
	MMBtu/hr Rating	2.7
	Improvement Reduction	0.2
	Applicable Population	11
	Therm Savings/Install	43,200
Direct Heating	Operating Hours per Year	8,000
	MMBtu/hr Rating	25
	Improvement Reduction	0.15
	Applicable Population	21
	Therm Savings/Install	300,000
Combined Heat and Power	Operating Hours per Year	8,000
	Heat Output (MMBtu/hr)	9.3
	Thermal Utilization	0.8
	Applicable Population	44
	Therm Savings/Install	374,291
Exhaust Gas Heat Recovery	Operating Hours per Year	8,000
	MMBtu/hr Rating	10
	Improvement Reduction	0.1
	Applicable Population	37
	Therm Savings/Install	80,000

PSC FORM C.B. FORM 1
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 3/26/2024

INPUT DATA - PART 1
Peoples Gas System, Inc.
Program Title: Residential New Construction
Load Building

- (1) Life of Program 20 Years
- (2) Average therms consumed by Appliance (s) 59 Therms
- (3) Program peak consumption per installed Appliance:
 Summer 0 Therms
 Winter 0 Therms
- (4) Appliances Installed per Program 8,847 Units/Year
- (5) Average Number of Participants per Year 8,847 Participants/Year
- (6) Avoided annual kWh per Appliance 1,365 kWh
- (6)a Avoided demand kW per Appliance 0.000 kW
- (7) Avoided annual Therms per Appliance 14 Therms/Year
- (8) Incentive payment per Appliance 508 \$
- (9) Other Costs not identified in C.B. Forms
- (10) Escalation Rates:

Gas and Pipeline	2.20 %
Capital	2.20 %
O&M	2.20 %

Residential New Construction	
Load Building	
Calculated Benefit to Cost Ratios	
(1) Participant Cost Test (PCT)	1.009
(2) Gas-Rate Impact Measure Test (G-RIM)	1.301

Peoples Gas System, Inc.
Participant Cost Test (PCT) (Load Building Scenario)
Program: Residential New Construction

PSC C.B. FORM 2
Page 1 of 1
March 26, 2024

Year	Benefits					Costs					Total Costs	Net Benefits	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)			(11)
	Electric Bill Savings	Tax Credits	Utility Rebate	Other Benefits	Total Benefits	Net Customer Equipment Costs	Customer Gas Installation Costs	Incremental O&M Costs	Annual Gas Energy Charge	Annual Cost of Gas	Annual Customer Charge	Total Costs	Net Benefits
2025	176	0	508	0	684	22	707	0	37	52	74	893	(209)
2026	180	0	0	0	180	0	0	0	38	53	76	167	13
2027	184	0	0	0	184	0	0	0	39	54	77	171	13
2028	188	0	0	0	188	0	0	0	40	56	79	174	13
2029	192	0	0	0	192	0	0	0	41	57	81	178	14
2030	196	0	0	0	196	0	0	0	42	58	83	182	14
2031	201	0	0	0	201	0	0	0	42	59	84	186	14
2032	205	0	0	0	205	0	0	0	43	61	86	190	15
2033	209	0	0	0	209	0	0	0	44	62	88	194	15
2034	214	0	0	0	214	0	0	0	45	63	90	199	15
2035	219	0	0	0	219	0	0	0	46	65	92	203	16
2036	224	0	0	0	224	0	0	0	47	66	94	208	16
2037	228	0	0	0	228	0	0	0	48	68	96	212	16
2038	233	0	0	0	233	0	0	0	49	69	98	217	17
2039	239	0	0	0	239	0	0	0	51	71	100	222	17
2040	244	0	0	0	244	0	0	0	52	72	103	226	17
2041	249	0	301	0	550	31	74	0	53	74	105	263	287
2042	255	0	0	0	255	0	0	0	54	75	107	237	18
2043	260	0	0	0	260	0	0	0	55	77	109	242	19
2044	266	0	0	0	266	0	0	0	56	79	112	247	19
Nominal	4,362	0	809	0	5,170	54	707	0	924	1,292	1,834	4,811	
NPV:	2,284	0	604	0	2,887	32	707	0	484	676	961	2,861	
Discount rate:		0.0742											
				Total PV of Benefits	2,887						Total PV of Costs	2,861	
											PCT	1,009	

Peoples Gas System, Inc.													
Gas - Rate Impact Measure Test (G-RIM)(Load Building Scenario)													
Program: Residential New Construction													
PSC C.B. FORM 3													
Page 1 of 1													
March 26, 2024													
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
YEAR	Benefits						Costs				Total Cost	Net Benefits	
	Energy Charge	Gas Charge	Customer Charge	Total Benefits	Gas Supply	Non-Fuel Supply Costs	Depreciation	Customer	Admin	Rebate/ Incentive			
2025	37	52	74	163	52	0	33	0	38	508	631	(468)	
2026	38	53	76	167	53	0	32	0	0	0	85	82	
2027	39	54	77	171	54	0	31	0	0	0	85	85	
2028	40	56	79	174	56	0	30	0	0	0	86	89	
2029	41	57	81	178	57	0	29	0	0	0	86	92	
2030	42	58	83	182	58	0	28	0	0	0	86	96	
2031	42	59	84	186	59	0	27	0	0	0	87	99	
2032	43	61	86	190	61	0	26	0	0	0	87	103	
2033	44	62	88	194	62	0	26	0	0	0	88	107	
2034	45	63	90	199	63	0	25	0	0	0	88	111	
2035	46	65	92	203	65	0	24	0	0	0	89	114	
2036	47	66	94	208	66	0	23	0	0	0	90	118	
2037	48	68	96	212	68	0	23	0	0	0	90	122	
2038	49	69	98	217	69	0	22	0	0	0	91	126	
2039	51	71	100	222	71	0	21	0	0	0	92	130	
2040	52	72	103	226	72	0	21	0	0	0	93	134	
2041	53	74	105	231	74	0	20	0	54	301	449	(217)	
2042	54	75	107	237	75	0	19	0	0	0	95	142	
2043	55	77	109	242	77	0	19	0	0	0	96	146	
2044	56	79	112	247	79	0	18	0	0	0	97	150	
NOMINAL	924	1,292	1,834	4,050	1,292	0	497	0	93	809	2,690	1,360	
NPV:	484	676	961	2,121	676	0	294	0	56	604	1,630	491	
Discount rate:	0.0742												
	Total PV of Benefits			2,121	Total PV of Costs			1,630	G-RIM				1,301

PSC FORM C.B. FORM 1
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3/26/2024

INPUT DATA - PART 1
Peoples Gas System, Inc.
Program Title: Residential Retrofit
Load Building

- (1) Life of Program 20 Years
- (2) Average therms consumed by Appliance (s) 61 Therms
- (3) Program peak consumption per installed Appliance:

	Summer	0 Therms
	Winter	0 Therms
- (4) Appliances Installed per Program 601 Units/Year
- (5) Average Number of Participants per Year 601 Participants/Year
- (6) Avoided annual kWh per Appliance 1,494 kWh
- (6)a Avoided demand kW per Appliance 0.000 kW
- (7) Avoided annual Therms per Appliance 16 Therms/Year
- (8) Incentive payment per Appliance 497 \$
- (9) Other Costs not identified in C.B. Forms
- (10) Escalation Rates:

	Gas and Pipeline	2.20 %
	Capital	2.20 %
	O&M	2.20 %

Residential Retrofit	
Load Building	
Calculated Benefit to Cost Ratios	
(1) Participant Cost Test (PCT)	1.033
(2) Gas-Rate Impact Measure Test (G-RIM)	1.313

Peoples Gas System, Inc.
Participant Cost Test (PCT) (Load Building Scenario)
Program: Residential Retrofit

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Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Electric Bill Savings	Tax Credits	Utility Rebate	Other Benefits	Total Benefits	Net Customer Equipment Costs	Customer Gas Installation Costs	Incremental O&M Costs	Annual Gas Energy Charge	Annual Cost of Gas	Annual Customer Charge	Total Costs	Net Benefits
Costs													
2025	193	0	497	0	690	73	724	0	39	54	74	964	(275)
2026	197	0	0	0	197	0	0	0	40	56	76	171	26
2027	201	0	0	0	201	0	0	0	41	57	77	175	26
2028	206	0	0	0	206	0	0	0	41	58	79	178	27
2029	210	0	0	0	210	0	0	0	42	59	81	182	28
2030	215	0	0	0	215	0	0	0	43	61	83	186	28
2031	219	0	0	0	219	0	0	0	44	62	84	190	29
2032	224	0	0	0	224	0	0	0	45	63	86	195	30
2033	229	0	0	0	229	0	0	0	46	65	88	199	30
2034	234	0	0	0	234	0	0	0	47	66	90	203	31
2035	239	0	0	0	239	0	0	0	48	68	92	208	32
2036	245	0	0	0	245	0	0	0	49	69	94	212	32
2037	250	0	0	0	250	0	0	0	50	71	96	217	33
2038	255	0	0	0	255	0	0	0	52	72	98	222	34
2039	261	0	0	0	261	0	0	0	53	74	100	227	34
2040	267	0	0	0	267	0	0	0	54	75	103	232	35
2041	273	0	0	0	273	0	0	0	55	77	105	237	36
2042	279	0	343	0	622	106	0	0	56	79	107	348	274
2043	285	0	0	0	285	0	0	0	57	80	109	247	38
2044	291	0	0	0	291	0	0	0	59	82	112	253	38
Nominal	4,772	0	840	0	5,613	178	724	0	963	1,346	1,834	5,046	
NPV:	2,499	0	599	0	3,098	104	724	0	504	705	961	2,998	
Discount rate:			0.0742										
				Total PV of Benefits	3,098						Total PV of Costs	2,998	
											PCT	1,033	

YEAR	Peoples Gas System, Inc. Gas - Rate Impact Measure Test (G-RIM)(Load Building Scenario) Program: Residential Retrofit												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	Benefits						Costs						Net Benefits
	Energy Charge	Gas Charge	Customer Charge	Total Benefits	Gas Supply	Non-Fuel Supply Costs	Depreciation	Customer	Admin	Rebate/ Incentive	Total Cost	Net Benefits	
2025	39	54	74	167	54	0	33	0	0	38	497	623	(456)
2026	40	56	76	171	56	0	32	0	0	0	0	88	83
2027	41	57	77	175	57	0	31	0	0	0	0	88	87
2028	41	58	79	178	58	0	30	0	0	0	0	88	90
2029	42	59	81	182	59	0	29	0	0	0	0	88	94
2030	43	61	83	186	61	0	28	0	0	0	0	89	98
2031	44	62	84	190	62	0	27	0	0	0	0	89	101
2032	45	63	86	195	63	0	26	0	0	0	0	90	105
2033	46	65	88	199	65	0	26	0	0	0	0	90	109
2034	47	66	90	203	66	0	25	0	0	0	0	91	112
2035	48	68	92	208	68	0	24	0	0	0	0	92	116
2036	49	69	94	212	69	0	23	0	0	0	0	92	120
2037	50	71	96	217	71	0	23	0	0	0	0	93	124
2038	52	72	98	222	72	0	22	0	0	0	0	94	128
2039	53	74	100	227	74	0	21	0	0	0	0	95	132
2040	54	75	103	232	75	0	21	0	0	0	0	96	136
2041	55	77	105	237	77	0	20	0	0	0	0	97	140
2042	56	79	107	242	79	0	19	0	56	343	497	(255)	
2043	57	80	109	247	80	0	19	0	0	0	99	148	
2044	59	82	112	253	82	0	18	0	0	0	100	153	
NOMINAL	963	1,346	1,834	4,144	1,346	0	497	0	94	840	2,778	1,366	
NPV:	504	705	961	2,170	705	0	294	0	55	599	1,653	517	
Discount rate:	0.0742												
	Total PV of Benefits			2,170	Total PV of Costs			1,653					
					G-RIM			1,313					

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INPUT DATA - PART 1
Peoples Gas System, Inc.
Program Title: Residential Retention
Load Reduction

- (1) Life of Program 20 Years
- (2) Average therms consumed by Appliance (s) 123 Therms
- (3) Program peak consumption per installed Appliance:

Summer	0 Therms
Winter	0 Therms
- (4) Appliances Installed per Program 8,024 Units/Year
- (5) Average Number of Participants per Year 8,024 Participants/Year
- (6) Avoided annual kWh per Appliance 0 kWh
- (6)a Avoided demand kW per Appliance 0.000 kW
- (7) Avoided annual Therms per Appliance 11 Therms/Year
- (8) Incentive payment per Appliance 401 \$
- (9) Other Costs not identified in C.B. Forms
- (10) Escalation Rates:

	Gas and Pipeline	2.20 %
	Capital	2.20 %
	O&M	2.20 %

Residential Retention	
Load Reduction	
Calculated Benefit to Cost Ratios	
(1) Participant Cost Test (PCT)	26.534
(2) Gas-Rate Impact Measure Test (G-RIM)	1.466

Peoples Gas System, Inc.
Gas - Rate Impact Measure Test (G-RIM)(Load Reduction Scenario)
Program: Residential Retention

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YEAR	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Energy Charge (Gas)	Gas Charge (therm)	Incremental Cust Charge	Avoided Main	Avoided Meter/Regulator	Avoided Depreciation	Avoided Taxes	Total Benefits	Energy Charge	Gas Charge	Rebate/ Incentive	Admin Cost	Total Cost	Net Benefits
Benefits														
Costs														
2025	7	10	74	0	0	0	0	91	7	10	401	38	456	(365)
2026	7	10	76	0	0	0	0	93	7	10	0	0	18	76
2027	8	11	77	0	0	0	0	95	8	11	0	0	18	77
2028	8	11	79	0	0	0	0	98	8	11	0	0	19	79
2029	8	11	81	0	0	0	0	100	8	11	0	0	19	81
2030	8	11	83	0	0	0	0	102	8	11	0	0	19	83
2031	8	12	84	0	0	0	0	104	8	12	0	0	20	84
2032	8	12	86	0	0	0	0	106	8	12	0	0	20	86
2033	9	12	88	0	0	0	0	109	9	12	0	0	21	88
2034	9	12	90	0	0	0	0	111	9	12	0	0	21	90
2035	9	13	92	0	0	0	0	114	9	13	0	0	22	92
2036	9	13	94	0	0	0	0	116	9	13	0	0	22	94
2037	9	13	96	0	0	0	0	119	9	13	0	0	23	96
2038	10	13	98	0	0	0	0	121	10	13	0	0	23	98
2039	10	14	100	0	0	0	0	124	10	14	0	0	24	100
2040	10	14	103	0	0	0	0	127	10	14	0	0	24	103
2041	10	14	105	0	0	0	0	129	10	14	401	54	480	(350)
2042	10	15	107	0	0	0	0	132	10	15	0	0	25	107
2043	11	15	109	0	0	0	0	135	10	15	0	0	26	109
2044	11	15	112	0	0	0	0	138	11	15	0	0	26	112
NOMINAL	180	251	1,834	0	0	0	0	2,265	180	251	801	1324	1324	941
NPV:	94	131	961	0	0	0	0	1,186	94	131	528	809	809	377
Discount rate:	0.0742													
												Total PV of Benefits	1,186	
												Total PV of Costs	809	
												G-RIM	1,466	

INPUT DATA - PART 1
Peoples Gas System, Inc.
Program Title: Commercial New Construction
Load Building

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(1) Life of Program	20 Years	
(2) Average therms consumed by Appliance (s)	3,202 Therms	
(3) Program peak consumption per installed Appliance:		Summer Winter
	0 Therms 0 Therms	
(4) Appliances Installed per Program	383 Units/Year	
(5) Average Number of Participants per Year	383 Participants/Year	
(6) Avoided annual kWh per Appliance	73,068 kWh	
(6)a Avoided demand kW per Appliance	16,499 kW	
(7) Avoided annual Therms per Appliance	0 Therms/Year	
(8) Incentive payment per Appliance	3,104 \$	
(9) Other Costs not identified in C.B. Forms		Gas and Pipeline Capital O&M
(10) Escalation Rates:		2.20 % 2.20 % 2.20 %

Commercial New Construction Load Building Calculated Benefit to Cost Ratios	
(1) Participant Cost Test (PCT)	1.213
(2) Gas-Rate Impact Measure Test (G-RIM)	2.395

Peoples Gas System, Inc.
Participant Cost Test (PCT) (Load Building Scenario)
Program: Commercial New Construction

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Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Electric Bill Savings	Tax Credits	Utility Rebate	Other Benefits	Total Benefits	Net Customer Equipment Costs	Customer Gas Installation Costs	Incremental O&M Costs	Annual Gas Energy Charge	Annual Cost of Gas	Annual Customer Charge	Total Costs	Net Benefits
Benefits													
Costs													
2025	5,245	0	3,104	0	8,350	-740	3,663	0	1,257	2,828	274	7,282	1,068
2026	5,361	0	0	0	5,361	0	0	0	1,284	2,890	280	4,455	906
2027	5,478	0	0	0	5,478	0	0	0	1,313	2,954	286	4,553	926
2028	5,599	0	0	0	5,599	0	0	0	1,342	3,019	293	4,653	946
2029	5,722	0	0	0	5,722	0	0	0	1,371	3,085	299	4,755	967
2030	5,848	0	0	0	5,848	0	0	0	1,401	3,153	306	4,860	988
2031	5,977	0	0	0	5,977	0	0	0	1,432	3,223	312	4,967	1,010
2032	6,108	0	0	0	6,108	0	0	0	1,464	3,293	319	5,076	1,032
2033	6,243	0	0	0	6,243	0	0	0	1,496	3,366	326	5,188	1,055
2034	6,380	0	0	0	6,380	0	0	0	1,529	3,440	333	5,302	1,078
2035	6,520	0	0	0	6,520	0	0	0	1,562	3,516	341	5,419	1,102
2036	6,664	0	0	0	6,664	0	0	0	1,597	3,593	348	5,538	1,126
2037	6,810	0	0	0	6,810	0	0	0	1,632	3,672	356	5,660	1,151
2038	6,960	0	0	0	6,960	0	0	0	1,668	3,753	364	5,784	1,176
2039	7,113	0	0	0	7,113	0	0	0	1,704	3,835	372	5,912	1,202
2040	7,270	0	0	0	7,270	0	0	0	1,742	3,920	380	6,042	1,228
2041	7,430	0	0	0	7,430	0	0	0	1,780	4,006	388	6,175	1,255
2042	7,593	0	2,055	0	9,649	-1,071	0	0	1,819	4,094	397	5,239	4,409
2043	7,760	0	0	0	7,760	0	0	0	1,860	4,184	405	6,449	1,311
2044	7,931	0	0	0	7,931	0	0	0	1,900	4,276	414	6,591	1,340
Nominal	130,013	0	5,160	0	135,173	-1,811	3,663	0	31,154	70,101	6,793	109,900	
NPV:	68,082	0	3,713	0	71,795	-1,057	3,663	0	16,314	36,709	3,557	59,186	
Discount rate:		0.0742											
				Total PV of Benefits	71,795					Total PV of Costs		59,186	
											PCT	1,213	

Peoples Gas System, Inc.
Gas - Rate Impact Measure Test (G-RIM)(Load Building Scenario)
Program: Commercial New Construction

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YEAR	Benefits				Costs					Rebate/ Incentive	Total Cost	Net Benefits	
	(1) Energy Charge	(2) Gas Charge	(3) Customer Charge	(4) Total Benefits	(5) Gas Supply	(6) Non-Fuel Supply Costs	(7) Depreciation	(8) Customer	(9) Admin				(10)
2025	2,828	1,257	274	4,359	1,257	0	396	0	0	38	3104	4,796	(437)
2026	2,890	1,284	280	4,455	1,284	0	384	0	0	0	0	1,668	2,787
2027	2,954	1,313	286	4,553	1,313	0	372	0	0	0	0	1,685	2,868
2028	3,019	1,342	293	4,653	1,342	0	361	0	0	0	0	1,703	2,950
2029	3,085	1,371	299	4,755	1,371	0	350	0	0	0	0	1,721	3,034
2030	3,153	1,401	306	4,860	1,401	0	339	0	0	0	0	1,741	3,119
2031	3,223	1,432	312	4,967	1,432	0	329	0	0	0	0	1,761	3,206
2032	3,293	1,464	319	5,076	1,464	0	319	0	0	0	0	1,783	3,293
2033	3,366	1,496	326	5,188	1,496	0	310	0	0	0	0	1,805	3,382
2034	3,440	1,529	333	5,302	1,529	0	300	0	0	0	0	1,829	3,473
2035	3,516	1,562	341	5,419	1,562	0	291	0	0	0	0	1,854	3,565
2036	3,593	1,597	348	5,538	1,597	0	282	0	0	0	0	1,879	3,659
2037	3,672	1,632	356	5,660	1,632	0	274	0	0	0	0	1,906	3,754
2038	3,753	1,668	364	5,784	1,668	0	266	0	0	0	0	1,933	3,851
2039	3,835	1,704	372	5,912	1,704	0	258	0	0	0	0	1,962	3,950
2040	3,920	1,742	380	6,042	1,742	0	250	0	0	0	0	1,992	4,050
2041	4,006	1,780	388	6,175	1,780	0	242	0	0	0	0	2,023	4,152
2042	4,094	1,819	397	6,310	1,819	0	235	0	56	2055	0	4,165	2,145
2043	4,184	1,860	405	6,449	1,860	0	228	0	0	0	0	2,087	4,362
2044	4,276	1,900	414	6,591	1,900	0	221	0	0	0	0	2,121	4,470
NOMINAL	70,101	31,154	6,793	108,048	31,154	0	6,007	0	94	5,160	0	42,414	65,633
NPV:	36,709	16,314	3,557	56,580	16,314	0	3,545	0	55	3,713	0	23,627	32,953
Discount rate:	0.0742												
	Total PV of Benefits			56,580	Total PV of Costs			23,627					
					G-RIM			2,395					

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INPUT DATA - PART 1
Peoples Gas System, Inc.
Commercial Retrofit
Load Building

- (1) Life of Program 20 Years
- (2) Average therms consumed by Appliance (s) 2,653 Therms
- (3) Program peak consumption per installed Appliance:

	Summer	0 Therms
	Winter	0 Therms
- (4) Appliances Installed per Program 159 Units/Year
- (5) Average Number of Participants per Year 159 Participants/Year
- (6) Avoided annual kWh per Appliance 69,133 kWh
- (6)a Avoided demand kW per Appliance 17.356 kW
- (7) Avoided annual Therms per Appliance 0 Therms/Year
- (8) Incentive payment per Appliance 3,403 \$
- (9) Other Costs not identified in C.B. Forms
- (10) Escalation Rates:

	Gas and Pipeline	2.20 %
	Capital	2.20 %
	O&M	2.20 %

Commercial Retrofit	
Load Building	
Calculated Benefit to Cost Ratios	
(1) Participant Cost Test (PCT)	1.363
(2) Gas-Rate Impact Measure Test (G-RIM)	2.257

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Peoples Gas System, Inc.
Gas - Rate Impact Measure Test (G-RIM)(Load Building Scenario)
Program: Commercial Retrofit

YEAR	Benefits				Costs						Total Cost	Net Benefits
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
	Energy Charge	Gas Charge	Customer Charge	Total Benefits	Gas Supply	Non-Fuel Supply Costs	Depreciation	Customer	Admin	Rebate/ Incentive	Total Cost	Net Benefits
2025	2,343	1,041	274	3,658	1,041	0	396	0	38	3403	4,879	(1,221)
2026	2,395	1,064	280	3,739	1,064	0	384	0	0	0	1,448	2,291
2027	2,447	1,088	286	3,821	1,088	0	372	0	0	0	1,460	2,361
2028	2,501	1,112	293	3,905	1,112	0	361	0	0	0	1,473	2,433
2029	2,556	1,136	299	3,991	1,136	0	350	0	0	0	1,486	2,505
2030	2,612	1,161	306	4,079	1,161	0	339	0	0	0	1,500	2,578
2031	2,670	1,187	312	4,169	1,187	0	329	0	0	0	1,516	2,653
2032	2,729	1,213	319	4,260	1,213	0	319	0	0	0	1,532	2,729
2033	2,789	1,239	326	4,354	1,239	0	310	0	0	0	1,549	2,805
2034	2,850	1,267	333	4,450	1,267	0	300	0	0	0	1,567	2,883
2035	2,913	1,294	341	4,548	1,294	0	291	0	0	0	1,586	2,962
2036	2,977	1,323	348	4,648	1,323	0	282	0	0	0	1,605	3,043
2037	3,042	1,352	356	4,750	1,352	0	274	0	0	0	1,626	3,124
2038	3,109	1,382	364	4,855	1,382	0	266	0	0	0	1,647	3,207
2039	3,178	1,412	372	4,961	1,412	0	258	0	0	0	1,670	3,292
2040	3,248	1,443	380	5,071	1,443	0	250	0	0	0	1,693	3,378
2041	3,319	1,475	388	5,182	1,475	0	242	0	0	0	1,717	3,465
2042	3,392	1,507	397	5,296	1,507	0	235	0	0	0	1,742	3,554
2043	3,467	1,541	405	5,413	1,541	0	228	0	0	0	1,768	3,644
2044	3,543	1,574	414	5,532	1,574	0	221	0	58	2047	3,900	1,632
NOMINAL	58,079	25,811	6,793	90,682	25,811	0	6,007	0	96	5,450	37,364	53,318
NPV:	30,413	13,516	3,557	47,486	13,516	0	3,545	0	53	3,929	21,043	26,444
Discount rate:		0.0742										
			Total PV of Benefits	47,486					Total PV of Costs		21,043	
									G-RIM		2,257	

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INPUT DATA - PART 1
Peoples Gas System, Inc.
Program Title: Commercial CHP
Load Building

- (1) Life of Program 20 Years
- (2) Average therms consumed by Appliance (s) 27,733 Therms
- (3) Program peak consumption per installed Appliance:

Summer	0 Therms
Winter	0 Therms
- (4) Appliances Installed per Program 0 Units/Year
- (5) Average Number of Participants per Year 0 Participants/Year
- (6) Avoided annual kWh per Appliance 4,400,000 kWh
- (6)a Avoided demand kW per Appliance 550.000 kW
- (7) Avoided annual Therms per Appliance 0 Therms/Year
- (8) Incentive payment per Appliance 247,500 \$
- (9) Other Costs not identified in C.B. Forms
- (10) Escalation Rates:

Gas and Pipeline	2.20 %
Capital	2.20 %
O&M	2.20 %

Commercial CHP Load Building	
Calculated Benefit to Cost Ratios	
(1) Participant Cost Test (PCT)	2.709
(2) Gas-Rate Impact Measure Test (G-RIM)	1.175

Peoples Gas System, Inc.
Participant Cost Test (PCT) (Load Building Scenario)
Program: Commercial CHP

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Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Electric Bill Savings	Tax Credits	Utility Rebate	Other Benefits	Total Benefits	Net Customer Equipment Costs	Customer Gas Installation Costs	Incremental O&M Costs	Annual Gas Energy Charge	Annual Cost of Gas	Annual Customer Charge	Total Costs	Net Benefits
Benefits													
Costs													
2025	309,299	0	247,500	0	556,799	1,100,000	0	0	10,887	24,497	1,096	1,136,481	(579,682)
2026	316,103	0	0	0	316,103	0	0	0	11,126	25,036	1,120	37,283	278,820
2027	323,058	0	0	0	323,058	0	0	0	11,371	25,587	1,145	38,103	284,954
2028	330,165	0	0	0	330,165	0	0	0	11,621	26,150	1,170	38,942	291,223
2029	337,429	0	0	0	337,429	0	0	0	11,877	26,725	1,196	39,798	297,630
2030	344,852	0	0	0	344,852	0	0	0	12,138	27,313	1,222	40,674	304,178
2031	352,439	0	0	0	352,439	0	0	0	12,405	27,914	1,249	41,569	310,870
2032	360,192	0	0	0	360,192	0	0	0	12,678	28,528	1,277	42,483	317,709
2033	368,117	0	0	0	368,117	0	0	0	12,957	29,156	1,305	43,418	324,699
2034	376,215	0	0	0	376,215	0	0	0	13,242	29,797	1,333	44,373	331,842
2035	384,492	0	0	0	384,492	0	0	0	13,534	30,453	1,363	45,349	339,143
2036	392,951	0	0	0	392,951	0	0	0	13,831	31,123	1,393	46,347	346,604
2037	401,596	0	0	0	401,596	0	0	0	14,136	31,808	1,423	47,367	354,229
2038	410,431	0	0	0	410,431	0	0	0	14,447	32,507	1,455	48,409	362,022
2039	419,460	0	0	0	419,460	0	0	0	14,764	33,223	1,487	49,474	369,987
2040	428,688	0	0	0	428,688	0	0	0	15,089	33,954	1,519	50,562	378,126
2041	438,119	0	0	0	438,119	0	0	0	15,421	34,701	1,553	51,674	386,445
2042	447,758	0	0	0	447,758	0	0	0	15,761	35,464	1,587	52,811	394,947
2043	457,609	0	0	0	457,609	0	0	0	16,107	36,244	1,622	53,973	403,636
2044	467,676	0	0	0	467,676	0	0	0	16,462	37,042	1,657	55,161	412,516
Nominal	7,666,648	0	247,500	0	7,914,148	1,100,000	0	0	269,856	607,224	27,171	2,004,251	
NPV:	4,014,703	0	247,500	0	4,262,203	1,100,000	0	0	141,312	317,978	14,228	1,573,519	
Discount rate:	0.0742												
Total PV of Benefits					4,262,203						Total PV of Costs		1,573,519
												PCT	2,709

YEAR	Peoples Gas System, Inc.												Net Benefits
	Gas - Rate Impact Measure Test (G-RIM)(Load Building Scenario)												
	Program: Commercial CHP												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
Benefits													Total Cost
Energy Charge	Gas Charge	Customer Charge	Total Benefits	Gas Supply	Non-Fuel Supply Costs	Depreciation	Customer	Admin	Rebate/ Incentive				
Costs													
2025	24,497	10,887	1,096	36,481	10,887	0	1,592	0	38	247,500	260,017	(223,537)	
2026	25,036	11,126	1,120	37,283	11,126	0	1,544	0	0	0	12,670	24,613	
2027	25,587	11,371	1,145	38,103	11,371	0	1,497	0	0	0	12,868	25,235	
2028	26,150	11,621	1,170	38,942	11,621	0	1,452	0	0	0	13,073	25,869	
2029	26,725	11,877	1,196	39,798	11,877	0	1,408	0	0	0	13,285	26,514	
2030	27,313	12,138	1,222	40,674	12,138	0	1,365	0	0	0	13,504	27,170	
2031	27,914	12,405	1,249	41,569	12,405	0	1,324	0	0	0	13,729	27,839	
2032	28,528	12,678	1,277	42,483	12,678	0	1,284	0	0	0	13,962	28,521	
2033	29,156	12,957	1,305	43,418	12,957	0	1,245	0	0	0	14,202	29,216	
2034	29,797	13,242	1,333	44,373	13,242	0	1,207	0	0	0	14,450	29,923	
2035	30,453	13,534	1,363	45,349	13,534	0	1,171	0	0	0	14,705	30,645	
2036	31,123	13,831	1,393	46,347	13,831	0	1,136	0	0	0	14,967	31,380	
2037	31,808	14,136	1,423	47,367	14,136	0	1,101	0	0	0	15,237	32,130	
2038	32,507	14,447	1,455	48,409	14,447	0	1,068	0	0	0	15,515	32,894	
2039	33,223	14,764	1,487	49,474	14,764	0	1,036	0	0	0	15,800	33,674	
2040	33,954	15,089	1,519	50,562	15,089	0	1,004	0	0	0	16,094	34,469	
2041	34,701	15,421	1,553	51,674	15,421	0	974	0	0	0	16,395	35,279	
2042	35,464	15,761	1,587	52,811	15,761	0	945	0	0	0	16,705	36,106	
2043	36,244	16,107	1,622	53,973	16,107	0	916	0	0	0	17,023	36,950	
2044	37,042	16,462	1,657	55,161	16,462	0	888	0	0	0	17,350	37,811	
NOMINAL	607,224	269,856	27,171	904,251	269,856	0	24,156	0	38	247,500	541,550	362,701	
NPV:	317,978	141,312	14,228	473,519	141,312	0	14,255	0	38	247,500	403,106	70,412	
Discount rate:	0.0742												
	Total PV of Benefits			473,519	Total PV of Costs			403,106	G-RIM		1,175		

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INPUT DATA - PART 1
Peoples Gas System, Inc.
Commercial Electric Replacement
Load Building

- (1) Life of Program 20 Years
- (2) Average therms consumed by Appliance (s) 5,829 Therms
- (3) Program peak consumption per installed Appliance:

Summer	0 Therms
Winter	0 Therms
- (4) Appliances Installed per Program 0 Units/Year
- (5) Average Number of Participants per Year 0 Participants/Year
- (6) Avoided annual kWh per Appliance 156,902 kWh
- (6)a Avoided demand kW per Appliance 100.000 kW
- (7) Avoided annual Therms per Appliance 0 Therms/Year
- (8) Incentive payment per Appliance 10,000 \$
- (9) Other Costs not identified in C.B. Forms
- (10) Escalation Rates:

Gas and Pipeline Capital	2.20 %
O&M	2.20 %

Commercial Electric Replacement Load Building	
Calculated Benefit to Cost Ratios	
(1) Participant Cost Test (PCT)	1.334
(2) Gas-Rate Impact Measure Test (G-RIM)	1.841

Peoples Gas System, Inc.
Participant Cost Test (PCT) (Load Building Scenario)
Program: Commercial Electric Replacement

PSC C.B. FORM 2
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Year	Benefits					Costs					Total Costs	Net Benefits	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)			(11)
Electric Bill Savings	Tax Credits	Utility Rebate	Other Benefits	Total Benefits	Net Customer Equipment Costs	Customer Gas Installation Costs	Incremental O&M Costs	Annual Gas Energy Charge	Annual Cost of Gas	Annual Customer Charge	Total Costs	Net Benefits	
2025	12,154	0	10,000	0	22,154	16,120	10,260	0	2,288	5,149	219	34,037	(11,883)
2026	12,422	0	0	0	12,422	0	0	0	2,339	5,263	224	7,825	4,596
2027	12,695	0	0	0	12,695	0	0	0	2,390	5,378	229	7,998	4,697
2028	12,974	0	0	0	12,974	0	0	0	2,443	5,497	234	8,173	4,801
2029	13,260	0	0	0	13,260	0	0	0	2,497	5,618	239	8,353	4,906
2030	13,551	0	0	0	13,551	0	0	0	2,551	5,741	244	8,537	5,014
2031	13,849	0	0	0	13,849	0	0	0	2,608	5,867	250	8,725	5,125
2032	14,154	0	0	0	14,154	0	0	0	2,665	5,997	255	8,917	5,237
2033	14,465	0	0	0	14,465	0	0	0	2,724	6,128	261	9,113	5,352
2034	14,784	0	0	0	14,784	0	0	0	2,783	6,263	267	9,313	5,470
2035	15,109	0	0	0	15,109	0	0	0	2,845	6,401	273	9,518	5,591
2036	15,441	0	0	0	15,441	0	0	0	2,907	6,542	279	9,728	5,714
2037	15,781	0	0	0	15,781	0	0	0	2,971	6,686	285	9,942	5,839
2038	16,128	0	0	0	16,128	0	0	0	3,037	6,833	291	10,161	5,968
2039	16,483	0	0	0	16,483	0	0	0	3,103	6,983	297	10,384	6,099
2040	16,846	0	0	0	16,846	0	0	0	3,172	7,137	304	10,612	6,233
2041	17,216	0	0	0	17,216	0	0	0	3,241	7,294	311	10,846	6,370
2042	17,595	0	0	0	17,595	0	0	0	3,313	7,454	317	11,085	6,510
2043	17,982	0	0	0	17,982	0	0	0	3,386	7,618	324	11,328	6,654
2044	18,378	0	0	0	18,378	0	0	0	3,460	7,786	331	11,578	6,800
Nominal	301,268	0	10,000	0	311,268	16,120	10,260	0	56,723	127,636	5,434	216,173	
NPV:	157,761	0	10,000	0	167,761	16,120	10,260	0	29,703	66,838	2,846	125,767	
Discount rate:		0.0742											
				Total PV of Benefits	167,761					Total PV of Costs		125,767	
										PCT		1.334	

Peoples Gas System, Inc													
Gas - Rate Impact Measure Test (G-RIM)(Load Building Scenario)													
Program: Commercial Electric Replacement													
PSC C.B. FORM 3													
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March 26, 2024													
YEAR	Benefits			Costs					Rebate/ Incentive	Total Cost	Net Benefits		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				(9)	(10)
	Energy Charge	Gas Charge	Customer Charge	Total Benefits	Gas Supply	Non-Fuel Supply Costs	Depreciation	Customer	Admin				
2025	5,149	2,288	219	7,657	2,288	0	1,592	0	0	38	10000	13,919	(6,262)
2026	5,263	2,339	224	7,825	2,339	0	1,544	0	0	0	0	3,882	3,943
2027	5,378	2,390	229	7,998	2,390	0	1,497	0	0	0	0	3,887	4,110
2028	5,497	2,443	234	8,173	2,443	0	1,452	0	0	0	0	3,894	4,279
2029	5,618	2,497	239	8,353	2,497	0	1,408	0	0	0	0	3,904	4,449
2030	5,741	2,551	244	8,537	2,551	0	1,365	0	0	0	0	3,917	4,620
2031	5,867	2,608	250	8,725	2,608	0	1,324	0	0	0	0	3,932	4,793
2032	5,997	2,665	255	8,917	2,665	0	1,284	0	0	0	0	3,949	4,968
2033	6,128	2,724	261	9,113	2,724	0	1,245	0	0	0	0	3,969	5,144
2034	6,263	2,783	267	9,313	2,783	0	1,207	0	0	0	0	3,991	5,323
2035	6,401	2,845	273	9,518	2,845	0	1,171	0	0	0	0	4,016	5,503
2036	6,542	2,907	279	9,728	2,907	0	1,136	0	0	0	0	4,043	5,685
2037	6,686	2,971	285	9,942	2,971	0	1,101	0	0	0	0	4,072	5,869
2038	6,833	3,037	291	10,161	3,037	0	1,068	0	0	0	0	4,105	6,056
2039	6,983	3,103	297	10,384	3,103	0	1,036	0	0	0	0	4,139	6,245
2040	7,137	3,172	304	10,612	3,172	0	1,004	0	0	0	0	4,176	6,436
2041	7,294	3,241	311	10,846	3,241	0	974	0	0	0	0	4,215	6,630
2042	7,454	3,313	317	11,085	3,313	0	945	0	0	0	0	4,257	6,827
2043	7,618	3,386	324	11,328	3,386	0	916	0	0	0	0	4,302	7,027
2044	7,786	3,460	331	11,578	3,460	0	888	0	0	0	0	4,348	7,229
NOMINAL	127,636	56,723	5,434	189,793	56,723	0	24,156	0	0	38	10,000	90,917	98,876
NPV:	66,838	29,703	2,846	99,387	29,703	0	14,255	0	0	38	10,000	53,997	45,390
Discount rate:				0.0742									
				Total PV of Benefits				Total PV of Costs					
				99,387				53,997					
								G-RIM					
								1,841					

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INPUT DATA - PART 1
Peoples Gas System, Inc.
Program Title: Commercial Retention
Load Reduction

- (1) Life of Program 20 Years
- (2) Average therms consumed by Appliance (s) 2,592 Therms
- (3) Program peak consumption per installed Appliance:
 - Summer 0 Therms
 - Winter 0 Therms
- (4) Appliances Installed per Program 636 Units/Year
- (5) Average Number of Participants per Year 636 Participants/Year
- (6) Avoided annual kWh per Appliance 0 kWh
- (6)a Avoided demand kW per Appliance 0.000 kW
- (7) Avoided annual Therms per Appliance 308 Therms/Year
- (8) Incentive payment per Appliance 1,938 \$
- (9) Other Costs not identified in C.B. Forms
- (10) Escalation Rates:
 - Gas and Pipeline 2.20 %
 - Capital 2.20 %
 - O&M 2.20 %

Commercial Retention Load Reduction Calculated Benefit to Cost Ratios	
(1) Participant Cost Test (PCT)	11.141
(2) Gas-Rate Impact Measure Test (G-RIM)	1.129

Peoples Gas System, Inc.
Participant Cost Test (PCT) (Load Reduction)
Program: Commercial Retention

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Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Energy Charge Savings	Gas Charge Savings	Tax Credits	Utility Rebate	Other Benefits	Total Benefits	Net Customer Equipment Costs	Net Customer Gas Installation Costs	Incremental O&M Costs	Total Costs	Net Benefits
2025	121	121	0	1,938	0	2,179	355	0	0	355	1,824
2026	124	124	0	0	0	247	0	0	0	0	247
2027	126	126	0	0	0	253	0	0	0	0	253
2028	129	129	0	0	0	258	0	0	0	0	258
2029	132	132	0	0	0	264	0	0	0	0	264
2030	135	135	0	0	0	270	0	0	0	0	270
2031	138	138	0	0	0	276	0	0	0	0	276
2032	141	141	0	0	0	282	0	0	0	0	282
2033	144	144	0	0	0	288	0	0	0	0	288
2034	147	147	0	0	0	294	0	0	0	0	294
2035	150	150	0	0	0	301	0	0	0	0	301
2036	154	154	0	0	0	307	0	0	0	0	307
2037	157	157	0	0	0	314	0	0	0	0	314
2038	161	161	0	0	0	321	0	0	0	0	321
2039	164	164	0	0	0	328	0	0	0	0	328
2040	168	168	0	0	0	335	0	0	0	0	335
2041	171	171	0	0	0	343	0	0	0	0	343
2042	175	175	0	1,938	0	2,288	514	0	0	514	1,774
2043	179	179	0	0	0	358	0	0	0	0	358
2044	183	183	0	0	0	366	0	0	0	0	366
Nominal	2,999		0	3,875	0	9,872	869	0	0	869	
NPV:	1,570		0	2,511	0	5,652	507	0	0	507	
Discount rate:		0.0742									
				Total PV of Benefits	5,652			Total PV of Costs		507	
								PCT		11.141	

YEAR	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	Energy Charge	Gas Charge	Incremental Cust Charge	Avoided Main	Avoided Meter/Regulator	Avoided Depreciation	Avoided Taxes	Total Benefits	Energy Charge	Gas Charge	Rebate/ Incentive	Admin Cost	Total Cost	Net Benefits	
	Benefits				Costs										
2025	272	121	274	0	0	0	0	667	272	121	1938	38	2,369	(1,702)	
2026	278	124	280	0	0	0	0	682	278	124	0	0	402	280	
2027	284	126	286	0	0	0	0	697	284	126	0	0	411	286	
2028	291	129	293	0	0	0	0	712	291	129	0	0	420	293	
2029	297	132	299	0	0	0	0	728	297	132	0	0	429	299	
2030	303	135	306	0	0	0	0	744	303	135	0	0	438	306	
2031	310	138	312	0	0	0	0	760	310	138	0	0	448	312	
2032	317	141	319	0	0	0	0	777	317	141	0	0	458	319	
2033	324	144	326	0	0	0	0	794	324	144	0	0	468	326	
2034	331	147	333	0	0	0	0	812	331	147	0	0	478	333	
2035	338	150	341	0	0	0	0	829	338	150	0	0	489	341	
2036	346	154	348	0	0	0	0	848	346	154	0	0	500	348	
2037	353	157	356	0	0	0	0	866	353	157	0	0	511	356	
2038	361	161	364	0	0	0	0	885	361	161	0	0	522	364	
2039	369	164	372	0	0	0	0	905	369	164	0	0	533	372	
2040	377	168	380	0	0	0	0	925	377	168	0	0	545	380	
2041	386	171	388	0	0	0	0	945	386	171	0	0	557	388	
2042	394	175	397	0	0	0	0	966	394	175	1938	56	2,562	(1,596)	
2043	403	179	405	0	0	0	0	987	403	179	0	0	582	405	
2044	412	183	414	0	0	0	0	1,009	412	183	0	0	595	414	
NOMINAL	6,747	2,999		0	0	0	0	16,539	6,747	2,999	3,875		13,715	2,824	
NPV:	3,533	1,570		0	0	0	0	8,661	3,533	1,570	2,511		7,670	991	
Discount rate:	0.0742														
	Total PV of Benefits							8,661	Total PV of Costs				7,670		
													G-RIM	1,129	

Peoples Gas System, Inc.
 Achievable Potential Measure List
 2025-2034 DSM Goals

Residential	
Category	Measure
Water Heating	
	Tank Water Heater
	Tankless Water Heater
	Energy Star Tank Water Heater
Cooking	
	Range/Cooktop
HVAC	
	Furnace
	Gas Heat Pump
Laundry	
	Clothes Dryer

Commercial	
Category	Measure
Water Heating	
	Tankless Water Heater
	Energy Star Tank Water Heater
Cooking	
	Range/Cooktop
	Energy Star Convection Oven
	Energy Star Fryer
	Energy Star Griddle
	Energy Star Steam Cooker
HVAC	
	Furnace
	Gas Heat Pump
Laundry	
	Clothes Dryer
Other	
	Combined Heat and Power

Peoples Gas System, Inc.
Breakdown of Estimated Costs by Program and Year
2025-2034 DSM Goals

Year	Commercial New Construction	Commercial Retrofit	Commercial Retention	Residential New Construction	Residential Retrofit	Residential Retention	Total
2025	\$1,076,652	\$771,373	\$1,234,391	\$11,436,124	\$351,102	\$3,779,582	\$18,649,224
2026	\$1,094,882	\$741,566	\$1,237,468	\$11,459,351	\$346,526	\$3,719,667	\$18,599,460
2027	\$1,113,113	\$706,182	\$1,240,545	\$11,513,129	\$341,950	\$3,666,869	\$18,581,787
2028	\$1,131,343	\$670,798	\$1,243,621	\$11,510,665	\$337,374	\$3,620,667	\$18,514,468
2029	\$1,149,573	\$637,452	\$1,246,698	\$11,512,729	\$332,798	\$3,580,581	\$18,459,832
2030	\$1,167,804	\$602,068	\$1,249,775	\$11,509,428	\$327,702	\$3,546,172	\$18,402,949
2031	\$1,186,034	\$566,684	\$1,252,852	\$11,518,866	\$322,784	\$3,517,036	\$18,364,255
2032	\$1,204,265	\$536,877	\$1,255,929	\$11,565,794	\$317,981	\$3,492,802	\$18,373,648
2033	\$1,222,495	\$501,492	\$1,259,006	\$11,551,494	\$313,730	\$3,473,132	\$18,321,349
2034	\$1,240,726	\$466,108	\$1,262,082	\$11,549,554	\$309,153	\$3,457,713	\$18,285,337
Total	\$11,586,887	\$6,200,599	\$12,482,367	\$115,127,135	\$3,301,100	\$35,854,220	\$184,552,309