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PSEG Services Corporation

June 1, 2023

In the Matter of the Petition of
Public Service Electric and Gas Company
for Approval of Changes it its Gas Conservation
Incentive Program
(2023 PSE&G Gas Conservation Incentive
Program Rate Filing)

BPU Docket No. _____

VIA BPU E-FILING SYSTEM & ELECTRONIC MAIL

Sherri Golden, Board Secretary
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
P.O. Box 350
Trenton, New Jersey 08625-0350

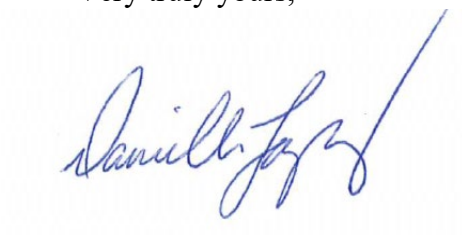
Dear Secretary Golden:

Enclosed for filing on behalf of petitioner Public Service Electric and Gas Company is the Petition, Testimony of Michael McFadden, Karen Reif, Stephen Swetz, and Supporting Schedules in the above-referenced proceeding.

Please be advised that Attachment A - Schedule 6 is confidential and will be provided to the parties upon receipt of the Non-Disclosure Agreement, which is enclosed here.

Consistent with the Order issued by the Board in connection with In the Matter of the New Jersey Board of Public Utilities' Response to the COVID-19 Pandemic for a Temporary Waiver of Requirements for Certain Non-Essential Obligations, BPU Docket No. EO20030254, Order dated March 19, 2020, this document is being filed electronically with the Secretary of the Board and the New Jersey Division of Rate Counsel. No paper copies will follow.

Very truly yours,



C Attached service list (via e-mail)

In the Matter of the Petition of Public Service Electric and Gas Company for Approval of Changes in its Gas Conservation Incentive Program (2023 PSE&G Gas CIP Rate Filing)
BPU Docket No.

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STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF	**)**	
PUBLIC SERVICE ELECTRIC AND GAS	**)**	
COMPANY FOR APPROVAL OF CHANGES	**)**	**BPU DOCKET NO. _____**
IN ITS GAS CONSERVATION	**)**	
INCENTIVE PROGRAM	**)**	
(2023 PSE&G GAS CONSERVATION	**)**	
INCENTIVE PROGRAM)	**)**	

VERIFIED PETITION

Public Service Electric and Gas Company ("PSE&G," "the Company," or "Petitioner"), a corporation of the State of New Jersey, having its principal offices at 80 Park Plaza, Newark, New Jersey, respectfully petitions the New Jersey Board of Public Utilities ("Board" or "BPU") pursuant to *N.J.S.A.* 48: 2-21, or any other statute the Board deems applicable, as follows:

INTRODUCTION AND OVERVIEW OF THE FILING

1. Petitioner is a public utility engaged in the distribution of electricity and the provision of electric Basic Generation Service ("BGS"), and distribution of gas and the provision of Basic Gas Supply Service ("BGSS"), for residential, commercial and industrial customers within the State of New Jersey. PSE&G provides service to approximately 2.3 million electric and 1.9 million gas customers in an area having a population in excess of 6.5 million persons and that extends from the Hudson River opposite New York City, southwest to the Delaware River at Trenton, and south to Camden, New Jersey.

2. Petitioner is subject to Board regulation for the purposes of setting its retail distribution rates and to assure safe, adequate, and reliable electric distribution and natural gas

distribution service pursuant to *N.J.S.A.* 48:2-21 *et seq*.

3. PSE&G is filing this Petition seeking Board approval for a rate adjustment related to changes in the average use per customer when compared to a baseline use per customer. The Clean Energy Future – Energy Efficiency Program ("CEF-EE") was approved in a Board Order dated September 23, 2020 in BPU Docket Nos. EO10121113 and GO18101112 ("CEF-EE Order"). In this Order, the Board approved a Conservation Incentive Program ("CIP") that allows the Company to account for lost sales revenue resulting from the decrease in customer energy usage. The CEF-EE Order approved a Stipulation that authorized a gas CIP ("GCIP") cost recovery filing by June 1, 2021, for new rates effective October 1, 2022, with annual adjustments to the GCIP thereafter. Stipulation, paragraph 39.

4. On June 1, 2022, PSE&G filed a petition with the Board requesting an adjustment to the GCIP rate for the period October 1, 2022 through September 30, 2023. On September 28, 2022, the Board issued an order approving the rates on a provisional basis, subject to refund with interest. Subsequently, on April 12, 2023, the Board approved the 2022-2023 GCIP rates as final.

BACKGROUND

5. On January 13, 2008, L. 2007, c. 340 ("RGGI Law") was signed into law and pronounced that EE and conservation measures must be essential elements of the State's energy future. The Legislature also found that public utility involvement and competition in the conservation and EE industries are essential to maximize efficiencies. N.J.S.A. 26:2C-45. Pursuant to Section 13 of the RGGI Law, codified in part as N.J.S.A. 48:3-98.1(a)(1), an electric or gas

public utility may, among other things, provide and invest in EE and conservation programs in its service territory on a regulated basis.

6. An electric or gas public utility's investment in EE and conservation programs is eligible for rate treatment approved by the Board, including a return on equity, or other incentives or rate mechanisms. N.J.S.A. 48:3-98.1(b).

7. On May 23, 2018, Governor Murphy signed the Clean Energy Act ("CEA") into law. The CEA builds upon the RGGI Law by employing clean energy strategies and establishing aggressive energy reduction requirements with the goal of improving public health by ensuring a cleaner environment for current and future New Jersey residents. Specifically, the CEA requires that each utility implement EE measures that "achieve annual reductions in the use of electricity of two percent of the average annual usage in the prior three years within five years of implementation of its electric energy efficiency program" and "annual reductions in the use of natural gas of 0.75 percent of the average annual usage in the prior three years within five years of implementation of its gas energy efficiency program."[1] The CEA emphasizes the importance of EE and peak demand reduction ("PDR") and calls upon New Jersey's electric and gas public utilities to play an increased role in delivering EE and PDR programs to customers, with the aim to achieve the State's goal of 100% clean energy by 2050.

8. The CEA required the Board to complete a study to determine energy savings targets for each utility to achieve the full economic, cost effective potential for energy usage reductions and the timeframe to achieve those reductions. It also required the Board to adopt

[1] *P.L. 2018, c. 17, § 3(a) and (e)(1).*

quantitative performance indicators ("QPIs") to establish utility targets for energy usage reduction and PDR, and to establish a stakeholder process to evaluate the economically achievable EE and PDR requirements, rate adjustments, QPIs, and the process for evaluating, measuring, and verifying energy usage reductions and peak demand reductions by the public utilities.

CEF-EE PROGRAM

9. PSE&G filed for approval of its CEF-EE Program pursuant to Section 13 of the RGGI Law on October 11, 2018 ("CEF-EE Petition" or "Petition").

10. The CEF-EE Program filing consisted of 22 sub-programs, including seven (7) residential subprograms, seven (7) commercial and industrial ("C&I") sub-programs, and eight (8) pilot subprograms. The CEF-EE residential sub-programs were proposed to, among other initiatives, promote the purchase and installation of high-efficiency appliances through rebates and on-bill incentives; provide customers with energy audits and installation of EE measures; educate residential builders and developers on energy efficient home design and construction; and educate kindergarten through 12th grade students on EE. These residential sub-programs were proposed to work together to upgrade efficiency in homes throughout PSE&G's service territory. The CEF-EE C&I sub-programs were proposed to, among other things, promote the installation of energy efficient equipment; advance efficient design and equipment installation for new buildings; optimize energy consumption in existing buildings; and upgrade all of PSE&G's existing high-pressure sodium cobra head streetlights to more efficient light emitting diode ("LED") streetlights. Lastly, the CEF-EE pilot sub-programs were proposed to implement

and manage select, advanced approaches to EE that, after the conclusion of the pilot phase, may support future EE programs in New Jersey.

11. The total proposed investment for the CEF-EE Program was approximately $2.8 billion, including $2.5 billion for investment—including $86.2 million for information technology ("IT") investments—and approximately $283 million in administrative costs, including $28.9 million for IT run costs, over the proposed six (6) year term of the Program, with a proposed 15-year amortization period for residential and C&I program investments.

12. PSE&G proposed that the costs be recovered via a new CEF-EE Program component ("CEF-EEC") of the Company's electric and gas Green Programs Recovery Charge ("GPRC") that would be filed annually. PSE&G proposed to earn a return on its net investment based on its most recent weighted average cost of capital ("WACC").

13. Additionally, the Company requested Board approval of a decoupling mechanism for recovering lost revenues, the Green Enabling Mechanism ("GEM"), which would provide for the recovery or refund of the difference between actual revenue and the level of "allowed" revenue per customer established in the most recently completed base rate case.

14. Pursuant to the requirements of the CEA, the Board undertook a process to develop a framework for establishing EE and PDR programs to reduce the use of electricity and natural gas in New Jersey.

15. As part of the Board's separate EE transition process applicable to all utility and State administered EE programs implemented pursuant to the CEA, the Board also established a stakeholder process to evaluate the economically achievable EE and PDR requirements, rate

adjustments, QPIs, and the process for evaluating, measuring, and verifying energy usage reductions and peak demand reductions by the public utilities.

16. Following several stakeholder meetings regarding the EE Potential Study, the Board adopted the energy savings targets and QPIs as preliminary and approved establishment of an Energy Efficiency Advisory Group to participate in the ongoing EE transition stakeholder process related to the development of EE and PDR programs in New Jersey.

17. Board Staff considered and incorporated public comments and technical data received throughout the EE transition process in the refinement of a framework for EE and PDR programs. Staff also released proposals for comment on program administration and cost recovery and, ultimately, following the submission of comments, on March 20, 2020 issued the full Energy Efficiency Transition Straw Proposal.

18. On June 10, 2020, the Board accepted Staff's proposed framework ("Framework Order") for the performance targets, program administration, cost recovery (including lost revenue treatment), evaluation, measurement, verification ("EM&V"), and filing and reporting standards for implementation of New Jersey's EE and PDR programs.

19. The Framework Order allowed utilities the option of seeking a lost revenue adjustment mechanism ("LRAM") or the Conservation Incentive Program to address lost revenue recovery as called for in the CEA. With regard to the Conservation Incentive Program, the Framework Order states:

> ***Conservation Incentive Program ("CIP")***
> As an alternative to the LRAM, Staff recommends that utilities continue to be able to utilize or propose participation in the Conservation Incentive Program ("CIP"). The Board approved the current CIP in 2014 for NJNG and SJG, and it includes the following

protections: (1) an earnings test, (2) rate caps on surcharges, (3) a Basic Gas Supply Service ("BGSS") Savings Test, and (4) required shareholder contributions.

Staff recommends the following adjustments designed to make the CIP applicable to both gas and electric public utilities:

- Removal of the BGSS Savings Test – which realizes savings as a result of contract Restructurings, contract terminations, reductions of capacity for periods of at least one year, and other gas procurement strategies designed to benefit customers – and incorporation of an alternative test, which may include a cost-effectiveness test. The BGSS Savings Test could not apply to electric public utilities due to the Basic Generation Service ("BGS") auction process and to the other non-participating gas public utilities since they do not manage their natural gas capacity portfolios.

- Requirement that the utility calculate the difference between its baseline revenue per applicable customer, determined by the utility's most recent base rate case, and the actual revenue per applicable customer on a monthly basis. Staff recommends that the difference between the monthly baseline and actual revenue amount be tracked in a deferral account and be subject to review during an annual cost recovery true-up filing.

- Requirement that the utility file a base rate case no later than five years after commencement of an approved EE program in order to reset the baseline revenue per applicable customer, with the five year requirement satisfied if the utility has another base rate filing obligation.

As part of the modified CIP, the following protections would remain in place: (1) an earnings test, (2) rate caps on surcharges, (3) some form of a shareholder contribution; and (4) incorporation of an alternative to the BGSS Savings Test.

20. Following the Board's issuance of the Framework Order, the Parties recommenced settlement discussions concerning PSE&G's CEF-EE proposal.

21. The Company, Board Staff, Rate Counsel, and the intervening parties reached an agreement resolving all issues in the CEF-EE proceeding as guided by the principles set forth in the Framework Order and by the Joint Utility Working Group and the Utility Program Working Groups formed in connection with the EE transition process.

22. Following discovery, the filing of testimony, evidentiary hearings and several settlement conferences as described above, the Parties executed a stipulation of settlement ("Stipulation") resolving the CEF-EE matter on September 22, 2020.

23. The CEF-EE Order approved the CIP mechanism that is the subject of this proceeding consistent with Staff's recommendation of the CIP in the Framework Order as outlined in Paragraph 24.

THE CIP

24. The Stipulation, approved by the CEF-EE Order dated September 23, 2020, provided for the recovery of fixed costs and the potential for decline in revenue to account for lost sales revenue resulting from the decrease in customer energy usage. The recovery of lost revenues will be made via a CIP based on the methodology outlined below and detailed in the schedule for gas, as noted in Attachment 6G to the CEF-EE Stipulation. As set forth fully in the CEF-EE Stipulation and its attachments, with respect to the CIP mechanism, the Company agreed as follows:

Shareholder Contribution

25. To implement initiatives to further customer conservation efforts, providing a funding amount ("shareholder contribution") of $3.3 million per year as long as the CIP remains in place, commencing with the start of the CIP deferrals, as defined below. All shareholder contribution expenditures will be allocated 55% to electric distribution (or approximately $1.8 million) and 45% to gas distribution (or approximately $1.5 million). Any under-spend in a year will be factored into the following year's spending amount. The shareholder contribution will not be included in customer rates. The shareholder contribution will support initiatives designed

to aid customers in reducing their costs of natural gas and electricity and to reduce each utility's peak demand.

Filing/Tariff Details

26. The parties to the CEF-EE Stipulation agreed that PSE&G would submit its first gas CIP cost recovery filing by June 1, 2022, for new rates effective October 1, 2022, based on an initial deferral period of October 1, 2021 through September 30, 2022 and that it would not book any GCIP deferral prior to October 1, 2021. The GCIP will be adjusted annually thereafter. The filings will document actual results, perform the required GCIP collection test described in more hereinafter, and propose the new GCIP rate. Any variances from the annual filing will be trued-up in the subsequent year. The initial GCIP filing was approved on April 12, 2023. This petition is for the second GCIP cost recovery filing seeking new rates effective October 1, 2023 based on a deferral period of October 1, 2022 through September 30, 2023.

Weather Normalization Charge

27. By Order dated September 14, 2021, the Board approved a provisional settlement where the parties agreed that as the remaining over/under balance of the Weather Normalization Charge ("WNC") approaches zero, PSE&G will make a compliance filing in the above docket to set the WNC rate to zero and roll any remaining over or under recovery balance, including interest, into the Company's initial GCIP.[2] In accordance with the Order, on April 20, 2022, PSE&G made a compliance filing with the Board setting the WNC rate to $0.000000 per therm

[2] *In the Matter of the Petition of Public Service Electric and Gas Company to Revise its Weather Normalization Charge for the 2021-2022 Annual Period,* BPU Docket No. GR21060952.

effective May 1, 2022.[3] In March 2023 the Company rolled the remaining WNC balance of $2,840 from October 2022 through March 2023 into the Company's Gas Conservation Incentive Program ("GCIP") balance.

CIP Methodology

28. The monthly CIP deferrals will be calculated by way of the approved methodology as reflected in Attachments 5 and 6G to the CEF-EE Stipulation. For the GCIP, the baseline usage per customer by applicable rate schedule is based on the billing determinants approved in the Company's 2018 base rate case. The baseline usage per customer will be adjusted with each subsequent base rate case. The margin rate utilized in the calculation of the gas deferral is based on the current variable margin rate for each rate schedule and will be updated for any Infrastructure Investment Program ("IIP") rate adjustments or all other future base rate changes.

29. For purposes of determining recovery eligibility for CIP accruals, the margin impact of changes in customer usage will be segregated into weather-related and non-weather-related components. The non-weather-related components will be limited by eligibility tests described in more detail below. The weather-related component will not be subject to those limitations.

30. The non-weather component will be calculated by first deducting the weather component. For gas, the weather impact will be calculated consistent with the Gas CIP tariff. The weather normalization methodology is shown in Attachment A, Schedule 4 (which is consistent with the methodology presented in Schedule 4 of Attachment 6G of the CEF-EE

[3] *In the Matter of the Petition of Public Service Electric and Gas Company to Revise its Weather Normalization Charge for the 2021-2022 Annual Period,* BPU Docket No. GR21060952

Stipulation). A description of the weather calculation is provided in the testimony of Michael McFadden.

31. Recovery of non-weather related gas CIP impacts shall be subject to the application of two eligibility tests: a modified BGSS Savings Test and a Variable Margin Test. A description of the eligibility tests is provided in the testimony of Stephen Swetz ("BGSS Savings Test") and Michael McFadden ("Variable Margin Test"). The dual cost recovery tests set forth above shall operate in conjunction with each other so that the total non-weather recoverable amount is limited to the smaller of the two (2) recoverable amounts allowed under the separate BGSS Savings Test and Variable Margin Test for Gas. Any amounts that exceed the BGSS Savings Test and/or Variable Margin Test may be deferred for future recovery subject to the earnings test described below. The Company has agreed to not seek recovery of interest on any deferred carry-forward amount. There is no limitation on the non-weather recovery forecasted in this proceeding.

Earnings Test

32. The parties to the CEF-EE stipulation agreed to include an earnings test, through which actual ROE shall be determined based on the actual net income of the utility for the most recent 12-month period divided by the average of the beginning and ending common equity balances for the corresponding period. The timing of the earnings test and definitions of Net Income and Common Equity are specified in the GCIP Tariffs. The earnings test will be applicable to the total CIP deferral, including weather and non-weather components. If the calculated ROE exceeds the allowed ROE from the utility's last base rate case by 50 basis points or more, recovery of lost revenues through the CIP shall not be allowed for the applicable filing period and shall not

be carried over to subsequent filing periods. There is no earnings test limitation forecasted in this proceeding.

REQUEST FOR COST RECOVERY

33. Consistent with the CEF-EE Order, PSE&G is seeking BPU approval to implement a rate adjustment related to changes in the average revenue per customer when compared to a baseline revenue per customer.

34. Per the CEF-EE Order, the gas baseline use per customer is based on the billing determinants from the 2018 base rate case. The difference between the actual use per customer and the baseline use per customer is multiplied by the actual number of customers and the per therm margin rate for each applicable rate schedule.

35. Attachment A provides the approved CIP schedules from the CEF-EE Order, updated for the latest CIP deferral period of October 1, 2022 through September 30, 2023. Attachment B is the testimony of Michael P. McFadden, PSE&G's Director of Sales and Revenue Forecasting, providing an overview of the CIP mechanism, the calculation of weather impacts for the current CIP period, and the calculation of the Variable Margin Test. Attachment C is the testimony of Karen B. Reif, PSE&G's Vice President of Renewables and Energy Solutions, providing the spending activity related to the CIP Shareholder Contribution ("SC") over the past several months, and an update on the SC expenditures to date. Attachment D is the testimony of Steven Swetz, Senior Director of Corporate Rates and Revenue Requirements for PSEG Services Corporation supporting the Earnings Test, BGSS Savings Test and rate calculation for the current CIP period.

36. The Company's total deferral for the gas CIP ("GCIP") is $109,934,665, representing ($10,253,880) of non-weather related gas distribution margin deficiencies, $109,219,047 related to weather related gas distribution margin, $2,840 relating to the WNC ending balance transferred to GCIP from October 2022 through March of 2023 and the GCIP Carry-Forward amount of $10,966,659.

37. The application of the Variable Margin Revenue Test and the BGSS Savings Test did not result in a limitation on the Company's GCIP recovery of non-weather related revenues as there is no limitation on a refund of the non-weather component of the GCIP.

38. The GCIP rates are summarized below:

		GCIP Rates Without SUT	**GCIP Rates with SUT**	
Group I	RSG	$0.060736	$0.064760	Per therm
Group II	GSG	$0.044451	$0.047396	Per therm
Group III	LVG	$0.004748	$0.005063	Per therm

See, Attachment D, Schedule SS-GCIP-2.

39. Based upon rates effective May 1, 2023, the average monthly bill impacts of the rates requested are set forth in Schedule SS-GCIP-3.

40. The average monthly impact of the proposed rates to the typical residential gas heating customer using 172 therms in a winter month and 86.7 average monthly therms (1,040 annually) would be an increase in the average monthly bill from $97.77 to $100.854 or $3.08 or approximately 3.15% (based upon Delivery Rates and BGSS-RSG charges in effect as of May 1, 2023, and assuming that the customer receives BGSS service from PSE&G). Attachment E is a draft Form of Notice of Filing and of Public Hearings (Form of Notice). This

Form of Notice will be placed in newspapers having a circulation within the Company's gas service territory upon scheduling of public hearing dates. A Notice will be served on the County Executives and Clerks of all municipalities within the Company's gas service territory upon scheduling of public hearing dates.

41. In accordance with the Board's recent Covid-19 order, [4] notice of this filing, the Petition, testimony, and schedules will be served upon the Division of Law, Public Utilities Section, R.J. Hughes Justice Complex, 25 Market St. 7th Floor West, PO Box 112, Trenton, NJ 08625and upon the Director, Division of Rate Counsel, 140 East Front Street 4th Floor, Trenton, N.J. 08625 by electronic mail. Electronic copies of the Petition, testimony, and schedules will also be sent to the persons identified on the service list provided with this filing.

42. PSE&G requests that the Board find the proposed rates shown in the tariff sheets included herein at Attachment D, Schedule SS-GCIP-4, are just and reasonable and PSE&G should be authorized to implement the proposed rates as set forth herein, effective October 1, 2023.

43. Any final rate relief found by the Board to be just and reasonable may be allocated by the Board for consistency with the provisions of *N.J.S.A.* 48:2-21 and for other good and legally sufficient reasons, to any class or classes of customers of the Company. Therefore, the average percentage changes in final rates may increase or decrease compared to the proposed rates based upon the Board's decision.

[4] *See In the Matter of the New Jersey Board of Public Utilities' Response to the Covid-19 Pandemic for a Temporary Waiver of the Requirements for Certain Non-Essential Obligations*, Docket No. EO20030254, dated March 19, 2020.

COMMUNICATIONS

44. Communications and correspondence related to the Petition should be sent as follows:

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CONCLUSION AND REQUESTS FOR APPROVAL

For all the foregoing reasons, PSE&G respectfully requests that the Board retain jurisdiction of this matter and review and expeditiously issue an order approving this Petition specifically finding that:

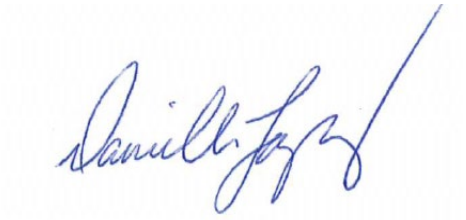
1. PSE&G is authorized to receive the GCIP rate adjustment associated with the GCIP period from October 1, 2022 – September 30, 2023, as reflected in this Petition and accompanying materials, along with anticipated updates of data; and

2. The rates shown in the tariff sheets included herein Attachment D, Schedule SS-GCIP-4, are just and reasonable and PSE&G should be authorized to implement the proposed rates as set forth herein, effective October 1, 2023 per the CEF-EE Stipulation, upon issuance of a written BPU order.

3. Any amount not recovered in the current GCIP period will be deferred for recovery in a subsequent GCIP proceeding.

Respectfully submitted,

PUBLIC SERVICE ELECTRIC AND GAS COMPANY



By _____

Danielle Lopez
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80 Park Plaza, T10
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DATED: June 1, 2023

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF	**)**	
PUBLIC SERVICE ELECTRIC AND GAS	**)**	
COMPANY FOR APPROVAL OF CHANGES	**)**	**BPU DOCKET NO. _____**
IN ITS GAS CONSERVATION	**)**	
INCENTIVE PROGRAM	**)**	
(2023 PSE&G GAS CONSERVATION	**)**	
INCENTIVE PROGRAM)	**)**	

CERTIFICATION

I, Michael P. McFadden, of full age, certifies as follows:

1. I am Director of Sales and Revenue Forecasting for PSEG Services Corporation.

2. I have read the contents of the foregoing Petition, and the information contained therein are true and correct to the best of my knowledge, information, and belief.

BY: 

Michael P. McFadden

Public Service Electric and Gas Company
Conservation Incentive Program
Group I: Residential Heat & Non-Heating
October 2022 - September 2023

Customer Class	Actual/ Estimate	Actual per Books[1] Total Class Therms	Number of Customers	Actual Avg. Use / Cust.	Baseline Use / Cust.[2]	Difference	Aggregate Therm Impact	Margin Factor	Margin Variance
(a)		(b)	(c)	(d) = (b) / (c)	(e)	(f) = (d) - (e)	(g) = (f) * (c)		
Residential RSG									
Oct-22	Act	76,737,759	1,699,041	45.2	38.7	6.5	10,992,795	$0.4184	$4,599,616
Nov-22	Act	141,365,764	1,701,243	83.1	87.6	(4.5)	(7,655,595)	$0.4184	($3,203,262)
Dec-22	Act	249,017,473	1,706,163	146.0	144.9	1.0	1,791,472	$0.4299	$770,132
Jan-23	Act	213,549,336	1,708,794	125.0	180.6	(55.6)	(95,060,198)	$0.4299	($40,865,239)
Feb-23	Act	213,535,674	1,708,876	125.0	153.5	(28.5)	(48,771,317)	$0.4299	($20,966,204)
Mar-23	Act	195,057,559	1,707,216	114.3	124.5	(10.3)	(17,498,962)	$0.4299	($7,522,594)
Apr-23	Act	90,238,816	1,708,740	52.8	70.4	(17.6)	(30,056,732)	$0.4299	($12,921,028)
May-23	Frcst	64,090,408	1,704,576	37.6	37.0	0.6	1,022,746	$0.4321	$441,877
Jun-23	Frcst	36,024,273	1,705,547	21.1	21.0	0.1	204,666	$0.4375	$89,538
Jul-23	Frcst	29,866,815	1,706,519	17.5	18.0	(0.5)	(853,260)	$0.4375	($373,287)
Aug-23	Frcst	26,745,529	1,707,491	15.7	18.0	(2.3)	(3,995,529)	$0.4375	($1,747,976)
Sep-23	Frcst	31,016,452	1,708,462	18	19.5	(1.4)	(2,306,424)	$0.4375	($1,009,021)
Total		1,367,245,859		801.2	913.7		(192,186,338)		($82,707,447)

Margin Deficiency/ (Credit)	$	82,707,447
Prior Period (Over) / Under Recovery[3]	$	10,648,498
Total Deficiency/(Credit)	$	93,355,944
Projected Residential Non-Heating Throughput for Recovery Period		1,541,119,719
Pre-tax CIP Charge/(Credit)	$	0.060577
BPU/RC Assessment Factor		1.002600
CIP Charge/(Credit) including assessments	$	0.060735
6.625% Sales Tax	$	0.0040
Proposed After-tax CIP Charge/(Credit) per Therm	**$**	**0.0648**
Current After-tax CIP Charge/(Credit) per Therm	$	0.0292
Increase/ (Decrease) in After-tax CIP Charge/(Credit) per Therm	$	0.035579

[1] Per Schedule 1, Page 2
[2] From 2018 Base Rate Case
[3] Per Schedule 1, Page 3

Public Service Electric and Gas Company
Customers and Therms

Group I: Residential Heat & Non-Heating

	Act Oct-22	Act Nov-22	Act Dec-22	Act Jan-23	Act Feb-23	Act Mar-23	Act Apr-23	Frcst May-23	Frcst Jun-23	Frcst Jul-23	Frcst Aug-23	Frcst Sep-23	
Customers													
RSG heating	1,477,728	1,479,616	1,484,291	1,489,159	1,490,148	1,489,472	1,490,614	1,484,861	1,485,707	1,486,553	1,487,400	1,488,246	
RSG non-heating	221,313	221,627	221,872	219,634	218,727	217,744	218,125	219,715	219,840	219,966	220,091	220,216	
Total Customers	1,699,041	1,701,243	1,706,163	1,708,794	1,708,876	1,707,216	1,708,740	1,704,576	1,705,547	1,706,519	1,707,491	1,708,462	
Volumes													
RSG heating	74,734,509	138,560,928	244,802,590	209,066,464	210,475,643	191,991,670	88,569,853	62,932,994	35,373,708	29,327,448	26,262,529	30,456,323	1,342,554,658
RSG non-heating	2,003,251	2,804,836	4,214,883	4,482,872	3,060,031	3,065,890	1,668,964	1,157,414	650,565	539,367	483,000	560,129	24,691,201
Total Volumes	76,737,759	141,365,764	249,017,473	213,549,336	213,535,674	195,057,559	90,238,816	64,090,408	36,024,273	29,866,815	26,745,529	31,016,452	1,367,245,859

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
STATEMENT OF ESTIMATED UNDER/(OVER) RECOVERED CIP BALANCE
Group I: Residential Heat & Non-Heating
October 2022 - September 2023

	Act Oct-22	Act Nov-22	Act Dec-22	Act Jan-23	Act Feb-23	Act Mar-23	Act Apr-23	Frcst May-23	Frcst Jun-23	Frcst Jul-23	Frcst Aug-23	Frcst Sep-23	TOTAL
Beginning Under/(Over) Recovery $	47,953,801	45,860,011	42,002,846	35,208,405	29,381,711	23,555,390	18,233,245	15,771,079	14,022,372	13,039,450	12,224,533	11,494,782	47,953,801
Therm Sales	76,737,759	141,365,764	249,017,473	213,549,336	213,535,674	195,057,559	90,238,816	64,090,408	36,024,273	29,866,815	26,745,529	31,016,452	1,367,245,859
Pre-tax Recovery Rate per Therm[1]	0.0273	0.0273	0.0273	0.0273	0.0273	0.0273	0.0273	0.0273	0.0273	0.0273	0.0273	0.0273	
Recovery $	2,093,790	3,857,165	6,794,442	5,826,694	5,826,321	5,322,146	2,462,166	1,748,707	982,922	814,916	729,752	846,284	37,305,303
Ending Under/(Over) Recovery $	45,860,011	42,002,846	35,208,405	29,381,711	23,555,390	18,233,245	15,771,079	14,022,372	13,039,450	12,224,533	11,494,782	10,648,498	10,648,498

[1] Pre-tax Recovery Rate per therm excluding BPU and RC assessments.

Public Service Electric and Gas
Conservation Incentive Program
Group II: General Service Gas (GSG)
October 2022 - September 2023

Customer Class (a)	Actual/ Estimate	Actual per Books[1] Total Class Therms (b)	Number of Customers (c)	Actual Avg. Use / Cust. (d) = (b) / (c)	Baseline Use / Cust.[2] (e)	Difference (f) = (d) - (e)	Aggregate Therm Impact (g) = (f) * (c)	Margin Factor	Margin Variance
General Service Small									
Oct-22	Act	12,147,145	139,376	87.2	110.8	(23.7)	(3,296,242)	$0.3186	($1,050,054)
Nov-22	Act	26,331,722	139,632	188.6	172.0	16.6	2,315,097	$0.3186	$737,500
Dec-22	Act	46,985,611	138,159	340.1	320.4	19.7	2,718,974	$0.3244	$881,997
Jan-23	Act	39,560,986	140,576	281.4	421.1	(139.7)	(19,635,606)	$0.3244	($6,369,516)
Feb-23	Act	40,074,465	140,886	284.5	351.6	(67.2)	(9,460,495)	$0.3244	($3,068,852)
Mar-23	Act	37,330,764	141,065	264.6	275.8	(11.2)	(1,574,282)	$0.3244	($510,675)
Apr-23	Act	16,769,742	140,696	119.2	170.7	(51.5)	(7,247,267)	$0.3244	($2,350,912)
May-23	Frcst	12,111,365	140,787	86.0	80.1	5.9	834,867	$0.3255	$271,737
Jun-23	Frcst	7,614,268	140,794	54.1	49.2	4.9	687,075	$0.3282	$225,527
Jul-23	Frcst	6,311,086	140,802	44.8	58.5	(13.7)	(1,926,171)	$0.3282	($632,250)
Aug-23	Frcst	6,607,374	140,809	46.9	50.5	(3.6)	(504,096)	$0.3282	($165,466)
Sep-23	Frcst	6,252,916	140,816	44.4	52.6	(8.2)	(1,154,691)	$0.3282	($379,018)
Total		258,097,444		1,841.8	2,113.3		(38,242,839)		($12,409,983)

Margin Deficiency/ (Credit)	$	12,409,983
Prior Period (Over) / Under Recovery[3]	$	567,155
Total Deficiency/(Credit)	$	12,977,138
Projected Commercial Throughput for Recovery Period		292,705,536
Pre-tax CIP Charge/(Credit)	$	0.044335
BPU/RC Assessment Factor		1.002600
CIP Charge/(Credit) including assessments	$	0.044450
6.625% Sales Tax	$	0.002945
Proposed After-tax CIP Charge/(Credit) per Therm	**$**	**0.047395**
Current After-tax CIP Charge/(Credit) per Therm	$	0.029649
Increase/ (Decrease) in After-tax CIP Charge/(Credit) per Therm	$	0.017746

[1] Per Schedule 2, Page 2
[2] From 2018 Base Rate Case
[3] Per Schedule 2, Page 3

Public Service Electric and Gas
Customers and Therms

Group II: General Service Gas (GSG)

	Act Oct-22	Act Nov-22	Act Dec-22	Act Jan-23	Act Feb-23	Act Mar-23	Act Apr-23	Frcst May-23	Frcst Jun-23	Frcst Jul-23	Frcst Aug-23	Frcst Sep-23	
Customers													
GSG Heating	114,205	114,618	113,416	115,407	115,669	115,803	115,542	115,552	115,558	115,565	115,570	115,576	
GSG Non-Heating	25,171	25,014	24,743	25,169	25,217	25,261	25,154	25,235	25,236	25,237	25,239	25,240	
Total Customers	139,376	139,632	138,159	140,576	140,886	141,065	140,696	140,787	140,794	140,802	140,809	140,816	
Volumes													
GSG Heating	9,877,237	22,769,028	41,489,374	34,672,378	35,213,663	32,566,822	13,924,498	10,526,314	6,617,765	5,485,135	5,742,647	5,434,577	224,319,437
GSG Non-Heating	2,269,908	3,562,694	5,496,237	4,888,609	4,860,802	4,763,942	2,845,244	1,585,052	996,503	825,951	864,727	818,338	33,778,008
Total Volumes	12,147,145	26,331,722	46,985,611	39,560,986	40,074,465	37,330,764	16,769,742	12,111,365	7,614,268	6,311,086	6,607,374	6,252,916	258,097,444

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
STATEMENT OF ESTIMATED UNDER/(OVER) RECOVERED CIP BALANCE
Group II: General Service Gas (GSG)
October 2022 - September 2023

	Act Oct-22	Act Nov-22	Act Dec-22	Act Jan-23	Act Feb-23	Act Mar-23	Act Apr-23	Frcst May-23	Frcst Jun-23	Frcst Jul-23	Frcst Aug-23	Frcst Sep-23	TOTAL
Beginning Under/(Over) Recovery $	7,722,649	7,385,881	6,655,861	5,353,232	4,256,443	3,145,418	2,110,460	1,645,536	1,309,760	1,098,662	923,694	740,511	7,722,649
Therm Sales	12,147,145	26,331,722	46,985,611	39,560,986	40,074,465	37,330,764	16,769,742	12,111,365	7,614,268	6,311,086	6,607,374	6,252,916	258,097,444
Pre-tax Recovery Rate per Therm[1]	0.0277	0.0277	0.0277	0.0277	0.0277	0.0277	0.0277	0.0277	0.0277	0.0277	0.0277	0.0277	
Recovery $	336,767	730,021	1,302,629	1,096,789	1,111,024	1,034,958	464,924	335,775	211,098	174,969	183,183	173,356	7,155,494
Ending Under/(Over) Recovery $	7,385,881	6,655,861	5,353,232	4,256,443	3,145,418	2,110,460	1,645,536	1,309,760	1,098,662	923,694	740,511	567,155	567,155

[1] Pre-tax Recovery Rate per therm excluding BPU and RC assessments.

Public Service Electric and Gas Company
Conservation Incentive Program
Group III: Large Volume Gas (LVG)
October 2022 - September 2023

Customer Class (a)	Actual/ Estimate	Actual per Books[1] Total Class Therms (b)	Actual per Books[1] Number of Customers (c1)	Large Customer Adjustment (c2)	Adjusted Number of Customers (c) = (c1) + (c2)	Actual Avg. Use / Cust.[2] (d) = (b) / (c)	Baseline Use / Cust. (e)	Difference (f) = (d) - (e)	Aggregate Therm Impact (g) = (f) * (c)	Margin Factor	Margin Variance
General Service Large											
Oct-22	Act	48,377,923	19,429	-	19,429	2,490.0	2,350.0	140.0	2,719,131	$0.0452	$122,801
Nov-22	Act	66,036,511	19,528	-	19,528	3,381.6	3,486.2	(104.6)	(2,042,044)	$0.0452	($92,223)
Dec-22	Act	106,972,917	19,157	-	19,157	5,584.1	5,220.9	363.2	6,957,893	$0.0460	$320,007
Jan-23	Act	95,581,335	19,457	-	19,457	4,912.3	6,506.4	(1,594.1)	(31,016,538)	$0.0460	($1,426,513)
Feb-23	Act	99,304,324	19,680	-	19,680	5,046.0	5,940.9	(894.9)	(17,612,395)	$0.0460	($810,029)
Mar-23	Act	96,465,200	19,891	-	19,891	4,849.7	5,478.7	(629.0)	(12,511,185)	$0.0460	($575,414)
Apr-23	Act	51,293,227	19,654	-	19,654	2,609.8	3,703.5	(1,093.7)	(21,495,101)	$0.0460	($988,603)
May-23	Frcst	40,824,842	19,483	-	19,483	2,095.4	2,037.8	57.6	1,122,416	$0.0461	$51,796
Jun-23	Frcst	24,152,117	19,495	-	19,495	1,238.9	1,477.0	(238.1)	(4,641,954)	$0.0464	($215,308)
Jul-23	Frcst	27,456,334	19,506	-	19,506	1,407.6	1,374.6	33.0	643,308	$0.0464	$29,839
Aug-23	Frcst	22,678,250	19,518	-	19,518	1,161.9	1,379.9	(218.0)	(4,254,729)	$0.0464	($197,347)
Sep-23	Frcst	24,395,319	19,530	-	19,530	1,249	1,322.8	(73.7)	(1,438,970)	$0.0464	($66,744)
Total		703,538,299				36,026.4	40,278.7		(83,570,169)		($3,847,737)

Margin Deficiency/ (Credit)	$	3,847,737
Prior Period (Over) / Under Recovery[3]	$	(248,994)
Total Deficiency/(Credit)	$	3,598,743
Projected Commercial Throughput for Recovery Period		759,862,139
Pre-tax CIP Charge/(Credit)	$	0.004736
BPU/RC Assessment Factor	$	1.002600
CIP Charge/(Credit) including assessments	$	0.004748
6.625% Sales Tax	$	0.000315
Proposed After-tax CIP Charge/(Credit) per Therm	**$**	**0.005063**
Current After-tax CIP Charge/(Credit) per Therm	$	0.004029
Increase/ (Decrease) in After-tax CIP Charge/(Credit) per Therm	$	0.001034

[1] Per Schedule 3, Page 2
[2] From 2018 Base Rate Case
[3] Per Schedule 3, Page 3

Public Service Electric and Gas Company
Customers and Therms

Group III: Large Volume Gas (LVG)

		Act Oct-22	Act Nov-22	Act Dec-22	Act Jan-23	Act Feb-23	Act Mar-23	Act Apr-23	Frcst May-23	Frcst Jun-23	Frcst Jul-23	Frcst Aug-23	Frcst Sep-23	
Customers														
LVG		19,429	19,528	19,157	19,457	19,680	19,891	19,654	19,483	19,495	19,506	19,518	19,530	
	Total Customers	19,429	19,528	19,157	19,457	19,680	19,891	19,654	19,483	19,495	19,506	19,518	19,530	
Volumes														
LVG		48,377,923	66,036,511	106,972,917	95,581,335	99,304,324	96,465,200	51,293,227	40,824,842	24,152,117	27,456,334	22,678,250	24,395,319	703,538,299
	Total Volumes	48,377,923	66,036,511	106,972,917	95,581,335	99,304,324	96,465,200	51,293,227	40,824,842	24,152,117	27,456,334	22,678,250	24,395,319	703,538,299

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
STATEMENT OF ESTIMATED UNDER/(OVER) RECOVERED CIP BALANCE
Group III: Large Volume Gas (LVG)
October 2022 - September 2023

	Act Oct-22	Act Nov-22	Act Dec-22	Act Jan-23	Act Feb-23	Act Mar-23	Act Apr-23	Frcst May-23	Frcst Jun-23	Frcst Jul-23	Frcst Aug-23	Frcst Sep-23	TOTAL
Beginning Under/(Over) Recovery $	2,401,234	2,218,995	1,970,235	1,567,268	1,207,213	833,134	469,750	276,528	122,741	31,760	(71,668)	(157,097)	2,401,234
Therm Sales	48,377,923	66,036,511	106,972,917	95,581,335	99,304,324	96,465,200	51,293,227	40,824,842	24,152,117	27,456,334	22,678,250	24,395,319	703,538,299
Pre-tax Recovery Rate per Therm[1]	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	
Recovery $	182,240	248,760	402,967	360,055	374,079	363,384	193,222	153,787	90,981	103,428	85,429	91,897	2,650,229
Ending Under/(Over) Recovery $	2,218,995	1,970,235	1,567,268	1,207,213	833,134	469,750	276,528	122,741	31,760	(71,668)	(157,097)	(248,994)	(248,994)

[1] Pre-tax Recovery Rate per therm excluding BPU and RC assessments.

Attachment A
Schedule 4

Public Service Electric and Gas
Weather Normalization
2022-2023 Winter Period

Step 1: Determine the degree day variance from the dead band.

	Normal Degree Days	0.50% Dead Band	Dead Band Low End	Dead Band High End	Actual Degree Days	Normalization Amount (1)
October	228	1	226	229	270	(42)
November	523	3	520	525	437	83
December	816	4	812	820	813	(1)
January	989	5	984	994	660	324
February	838	4	834	842	665	169
March	684	3	681	688	619	61
April	354	2	352	356	245	108
May	128	1	127	129	128	-

Step 2: Determine the normalized volumes by rate class.

	Therms Per Degree Day (2)			Normalization Volumes (3)		
	RSG	GSG	LVG	RSG	GSG	LVG
October	161,976	-	97,276	(6,738,202)	-	(4,046,682)
November	251,722	40,965	97,271	20,837,967	3,391,110	8,052,255
December	281,419	57,828	97,266	(187,144)	(38,456)	(64,682)
January	310,413	58,579	96,300	100,695,390	19,002,504	31,238,918
February	297,943	60,116	96,293	50,268,446	10,142,698	16,246,394
March	297,388	60,569	96,286	18,288,823	3,724,861	5,921,415
April	295,011	61,802	96,277	31,735,317	6,648,291	10,356,838
May	212,716	26,426	96,266	-	-	-

Step 3: Calculate the margin revenue to be deferred.

Margin Revenue Factor:	Margin Revenue Deferral (4)			
October 2022 - November 2022	**0.418421**	**0.318561**	**0.045162**	
December 2022 - April 2023	**0.429888**	**0.324386**	**0.045992**	
May 2023	**0.432050**	**0.325485**	**0.046147**	**Total**
October	$ (2,819,405)	$ -	$ (182,756)	$ (3,002,161)
November	$ 8,719,043	$ 1,080,275	$ 363,656	$ 10,162,974
December	$ (80,451)	$ (12,475)	$ (2,975)	$ (95,900)
January	$ 43,287,740	$ 6,164,146	$ 1,436,740	$ 50,888,626
February	$ 21,609,802	$ 3,290,149	$ 747,204	$ 25,647,155
March	$ 7,862,146	$ 1,208,293	$ 272,338	$ 9,342,776
April	$ 13,642,632	$ 2,156,613	$ 476,332	$ 16,275,576
May	$ -	$ -	$ -	$ -
Winter Period Total	$ 92,221,506	$ 13,887,002	$ 3,110,539	$ 109,219,047

(1) Amount above or below the Dead Band
(2) Consumption factors to be true-up at the end of the Winter Period for actual # of customers.
(3) Normalization degree days x Therms Per Degree Day
(4) Normalization Volumes x Margin Revenue Factor

Public Service Electric and Gas
Conservation Incentive Program Filing
October 2022 - September 2023
CIP Recovery Tests
Summary

Determine Weather and Non-Weather CIP Impacts

	Weather	Non-Weather	Total
CIP Group 1 (RSG)	$ 92,221,506	$ (9,514,060)	$ 82,707,447
CIP Group 2 (GSG)	$ 13,887,002	$ (1,477,019)	$ 12,409,983
CIP Group 3 (LVG)	$ 3,110,539	$ 737,198	$ 3,847,737
Total Deficiency/(Credit)	$ 109,219,047	$ (10,253,880)	$ 98,965,167

Step 2: Apply Modified BGSS Savings Test

A. Non-weather Impact Subject to Modified BGSS Savings Test		
Non-Weather Impact	$	-
75% Factor		75%
Subtotal	$	-
Prior Year Carry-Forward (Modified BGSS Savings Test)	$	-
Non-weather Impact Subject to Test	**$**	**-**
B. BGSS Savings		
Permanent Capacity Savings (Exhibit C, Schedule 6, Page 3)	$	45,394,957
Additional Capacity BGSS Savings (Exhibit C, Schedule 6, Page 3)	$	-
Avoided Cost BGSS Savings (Exhibit C, Schedule 6, Page 4)	$	7,849,730
Total BGSS Savings	**$**	**53,244,687**
C. Results		
Non-Weather Impacts Passing Test (current accrual)	**$**	**-**
Non-Weather Impacts Passing Test (prior year carry-forward)	**$**	**-**
Non-Weather Impacts Exceeding Test	**$**	**-**

Public Service Electric and Gas
Conservation Incentive Program Filing
October 2022 - September 2023
CIP Recovery Tests
Summary

Step 3: Apply Variable Margin Revenue Test

A. Non-weather Impact Subject to Variable Margin Revenue Test			
Non-Weather Impact	$	-	
Prior Year Carry-Forward (Variable Margin Revenue Test)	$	-	
Non-weather Impact Subject to Test	**$**	**-**	
B. Variable Margin Revenues			
Variable Margin Revenues (Exhibit C, Schedule 6, Page 5)	$	801,222,127	
Factor		6.5%	
Total Fixed Recovery Cap	**$**	**52,079,438**	
C. Results			
Non-Weather Impacts Passing Test (current accrual)	**$**	**-**	
Non-Weather Impacts Passing Test (prior year carry-forward)	**$**	**-**	
Non-Weather Impacts Exceeding Test	**$**	**-**	

Step 4: Determine Recoverable Non-Weather CIP Impacts

A. Current Year Accrual Recoverable Non-Weather Impacts				
Amount Passing Modified BGSS Savings Test	$	-		
Amount Passing Variable Margin Revenue Test	$	-		
Recoverable Amount			**$**	**-**
B. Previous Carry-Forward Recoverable Amounts				
Amount Passing Modified BGSS Savings Test			**$**	**-**
Amount Passing Variable Margin Revenue Test	$	-		
Deduction for any amount also included in above	$	-		
			$	**-**
Total Non-Weather Recoverable CIP Amount			**$**	**-**

Public Service Electric and Gas Company
CIP Recovery Tests
CIP BGSS Savings

I. Permanent BGSS Savings

Pipeline	Contract No.	Type of Transaction	Quantity Dth	Annual $
Texas Eastern	870146	Contract Terminated	88,321	$ 3,539,906
Texas Eastern	870145	Contract Terminated	25,000	821,250
Texas Eastern	911678	Contract Reduced	33,376	1,400,000
Texas Eastern	911677	Contract Reduced	56,493	2,000,000
Texas Eastern	911679	Contract Reduced	59,817	2,200,000
Dominion	200318/200315	Contract Terminated	43,300	1,089,237
Dominion	525445	Contract Reduced	48,526	2,537,483
Dominion	200482	Contract Reduced	55,737	4,271,190
National Fuel	F11135	Contract Terminated	48,400	3,545,087
National Fuel	F10833	Contract Terminated	30,795	1,265,702
National Fuel	F10845	Contract Terminated	20,000	822,018
Steuben	4	Contract Terminated	11,111	1,084,634
Steuben	3	Contract Terminated	30,955	3,333,011
Trunkline	21079	Contract Terminated	89,392	6,630,062
Trunkline	20912	Contract Terminated	25,242	998,725
Panhandle	22945	Contract Terminated	88,498	2,994,348
Panhandle	22652	Contract Terminated	25,000	718,138
Texas Gas	T025024	Contract Terminated	85,417	6,144,167
Total Permanent Reductions				**$ 45,394,957**

II. Additional Capacity BGSS Savings

CIP Recovery Year	Annual $
2021-2022	$ -

III. Avoided Capacity

CIP Recovery Year	Annual $
2021-2022	**$ 7,849,730**

VI. Total of all Savings

CIP Recovery Year	Permanent Capacity Savings	Additional Capacity BGSS Savings	Avoided Cost BGSS Savings	Annual $
2021-2022	$ 45,394,957	$ -	$ 7,849,730	**$ 53,244,687**

Public Service Electric and Gas
CIP Recovery Tests
Avoided Capacity Cost BGSS Savings

Month (a)	Base Year Customer Count (b)	Current Year Customer Count (c)	Net Increase/ (Decrease) Customer Count (d) = (b) / (c)	Baseline Use / Cust. (e)	Avoided Capacity (f) = (d) * (e)
Group 1: RSG					
October	1,624,278	1,699,041	74,763	38.7	2,893,326
November	1,630,996	1,701,243	70,247	87.6	6,153,658
December	1,635,566	1,706,163	70,597	144.9	10,229,573
January	1,636,952	1,708,794	71,842	180.6	12,974,627
February	1,630,001	1,708,876	78,875	153.5	12,107,292
March	1,615,444	1,707,216	91,772	124.5	11,425,589
April	1,653,790	1,708,740	54,950	70.4	3,868,462
May	1,636,600	1,704,576	67,976	37.0	2,515,112
June	1,631,876	1,705,547	73,671	21.0	1,547,091
July	1,683,288	1,706,519	23,231	18.0	418,158
August	1,621,557	1,707,491	85,934	18.0	1,546,812
September	1,630,455	1,708,462	78,007	19.5	1,521,137
Subtotal				913.7	67,200,837
			Average Per Unit BGSS Capacity Cost		0.11681
			Total Avoided Capacity Cost BGSS Savings		$7,849,730

Notes:
(1) Base Year Customer Count is equal to the test year customer count used to set base rates in a base rate case

(2) Current Year Customer Count is equal to the customer count in the CIP accrual year.

(3) The average per unit BGSS Capacity Cost represents the average of all capacity costs in the BGSS portfolio included in the annual BGSS filing for the prospective BGSS year. This value is used as a proxy for the avoided cost of incremental capacity.

Public Service Electric and Gas
CIP Recovery Tests
Variable Margin

Group I (RSG)	$669,042,091
Group II (GSG)	$96,025,216
Group III (LVG)	$36,154,821
Total Variable Margin	$801,222,127

Customer Class		Actual/ Estimate	Number of Customers	Baseline Use / Cust.	Margin Factor	Variable Revenue
RSG						
	Oct-22	Act	1,699,041	38.7	$0.4184	$27,512,388
	Nov-22	Act	1,701,243	87.6	$0.4184	$62,356,825
	Dec-22	Act	1,706,163	144.9	$0.4299	$106,278,238
	Jan-23	Act	1,708,794	180.6	$0.4299	$132,666,944
	Feb-23	Act	1,708,876	153.5	$0.4299	$112,764,973
	Mar-23	Act	1,707,216	124.5	$0.4299	$91,371,992
	Apr-23	Act	1,708,740	70.4	$0.4299	$51,713,496
	May-23	Frcst	1,704,576	37.0	$0.4321	$27,249,096
	Jun-23	Frcst	1,705,547	21.0	$0.4375	$15,669,104
	Jul-23	Frcst	1,706,519	18.0	$0.4375	$13,438,315
	Aug-23	Frcst	1,707,491	18.0	$0.4375	$13,445,969
	Sep-23	Frcst	1,708,462	19.5	$0.4375	$14,574,750
Total				913.7		$669,042,091
GSG						
	Oct-22	Act	139,376	110.8	$0.3186	$4,919,493
	Nov-22	Act	139,632	172.0	$0.3186	$7,650,779
	Dec-22	Act	138,159	320.4	$0.3244	$14,359,341
	Jan-23	Act	140,576	421.1	$0.3244	$19,202,484
	Feb-23	Act	140,886	351.6	$0.3244	$16,068,629
	Mar-23	Act	141,065	275.8	$0.3244	$12,620,450
	Apr-23	Act	140,696	170.7	$0.3244	$7,790,733
	May-23	Frcst	140,787	80.1	$0.3255	$3,670,507
	Jun-23	Frcst	140,794	49.2	$0.3282	$2,273,754
	Jul-23	Frcst	140,802	58.5	$0.3282	$2,703,702
	Aug-23	Frcst	140,809	50.5	$0.3282	$2,334,081
	Sep-23	Frcst	140,816	52.6	$0.3282	$2,431,263
Total				2,113.3		$96,025,216
LVG						
	Oct-22	Act	19,429	2,350.0	$0.0452	$2,062,046
	Nov-22	Act	19,528	3,486.2	$0.0452	$3,074,564
	Dec-22	Act	19,157	5,220.9	$0.0460	$4,599,892
	Jan-23	Act	19,457	6,506.4	$0.0460	$5,822,493
	Feb-23	Act	19,680	5,940.9	$0.0460	$5,377,235
	Mar-23	Act	19,891	5,478.7	$0.0460	$5,012,040
	Apr-23	Act	19,654	3,703.5	$0.0460	$3,347,679
	May-23	Frcst	19,483	2,037.8	$0.0461	$1,832,149
	Jun-23	Frcst	19,495	1,477.0	$0.0464	$1,335,557
	Jul-23	Frcst	19,506	1,374.6	$0.0464	$1,243,665
	Aug-23	Frcst	19,518	1,379.9	$0.0464	$1,249,228
	Sep-23	Frcst	19,530	1,322.8	$0.0464	$1,198,272
Total				40,278.7		$36,154,821

ATTACHMENT A
Schedule 6

CONFIDENTIAL

TO BE PROVIDED UPON EXECUTION OF THE NON-DISCLOSURE AGREEMENT

ATTACHMENT B

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

In The Matter of the Petition of Public Service Electric and Gas Company for Approval of Changes in its Gas Conservation Incentive Program (2023 PSE&G Gas Conservation Incentive Program)

BPU Docket No. _____

DIRECT TESTIMONY

OF

MICHAEL P. MCFADDEN
DIRECTOR – SALES AND REVENUE FORECASTING

June 1, 2023

ATTACHMENT B

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DIRECT TESTIMONY
OF
MICHAEL P. MCFADDEN
DIRECTOR – SALES AND REVENUE FORECASTING

Q. Please state your name, affiliation and business address.

A. My name is Michael McFadden, and I am the Director of Sales and Revenue Forecasting for PSEG Services Corporation. My principal place of business is 80 Park Plaza, Newark, New Jersey 07102.

Q. Please describe your education and business experience.

A. I received a Bachelor's of Science degree in Finance from the Rutgers School of Business and a Masters of Business Administration from Excelsior College. I have over 15 years' experience in rates, revenue requirements, and financial analysis. I started my career as an analyst in the Bureau of Rates and Tariffs for the New Jersey Board of Public Utilities ("Board") before joining Public Service Electric and Gas ("PSE&G", or "the Company") as a Senior Regulatory Analyst in 2008. In 2014, I was promoted to Manager of Revenue Requirements where I managed over 20 annual regulatory filings with the Board, including the Clean Energy Future – Energy Efficiency filing, which resulted in Board approval of the Conservation Incentive Program ("CIP"). In June 2021, I was promoted to my current position of Director of Sales and Revenue Forecasting for PSEG Services Corporation.

Q. Please describe your responsibilities as Director of Sales and Revenue Forecasting for PSEG Services Corporation.

A. I am responsible for overseeing the development of the Company's electric and gas sales and revenue forecast, including the forecasted electric and gas CIP accrual, and supervising the development of the weather impacts on the sales and revenue forecast.

Q. What is the purpose of your direct testimony in this proceeding?

A. The purpose of this testimony is to provide:

- An overview of the gas CIP mechanism ("GCIP"), including the monthly baseline use per customer for each applicable GCIP customer group;
- The calculation of the weather impacts for the current proceeding of October 1, 2022 – September 30, 2023 ("GCIP Period"); and
- The calculation of heating degree day ("HDD") normal weather and HDD consumption factors for the period October 1, 2023 through May 31, 2024 to be utilized in the calculation of weather for the subsequent CIP proceeding;
- The calculation of the Variable Margin GCIP savings test. Note that the BGSS Savings Test and the Earnings Test described in the Petition are discussed in the testimony of Mr. Stephen Swetz, submitted herewith.

Q. Does your testimony include any schedules?

A. Yes. My testimony includes schedules that were prepared by me or under my direction and supervision. These schedules are as follows:

- Schedule MPM-GCIP-1 shows the true-up calculation for the residential coefficients to account for the difference between the actual and the projected number of

customers on which the coefficients embodied in the Gas CIP tariff were based. The Schedule includes actual results from October 1, 2022 through April 30, 2023 and assumes actual customers are the same as forecast for May 2023;

- Schedule MPM-GCIP-2 presents the development of the proposed CIP monthly Degree Day Consumption Factors to be used for the 2023-2024 Winter Period;
- Schedule MPM-GCIP-3 contains the updated base level of normal degree days for the 2023-2024 Winter Period based on the 20 year period ending December 2022; and
- Schedule MPM-GCIP-4 contains a description of the Gas Sales Forecast Model, which explains the derivation of the weather coefficients and the data values used in the generation of the HDD consumption factors in Schedule MPM-GCIP-2.

Q. What is the GCIP mechanism?

A. The GCIP mechanism was approved by the Board in the Clean Energy Future – Energy Efficiency matter on September 23, 2020 in Dockets Nos. GO18101112 and EO18101113 ("CEF-EE Order"). The GCIP rate mechanism provides a rate adjustment related to changes in the average use per customer when compared to a baseline use per customer, removing the disincentive for the Company to encourage customers to conserve energy. The GCIP margin deficiency to be collected from customers or the margin excess to be refunded to customers is calculated each month by applicable rate schedule by subtracting the baseline use per customer from the actual use per customer and multiplying the resulting use per customer by the actual number of customers and per therm margin rate for the month.

Q. What rate schedules are included in the GCIP?

A. The GCIP is applicable to each of the following customer groups:

- Group I – Residential Service Gas ("RSG");
- Group II – General Service Gas ("GSG"); and
- Group III – Large Volume Gas ("LVG").

Q. How is the baseline use per customer determined?

A. Per the CEF-EE Order, the gas baseline use per customer ("BUC") shall be stated in therms on a monthly basis for each of the customer class groups to which the CIP applies. The BUC shall be rounded to the nearest one tenth of one therm and shall be reset each time new base rates are placed into effect through a base rate case. The BUC for this proceeding is based on the therms and customers from PSE&G's 2018 base rate case. Please see the table below for the BUC for each customer group from PSE&G's 2018 base rate case and utilized in the calculation of base rates and future infrastructure investment program rate calculations.

Baseline Use per Customer - 2018 Base Rate Case			
Month	**RSG**	**GSG**	**LVG**
Oct	38.7	110.8	2,350.0
Nov	87.6	172.0	3,486.2
Dec	144.9	320.4	5,220.9
Jan	180.6	421.1	6,506.4
Feb	153.5	351.6	5,940.9
Mar	124.5	275.8	5,478.7
Apr	70.4	170.7	3,703.5
May	37.0	80.1	2,037.8
Jun	21.0	49.2	1,477.0
Jul	18.0	58.5	1,374.6
Aug	18.0	50.5	1,379.9
Sep	19.5	52.6	1,322.8
TOTAL ANNUAL	**913.7**	**2,113.3**	**40,278.7**

Q. Where are the calculations of the GCIP Margin Excess or Deficiency for this proceeding?

A. Please see Attachment A, Schedules 1 through 3 to the Petition for the October 1, 2022 through September 30, 2023 results based on actual data from October 1, 2022 through April 30, 2023 and a forecast for the remaining months from May 1, 2023 through September 30, 2023. Attachment A is the same template as Exhibit 6G of the Stipulation approved by the Board in the CEF-EE matter. Schedule 1 shows the results for rate schedules RSG, Schedule 2 shows the results for rate schedule GSG and Schedule 3 shows the results for rate schedule LVG. In each schedule, page 1 shows the calculation of the monthly margin variance for the GCIP period, page 2 shows details supporting the calculation, and page 3 shows the current period over or under-collection.

Q. Please describe the GCIP recovery tests?

A. Pursuant to the CEF-EE Order, recovery of a margin deficiency associated with non-weather related changes in customer usage is subject to the lesser of the outcomes of a BGSS Savings Test and a Variable Margin Test. In order to recover the GCIP non-weather related margin deficiency: (1) the Company must have BGSS savings of at least 75 percent of the non-weather related margin deficiency; and (2) the non-weather related margin deficiency must be less than or equal to 6.5% of aggregate variable margins. Any amount that exceeds these limitations may be deferred for future recovery and will be subject to the recovery tests in that future period.

Q. How is the therm impact of weather determined?

A. As described in the CEF-EE Order and shown in Attachment A, Schedule 4, weather will be calculated as the difference in the actual and normal HDD multiplied by the sales coefficients to establish sales impacts. The difference in the actual and normal HDD are adjusted for a deadband, which is ½ percent of the normal calendar-month degree days. The sales impacts, adjusted for the deadband, will be multiplied by a margin factor based on the latest tariff rates to derive the revenue impact of weather.

Q. How did you calculate the non-weather related GCIP margin?

A. The non-weather related GCIP margin is calculated as the total GCIP margin deficiency less the weather related margin deficiency. In accordance with the CEF-EE Order, the impact of weather for the GCIP period is calculated in a manner consistent with the gas Weather Normalization Charge ("WNC") and is shown in Attachment A, Schedule 4. The weather effect will be measured by the impacts on sales and associated distribution revenue of heating degree days. As shown in Attachment A, Schedule 4, the margin impact is determined by calculating the total therm impact of weather in the month, adjusted for a deadband, and multiplying it by the per therm variable base distribution rate for each customer group, known as the margin factor.

Q. How were the consumption factors determined for this proceeding?

A. The weather in this GCIP proceeding uses the approved consumption factors for October 2022 through May 2023 in the CIP tariff.

Q. Are there any adjustments to the approved consumption factors in the CIP tariff?

A. Yes. For RSG only, the consumption factors are trued-up. The monthly degree day consumption factors for the RSG Heating customers and for the RSG Non-Heating customers are based on regression models of use per customer. The consumption factor for these two customer groups are, as a result, calculated by multiplying the consumption factor per customer by the forecasted number of customers in each month. The trued-up consumption factors for these two groups are the consumption factors embodied in the CIP tariff adjusted to reflect the actual number of customers from October 2022 through April 2023. For May 2023, the actual customers are estimated to be the same as the forecasted customers until the actual customers are known. The trued-up monthly degree day consumption factors are calculated, as Schedule MPM-GCIP-1 shows, by multiplying the RSG Heating and the RSG Non-Heating degree day consumption factors by the ratio of the actual number of customers to the forecasted number of customers that were incorporated into the original calculation.

Q. How are the updated monthly HDD consumption factors developed?

A. Schedule MPM-GCIP-2 shows the calculation of the monthly HDD consumption factors for the next CIP period of October 2023 through September 2024 based on the estimated HDD weather coefficients from the Company's econometric sales forecasting models. The impact of the monthly degree days is the sum of the coefficient on the heating degree day variable and the product of the coefficient and the value of the economic/demographic variable of any variable and or variables that are interactive with heating degree days, such as the price-heating degree day interactive variable, to arrive at the total therm per heating degree day estimate. In the case of the residential rates, this is

multiplied by the projected number of customers since the models, and as a result the coefficients, are based on sales per customer – not on total customers. Please see Schedule MPM-GCIP-5 for the details on the derivation of the weather coefficients and the data values used in the generation of the HDD consumption factors in Schedule MPM-GCIP-2.

Q. How is the normal HDD determined?

A. The base level of normal HDD for the period of October 2022 – May 2023 are equal to the approved normal HDD in the CIP tariff.

Q. Have the base level of normal degree days for the next winter period of October 2023 through May 2024 been updated?

A. Yes. The base level of normal degree days for the winter period months of October 2023 through September 2024 have been calculated based on the 20-year period ending December 2022 and are shown in Schedule MPM-GCIP-3.

Q. How is the margin factor for each rate schedule determined?

A. The margin factor is the weighted average of the latest per therm distribution rates in the Company's tariff and the approved therm billing determinants from the last base rate case. Please see Schedule MPM-GCIP-4 for the calculation.

Q. What is the GCIP non-weather margin?

A. The total weather impact from October 2022 – April 2023 is an under-collection of $109.2 million from the significantly warmer than normal weather as shown in Attachment A, Schedule 4. The total deferral as calculated in Attachment A, Schedule 1 – 4 for the GCIP period is estimated at $99.0 million. As a result, the non-weather GCIP deferral subject to the GCIP savings test is ($10.2) million as shown in Attachment A, Schedule 5.

Q. What are the results of the GCIP savings tests?

A. The GCIP savings tests are the lesser of a modified BGSS Savings Test and a Variable Margin Revenue Test. As shown in Attachment A, Schedule 5, there is no limit in the GCIP recovery for the BGSS Savings Test or the Variable Margin Revenue Test. The non-weather GCIP savings tests only apply when the non-weather component of the CIP deferral will be a charge to customers; there is no limitation on a refund of the non-weather component, which is the case in this proceeding.

Q. Please describe the BGSS Savings Test.

A. Please see the testimony of Stephen Swetz for the calculation of the BGSS savings test, which is shown in Attachment A, Schedule 5, pages 3 and 4.

Q. Please describe the Variable Margin Revenue Test.

A. As shown in Attachment A, Schedule 5, page 5, the Variable Margin Revenue Test first calculates the total Variable Revenue as the actual number of customers multiplied by the baseline use per customer and by the margin factor per customer group. The total Variable Revenue is then multiplied by the allowed percentage of variable margin, which is 6.5%. Based on actual results from October 2022 through April 2023 and a forecast from May 2023 – September 2023, total variable margin is $801.2 million, resulting, after applying the 6.5% rate, in a variable margin cap of $52.1 million.

Q. Is there an additional GCIP Recovery Test?

A. Yes. In addition to the BGSS and Variable Margin Revenue Test for non-weather recovery caps, the Company must pass an earnings test. Please see the testimony of Mr. Swetz for the calculation of the earnings test.

Q. What was the final CIP deferral from the prior CIP cost recovery filing?

A. The Board approved the final CIP deferral of $58,077,684 for the October 2021 – September 2022 recovery period in Docket No. GR22050362 on April 12, 2023.

Q. Were there any limitations on recovery of the recovery of the final CIP deferral balance from the prior proceeding due to the earnings test or the non-weather savings tests?

A. No. There were no limitations due to the GCIP recovery tests. However, rates were set on a provisional basis to recover $53,024,940, or $5,052,744 less than the final deferral amount. The difference between the final CIP deferral of $58,077,684 and the amount actually recovered in rates from October 2022 through September 2023 will be recovered in this proceeding.

Q. Has the impact of the GCIP margin excess and margin deficiency been calculated by customer group?

A. Yes. Please see the testimony of Mr. Swetz for the proposed rates for each customer group and the associated impact on a typical or class average customer.

Q. Does this conclude your testimony at this time?

A. Yes.

ATTACHMENT B

Public Service Electric and Gas Company
Conservation Incentive Program - Gas

SCHEDULE MPM-GCIP-1

Calculation of the Customer True-Up to the RSG-Residential Degree Day Consumption Factors

	RSG-Residential Heating					RSG-Residential Non-Heating				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			(2) / (1)		(4) x (3)			(7) / (6)		(9) x (8)
	Customers			Consumption	Trued-Up Consumption	Customers			Consumption	Trued-Up Consumption
Month	Forecast	Actual	Adjustment	Factor	Factor	Forecast	Actual	Adjustment	Factor	Factor
Oct-22	1,467,099	1,477,728	1.0072449	160,811	161,976	224,071	221,313	0.9876914		0
Nov-22	1,469,374	1,479,616	1.0069703	244,433	246,137	224,534	221,627	0.9870532	5,658	5,585
Dec-22	1,472,421	1,484,291	1.0080616	272,345	274,541	224,052	221,872	0.9902701	6,946	6,878
Jan-23	1,464,327	1,489,159	1.0169580	297,514	302,559	226,038	219,634	0.9716685	8,083	7,854
Feb-23	1,467,145	1,490,148	1.0156788	285,968	290,452	223,122	218,727	0.9803023	7,641	7,490
Mar-23	1,469,114	1,489,472	1.0138573	285,699	289,658	221,722	217,744	0.9820586	7,871	7,730
Apr-23	1,472,137	1,490,614	1.0125511	283,018	286,570	221,634	218,125	0.9841676	8,577	8,441
May-23	1,472,462	1,472,462	1.0000000	203,907	203,907	221,326	221,326	1.0000000	8,809	8,809

Public Service Electric and Gas Company
Conservation Incentive Program - Gas

Degree Day Consumption Factor Calculation

	RSG Heating							RSG Non-Heating				
		HDDxWage	HDD x Price	Value			Degree Day Consumption		HDD x Price	Value		Degree Day Consumption
Month	HDD	Coefficient	Coefficient	Real Price	Wage	Customers	Factor	HDD	Coefficient	Real Price	Customers	Factor
Oct-23		0.001136		0.8591	108.2200	1,491,389	183,348			1.2210	218,045	-
Nov-23	0.05772	0.001136		0.8591	108.2200	1,492,636	269,657	0.0108		1.2210	217,770	2,352
Dec-23	0.18472		-0.00507	0.8591	108.2200	1,493,881	269,443	0.0142		1.2210	217,496	3,088
Jan-24	0.20747		-0.00507	0.9412	109.2800	1,495,162	303,067	0.0333	-0.0146	1.2998	217,222	3,111
Feb-24	0.19926		-0.00507	0.9412	109.2800	1,496,424	291,037	0.0262	-0.0105	1.2998	216,949	2,723
Mar-24	0.19586			0.9412	109.2800	1,497,687	293,337	0.0139		1.2998	216,675	3,012
Apr-24	0.19037			0.9412	109.2800	1,498,947	285,355	0.0145		1.2998	216,403	3,138
May-24	0.13935			0.9412	109.2800	1,500,209	209,054	0.0160		1.2998	216,130	3,458

Public Service Electric and Gas Company
Conservation Incentive Program - Gas

	Commercial GSG Heating					Commercial GSG Non-Heating	
	HDDxPrice		HDDxHouseholds		Degree Day Consumption	HDD	Degree Day Consumption
Month	Coefficient	Value	Coefficient	Value	Factor	Coefficient	Factor
Oct-23							
Nov-23	-17,475	0.9782	15	3,375	34,861	2,625	2,625
Dec-23	-13,906	0.9782	19	3,375	51,188	3,709	3,709
Jan-24	-12,340	0.9422	19	3,378	52,644	3,907	3,907
Feb-24	-11,197	0.9422	19	3,378	54,216	4,014	4,014
Mar-24	-13,840	0.9422	20	3,378	55,149	4,047	4,047
Apr-24	-12,741	0.9422	21	3,378	57,596	4,118	4,118
May-24	-20,477	0.9422	15	3,378	29,705	3,863	3,863

Public Service Electric and Gas Company
Conservation Incentive Program - Gas

Month	Industrial GSG Heating		Industrial GSG Non-Heating	
	HDD Coefficient	Degree Day Consumption Factor	HDD Coefficient	Degree Day Consumption Factor
Oct-23	633	633	-	-
Nov-23	1,220	1,220	139	139
Dec-23	2,154	2,154	259	259
Jan-24	2,463	2,463	234	234
Feb-24	1,934	1,934	138	138
Mar-24	2,215	2,215	243	243
Apr-24	1,748	1,748	229	229
May-24	1,160	1,160	163	163

Public Service Electric and Gas Company
Conservation Incentive Program - Gas

	Commercial LVG					Industrial LVG				
Month	HDDxCust		HDDxPrice		Degree Day Consumption Factor	HDDxMfg		HDDxPrice		Degree Day Consumption Factor
	Coefficient	Value	Coefficient	Value		Coefficient	Value	Coefficient	Value	
Oct-23	32.42	3379.41	-26003	0.8054	88,624	39.41	248.64	-2597	0.95	7,326
Nov-23	32.42	3379.41	-26003	0.8054	88,624	39.41	248.51	-2597	0.95	7,321
Dec-23	32.42	3379.41	-26003	0.8054	88,624	39.41	248.36	-2597	0.95	7,315
Jan-24	32.42	3394.04	-26003	0.7529	90,462	39.41	248.20	-2597	0.90	7,452
Feb-24	32.42	3394.04	-26003	0.7529	90,462	39.41	248.03	-2597	0.90	7,445
Mar-24	32.42	3394.04	-26003	0.7529	90,462	39.41	247.83	-2597	0.90	7,437
Apr-24	32.42	3394.04	-26003	0.7529	90,462	39.41	247.60	-2597	0.90	7,428
May-24	32.42	3394.04	-26003	0.7529	90,462	39.41	247.34	-2597	0.90	7,418

Public Service Electric and Gas Company
Conservation Incentive Program - Gas

SCHEDULE MPM-GCIP-3

Normal Monthly Weather
(2003-2022 Average)

Calendar Month	Degree Days
October-23	225.14
November-23	515.50
December-23	810.29
January-24	1005.68
February-24	868.22
March-24	682.63
April-24	355.17
May-24	123.16

Public Service Electric and Gas Company
Conservation Incentive Program - Gas

SCHEDULE MPM-GCIP-4

Weighted Average Therm Margin Rate Calculation

RSG	*Therms* (000)*	*Rates Oc22 - Nov22*	*Rates Dec22 - Apr23*	*Rates May23*	*Rates Jun23 - Sep23*
Distribution Charges	1,494,872	0.418429	0.429896	0.432058	0.437491
Off-Peak Usage	56	0.209214	0.214948	0.216029	0.218746
Wtd Avg Rate	**1,494,928**	**0.418421**	**0.429888**	**0.43205**	**0.437483**

GSG	*Therms (000)*	*Rates Oc22 - Nov22*	*Rates Dec22 - Apr23*	*Rates May23*	*Rates Jun23 - Sep23*
Distribution Charge - Pre 7/14/97	2,183	0.318585	0.324411	0.325510	0.328267
Distribution Charge - All Others	295,256	0.318585	0.324411	0.325510	0.328267
Off-Peak Dist Charge - Pre 7/14/97	-	0.159293	0.162206	0.162755	0.164134
Off-Peak Dist Charge - All Others	45	0.159293	0.162206	0.162755	0.164134
Wtd Avg Rate	**297,484**	**0.318561**	**0.324386**	**0.325485**	**0.328242**

LVG	*Therms (000)*	*Rates Oc22 - Nov22*	*Rates Dec22 - Apr23*	*Rates May23*	*Rates Jun23 - Sep23*
Distribution Charge 0-1,000 pre 7/14/97	8,974	0.037727	0.034950	0.03442	0.033584
Distribution Charge over 1,000 pre 7/14/97	45,378	0.047127	0.048909	0.049245	0.049765
Distribution Charge 0-1,000 post 7/14/97	145,700	0.037727	0.034950	0.03442	0.033584
Distribution Charge over 1,000 post 7/14/97	540,051	0.047127	0.048909	0.049245	0.049765
Wtd Avg Rate	**740,103**	**0.045162**	**0.045992**	**0.046147**	**0.046383**

* Therms represents the annualized, weather-normalized approved sales from the 2018 base rate case

Natural Gas Sales Forecast - 2023

Public Service Electric & Gas Company

Finance Department

Electric and Gas Sales and Revenue Forecasting Group

September 2022

Contents

Introduction

The natural gas sales forecast has a key role in both the operating and financial planning processes of Public Service Electric & Gas (PSE&G).

The volumetric and maximum day sendout projections are used in the development of strategies for optimal gas procurement by PSE&G's BGSS supplier.

The sales forecast also serves as the basis for the natural gas revenue forecast that is a key parameter in PSE&G's financial planning process. This includes not only the budgeting process but also the regulatory process.

The purpose of this document is to describe the current forecast methodology, forecast assumptions, and the 2023 gas sales forecast. The first section describes the econometric sales models. A discussion of the forecast assumptions used to develop the sales forecast follows. Section III describes the maximum daily send-out projection. An appendix contains more detailed information on the billing period to calendar month conversion, and forecast tables.

I Model Specification and Estimation

Residential Model

Residential gas sales are determined by the number of residential customers and the amount of gas that each of these customers uses. As a result, the modeling of residential sales is disaggregated into two components: the projection of the number of customers and the estimate of what, on average, each of these customers will use. While the projection of the number of residential natural gas customers can be based on historical trends and expected residential construction activity in the service area, the models utilized to develop the average use forecast are more complicated and are described below.

The demand for energy is a derived demand from the demand for the services that the energy provides. In the case of gas in the residential sector, this is a demand for the three main end-uses of gas: space heating, water heating, and cooking. Standard microeconomic theory suggests that the demand for these gas-fueled end-uses is a function of the real, i.e. inflation adjusted, price of gas, and the income of the household. In addition, since space heating and, to a lesser extent, water heating is affected by the weather; weather also needs to be included in the model specification, i.e.

THERM/CUST = *f*(PRICEGAS, INCOME, WEATHER) [1]

where:

THERM/CUST	= Average gas sales per customer,
PRICEGAS	= Real price of gas,
INCOME	= Measure of customer income,
WEATHER	= Billing-month weather.

While information on individual appliance ownership and consumption is not available, PSE&G does segregate its Residential customer data into those customers that have gas space heating and those that do not. As a result, separate models estimating the average gas sales for space heating customers and non-space heating customers were developed.

Weather is incorporated into the models using billing-month heating degree days (HDD). To allow for the possibility of month-specific response to weather, the heating degree data was multiplied by monthly binary variables to produce month-specific HDD independent variables.

The real price of gas was defined as the annual average revenue per therm divided by the Consumers' Price Index –All Urban Consumers. However, the extreme seasonality of monthly gas consumption made the utilization of this variable directly in a linear specification impractical because it is unrealistic to expect that a change in price would have the same impact, measured in therms,

in January, a high consumption month, as in July where consumption can be only one-tenth the January volume. As a result, this variable was incorporated as an interactive variable with HDD to create the effect that a change in price will affect the magnitude of the response to weather, i.e. a small response in the summer months and a much larger response during the space heating season.

Income is defined as the total real wages and salary disbursements for New Jersey from the U.S. Department of Commerce, Bureau of Economic Analysis. This is a narrower measure than personal income, omitting for example dividends, interest and rental income, and, as a result, is assumed to more accurately reflect the economic well-being of the majority of our customers. The incorporation of this variable directly into a linear specification suffers from the same drawback as that of the price. As a result, this variable was also incorporated into the specification as an interactive variable with HDD. In the models the economic variables were lagged one year to account for the delay in the impact that these variables have on consumer behavior.

As a result, the final functional form of the model that was estimated is:

$$THERM/CUST_t = f(\overline{MONTH}xHDD_t \times PRICEGAS_{a-1}, \overline{MONTH}xHDD_t \times INCOME_{a-1}, \overline{MONTH}xHDD_t) \quad [2]$$

where:

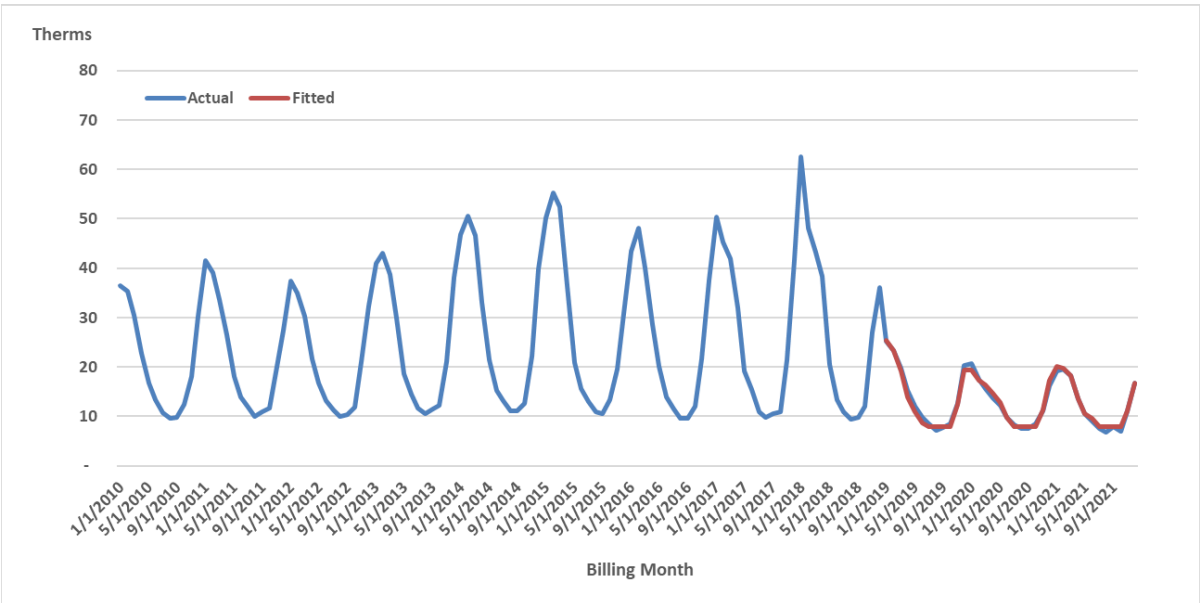
THERM/CUST	= Average gas sales per customer,
PRICEGAS	= Real price of gas,
INCOME	= Real Wage and Salary Disbursements,
HDD	= Heating degree days,
$\overline{MONTH}$	= Vector of binary variables for each heating month,
t	= Billing-month,
a	= Year associated with billing-month, t.

RSG Heating model was estimated using monthly data from January 2010 to December 2021 period while RSG No-Heating model was estimated using monthly data from January 2019 to December 2021. The results of the OLS estimation procedure are summarized in Table 1 and Figures 1 and 2.

As Figures 1 and 2 illustrate, the high values of the coefficients of determination of both the model for gas space heating customers and the model of those customers without gas heating explain an extremely high proportion of the variation from the mean values. The estimates of the individual coefficients of the RSG model estimations are what one would expect given the characteristics of residential natural gas consumption. The key predictor of gas sales to this sector is weather with the weather having a greater impact on those customers with gas space heating than those without. Price is a factor for residential customers during the winter months but, its impact is relatively small.

Figure 1
RSG Space Heating Model
Actual vs. Fitted Values

Figure 2
RSG Non-Space Heating Model
Actual vs. Fitted Values



The price elasticity estimates were estimated to be -0.0103 and -0.2101 for space heating and non-space heating customers, respectively and consistent with lower gas prices and the lack of a surge in consumption in response to them. The non-space heating elasticity is the result of a similar therm impact of price but, measured over a much smaller base usage. Income was found to have an effect on gas consumption by space heating customers in the fall. This is consistent with income changes resulting affecting when space heating equipment is turned on. The economic downturn appeared to result in a delay in turning on this equipment in the fall reducing use.

Table 1

Estimated Coefficients of the Residential Models

(standard errors in parentheses)

	JAN	FEB	MAR	APR	MAY	JUNE	NOV	DEC	R2	DW	n
HEATING											
HDD	0.20747	0.19926	0.19586	0.19037	0.13935	0.18614	0.05772	0.18472	0.999	1.588	144
	(0.007)	(0.006)	(0.006)	(0.009)	(0.004)	(0.019)	(0.008)	(0.007)			
		DJF*				A	C				
PRICE x HDD		-0.00507		**COVID x HDD**		0.0137	0.0009				
		(0.002)				(0.008)	(0.001)				
		ON**									
WAGE x HDD		0.00114									
		(0.000)									

*** Dec-Jan-Feb**
**** Oct-Nov**

	JAN	FEB	MAR	APR	MAY	JUNE	NOV	DEC	R2	DW	n
NON-HEATING											
HDD	0.03325	0.02620	0.01389	0.01454	0.01602	0.04181	0.01080	0.01416	0.984	1.027	36
	(0.003)	(0.003)	(0.001)	(0.001)	(0.002)	(0.013)	(0.001)	(0.001)			
PRICE x HDD	-0.01459	-0.01052									
	(0.003)	(0.003)									

The second key element of the residential forecast, as noted above, is the projection of the number of residential natural gas customers. This forecast is based on historical trends between customer growth and residential construction activity in the service area and is discussed in the Forecast Assumptions section.

Commercial

The demand for natural gas by the non-residential sector, as with any other factor of production, is a function of the input's price, the price of substitutes (if any) and the level of production. This implies that gas sales to the commercial sector is a function of the real price of gas and the level of "output" of the commercial sector in PSE&G's service territory, i.e. Again, since gas is primarily used for space and/or water heating, weather needs to be included in the specification resulting in the following:

THERMS = *f*(PRICEGAS, OUTPUT, HDD) [3]

where:

THERMS	= Gas Sales,
PRICEGAS	= Real price of gas,
OUTPUT	= Commercial sector output,
HDD	= Heating degree days.

The problem with this specification is that there is not a good measure of output for the local commercial sector. However, if it is assumed that the demand for local commercial output is a function of the local economic and demographic factors, i.e., how many households there are (HSH) and how much money do they have to spend (INCOME), commercial output can then be defined as:

OUTPUT = *f*(INCOME, HSH) [4]

Substituting [4] into [3] yields:

THERMS = *f*(PRICEGAS, INCOME, HSH, HDD) [5]

LVG model was estimated for customers in the commercial sector using monthly billing data from January 2010 to December 2021 period .The firm delivery customers in this class whose usage does not exceed 300 Dth are served under rate GSG. These customers are further disaggregated into those with gas space heat and those that heat with other fuels. These two groups of customers are modeled separately. Time period for GSG Heating model and GSG Non-Heating model set from January 2010 to December 2021 period for the model estimations. The larger commercial customers are served under rate LVG. These are also modeled separately.

Historical annual household estimates for New Jersey is available from the U.S. Bureau of the Census. As with the residential models, the strong seasonality associated with commercial gas sales dictates that the economic/demographic variables can be used in the model directly but, need to be used as interactive variables with HDD. In addition, in the models the economic variables were lagged one year to account for the delay in the impact that these variables have

on consumer behavior. As a result, the functional form that was estimated for each of the three groups of commercial customers is[1]:

$$\begin{aligned} THERMS_t = f(&\overline{MONTH} \times HDD_t \times PRICEGAS_{a-1}, \\ &\overline{MONTH} \times HDD_t \times INCOME_{a-1}, \\ &\overline{MONTH} \times HDD_t \times HSH_{a-1,}\, HDD_t) \end{aligned} \quad [6]$$

where:

THERMS	= Gas sales,
PRICEGAS	= Real price of gas,
INCOME	= Real Wage and Salary Disbursements,
HDD	= Heating degree days,
$\overline{MONTH}$	= Vector of binary variables for each heating month,
t	= Billing-month,
a	= Year associated with billing-month, t.

The results of the OLS estimation procedure, summarized in Figures 3-5, show that the commercial models also fit the historical data well.

The estimated coefficients of the three commercial models indicate that while the small commercial space heating are sensitive to price, with an estimated elasticity of -0.2085 the non-space heating customers are not, and the large commercial LVG customers are sensitive to price, with an estimated elasticity of -0.1193. In addition, while the coefficients on households, the economic indicator in the models, are highly statistically significant, this does not imply large sales increases given the anticipated slow growth in the number of households.

[1] It was not necessary to incorporate month-specific HDD specification since the LVG sales are less sensitive to the weather.

Figure 3
GSG Commercial Space Heating Model
Actual vs. Fitted Values

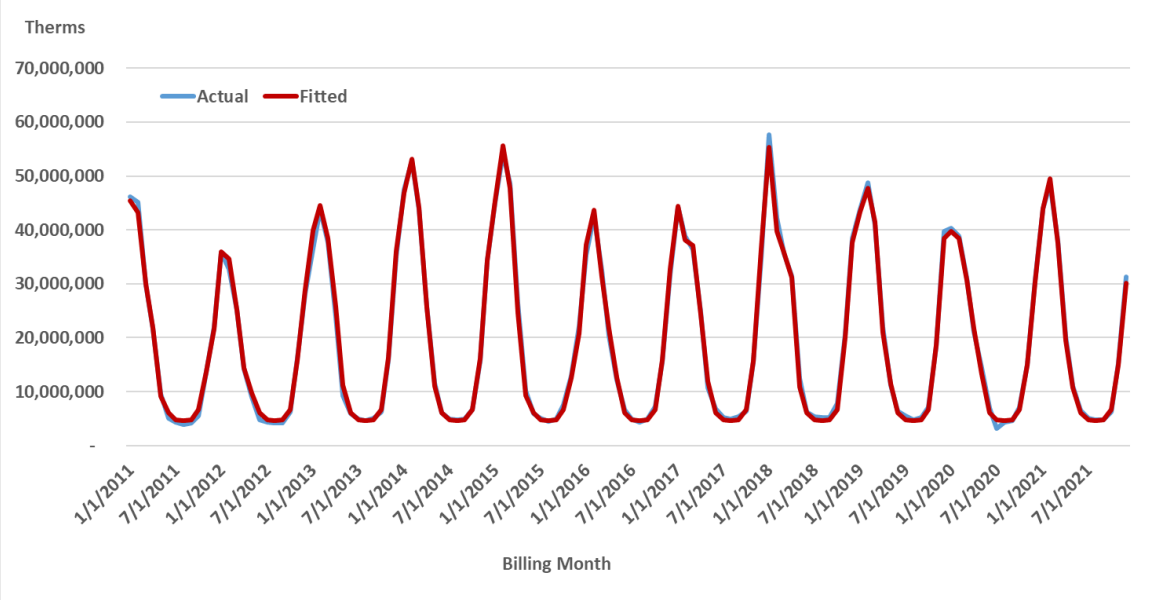


Figure 4
GSG Commercial Non-Space Heating Model
Actual vs. Fitted Values

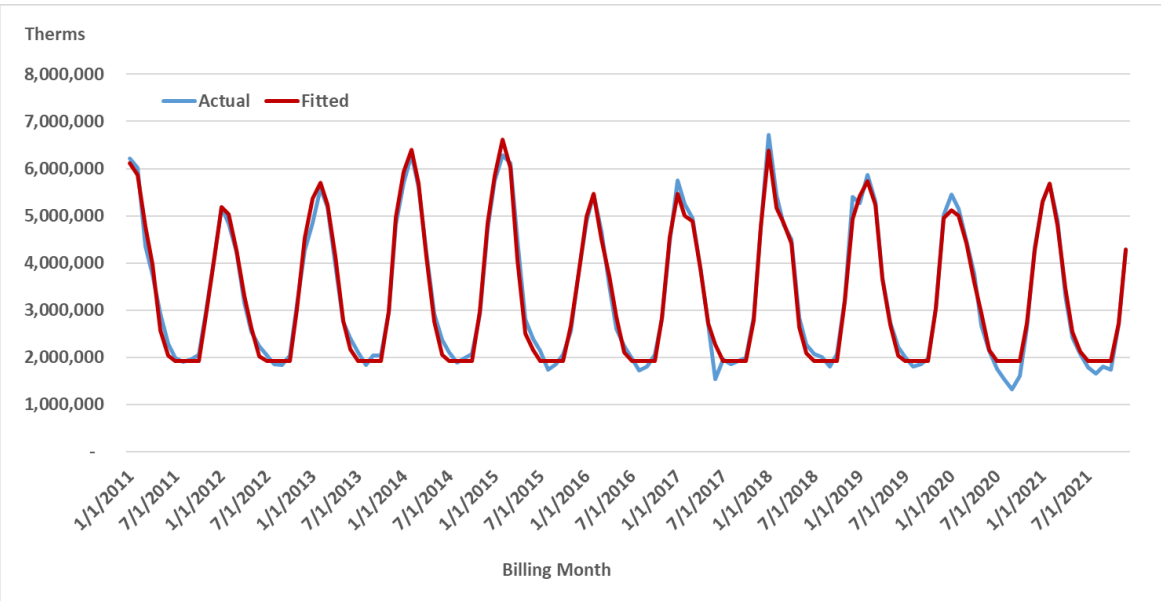


Figure 5
LVG Commercial Model
Actual vs. Fitted Values

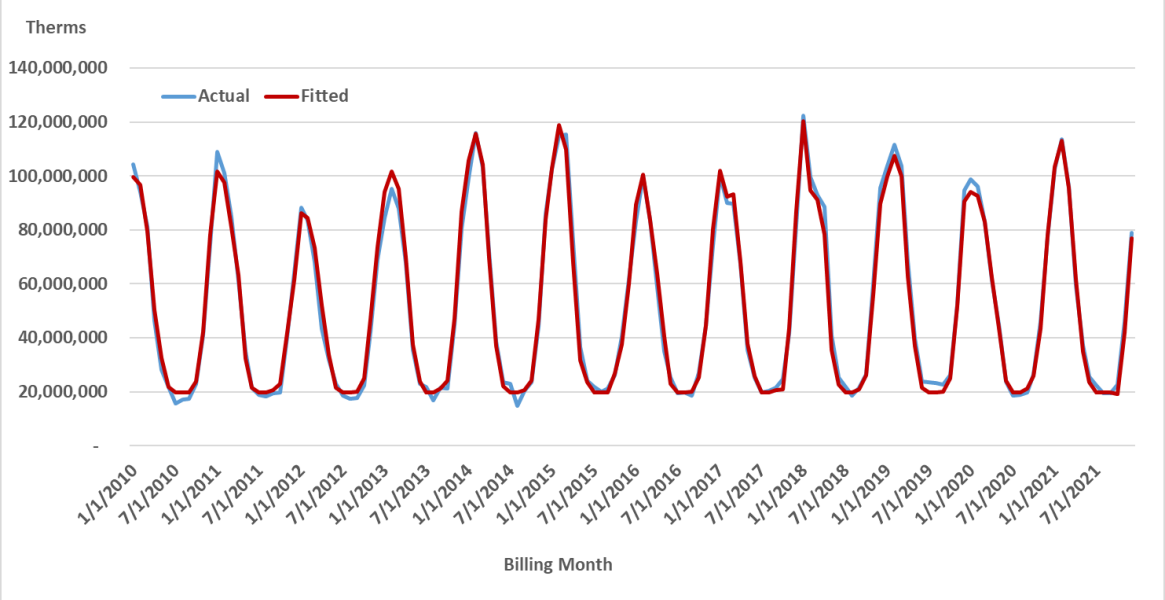


Table 2

Estimated Coefficients of the GSG Commercial Gas Sales Models
(standard errors in parentheses)

	JAN	FEB	MAR	APR	MAY	JUN	NOV	DEC	R2	DW	n
HEATING											
PRICE x HDD	-12340 (2,064)	-11197 (2,169)	-13840 (2,726)	-12741 (4,346)	-20477 (12,206)		-17475 (5,345)	-13906 (3,033)	0.997	1.576	132
CUST x HDD	19.03 (0.8)	19.18 (0.8)	20.19 (1.0)	20.61 (1.6)	14.51 (3.4)		15.40 (2.4)	19.20 (1.0)			
	A	B									
COVID x HDD	-5053 (2,017)	-1334 (614)									
NON-HEATING											
HDD	3907 (71)	4014 (72)	4047 (86)	4118 (141)	3863 (326)	4938 (1,597)	2625 (176)	3709 (92)	0.984	1.333	132
	A	B									
COVID x HDD	-618 (371)	-200 (117)									

Table 3

Estimated Coefficients of the LVG Commercial Gas Sales Models

(standard errors in parentheses)

HDD x PRICE	HDD x CUST	COVID x HDD A	COVID x HDD B	R2	DW	n
-26003	32	-11745	-531	0.990	1.011	144
(3,909)	(1)	(6,344)	(2,241)			

Industrial

While gas sales to the commercial sector are correlated with commercial output because output tends to be correlated with commercial space-heated floor space, sales to the PSE&G rate GSG and rate LVG gas customers in the industrial sector are not correlated with the industrial output because gas, for the most part, is not used for process heat. It is used to heat employee workspaces and the number of employees has been declining while industrial output has been increasing. Therefore, rather than used the traditional function for the demand for a factor of production such as [3], the following specification is used:

$$THERMS = f(PRICEGAS, EMP, HDD) \quad [7]$$

where:

EMP = Manufacturing employment.

Since gas is used primarily for space heating the economic variables need to be used as interactive variables with HDD to account for the extreme seasonality of the data. As a result, the functional forma that was estimated is:

$$THERMS_t = f(HDD_t \times PRICEGAS_{a-1}, HDD_t \times EMP_{a-1}, HDD_t) \quad [8]$$

where:

THERMS = Gas sales,
PRICEGAS = Real price of gas,
HDD = Heating degree days,
t = Billing-month,
a = Year associated with billing-month, t.

The results of the OLS estimation procedure, summarized in Figures 6-8, show that the industrial models for customers in the two space heating segments fit the historical data well. GSG Heating model is estimated for using monthly billing data from January 2011 to December 2021 period while Non-Heating model is estimated for using monthly billing data from January 2013 to December 2021 in order to get better estimation results. The data for industrial GSG non-heating customers, however, seems to indicate the presence of out of period adjustments in the billing data which the model doesn't, and can't be expected to, account for. These were addressed with binary variables. The larger industrial customers are served under rate LVG. The model was estimated for customers in the industrial sector using monthly billing data from January 2010 to December 2021 period.

Like the small and medium commercial models, the estimated coefficients of the three industrial models indicate that sensitivity to price is small. The small industrial customers, rate GSG did not show any statistically significant response to price while rate LVG sensitive to price, with an estimated elasticity of -0.1 Small response of the industrial sector to gas prices is attributed to the fact that gas, since it is not used for process heat, is a relatively small proportion of the total costs of production.

Figure 6
GSG Industrial Space Heating Model
Actual vs. Fitted Values

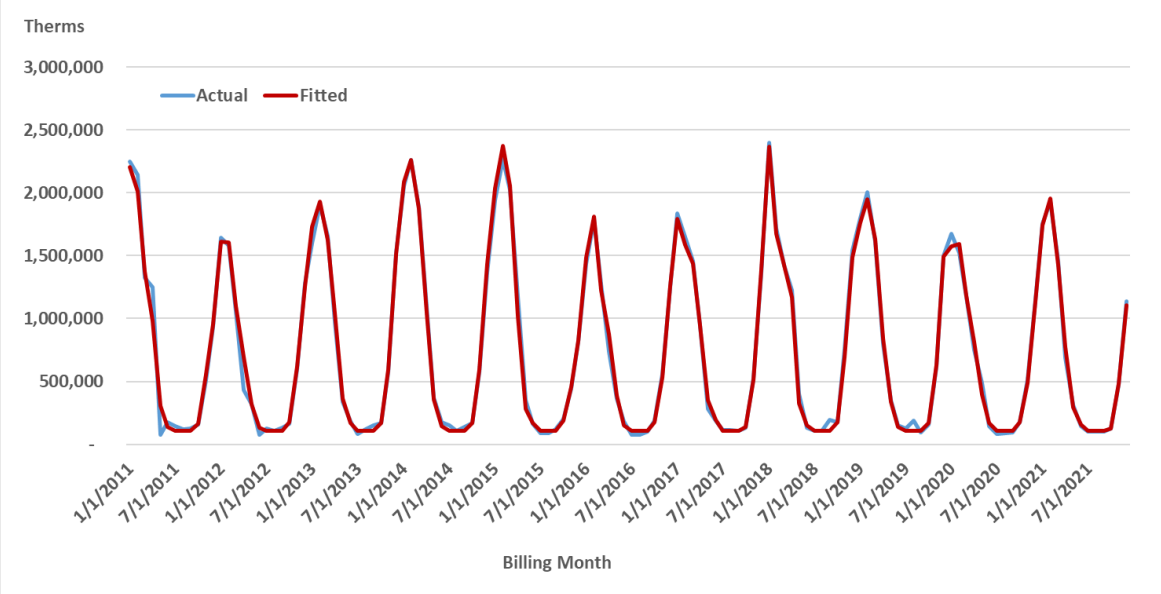


Figure 7
GSG Industrial Non-Space Heating Model
Actual vs. Fitted Values

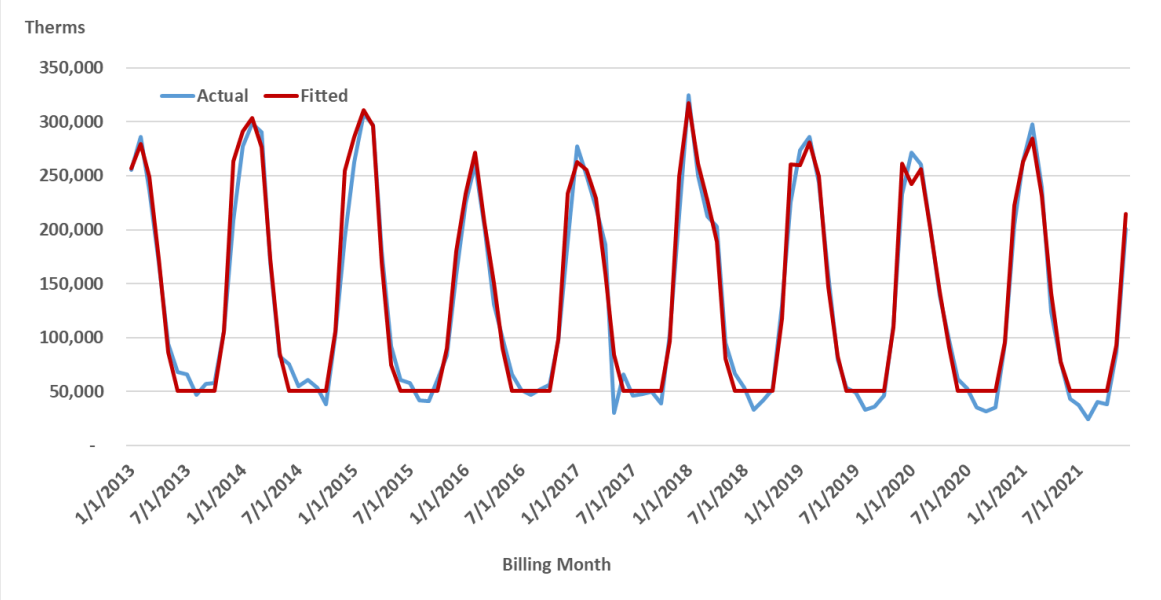


Figure 8
LVG Industrial Heating Model
Actual vs. Fitted Values

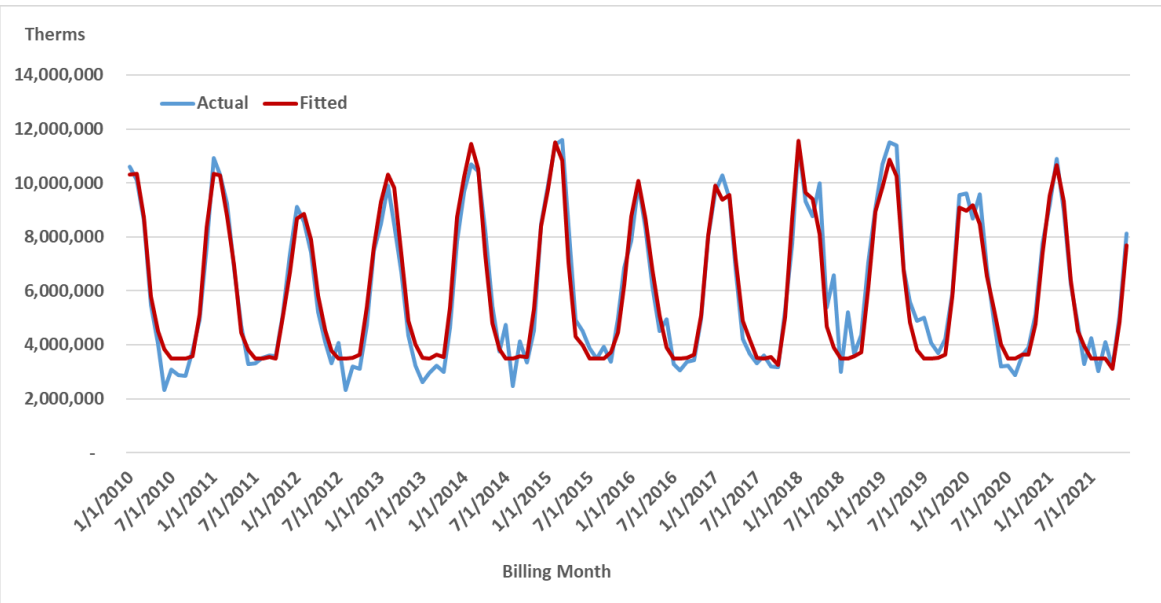


Table 4

Estimated Coefficients of the GSG Industrial Gas Sales Models
(standard errors in parentheses)

	JAN	FEB	MAR	APR	MAY	JUN	OCT	NOV	DEC	R2	DW	n
HEATING												
HDD	2463	1934	2215	1748	1160	1195	633	1220	2154	0.993	2.228	132
	(174)	(23)	(150)	(46)	(105)	(515)	(226)	(57)	(183)			
	A	B										
COVID x HDD	-257	-66										
	(117)	(37)										
NON-HEATING												
HDD	234	138	243	229	163			139	259	0.874	2.039	120
	(14)	(84)	(16)	(27)	(61)			(33)	(17)			
	A	B										
COVID x HDD	-34	-1										
	(69)	(22)										

Table 5

Estimated Coefficients of the LVG Industrial Gas Sales Models
(standard errors in parentheses)

		COVID x HDD				
HDD x PRICE	HDD x EMP	A	B	R2	DW	n
-2597	39	-914	-459	0.941	1.516	144
(968)	(4)	(1,242)	(455)			

II Forecast Assumptions

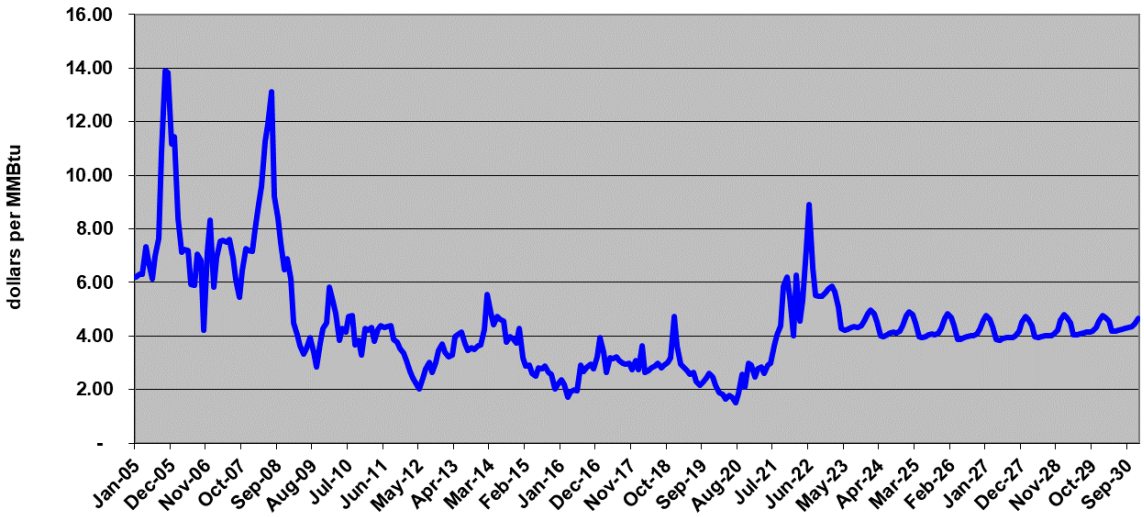
The models described above, in concert with assumptions about future prices and local economic and demographic parameters, were utilized to produce a forecast of billed natural gas delivered sales by rate for the residential, commercial, and industrial customer classes. The assumptions and the forecasts are described in more detail below.

Natural Gas Prices

The main driver of retail natural gas prices is the wholesale cost of gas which changes monthly. While these costs are passed through to commercial and industrial customers on monthly basis, the gas cost under- or over-collection of the residential customers is addressed in October where the rate is adjusted to collect or return the imbalance over the following twelve months. For the purpose of the forecast, the wholesale natural gas price was assumed to follow the NYMEX future prices as of July 06, 2022. As figure 9 shows, the wholesale price of gas is projected to stay relatively stable during the 2022-2029 periods.

Figure 9

NYMEX Natural Gas Futures Prices, July 6, 2022
($/MMBtu)



This price projection was used in the ER&T Gas cost model which generated commodity gas costs by rate. The residential costs, along with the actual imbalance in the residential gas supply cost and the revenue collection to offset this cost was utilized in the Cognos residential model to produce a stream of residential prices assuming that every October the imbalance was trued-up over the following 12 months. These projected commodity costs, combined with delivery tariff assumptions results in projected retail prices that are summarized below.

Table 6

Historic and Projected Retail Gas Prices

(dollars per therm)

	RSG		Commercial			Industrial		
			GSG		LVG	GSG		LVG
Year	Heating	Non-Heating	Heating	Non-Heating		Heating	Non-Heating	
2010	1.24	1.43	1.10	1.07	0.97	1.11	1.06	0.92
2011	1.09	1.26	1.06	1.04	0.92	1.05	1.05	0.87
2012	1.00	1.18	0.95	0.93	0.80	0.95	0.98	0.75
2013	0.94	1.09	1.00	0.99	0.84	1.00	1.01	0.80
2014	0.80	0.94	1.06	1.04	0.91	1.10	1.08	0.90
2015	0.64	0.80	0.86	0.85	0.74	0.86	0.88	0.74
2016	0.71	0.87	0.83	0.83	0.69	0.83	0.86	0.70
2017	0.77	0.91	0.95	0.95	0.79	0.95	0.98	0.80
2018	0.74	0.88	0.93	0.92	0.79	0.94	0.96	0.77
2019	0.81	1.25	0.94	0.92	0.78	0.94	0.97	0.73
2020	0.78	1.31	0.87	0.87	0.71	0.80	0.91	0.66
2021	0.82	1.36	1.02	1.04	0.84	1.01	1.07	0.77
2022	0.97	1.37	1.10	1.33	0.91	1.29	1.35	1.07
2023	1.09	1.51	1.09	1.28	0.87	1.29	1.33	1.04
2024	1.03	1.44	1.01	1.21	0.90	1.21	1.25	0.97
2025	1.10	1.51	1.08	1.27	0.93	1.27	1.31	0.99
2026	1.07	1.48	1.06	1.25	0.91	1.25	1.29	0.98
2027	1.15	1.56	1.13	1.32	0.94	1.32	1.36	1.01
2028	1.22	1.63	1.18	1.38	0.97	1.36	1.41	1.03
2029	1.31	1.72	1.24	1.43	1.00	1.41	1.46	1.06
2030	1.40	1.81	1.33	1.52	1.04	1.50	1.55	1.09
2031	1.42	1.83	1.33	1.52	1.04	1.50	1.55	1.10
2032	1.09	1.50	1.09	1.27	0.91	1.25	1.30	0.97
2033	1.09	1.50	1.09	1.27	0.91	1.25	1.30	0.97
2034	1.09	1.50	1.09	1.27	0.91	1.25	1.30	0.97
2035	1.09	1.50	1.09	1.27	0.91	1.25	1.30	0.97

Energy Efficiency

In recent years, new technologies and state's saving programs have had significant impact on gas consumption to residential, commercial and industrial customer groups. The method of incorporating efficiency changes into the model estimation process when the changes are not driven by any of the economic explanatory variables is a two-step process.

The first step is to eliminate the impact of these programs in the historical series by adding the estimated impacts of these programs to the historical data, estimating the model, and then producing a forecast. This forecast will not have any impacts of the efficiency programs embedded in it.

The second step is to remove the impacts of the efficiency programs from both the history and the forecast. This reverts the historical data back to actual values and produces a forecast with the impacts of the efficiency programs correctly incorporated.

This methodology is used for RSG Heating, Commercial GSG Heating and LVG sales to incorporate the impacts of the current PSE&G efficiency programs and the estimated impacts of the proposed Clean Energy Future filing. These impacts are summarized in Table 7 below.

Table 7
Impacts of
Energy Master Plan – Energy Efficiency – Clean Energy Future
(therms)

	BILLING MONTH ASUMPTIONS		
	EMP	EE	CEF
2010	14,596,330	1,014,482	-
2011	16,831,360	3,286,510	-
2012	12,618,148	4,213,546	-
2013	14,974,182	5,039,977	-
2014	17,382,618	6,586,486	-
2015	17,361,247	6,989,516	-
2016	18,497,175	7,495,738	-
2017	19,852,982	8,348,880	-
2018	22,055,381	9,278,342	-
2019	22,760,483	8,941,105	-
2020	23,414,574	10,475,843	1,214,524
2021	29,100,748	9,957,697	6,978,195
2022	26,222,532	9,608,747	21,136,341
2023	22,509,898	8,137,942	39,588,634
2024	21,650,010	8,420,245	59,629,458
2025	20,624,395	9,239,028	82,689,574
2026	19,357,357	8,385,886	106,477,515
2027	17,336,599	7,191,938	132,972,229
2028	15,336,888	6,779,179	158,913,247
2029	14,061,212	2,972,413	179,354,570
2030	12,588,250	2,563,522	191,297,509
2031	11,294,115	2,086,041	198,946,301
2032	9,680,670	2,010,338	205,006,562
2033	8,067,225	1,325,004	205,171,618
2034	6,453,780	-	205,171,618
2035	4,840,335	-	205,171,618

Economic Projections

Economic and demographic forecast assumptions for the nation and New Jersey are from Moody's Economy July 2022 forecast. This forecast captures impact of COVID-19 on economy which assumes that, nationally, the economy will recover at a slow rate after pandemic. Tighter monetary and financial conditions to reduce stubbornly high inflation will slow economic growth. This national forecast is expected to be reflected in New Jersey's economic outlook that is also expected to be at a slow pace. The forecast is summarized in Table 8.

Weather during the forecast period is assumed to be "normal" as defined by the average daily weather during the twenty-year period ending December 31, 2021.

Table 8

National and New Jersey Economic Forecast Assumptions

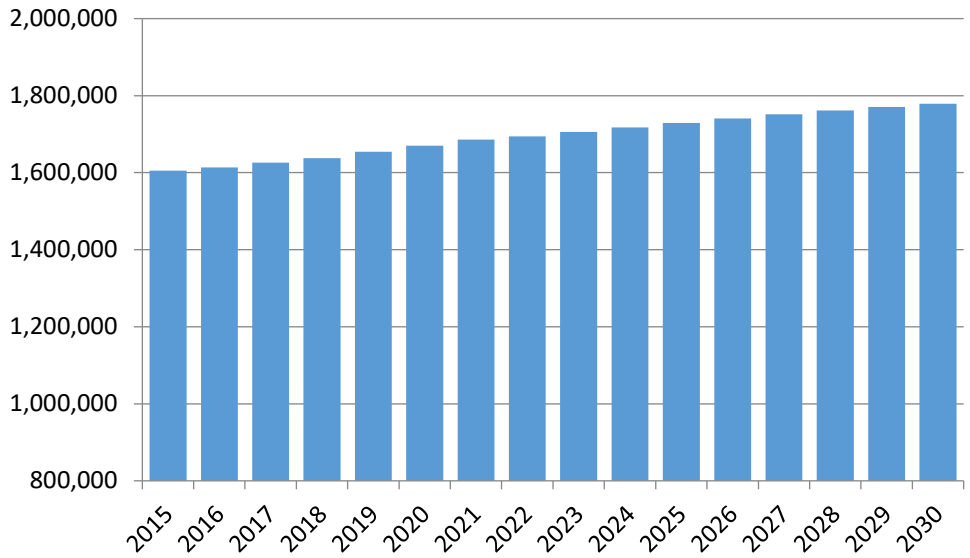
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
United States														
Gross Domestic Product, (Bil. USD, SAAR)	19,480	20,527	21,372	20,897	22,997	24,962	26,271	27,589	28,896	30,238	31,571	32,930	34,333	35,729
Industrial Production: Total, (Index 2012=100, SA)	100	103	102	95	100	106	108	110	112	113	114	116	118	119
Income: Personal - Total, (Bil. Ch. 2009 USD, SAAR)	15,889	16,346	16,762	17,647	18,272	17,763	18,218	18,767	19,214	19,676	20,138	20,606	21,075	21,536
Employment: Total Nonagricultural, (Mil. #, SA)	147	149	151	142	146	152	154	155	156	157	157	158	159	160
Household Survey: Unemployment Rate, (%, SA)	4.4	3.9	3.7	8.1	5.4	3.6	3.7	3.7	3.8	4.1	4.1	4.1	4.1	4.1
CPI: Urban Consumer - All Items, (Index 1982-84=100, SA)	245	251	256	259	271	291	300	307	314	321	328	335	342	350
Interest Rates: 3-Month Treasury Bills EBY, (% p.a., NSA)	0.9	2.0	2.1	0.4	0.0	1.6	3.5	3.0	2.5	2.5	2.5	2.5	2.4	2.4
Terms Conventional Mortgages: All Loans Fixed Effective Rate, (%, NSA)	4.1	4.7	4.4	3.8	3.8	4.9	5.7	5.7	5.9	6.2	6.2	6.2	6.2	6.1
New Jersey														
Real Personal Income, (Mil. 09$, SAAR)	539,796	551,146	563,195	586,604	600,681	580,203	592,487	608,647	621,807	634,912	647,534	660,082	672,561	684,156
Employment: Total Nonagricultural, (Ths., SA)	4,124	4,161	4,198	3,857	4,021	4,200	4,253	4,286	4,301	4,304	4,308	4,313	4,319	4,322
Employment: Total Manufacturing, (Ths., SA)	247	250	251	238	240	246	248	248	248	246	243	241	238	235
Employment: Total Non-Manufacturing, (Ths., SA)	3,877	3,911	3,947	3,619	3,780	3,954	4,005	4,038	4,053	4,059	4,065	4,073	4,081	4,086
Labor: Unemployment Rate, (%, SA)	4.5	4.0	3.4	9.5	6.4	4.0	4.0	3.9	4.0	4.2	4.3	4.3	4.3	4.3
Population: Total, (Ths.)	8,886	8,885	8,878	8,865	8,863	8,884	8,909	8,920	8,921	8,920	8,916	8,911	8,905	8,898
Households: Total, (Ths.)	3,343	3,353	3,362	3,354	3,364	3,379	3,394	3,403	3,409	3,413	3,415	3,417	3,420	3,424
Housing Starts: Single-family, (#, SAAR)	11,707	12,291	12,288	13,333	14,573	15,490	18,485	18,826	18,286	17,578	16,352	14,860	13,839	12,874

Customer Forecasts

The number of residential customers with and without natural gas space heat is based on historical trends and expected residential construction activity in the service area. Residential non-heating customers have been steadily declining at an average annual rate of 1.5 percent and this is expected to continue. Furthermore it is assumed that these customers are converting to gas heat. The number of gas heating customers is also expected to increase as new residential construction occurs. The number of gas customers is assumed to reflect the current decline seen in new single family housing construction. As a result, as the figure below shows, the number of residential customers is expected to remain relatively stable.

Figure 10

Annual Gas Residential Customers



BGSS Share

The share of delivered sales that are BGSS supplied is assumed to follow recent trends where therm shares have stabilized at their current levels across the broad range of customer classes.

III Maximum Daily Sendout Forecast

Introduction

Distribution facilities are designed to meet the estimated maximum hour demand on a day with a mean temperature of 0°F and with seven weather stations in NJ as the measuring base. Gas supplies are designed to meet the estimated maximum daily as well as maximum hourly demand. The maximum daily sendout forecast process consists of:

- Estimating the relationship between weather and firm daily sendout,
- Extrapolating that relationship to determine the current level of daily sendout at 0 degrees if no day that cold appeared in the model estimation data,
- Forecasting future maximum daily sendout levels based on the current estimated level

The remainder of this section describes each of these steps in turn.

Daily Firm Sendout Model Estimation

There are two major issues in modeling maximum firm daily sendout. First, the diversity of the customer base needs to be controlled for. Second, the model has to be designed to be extrapolated rather than interpolated. Each of these issues is discussed below.

The firm sendout number accounts for gas deliveries to a diverse set of customers ranging from residential homes to large industrial sites. Since sales to different types of customers respond to weather differently, customer mix must be controlled for in any modeling effort. In addition, the behavior of this diverse group of customers will change differently over time as prices and other economic parameters change over time. As a result, these changes also need to be accounted for. Unfortunately, the firm sendout number is not available by rate. As a result, the only way to control for changes in customer mix and changes in the behavior over time by these customers is to limit the time period of data that is used in the model estimation.

The second issue, of extrapolation, is addressed in a similar way. The relationship between sendout and weather is fairly linear. In reality, it is probably not perfectly linear. This is not an issue when estimating a model and using the results to interpolate values with the range of the estimation data. However, when extrapolating the data outside the range of the estimation data the

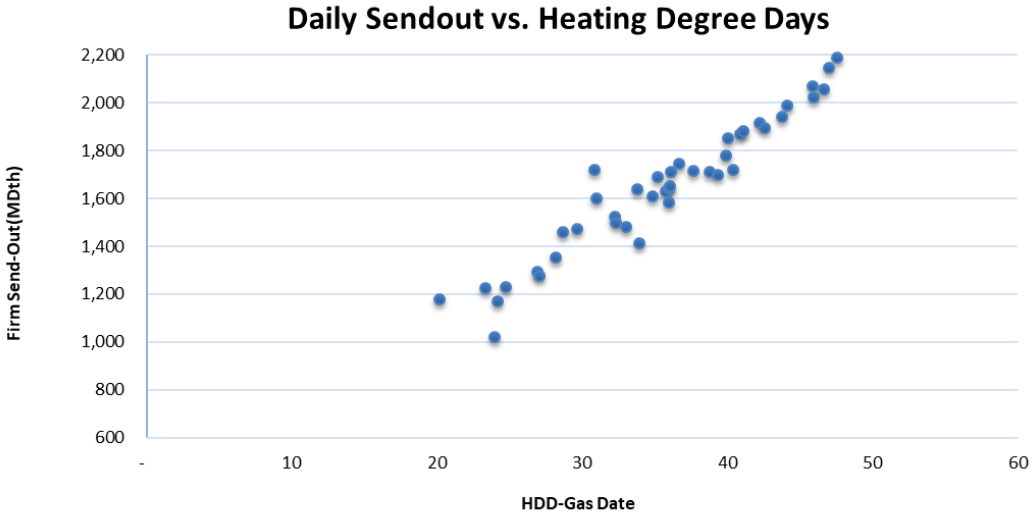
imprecision increases. The way to minimize this imprecision is to limit the observations to the lower temperature data so as to get a linear estimation of that portion of a non-linear curve that is closest to the ultimate extrapolation value.

To address both of these forecasting issues, the data used in estimating the relationship between daily sendout and weather was limited to January 2022, January to February 18th 2022 during the most recent year available. Customer class mix will not change significantly in this short period and it contains the coldest months when the maximum sendout would most likely occur. Analysis of the data for these months indicates two things.

First, the data confirms the general responsiveness of firm sendout to the weather, as Figure 11 shows. Second, the relationship appears linear

Figure 11

January & February 2022
Daily Firm Sendout vs Heating Degree Days



To refine the impact of the day-type on sendout, the regression model from previous years was enhanced to allow for not only an intercept change from the day-type but, also a HDD response change.

The regression model that modeled daily sendout, SENDOUT, is specified as:

$$SENDOUT_t = f(HDD_t, HDD_{t-1}, \text{WIND-SPEED}, \text{SKY-CONDITIONS}, WEEKDAY_t, HOLIDAY_t, SNOW_t) \quad [9]$$

Where:

HDD_t	=	Heating degree days on gas day t,
HDD_{t-1}	=	One day lag basis Heating degree days on gas day t-1,
WIND-SPEED	=	Daily average wind speed, MPH,
SKY-COND	=	Report of each cloud layer,
WEEKDAY	=	Interactive variable that takes the value of HDD on weekdays, otherwise 0,
HOLIDAY	=	Interactive variable that takes the value of HDD on Sundays or Holidays, otherwise 0,
SNOW	=	Binary variable that takes the value of 1 when reported snowstorm accumulation in any portion of the service area is 6 inches or more, 0 otherwise.

The estimation results are shown in Table 8 and Figure 12 below.

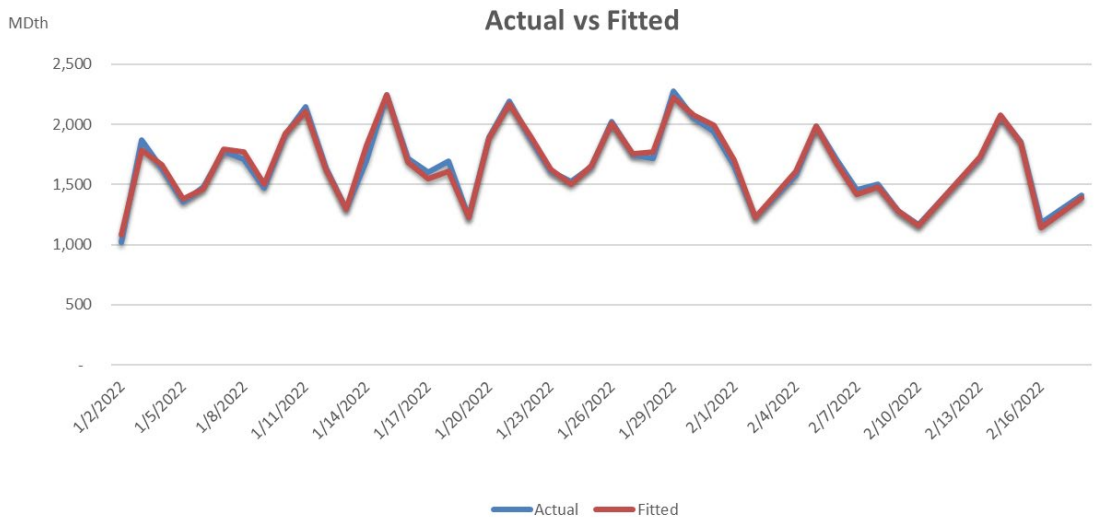
Table 8

Estimated Coefficients of the Daily Sendout Model
(standard errors in parentheses)

	HDD									
Intercept	HDD	LAG	HOLIDAY	WEEKDAY	WIND-SPEED	SKY COND	SNOW	R2	DW	n
-26.9	36.2	8.0	-1.02	0.16	15.2	6.6	-70.9	0.984	1.814	44
(52.6)	(1.1)	(0.9)	(0.7)	(0.5)	(2.7)	(5.9)	(26.7)			

Figure 12

Daily Sendout Model
Actual vs. Fitted Values



The estimated coefficients of the model suggest that the estimated maximum daily peak would occur on a Friday. The model predicts that the maximum peak daily sendout would be 2221 MDth.

A. Calendar-Month Sales Calculation

Introduction

Utilities have traditionally had a disconnection in the timing of their revenues and their costs. Revenues from retail sales are a revenue stream from meter readings and the resulting bills to their customers that occur on a daily basis throughout the month. The bills issued from meter reads in the current month's meter reading schedule are all recorded as billing-month revenue. Billing-month revenue will include revenue from electricity or gas delivered during the previous month while excluding deliveries of electricity or gas delivered during the current month that occurred after the meters were read. Expenses, on the other hand, such as wages, fuel, depreciation, etc., have been recorded on a calendar-month basis. This inconsistency in the revenue and expense streams can be tolerated if there are no major changes in the revenue and/or expense streams. If major changes are occurring, such as a rapid increase in fossil fuel prices or a high seasonality in sales, a comparison of the billing-month revenue and the calendar-month expenses can give a false view of a utility's financials. To remedy this situation, the sales and revenue accrual calculation, the estimation of calendar-month sales and revenue from billed sales and revenue and the estimation of unbilled sales and revenue was developed.

Section II will discuss how, in theory, the billed sales and the unbilled estimates are used to calculate calendar-month sales using a simple example and introduce the notation that will serve as the basis of the analysis. A description of the theory's specific application to PSE&G's meter reading schedule, that can have a single billing month encompass up to four calendar-months, follows.

Section III will describe the implementation of the estimation of the calendar-month sales and revenue process at PSE&G.

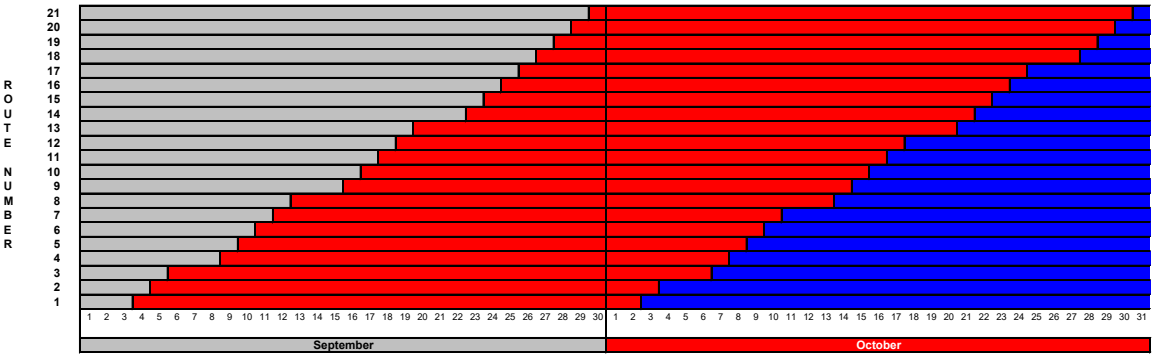
The Unbilled and Calendar-Month Estimation

A Simple Example

Utilities generally read all of their meters every month on 21 workdays. Figure 1, below shows a hypothetical October billing-month (in red) as determined by the September and October meter reading schedules. In the chart, each row represents a Route Number or a group of meters that are always read on the same day (although the day when they are all read may vary from month to month). The bottom row is red on all the days after the September read date, September 3rd until the October read date, October 2nd. If it is assumed that the customers' meters are read at noon, the October bill to these customers will reflect 28.5 days of service in September and only 1.5 days in October[2]. The second row from the bottom represents Route 2 whose customers' meters were read on September 4th and October 3rd. The October bill to these customers will reflect 27.5 days of service in September and only 2.5 days in October. This continues until the top row, Route 21, that had meter reading days of September 29th and October 30th. The October bills to these customers represent only 1.5 days of September service and 29.5 days of October service.

Figure 1

Hypothetical October 2008 Billing-Month



From the red portion of the diagram, it can be seen that the October billing-month consists of September sales that are billed in October that, to facilitate discussion, will be referred to as SEP B> OCT and October sales that are billed in October i.e., OCT B> OCT. The calendar-month sales are defined as the red and blue rectangle defined by the month of October and the 21 read-cycles. This consists of OCT B> OCT sales and the October unbilled sales, OCT B> NOV, the October sales that will be billed in November.

[2] Or, more realistically, if the meter reads for all the Route 1 customers are evenly distributed throughout an 8:00 AM to 4:00 PM workday, the reads, on average, would represent a half day's sales on the read day.

The relationship between billed, unbilled, and calendar-month sales can be derived from these identities from the steps below.

$$\text{October Calendar} = \boxed{\text{OCT B> OCT}} + \boxed{\text{OCT B> NOV}} = \boxed{\begin{matrix}\text{OCT B> OCT}\\ \text{OCT B> NOV}\end{matrix}} \qquad [1]$$

Adding and subtracting $\boxed{\text{SEP B> OCT}}$ to the r.h.s. of [1] yields:

$$\text{October Calendar} = \boxed{\begin{matrix}\text{OCT B> OCT}\\ \text{OCT B> NOV}\end{matrix}} + \boxed{\text{SEP B> OCT}} - \boxed{\text{SEP B> OCT}} \qquad [2]$$

Rearranging the r.h.s. of [2] yields:

$$\text{October Calendar} = \boxed{\begin{matrix}\text{OCT B> OCT}\\ \text{SEP B> OCT}\end{matrix}} + \boxed{\text{OCT B> NOV}} - \boxed{\text{SEP B> OCT}} \qquad [3]$$

Substituting [1] into the l.h.s. of [3] yields:

$$\boxed{\begin{matrix}\text{OCT B> OCT}\\ \text{OCT B> NOV}\end{matrix}} = \boxed{\begin{matrix}\text{OCT B> OCT}\\ \text{SEP B> OCT}\end{matrix}} + \boxed{\text{OCT B> NOV}} - \boxed{\text{SEP B> OCT}} \qquad [4]$$

This is the familiar:

$$\text{October Calendar} = \text{October Billed} + \text{October Unbilled} - \text{September Unbilled}^{3} \qquad [5]$$

This formula for the accrual of calendar-month sales and revenues is preferred to any direct estimation of calendar-month sales because any error in the unbilled estimate is
"reversed out" in the following month. The advantage of this is that, as the calendar time period extends, the potential error resulting from unbilled estimates is reduced. This can be seen by summing up [5] over the 2008 calendar-year as:

$$\text{Calendar-Year 2008} = \sum_{i=\text{JAN08}}^{\text{DEC08}} \text{Billed}_i + \sum_{i=\text{JAN08}}^{\text{DEC08}} \text{Unbilled}_i - \sum_{i=\text{DEC07}}^{\text{NOV08}} \text{Unbilled}_i \qquad [6]$$

[3] The difference between the current month's unbilled and the previous month's is often referred to as
the "net unbilled".

Where:

$Billed_i$ = Billing-month sales in month i,
$Unbilled_i$ = Unbilled sales in month i.

That simplifies to:

$$\text{Calendar-Year 2008} = \sum_{i=JAN08}^{DEC08} Billed_i + Unbilled_{DEC08} - Unbilled_{DEC07} \qquad [7]$$

The key result from [7] is that the annual calendar-year sales are the annual billed sales, a very large real number, and the difference between two monthly unbilled estimates. Since the error that can be expected in the difference between the two monthly unbilled estimates can be assumed to be quite small compared to the annual billed total, the calendar-year estimate, as a result, can be expected to be very accurate.

The same general results described in this simple example apply to PSE&G's more complicated meter reading schedule that is described below.

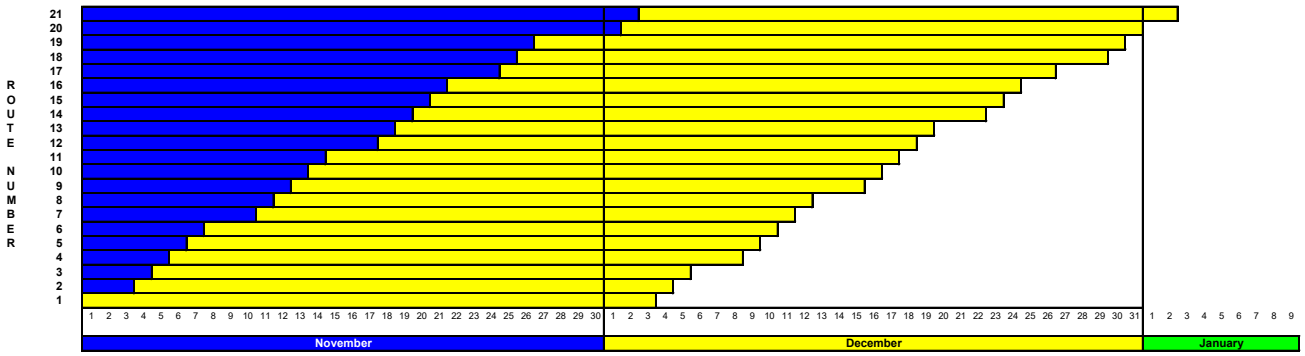
A More General Example

Unlike the hypothetical October billing-month, discussed above, that spanned two months, September and October, the PSE&G billing-month can encompass as many as four months. For example, the December 2008 PSE&G billing month, illustrated in Figure 2. has meter reading dates ranging from October 31st to January 2nd. As a result, it spans four months, October, November, December, and January[4].

[4] This is the original PSE&G December 2008 meter reading schedule. It has since been "compressed" to accommodate the implementation of iPower, the new billing and customer information system.

Figure 2

PSE&G December 2008 Billing-Month



Therefore, to develop a general algorithm applicable to PSE&G, the definition of billed, unbilled, and calendar sales must be expanded to include the potential of having sales from two additional calendar months reflected in a billing-month. December 2008 billing month, for example, is defined as:

$$\text{December Billed} = \boxed{\begin{array}{l}\text{OCT B> DEC}\\ \text{NOV B> DEC}\\ \text{DEC B> DEC}\\ \text{JAN B> DEC}\end{array}} \qquad [8]$$

Given the additional components of the billed, $\boxed{\text{OCT B> DEC}}$, i.e. the "under billed" sales, and $\boxed{\text{JAN B> DEC}}$, the "excess billed" sales, the addition of the current unbilled and subtraction of the previous month's unbilled to the December billed, as defined in the simple example above, will overstate December calendar-month sales by the sum of under billed and excess billed sales. As a result, the December unbilled needs to be redefined as:

$$\text{December Unbilled} = \boxed{\begin{array}{l}\text{DEC B> JAN}\\ \text{DEC B> FEB}\end{array}} + \boxed{\text{NOV B> JAN}} - \boxed{\text{JAN B> DEC}} \qquad [9]$$

$$\text{December Unbilled} = \text{December Unbilled} + \text{January Underbilled} - \text{December Excess Billed} \qquad [10]$$

December calendar can then be defined as December billed plus the new

December unbilled less the equivalent November unbilled or:

DEC B> OCT DEC B> NOV DEC B> DEC DEC B> JAN	=	OCT B> DEC NOV B> DEC DEC B> DEC JAN B> DEC					
	+	DEC B> JAN DEC B> FEB	+	NOV B> JAN	-	JAN B> DEC	
	-	NOV B> DEC NOV B> JAN	-	OCT B> DEC	+	DEC B> NOV	[11]

or, in words:

December Calendar = December Billed
+ December Unbilled
- November Unbilled [12]

This is the general formula that is used to calculate unbilled sales at PSE&G.

The PSE&G Gas Calendar-Month Estimation

The estimation of calendar-month gas sales at PSE&G is based on the notion that gas sales can be divided into two components: a weather sensitive component and a non-weather sensitive component. The weather sensitive component is affected by the winter weather as measured by heating degree days (HDD). The non-weather component is simply a function of the number of days in the sales period. As a result, sales during the unbilled periods can be estimated based on the HDD and number of days during the unbilled periods and the estimates of the weather-sensitive sales per HDD and non-weather sensitive sales per day.

The estimate of the weather-sensitive sales per HDD for each rate, the HDD coefficient, is the sum of the coefficients associated with its model's independent variables that have a HDD component divided by the number of days in the billing period. In the case of RSG that, unlike the other rates, is modeled on a use per customer basis, this result is multiplied by the number of customers.

The estimate of the non-weather sensitive sales per day for each rate, the base coefficient, is the value of the model equation with all of the coefficients associated with HDD set to zero and divided by the number of days in the billing period. As in the case of the HDD coefficient, the RSG result is multiplied by the number of customers.

Given the structure of the models, these coefficients will vary by month and by year. The current estimates for 2008 and 2009 are shown in Table 1 below.[5]

Table 1

Unbilled Weather and Base Coefficients, 2008-2009

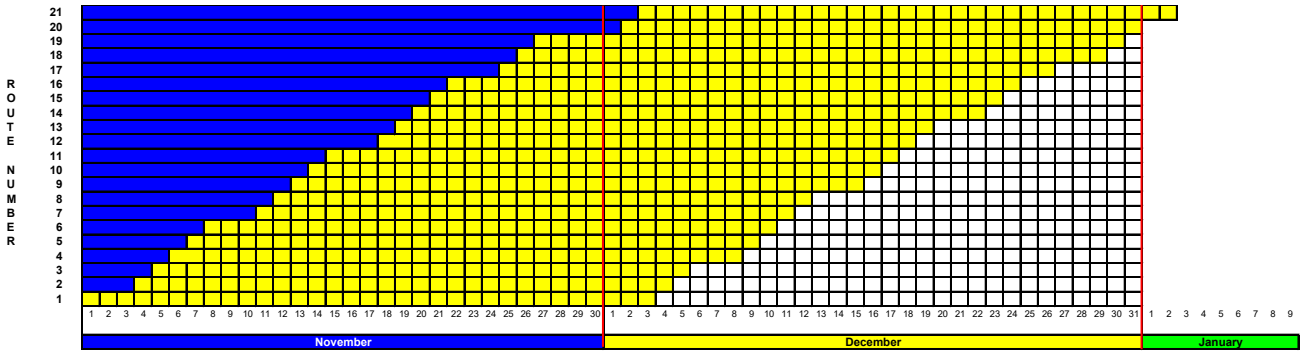
	RSG				GSG-Commercial				GSG-Industrial				LVG - Non Vehicle			
Billing	Heating		Non-heating		Heating		Non-heating		Heating		Non-heating		Commercial		Industrial	
Month	Base	HDD	Base	HDD	Base	HDD	Base	HDD	Base	HDD	Base	HDD	Base	HDD	Base	HDD
Jan-08	1,477,624	246,082	218,393	4,689	56,941	45,607	168,133	3,942	(15,873)	3,333	2,978	501	1,047,971	79,608	145,023	8,767
Feb-08	1,554,914	253,674	234,372	4,811	69,746	45,607	175,674	3,942	(15,256)	3,333	3,786	501	1,172,070	79,608	167,056	8,767
Mar-08	1,343,904	249,936	236,373	4,737	25,553	45,607	158,654	3,942	(16,832)	3,333	2,893	501	1,053,237	79,608	138,433	8,767
Apr-08	1,337,980	248,305	190,526	4,692	13,895	45,607	150,129	3,942	(15,769)	3,333	5,681	501	1,076,058	79,608	159,387	8,767
May-08	1,267,108	251,443	164,912	4,741	146,976	45,607	117,463	3,942	332	3,333	4,166	501	838,647	79,608	137,277	8,767
Jun-08	1,086,639	250,233	135,407	4,714	126,187	45,607	95,849	3,942	2,561	3,333	3,704	501	708,324	79,608	129,981	8,767
Jul-08	984,641	248,954	116,905	4,704	135,270	45,607	94,660	3,942	3,907	3,333	2,680	501	610,707	79,608	119,171	8,767
Aug-08	912,999	249,456	104,709	4,666	103,926	45,607	80,601	3,942	2,045	3,333	2,578	501	613,535	79,608	119,770	8,767
Sep-08	940,487	252,748	111,693	4,746	108,515	45,607	84,252	3,942	2,953	3,333	2,730	501	581,470	79,608	129,852	8,767
Oct-08	809,244	249,439	113,383	4,671	115,541	45,607	90,002	3,942	3,184	3,333	1,932	501	728,815	79,608	116,580	8,767
Nov-08	1,076,293	250,792	138,927	4,687	(9,962)	45,607	107,114	3,942	(7,929)	3,333	5,262	501	769,823	79,608	112,495	8,767
Dec-08	1,191,333	252,604	187,367	4,690	(9,608)	45,607	130,211	3,942	(18,805)	3,333	2,214	501	902,036	79,608	120,543	8,767
Jan-09	1,481,212	248,163	214,955	4,643	56,601	45,745	153,926	3,711	(15,827)	3,259	2,952	490	1,041,705	79,850	144,156	8,190
Feb-09	1,548,542	252,236	228,920	4,692	69,856	45,745	171,980	3,711	(15,254)	3,259	3,796	490	1,173,921	79,850	167,320	8,190
Mar-09	1,393,454	253,517	239,084	4,687	26,121	45,745	168,175	3,711	(17,054)	3,259	2,980	490	1,076,642	79,850	141,509	8,190
Apr-09	1,331,091	250,149	185,138	4,617	13,721	45,745	148,255	3,711	(15,497)	3,259	5,622	490	1,062,628	79,850	157,398	8,190
May-09	1,266,433	253,309	160,992	4,665	145,815	45,745	116,535	3,711	352	3,259	4,136	490	832,022	79,850	136,193	8,190
Jun-09	1,094,707	252,091	133,240	4,638	126,187	45,745	95,849	3,711	2,565	3,259	3,704	490	708,324	79,850	129,981	8,190
Jul-09	987,359	250,802	114,502	4,629	134,644	45,745	94,222	3,711	3,889	3,259	2,668	490	607,880	79,850	118,620	8,190
Aug-09	925,740	251,308	103,701	4,591	104,600	45,745	81,124	3,711	2,058	3,259	2,595	490	617,512	79,850	120,546	8,190
Sep-09	953,382	254,625	110,592	4,670	109,193	45,745	84,778	3,711	2,971	3,259	2,747	490	585,098	79,850	130,662	8,190
Oct-09	808,699	251,291	110,672	4,596	114,612	45,745	89,279	3,711	3,169	3,259	1,918	490	722,957	79,850	115,643	8,190
Nov-09	1,077,388	252,654	135,835	4,612	(9,899)	45,745	106,433	3,711	(7,834)	3,259	5,235	490	764,927	79,850	111,779	8,190
Dec-09	1,203,734	254,479	184,915	4,615	(9,637)	45,745	130,597	3,711	(18,750)	3,259	2,238	490	904,708	79,850	120,900	8,190

[5] While the coefficient is called the "base" coefficient, it really does not measure base use per day. Rather it is the intercept term in a simple regression. As a result, it can be negative reflecting the intercept of a regression that is outside of the relevant range.

The billed, unbilled, excess billed, and underbilled days and heating degree days are derived from the meter reading schedule and daily weather data. The measure used is the Average Route Days (ARD). The ARD are defined as the number of days across all routes for a given period divided by 21, the total number of routes. This concept is illustrated in Figure 3, a slightly different version of the December 2008 billing-month, shown below.

Figure 3

PSE&G December 2008 Billing-Month



Each square represents an ARD.[6] The total yellow blocks in each row represent the number of days in that particular route during the December billing-month. The sum of all the yellow blocks, 677, divided by 21 represent the average number of days in the December billing-month, i.e., the average number of days across the 21 routes or 32.24.

The number of excess billed days, JAN B> DEC , is:

1.5 (January 1st and half of January 2nd) / 21 = 0.07 [13]

HDD for each period are a weighted sum of the daily HDD where the weight is the ARD associated with that day. For example, from the diagram it can be seen that on December 21st, the sales to 8 routes, routes 14-21, will be in the

[6] Well, not exactly. Remember that it is assumed that the meters are read at noon. As a result the last yellow block to the right of each row counts as a half day. On the other hand, the last blue block on the right of each row also counts as a half day in the December billing-month so, the math works for the billing-month but, the half needs to be taken into account when discussing portions of the unbilled and billed periods. For a clearer discussion, however, the half days will be, for the most part, ignored.

December billing-month while sales to the first thirteen routes will be in the January billing-month. As a result , 8/21 or 38 percent of the HDD on December 20th will be assigned to the December billing month and 62 percent will be assigned to the January billing month.

HDD for underbilled and excess billed periods are assigned in a similar manner.

From Table 2 below that shows the normal monthly billed an unbilled HDD and days by type, it can be seen that underbilled days and HDD occur rarely while excess billed days are quite common.

Table 2

Billed and Unbilled Days and Weather 2008-2009

Billing Month	Heating Degree Days				Days			
	Billed	Unbilled	Excess Billed	Under Billed	Billed	Unbilled	Excess Billed	Under Billed
Jan-08	795.06	322.08	0.59	-	31.67	12.76	0.02	0.00
Feb-08	786.44	283.76	5.90	-	30.19	11.83	0.29	0.00
Mar-08	643.82	187.74	2.62	-	30.67	12.10	0.21	0.00
Apr-08	360.41	73.05	0.20	-	30.14	11.83	0.10	0.00
May-08	108.21	13.78	0.05	-	29.90	13.05	0.21	0.00
Jun-08	15.47	0.14	-	-	30.33	12.60	0.10	0.00
Jul-08	0.14	-	-	-	30.71	12.81	0.02	0.00
Aug-08	0.01	0.03	-	-	29.57	14.29	0.07	0.00
Sep-08	1.87	7.02	0.04	-	30.71	13.52	0.02	0.00
Oct-08	60.34	87.80	-	-	29.38	15.12	0.00	0.00
Nov-08	255.88	213.78	1.65	-	29.76	15.43	0.10	0.00
Dec-08	578.34	338.40	1.75	0.17	32.24	14.19	0.07	0.02
Jan-09	797.36	361.02	1.75	-	31.86	13.33	0.07	0.00
Feb-09	786.19	277.80	7.41	-	30.14	11.48	0.36	0.00
Mar-09	634.56	188.08	1.17	-	30.00	12.21	0.10	0.00
Apr-09	361.92	73.58	0.46	-	30.52	11.79	0.19	0.00
May-09	108.91	13.36	0.05	-	30.14	12.67	0.21	0.00
Jun-09	15.07	0.12	-	-	30.33	12.21	0.10	0.00
Jul-09	0.12	-	-	-	30.86	12.38	0.12	0.00
Aug-09	0.01	0.03	-	-	29.38	13.90	0.02	0.00
Sep-09	1.97	6.92	0.04	-	30.52	13.38	0.02	0.00
Oct-09	61.71	86.34	-	-	29.62	14.74	0.00	0.00
Nov-09	261.34	207.03	1.65	-	29.95	14.88	0.10	0.00
Dec-09	582.57	329.38	3.90	-	32.14	13.81	0.17	0.00

On a monthly basis, the necessary coefficient, weather, and day data are transmitted to PSE&G accounting services each month. They are used to calculate the actual current month unbilled sales, UnbilledTherms, using:

UnbilledTherms = UnbilledDays x BASECoef + UnbilledHDD x HDDCoef [14]

Where:

UnbilledDays = the number of route days in the unbilled period as defined by [9],

Unbilled HDD = the number of HDD in the unbilled period as defined by [9],

BASECoef = the Base coefficient,

HDDCoef = the HDD coefficient.

The results of this calculation, with the previous month's unbilled results, are used to calculate calendar-month sales.

Unbilled, and as a consequence, calendar-month revenue is calculated by pricing the unbilled therms at the projected tariff rates. Adding the net unbilled revenue to the billing-month revenues results in the estimate of calendar-month revenue.

B. Summary Tables

Delivered Gas Sales As Billed
2017-2027
(MDth)

Class	Rate	Category	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Residential	RSG	Heating	130,512	147,879	146,246	139,222	151,937	152,180	151,659	153,036	154,322	155,639	156,992
		Non-Heating	8,860	9,314	4,016	3,620	3,995	4,057	3,961	3,956	3,929	3,910	3,889
	Total		139,371	157,193	150,262	142,842	155,932	156,237	155,620	156,992	158,251	159,550	160,881
Commercial	GSG	Heating	22,541	25,864	24,501	20,883	24,011	23,691	23,435	23,606	23,339	23,126	22,862
		Non-Heating	3,939	4,315	4,077	3,682	3,766	3,798	3,913	3,914	3,915	3,913	3,912
		Total	26,480	30,179	28,577	24,565	27,777	27,489	27,348	27,520	27,253	27,039	26,774
	LVG		61,091	70,527	68,443	60,670	66,680	66,563	67,069	67,807	68,197	68,275	68,315
	TSG	Firm	941	1,193	1,060	971	1,010	992	962	922	866	809	754
		Non-Firm	10,062	14,028	14,595	9,534	10,783	10,756	10,710	10,643	10,541	10,434	10,330
		Total	11,003	15,221	15,655	10,505	11,793	11,748	11,672	11,566	11,407	11,242	11,084
	CIG		3,595	5,471	4,746	1,808	1,910	1,910	1,910	1,910	1,910	1,910	1,910
	CSG		16,341	21,300	8,119	5,254	8,297	8,297	8,297	8,297	8,297	8,297	8,297
	Total		118,510	142,697	125,540	102,801	116,458	116,007	116,297	117,100	117,064	116,763	116,379
Industrial	GSG	Heating	871	1,019	940	786	864	874	913	913	913	913	913
		Non-Heating	153	169	160	149	158	158	158	158	158	158	158
		Total	1,025	1,188	1,100	935	1,022	1,032	1,071	1,071	1,071	1,071	1,072
	LVG		7,043	8,383	8,339	6,937	7,823	7,862	7,806	7,801	7,759	7,698	7,643
	TSG	Firm	1,511	1,528	1,444	1,497	1,567	1,540	1,496	1,436	1,351	1,266	1,183
		Non-Firm	17,374	6,115	6,373	5,867	5,815	5,796	5,766	5,721	5,653	5,581	5,512
		Total	18,886	7,643	7,816	7,364	7,381	7,336	7,261	7,157	7,004	6,847	6,695
	CIG		564	1,020	695	613	535	535	535	535	535	535	535
	CSG		83,737	106,647	122,752	71,945	68,134	68,134	68,134	68,134	68,134	68,134	68,134
	Contract		8,822	-	-	-	-	-	-	-	-	-	-
	Total		120,075	124,880	140,702	87,793	84,896	84,899	84,808	84,699	84,503	84,286	84,080
Lighting	SLG		66	76	62	69	64	64	64	64	64	64	64
Total			378,023	424,847	416,566	333,506	357,350	357,207	356,789	358,854	359,882	360,663	361,404

Supplied Gas Sales As Billed
2017-2027
(MDth)

Class	Rate	Category	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Residential	RSG	Heating	124,075	141,470	141,490	135,338	148,004	148,241	147,733	149,075	150,329	151,612	152,929
		Non-Heating	8,362	8,844	3,814	3,472	3,840	3,899	3,807	3,802	3,776	3,758	3,738
	Total		132,437	150,315	145,305	138,811	151,844	152,140	151,540	152,877	154,104	155,370	156,667
Commercial	GSG	Heating	17,387	19,929	19,320	16,454	18,986	18,733	18,539	18,680	18,474	18,308	18,103
		Non-Heating	2,965	3,158	3,044	2,780	2,888	2,913	3,000	3,001	3,001	3,000	2,999
		Total	20,352	23,087	22,364	19,234	21,874	21,646	21,539	21,681	21,475	21,308	21,102
	LVG		24,578	26,300	27,067	22,372	25,169	25,117	25,338	25,658	25,821	25,865	25,893
	TSG	Firm	-	-	-	-	-	-	-	-	-	-	-
		Non-Firm	942	807	840	1,108	788	788	788	788	788	788	788
		Total	942	807	840	1,108	788	788	788	788	788	788	788
	CIG		3,595	5,471	4,746	1,808	1,910	1,910	1,910	1,910	1,910	1,910	1,910
	CSG		-	-	-	-	-	-	-	-	-	-	-
	Total		49,467	55,664	55,017	44,522	49,741	49,461	49,575	50,037	49,994	49,872	49,693
Industrial	GSG	Heating	689	799	774	649	721	729	762	762	762	762	763
		Non-Heating	113	127	126	121	130	130	131	131	131	131	131
		Total	802	927	901	770	851	860	892	892	893	893	893
	LVG		1,864	2,108	2,426	1,854	2,214	2,225	2,207	2,207	2,192	2,173	2,155
	TSG	Firm	-	-	-	-	-	-	-	-	-	-	-
		Non-Firm	108	109	67	39	22	22	22	22	22	22	22
		Total	108	109	67	39	22	22	22	22	22	22	22
	CIG		564	1,020	695	613	535	535	535	535	535	535	535
	CSG		-	-	-	-	-	-	-	-	-	-	-
	Contract		1,301	-	-	-	-	-	-	-	-	-	-
	Total		4,638	4,164	4,089	3,276	3,622	3,641	3,657	3,656	3,642	3,623	3,605
Lighting	SLG		26	26	24	29	25	25	25	25	25	25	25
Total			186,568	210,170	204,435	186,638	205,231	205,267	204,797	206,596	207,765	208,889	209,991

Supplied Share of Delivered Gas Sales As Billed
2017-2027
(percent)

Class	Rate	Category	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Residential	RSG	Heating	95%	96%	97%	97%	97%	97%	97%	97%	97%	97%	97%
		Non-Heating	94%	95%	95%	96%	96%	96%	96%	96%	96%	96%	96%
	Total		95%	96%	97%	97%	97%	97%	97%	97%	97%	97%	97%
Commercial	GSG	Heating	77%	77%	79%	79%	79%	79%	79%	79%	79%	79%	79%
		Non-Heating	75%	73%	75%	76%	77%	77%	77%	77%	77%	77%	77%
		Total	77%	76%	78%	78%	79%	79%	79%	79%	79%	79%	79%
	LVG		40%	37%	40%	37%	38%	38%	38%	38%	38%	38%	38%
	TSG	Firm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
		Non-Firm	9%	6%	6%	12%	7%	7%	7%	7%	7%	8%	8%
		Total	9%	5%	5%	11%	7%	7%	7%	7%	7%	7%	7%
	CIG		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	CSG		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total		42%	39%	44%	43%	43%	43%	43%	43%	43%	43%	43%
Industrial	GSG	Heating	79%	78%	82%	83%	83%	83%	83%	83%	83%	83%	83%
		Non-Heating	74%	75%	79%	82%	83%	83%	83%	83%	83%	83%	83%
		Total	78%	78%	82%	82%	83%	83%	83%	83%	83%	83%	83%
	LVG		26%	25%	29%	27%	28%	28%	28%	28%	28%	28%	28%
	TSG	Firm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
		Non-Firm	1%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%
		Total	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%
	CIG		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	CSG		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Contract		15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total		4%	3%	3%	4%	4%	4%	4%	4%	4%	4%	4%
Lighting	SLG		39%	35%	39%	42%	39%	39%	39%	39%	39%	39%	39%
Total			49%	49%	49%	56%	57%	57%	57%	58%	58%	58%	58%

Delivered Gas Sales Calendar-Year
2017-2027
(MDth)

Class	Rate	Category	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Residential	RSG	Heating	131,801	144,199	146,339	140,696	151,526	152,014	151,316	153,700	153,979	155,321	156,582
		Non-Heating	8,866	9,044	4,065	3,319	3,985	4,051	3,952	3,967	3,920	3,902	3,879
	Total		140,667	153,243	150,404	144,015	155,511	156,065	155,268	157,666	157,899	159,223	160,461
Commercial	GSG	Heating	22,771	25,196	24,676	21,218	23,857	23,706	23,336	23,735	23,277	23,073	22,793
		Non-Heating	4,040	4,256	4,086	3,714	3,720	3,816	3,905	3,926	3,907	3,905	3,902
		Total	26,811	29,453	28,762	24,932	27,577	27,522	27,241	27,661	27,185	26,978	26,695
	LVG		61,513	68,128	67,729	60,455	66,231	66,653	66,888	68,090	68,081	68,142	68,142
	TSG	Firm	951	1,197	924	1,000	1,010	992	962	922	866	809	754
		Non-Firm	9,668	10,972	12,155	9,455	10,783	10,756	10,710	10,643	10,541	10,434	10,330
		Total	10,618	12,169	13,079	10,455	11,793	11,748	11,672	11,566	11,407	11,242	11,084
	CIG		3,408	3,568	3,373	1,376	1,910	1,910	1,910	1,910	1,910	1,910	1,910
	CSG		8,734	18,502	6,131	5,374	10,113	8,297	8,297	8,297	8,297	8,297	8,297
	Total		111,084	131,819	119,074	102,591	117,625	116,129	116,008	117,524	116,880	116,570	116,127
Industrial	GSG	Heating	875	993	943	807	843	880	910	916	910	911	910
		Non-Heating	155	166	161	149	157	158	158	159	158	158	158
		Total	1,030	1,159	1,104	957	1,000	1,037	1,068	1,075	1,068	1,068	1,068
	LVG		7,093	8,258	8,373	6,923	7,816	7,863	7,785	7,823	7,741	7,679	7,622
	TSG	Firm	1,574	1,453	1,499	1,520	1,567	1,540	1,496	1,436	1,351	1,266	1,183
		Non-Firm	15,878	5,486	6,373	5,867	5,815	5,796	5,766	5,721	5,653	5,581	5,512
		Total	17,451	6,939	7,872	7,387	7,381	7,336	7,261	7,157	7,004	6,847	6,695
	CIG		557	657	594	331	535	535	535	535	535	535	535
	CSG		72,331	86,007	99,401	70,866	68,134	68,134	68,134	68,134	68,134	68,134	68,134
	Contract		6,389	-	-	-	-	-	-	-	-	-	-
	Total		104,851	103,020	117,344	86,465	84,867	84,906	84,783	84,725	84,482	84,264	84,055
Lighting	SLG		66	72	62	69	64	64	64	64	64	64	64
Total			356,668	388,153	386,884	333,140	358,067	357,164	356,123	359,979	359,325	360,121	360,707

Supplied Gas Sales Calendar-Year
2017-2027
(MDth)

Class	Rate	Category	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Residential	RSG	Heating	125,315	137,603	141,644	136,807	147,604	148,080	147,399	149,722	149,994	151,302	152,530
		Non-Heating	8,365	8,561	3,859	3,187	3,829	3,893	3,798	3,812	3,767	3,750	3,728
	Total		133,680	146,164	145,502	139,994	151,433	151,973	151,198	153,534	153,761	155,052	156,259
Commercial	GSG	Heating	17,569	19,242	19,479	16,762	18,829	18,745	18,463	18,780	18,427	18,268	18,050
		Non-Heating	2,976	3,083	3,053	2,804	2,856	2,926	2,994	3,010	2,995	2,994	2,991
		Total	20,545	22,325	22,531	19,567	21,685	21,671	21,457	21,790	21,422	21,262	21,041
	LVG		24,708	25,405	26,878	22,105	25,344	25,154	25,264	25,773	25,774	25,811	25,823
	TSG	Firm	-	-	-	-	-	-	-	-	-	-	-
		Non-Firm	892	699	803	1,016	788	788	788	788	788	788	788
		Total	892	699	803	1,016	788	788	788	788	788	788	788
	CIG		3,408	3,568	3,373	1,376	1,910	1,910	1,910	1,910	1,910	1,910	1,910
	CSG		-	-	-	-	-	-	-	-	-	-	-
	Total		49,553	51,997	53,586	44,063	49,727	49,522	49,419	50,261	49,894	49,771	49,562
Industrial	GSG	Heating	692	785	778	663	708	734	759	765	760	760	760
		Non-Heating	115	124	127	122	130	130	130	131	130	130	130
		Total	806	909	905	786	838	864	890	896	890	890	890
	LVG		1,877	2,082	2,428	1,859	2,244	2,225	2,200	2,214	2,187	2,167	2,148
	TSG	Firm	-	-	-	-	-	-	-	-	-	-	-
		Non-Firm	59	82	67	39	22	22	22	22	22	22	22
		Total	59	82	67	39	22	22	22	22	22	22	22
	CIG		557	657	594	331	535	535	535	535	535	535	535
	CSG		-	-	-	-	-	-	-	-	-	-	-
	Contract		805	-	-	-	-	-	-	-	-	-	-
	Total		4,104	3,731	3,994	3,015	3,639	3,646	3,647	3,667	3,634	3,614	3,596
Lighting	SLG		26	26	24	29	25	25	25	25	25	25	25
Total			187,362	201,918	203,107	187,101	204,824	205,166	204,289	207,487	207,314	208,462	209,441

Supplied Share of Delivered Gas Sales Calendar Year 2017-2027 (percent)

Class	Rate	Category	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Residential	RSG	Heating	95%	95%	97%	97%	97%	97%	97%	97%	97%	97%	97%
		Non-Heating	94%	95%	95%	96%	96%	96%	96%	96%	96%	96%	96%
	Total		95%	95%	97%	97%	97%	97%	97%	97%	97%	97%	97%
Commercial	GSG	Heating	77%	76%	79%	79%	79%	79%	79%	79%	79%	79%	79%
		Non-Heating	74%	72%	75%	76%	77%	77%	77%	77%	77%	77%	77%
		Total	77%	76%	78%	78%	79%	79%	79%	79%	79%	79%	79%
	LVG		40%	37%	40%	37%	38%	38%	38%	38%	38%	38%	38%
	TSG	Firm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
		Non-Firm	9%	6%	7%	11%	7%	7%	7%	7%	7%	8%	8%
		Total	8%	6%	6%	10%	7%	7%	7%	7%	7%	7%	7%
	CIG		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	CSG		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total		45%	39%	45%	43%	42%	43%	43%	43%	43%	43%	43%
Industrial	GSG	Heating	79%	79%	83%	82%	84%	83%	83%	83%	83%	83%	83%
		Non-Heating	74%	75%	79%	82%	83%	83%	83%	83%	83%	83%	83%
		Total	78%	78%	82%	82%	84%	83%	83%	83%	83%	83%	83%
	LVG		26%	25%	29%	27%	29%	28%	28%	28%	28%	28%	28%
	TSG	Firm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
		Non-Firm	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%
		Total	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%
	CIG		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	CSG		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Contract		13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total		4%	4%	3%	3%	4%	4%	4%	4%	4%	4%	4%
Lighting	SLG		39%	37%	39%	42%	39%	39%	39%	39%	39%	39%	39%
Total			53%	52%	52%	56%	57%	57%	57%	58%	58%	58%	58%

ATTACHMENT C

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

In The Matter of the Petition of Public Service Electric and Gas Company for Approval of Changes in its Gas Conservation Incentive Program (2023 PSE&G Gas Conservation Incentive Program)

BPU Docket No. _____

DIRECT TESTIMONY

OF

KAREN REIF
VICE PRESIDENT, RENEWABLES AND ENERGY SOLUTIONS

June 1, 2023

ATTACHMENT C

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DIRECT TESTIMONY
OF
KAREN REIF
VICE PRESIDENT, RENEWABLES AND ENERGY SOLUTIONS

Q. Please state your name, affiliation and business address.

A. My name is Karen B. Reif and I am the Vice President of Renewables and Energy Solutions for Public Service Electric and Gas Company ("PSE&G" or the "Company"). My principal place of business is 80 Park Plaza, Newark, New Jersey, 07102.

Q. Please describe your education and business experience.

A. I have a Bachelor of Arts degree in International Studies from Emory University, and a Master of Business Administration in Finance and Strategy from Carnegie Melon University. I have worked for PSE&G and its affiliate PSEG Services Corporation in various positions. I have also worked for ScottMadden Management Consultants as a consultant. I joined PSEG in 1995. I have held multiple positions across the organization including various roles in trading, deregulated subsidiaries, information technology and most recently, continuous improvement. I spent 14 years in the Information Technology Department, holding several leadership roles including system implementation, business relationship management and project management/quality support. Prior to becoming Vice President of Renewables and Energy Solutions, I served as the Senior Director of Continuous Improvement for PSEG Services Corporation. I established this function for PSEG, which is responsible for developing sustainable and quantifiable business improvements based on industry best practices. In July of 2018, I was named Vice President of Renewables and Energy Solutions. My professional experience includes finance, strategy, business relationships, application implementation, quality assurance, process management and program management. I

have primary management and oversight responsibility for the design, planning and operations of renewable energy, electric vehicles, energy storage and energy efficiency programs.

Q. What is the purpose of your direct testimony in this proceeding?

A. The purpose of this testimony is to provide a summary of the spending activity related to the Conservation Incentive Program ("CIP") Shareholder Contribution ("SC") over the past several months, and an update on the SC expenditures to date,

Q. How is the balance of your testimony organized?

A. The balance of my testimony is organized as follows:

I. Shareholder Contribution Background

II. Shareholder Contribution Program Activity Summary

III. Shareholder Contribution Expenditure Update

I. Shareholder Contribution Background

Q. Please describe the Shareholder Contribution funding construct.

A. The Shareholder Contribution construct was established in the Company's Clean Energy Future – Energy Efficiency ("CEF-EE") filing, which was approved on September 23, 2020 in Dockets Nos. GO18101112 and EO18101113. Pursuant to the Company's CEF-EE stipulation, paragraph 38, SC pending activities may include the following:

> The shareholder contribution will support initiatives designed to aid customers in reducing their costs of natural gas and electricity and to reduce each utility's peak demand. The initiatives may include efforts such as education and outreach, as well as enhancements to standard incentives to further encourage customer engagement in the CEF-EE Program (e.g., the distribution of free EE kits within

low- and moderate-income census tracts), grants to schools and community organizations, and a business EE portal.

- Community Education and Outreach: This category covers community outreach activities, such as presentations, lunch and learns, outreach tables, trade shows, business conferences, and green fairs. It may also include grants or initiatives with community organizations. Particular emphasis will be placed on low- and moderate-income communities.

- Municipal and NGO (non-governmental organization) Outreach: This category includes activities to work with municipalities and other organizations and may include funding for special studies or projects and partnerships to promote EE.

- Customer Engagement: This category includes activities to increase customer awareness and engagement in programs, including enhanced incentives for promotional purposes, such as the offering of a flash sale. Particular emphasis will be placed on low- and moderate-income customers. A business engagement portal may be explored to evaluate the potential to provide customized information to this diverse customer segment.

- Energy Efficient Economy: This category supports efforts to engage and develop a diverse supplier and workforce base to support the delivery of EE services.

II. Shareholder Contribution Program Activity Summary

Q. Please describe the programs and initiatives that the SC funds support.

A. Consistent with the provisions of the CEF-EE stipulation and order, SC spending for PY2 (October 2022 through September 2023) includes a $60,013 spending shortfall from PY1 which brings our forecasted spend to $3,360,013. Activities include the following initiatives and programs:

- Outreach and community events: in 2023 PSE&G engaged a vendor to continue to help drive awareness of our energy efficiency programs through many community events such as participation in the NJ Home & Garden Shows in Cherry Hill, Edison and Secaucus, the South Jersey Home Show in Voorhees, Liberty Science Center Community Evenings and Propelify. Having a presence at these events gave us the opportunity to promote our Energy Efficiency Program offerings while engaging with the public to answer any questions they may have. The funding was also used to purchase promotional giveaways to support these events. We also used the funding to promote our energy efficiency programs at community fairs such as the New Providence Green Fair, the City of Passaic Fall Festival, the North Brunswick Heritage Day, Paramus Earth Day Celebration, as well as at various malls like Menlo Park and Cherry Hill.
- Organizational sponsorships: In PY2 PSE&G funded the following sponsorships:
    - Sustainability Analytics Center (CESAC) at Montclair State University's Clean and Sustainable Energy Summit. The summit provided us the opportunity to discuss energy efficiency and the benefits of New Jersey's plan for a clean and sustainable energy future. This summit also provided a venue for informed participant-driven discussion on clean energy and climate change policies in New Jersey and beyond.

- The Association of New Jersey Environmental Commissions ("ANJEC"). The Company utilized this engagement to promote the benefits of energy efficiency to the attendees of the ANJEC environmental congress. The sponsorship also included a full-page ad in ANJEC's four quarterly newsletters.
- "Rutgers Day" an event hosted by Rutgers University where we promoted our program offerings to students and alumni.
- Invest Newark Small Business Week Expo where we had the opportunity to present our Direct Install program.
- NJBIA Annual NJ Women Business Leader Forum, a ROI-NJ event.
- NJBPU Clean Energy Conference: This provided PSE&G the opportunity to exhibit and promote the Energy Efficiency Programs to individuals attending the conference.
- New Jersey School Boards Association (NJSBA) conference, and
- Deborah Heart and Lung Center.

Sponsorship at these events and conferences gave us the opportunity to promote our Energy Efficiency Programs whether it was through page ads, panel participations, representation at the events or exhibiting.

Other special events we sponsored included the following:

- NJSBDC Awards Event: PSE&G was a sponsor of the New Jersey Small Business Development Center Awards event. The awards celebrated outstanding achievements, innovation and resilience honoring the accomplishments of New Jersey small businesses. We were able to engage with these small businesses, raise awareness and encourage participation in our programs.

- NJCCC Sustainability in Motion: The funds were used for a sponsorship of the Sustainability in Motion Conference which was co-hosted by the New Jersey Clean Communities Council and the Association of New Jersey Recyclers. The sponsorship included a full-page ad in the conference booklet, booth space for the promotion of our EE programs, and 2 email blasts.
- NJ Chamber of Commerce: PSE&G sponsored the ReNew Jersey Business Summit & Expo hosted by the NJ Chamber of Commerce. The Chamber consistently works to improve New Jersey's business climate and provide its members with opportunities to promote and grow their businesses and we had the opportunity to engage with those businesses to promote our programs.
- National Association of Social Workers (NJ Chapter): The funds were used toward a Sponsorship at the New Jersey Chapter of the National Association of Social Workers (NASW). This gave PSE&G the opportunity to promote our EE programs, raise awareness and encourage customer participation.

- Marketplace Free Shipping and Offer Center: PSE&G continues to use the funding to offer customers free shipping for orders placed in the on-line Marketplace that do not meet the $49 minimum order amount to receive free shipping. The continuation of this promotion has increased customer participation and encourages customers to make multiple purchases on small orders of energy efficient products. The Marketplace Offer Center funding is being used to cover the gap between the cost of a smart thermostat or other energy efficiency products and the associated rebates in order to provide them to low-moderate income customers at no cost.
- Sustainable Jersey: The PSE&G/Sustainable Jersey Partnership launched in December 2021. The primary goal is to empower schools, municipalities, residents and businesses to

better manage energy use and leverage PSE&G's energy-efficiency programs and incentives. Sustainable Jersey is providing customized technical assistance and implementation support for schools and municipalities to increase energy efficiency in their facilities, and for municipalities to offer outreach campaigns so everyone in their community can take advantage of PSE&G's high-impact, cost-effective programs and incentives. The PSE&G/Sustainable Jersey Partnership website launched in November 2022 and provides municipalities and schools with current offerings as well as links to all of PSE&G's energy efficiency programs and products. Also included in the Partnership, Sustainable Jersey has recruited and engaged over 50 schools in PSE&G service territory for participation in the EmPowered Schools program administered by the Alliance to Save Energy. To date, 16 municipalities have received energy efficiency technical assistance and a $2,500 grant through the Sustainable Jersey-PSE&G Energy Efficiency Partnership Program.

- C&I Trade Ally Incentive: Funding is being used to provide a Trade Ally Bonus incentive (calculated from total incentive per project) and a $1,000 bonus for each project that is approved for On-Bill Repayment (OBR) paid directly to participating Trade Allies. This bonus supported increased awareness and participation in the CEF EE C&I programs amongst our business customers and our contractor network.
- C&I Small Business Kits: The funding is being used to supply EE kits to PSE&G small business customers under 200 kW annual average demand focusing on industries with kitchens. The free small business kits introduce the PSE&G Business Energy Saver program, encourage participation, and increase awareness. Each kit includes two (2) screw in A19 LED lamps, one (1) advanced Tier 1 Power strip, one (1) pre-rinse kitchen spray valve, two (2)

bathroom aerators, one (1) kitchen aerator, three (3) 3ft pipe wrap, a PSE&G EE program brochure materials and a product guide.

- NY Giants Engagement: This partnership's purpose is to promote the Energy Efficiency Programs through the NY Giants using a variety of assets including radio, TV, in stadium, podcast, e-mail, banners and events activation. The list of activities and assets used to promote energy efficiency messaging in this sponsorship in the 2022/2023 season included:
    - Giants Radio: Inclusive of the sponsorship of the Giants Radio network, pre-game, in-game and post-game radio spots and billboards. For each of these tactics a specific EE awareness message was developed to promote the program during the 2022 NFL Regular Season.
    - Television: Received Two (2) thirty second (:30) commercial units promoting the EE Programs in the Giants Coaches, Post-Game and Chronicles Show during the Giants Regular Season Games. Each week included a premiere episode and 2 re-air episodes on MSG Network.
    - Game Day Signage: Received in stadium LED signage, HDTV signage, and Pylon signage at the NY Giants home games. This signage provided our EE programs with exposure throughout MetLife Stadium.
    - On-site activation: Had the opportunity to promote our EE Programs and engage with Giants fans through on-site interactions at 2 home games. The Giants supported the activation by providing one room/space at MetLife Stadium with a dedicated 10x10 foot booth, two tables and access for staffing.
    - Internet, Digital and Social Media: Received presenting sponsorship of the social feature "Power Player of the Game" across Giants social media channels. Utilized

Giants Podcast for program promotions with multiple on-air mentions throughout each show. Details on our EE Programs were included in 1 dedicated geo-targeted email that was sent to Giants email newsletter subscribers. Also included run-of-site banner ads and pre-roll exposure for video campaign on Giants.com during the 2022 NFL Regular Season and Post-Season.

Q. Is the Company considering additional programs and initiative to support with SC funds?

A. Yes, the Company continues to explore additional initiatives and ideas for SC spending that is consistent with the SC goals delineated in the approved CEF-EE stipulation.

III. Shareholder Contribution Spending

Q. Please summarize SC spending over the current spending period.

A. Pursuant to the CEF-EE stipulation, the Shareholder Contribution funding is $3.3 million per year. However, the deferral periods for the electric and natural gas CIPs are not aligned; the first electric deferral period was June 2021 – May 2022, and the first natural gas deferral period was October 2021 – September 2022. Given this misalignment, the Company proposed an approach to be consistent with the intent of the CEF-EE stipulation and order and proposed to spend $3,905,000 for the first 16 months to account for this misalignment, and then begin to report against the $3.3 on an annual 12-month basis.[1] Pursuant to the Order dated April 12, 2023, the Company's Shareholder Contribution funding was set at $3,905,000 for the period June 2021 to September 2022; $3.3 million to account for the October 2021-September 2022 period, when both electric and gas deferral periods were in effect, plus an additional $605,000,

[1] *In the Matter of Public Service Electric and Gas Company for Approval of Changes in its Gas Conservation Incentive Program (2022 PSE&G Gas Conservation Incentive Program Rate Filing),* BPU Docket No. GR22060362, Petition filed

for the June 2021-September 2021 period, when only the electric deferral period was in effect. During this time period, the Company recorded expenses of $3,844,987 against the target of $3,905,000. Pursuant to the CEF-EE Order, the $60,013 of underspending will be carried over into the current 12-month funding period.

Q. Please summarize the SC spending the Company over the current funding period.

A. Between October 1, 2022 and April 30, 2023, the Company recorded expenses of approximately $1.384 million of SC activity. The original target spending level of $3.3 million over the October 1, 2022 – September 30, 2023 time period will be increased by $60,013, the carryover from the prior period. A summary of actual expenses is included in Schedule KR-CIP-1.

Q. Does this conclude your testimony?

A. Yes, it does.

CIP recorded expenses through February 2023								
Activities	**Oct-22**	**Nov-22**	**Dec-22**	**Jan-23**	**Feb-23**	**Mar-23**	**Apr-23**	**PY2 total**
PSEG's Job's Program Training Site								**$ -**
Outreach and community events	$ 6,712				$ 37,739	$ 95,328	$ 93,593	**$ 233,372**
Organizational sponsorships		$ 10,000	$ 14,100		$ 10,000	$ 10,000	$ 3,000	**$ 47,100**
Marketplace Free Shipping	$ 48,410	$ 48,759	$ 35,771	$ 72,700	$ 13,205	$ 58,334	$ 37,838	**$ 315,017**
Offer Center		$ 3,382	$ 7,517	$ 1,482	$ 12,846	$ 4,326	$ 2,844	**$ 32,396**
Sustainable Jersey								**$ -**
Liberty Science Center								**$ -**
Trade Allies Incentives			$ (6,017)				$ 362,140	**$ 356,124**
Small Business Kits								**$ -**
NY Giants Engagement	$ 400,000							**$ 400,000**
Total	$ 455,122	$ 62,141	$ 51,371	$ 74,182	$ 73,790	$ 167,988	$ 499,415	**$ 1,384,009**

ATTACHMENT D

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

In The Matter of the Petition of Public Service Electric and Gas Company for Approval of Changes in its Gas Conservation Incentive Program (2023 PSE&G Gas Conservation Incentive Program)

BPU Docket No. _____

DIRECT TESTIMONY

OF

STEPHEN SWETZ
SENIOR DIRECTOR - CORPORATE RATES AND REVENUES REQUIREMENTS

June 1, 2023

ATTACHMENT D

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DIRECT TESTIMONY
OF
STEPHEN SWETZ
SENIOR DIRECTOR - CORPORATE RATES AND REVENUES REQUIREMENTS

Q. Please state your name and business address.

A. My name is Stephen Swetz. My business address is 80 Park Plaza, T-8, Newark, New Jersey 07102.

Q. By whom are you employed and in what capacity?

A. I am the Senior Director - Corporate Rates and Revenues Requirements, PSEG Services Corporation. My credentials are set forth in the attached Schedule SS-GCIP-1.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to discuss Public Service Electric and Gas Company's ("PSE&G", "the Company") derivation of the Gas Distribution Conservation Incentive Program ("GCIP") rates for the Company's Residential Service ("RSG"), General Service ("GSG") and Large Volume Service ("LVG") rate schedules as well as the results of the Earnings and the BGSS Savings Tests as approved by the Board on September 23, 2020, in the Clean Energy Future – Energy Efficiency ("CEF-EE") Board Order in Docket Nos. GO18101112 and EO18101113 ("CEF-EE Order").

Q. Please describe the GCIP mechanism.

A. As set forth in the Testimony of PSE&G Witness Michael P. McFadden, the GCIP mechanism provides a rate adjustment related to changes in the average use per customer when compared to a baseline use per customer, removing the disincentive for

the Company to encourage customers to conserve energy. The GCIP margin deficiency to be collected from customers or the margin excess to be refunded to customers is calculated each month by applicable rate schedule by subtracting the baseline use per customer from the actual number of customers and multiplying the difference by the actual number of customer and the per therm margin rate for the month.

Q. What rate schedules are included in the GCIP?

A. The GCIP is applicable to each of the following customer groups:

- Group I – Residential Service Gas ("RSG")
- Group II – General Service Gas ("GSG"); and
- Group III – Large Volume Gas ("LVG")

Q. What is the current total GCIP deferral balance?

A. As shown in Attachment A, Schedule 5, the Company's total deferral for the GCIP is $98,965,167, representing $(10,253,880) of non-weather related gas distribution margin deficiencies and $109,219,047 representing to weather related gas distribution margin. Additionally, the GCIP Carry-Forward amount of $10,966,659 will be recovered in this filing.

Q. Are there any limitations on the amount of margin deficiency that can be collected from customers through the GCIP?

A. Yes. There are three specific tests that are part of the GCIP:

1. Earnings Test;
2. BGSS Savings Test; and
3. Variable Margin Test.

The three tests are described below.

Q. Please briefly describe PSE&G's GCIP Earnings Test

A. The earnings test is applicable to the total GCIP deferral, including both weather and non-weather components. If the calculated Gas ROE ("GROE") exceeds the allowed ROE from the utility's last base rate case by 50 basis points or more, recovery of revenues through the GCIP shall not be allowed for the applicable filing period and shall not be carried over to subsequent filing periods.

Q. How is the GROE calculated?

A. The earnings test determines actual GROE based on the actual net income of the utility for the most recent 12-month period divided by the average of the beginning and ending common equity balances for the corresponding period.

Q. What time period is utilized for the earnings tests?

A. The earnings test for this filing is based on the latest available twelve month financial statements filed with FERC and/or the BPU, which is October 2022 through September 2023 for this filing. The earnings test in this initial filing contains actual results through December 2022 and forecasted results through September 2023. The Company will provide an updated earnings test with all actual results when they are available.

Q. What are the results of the Earnings Test?

A. Please see Attachment A, Schedule 6 CONFIDENTIAL for the results of the Earnings Test.

Q. Please describe the BGSS Savings Test.

A. The BGSS Savings Test recognizes opportunities to reduce peak demand and lower commodity costs through reductions in customer usage. As a result, non-weather

related margin is limited to the level of BGSS savings achieved when such savings are less than 75 percent of the non-weather related gas distribution margin deficiency, i.e. BGSS Savings Test. Any amount that exceeds the above limitation may be deferred for future recovery and is subject to a recovery test in a future year consistent with the amount by which the non-weather related gas distribution margin deficiency exceeded the recovery test.

Q. How is the BGSS Savings Test calculated?

A. The BGSS Savings Test recognizes three categories of savings:

i. Category One includes the Company's permanent savings realized from its permanent capacity releases or contract terminations on an ongoing basis. The permanent capacity releases and contract terminations are $45,394,957. These amounts will remain after the re-setting of the GCIP benchmarks in future base rate cases.

ii. Category Two includes BGSS gas cost savings from reductions of capacity on a long-term basis, i.e., for periods of at least one (1) year. This category of savings will include, but not limited to: 1) additional contract terminations; 2) release of capacity to an affiliate or non-affiliate; 3) contract restructuring; 4) reductions in the commodity cost of gas supply effectuated through purchasing strategies.

iii. Category Three is the Company's savings associated with avoided capacity costs to meet customer growth on a prospective basis beginning with the first annual GCIP filing following implementation of these terms. Avoided capacity costs are calculated on a monthly basis and are equal to the net change in customers for GCIP

multiplied by the corresponding Benchmark Use per Customer and by the average fixed capacity cost reflected in the Company's concurrent BGSS filing.

Q. What are the results of the BGSS Savings Test?

A. Please see Attachment A, Schedule 5 for the results of the BGSS Savings Test. The results of the BGSS Savings Test did not result in a limitation on the Company's GCIP recovery of non-weather related revenues.

Q. Are there any other limitations on setting the GCIP?

A. Yes. As stated in the CEF-EE Order, recovery of non-weather related margin deficiencies is limited by a Variable Margin Revenue Test. Please see the testimony of Michael P. McFadden for a description and the results of the Variable Margin Revenue Test at Attachment A, Schedule 5. The application of the Variable Margin Revenue Test did not result in a limitation on the Company's GCIP recovery of non-weather related revenues.

Q. Are there any other amounts included in the Company's request recovery?

A. Yes. By Order dated September 14, 2021, the Board approved a Provisional Settlement In the Matter of the Petition of Public Service Electric and Gas Company to Revise its Weather Normalization Charge for the 2021-2022 Annual Period (BPU Docket No. GR21060952). In the provisional settlement the parties agreed that as the remaining over/under balance of the Weather Normalization Charge ("WNC") approaches zero, PSE&G will make a compliance filing in the above docket to set the WNC rate to zero and roll any remaining over or under recovery balance, including interest, into the

Company's initial Gas Conservation Incentive Program ("CIP") filing, as established in I/M/O the Petition of PSE&G for Approval of its Clean Energy Future – Energy Efficiency Program on a Regulated Basis, Docket Nos. GO18101112 and EO18101113. In accordance with above, on April 20, 2022, PSE&G made a compliance filing in the Docket No. GR21060952 with the Board setting the WNC rate to $0.000000 per therm effective May 1, 2022. In March 2023 the Company rolled the remaining WNC balance of $2,840 from October 2022 through March 2023 into the Company's Gas Conservation Incentive Program ("GCIP") balance.

Q. What is the net GCIP balance to be collected from customers over the upcoming GCIP Period?

A. The total GCIP amounts to $109,934,665 million, which represents the total weather impact from October 2022 – April 2023 of $109,219,047 million from the warmer than normal weather as shown in Attachment A, Schedule 4, partially offset by the non-weather GCIP deferral subject to the GCIP savings test of ($10,253,880) million as shown in Attachment A, Schedule 5, $2,840 relating to the WNC ending balance transferred to GCIP from October 2022 through March of 2023 and the GCIP Carry-Forward amount of $10,966,659.

Q. Please show proposed GCIP rates.

A. The GCIP rates calculated in Schedule SS-GCIP-2 are summarized below:

		GCIP Rates w/o SUT	GCIP Rates incl SUT	
Group I	RSG	$0.060736	$0.064760	Per Therm
Group II	GSG	$0.044451	$0.047396	Per Therm
Group III	LVG	$0.004748	$0.005063	Per Therm

Q. What are the average monthly rate impacts to the typical residential customer?

A. Based upon rates effective May 1, 2023, the average monthly bill impacts of the rates requested are set forth in Schedule SS-GCIP-3.

The average monthly impact of the proposed rates to the typical residential gas customer using 172 therms in a winter month and 86.7 average monthly therms (1,040 annually) would be an increase in the average monthly bill from $97.77 to $100.85 or $3.08, or approximately 3.15% (based upon Delivery Rates and BGSS-RSG charges in effect May 1, 2023 and assuming that the customer receives BGSS-RSG service from PSE&G).

Q. Does this conclude your testimony?

A. Yes.

ATTACHMENT D

SCHEDULE INDEX

Schedule SS-GCIP-1	Qualifications
Schedule SS-GCIP-2	Rate Calculations
Schedule SS-GCIP-3	Residential Bill Impacts
Schedule SS-GCIP-4	Tariff Sheets

CREDENTIALS
OF
STEPHEN SWETZ
SR. DIRECTOR-CORPORATE RATES AND REVENUE REQUIREMENTS

My name is Stephen Swetz and I am employed by PSEG Services Corporation. I am the Sr. Director - Corporate Rates and Revenue Requirements where my main responsibility is to contribute to the development and implementation of electric and gas rates for Public Service Electric and Gas Company (PSE&G, the Company).

WORK EXPERIENCE

I have over 30 years of experience in Rates, Financial Analysis and Operations for three Fortune 500 companies. Since 1991, I have worked in various positions within PSEG. I have spent most of my career contributing to the development and implementation of PSE&G electric and gas rates, revenue requirements, pricing and corporate planning with over 20 years of direct experience in Northeastern retail and wholesale electric and gas markets.

As Sr. Director of the Corporate Rates and Revenue Requirements department, I have submitted pre-filed direct cost recovery testimony as well as oral testimony to the New Jersey Board of Public Utilities and the New Jersey Office of Administrative Law for base rate cases, as well as a number of clauses including infrastructure investments, renewable energy, and energy efficiency programs. A list of my prior testimonies can be found on pages 3 and 4 of this document. I have also

contributed to other filings including unbundling electric rates and Off-Tariff Rate Agreements. I have had a leadership role in various economic analyses, asset valuations, rate design, pricing efforts and cost of service studies.

I am an active member of the American Gas Association's Rate and Strategic Issues Committee, the Edison Electric Institute's Rates and Regulatory Affairs Committee and the New Jersey Utility Association (NJUA) Finance and Regulatory Committee.

EDUCATIONAL BACKGROUND

I hold a B.S. in Mechanical Engineering from Worcester Polytechnic Institute and an MBA from Fairleigh Dickinson University.

LIST OF PRIOR TESTIMONIES

Company	Utility	Docket	Testimony	Date	Case / Topic
Public Service Electric & Gas Company	G		written	Jun-23	Conservation Incentive Program (GCIP)
Public Service Electric & Gas Company	E	ER23050273	written	May-23	Energy Strong II Program (Energy Strong II) - Fourth Roll-In
Public Service Electric & Gas Company	G	GR23030102	written	Mar-23	Gas System Modernization Program III (GSMPIII)
Public Service Electric & Gas Company	E	ER23020061	written	Feb-23	Elecric Conservation Incentive Program (ECIP)
Public Service Electric & Gas Company	E/G	GR23010050	written	Jan-23	Remediation Adjustment Charge-RAC 30
Public Service Electric & Gas Company	E/G	GR23010009 and ER23010010	written	Jan-23	Societal Benefits Charge (SBC) / Cost Recovery
Public Service Electric & Gas Company	G	GR22120749	written	Dec-22	Gas System Modernization Program II (GSMPII) - Eighth Roll-In
Public Service Electric & Gas Company	E/G	ER22110669 & GR22110670	written	Nov-22	Energy Strong II Program (Energy Strong II) - Third Roll-In
Public Service Electric & Gas Company	E/G	ER22100667 & GR22100668	written	Oct-22	Tax Adjustment Clauses (TACs)
Public Service Electric & Gas Company	E/G	EO18101113 & GO18101112	written	Sep-22	Clean Energy Future - Energy Efficiency Extension Program
Public Service Electric & Gas Company	E/G	ER22070413 & GR22070414	written	Jul-22	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, EE17, S4All, S4AEXT, S4AEXT II, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	E	ER22060408	written	Jul-22	SPRC 2022
Public Service Electric & Gas Company	G	GR22060409	written	Jun-22	Gas System Modernization Program II (GSMPII) - Seventh Roll-In
Public Service Electric & Gas Company	G	GR22060367	written	Jun-22	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	G	GR22060362	written	Jun-22	Conservation Incentive Program (GCIP)
Public Service Electric & Gas Company	E/G	GR22030152	written	Mar-22	Remediation Adjustment Charge-RAC 29
Public Service Electric & Gas Company	E	ER22020035	written	Feb-22	Elecric Conservation Incentive Program (ECIP)
Public Service Electric & Gas Company	G	GR21121256	written	Dec-21	Gas System Modernization Program II (GSMPII) - Sixth Roll-In
Public Service Electric & Gas Company	E	ER21121242	written	Dec-21	Solar Successor Incentive Program (SuSI)
Public Service Electric & Gas Company	E/G	EO21111211 & GO21111212	written	Nov-21	Infrastructure Advancement Program (IAP)
Public Service Electric & Gas Company	E/G	ER21111209 & GR21111210	written	Nov-21	Energy Strong II Program (Energy Strong II) - Second Roll-In
Public Service Electric & Gas Company	E/G	ER21101201 & GR21101202	written	Oct-21	Tax Adjustment Clauses (TACs)
Public Service Electric & Gas Company	E/G	ER21070965 & GR21070966	written	Jul-21	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, EE17, S4All, S4AEXT, S4AEXT II, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	G	ER21060952	written	Jun-21	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	G	GR21060949	written	Jun-21	Gas System Modernization Program II (GSMPII) - Fifth Roll-In
Public Service Electric & Gas Company	E	ER21060948	written	Jun-21	SPRC 2021
PSEG New Haven LLC	PSEG New Haven LLC	21-06-40	written	Jun-21	PSEG 2022 AFRR
Public Service Electric & Gas Company	G	GR21060882	written	Jun-21	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E	ER21050859	written	May-21	Community Solar Cost Recovery
Public Service Electric & Gas Company	G	GR20120771	written	Dec-20	Gas System Modernization Program II (GSMPII) - Forth Roll-In
Public Service Electric & Gas Company	E/G	GR20120763	written	Dec-20	Remediation Adjustment Charge-RAC 28
Public Service Electric & Gas Company	E	ER20120736	written	Nov-20	Energy Strong II Program (Energy Strong II) - First Roll-In
Public Service Electric & Gas Company	E/G	ER20100685 & GR20100686	written	Oct-20	Tax Adjustment Clauses (TACs)
Public Service Electric & Gas Company	E	ER20100658	written	Oct-20	Non-Utility Generation Charge (NGC) / Cost Recovery
Public Service Electric & Gas Company	E/G	ER20060467 & GR20060468	written	Jun-20	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, EE17, S4All, S4AEXT, S4AEXT II, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	G	GR20060464	written	Jun-20	Gas System Modernization Program II (GSMPII) - Third Roll-In
Public Service Electric & Gas Company	E	ER20060454	written	Jun-20	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	G	GR20060470	written	Jun-20	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	G	GR20060384	written	Jun-20	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E	ER20040324	written	Apr-20	Transitional Renewable Energy Certificate Program (TREC)
Public Service Electric & Gas Company	E/G	GR20010073	written	Jan-20	Remediation Adjustment Charge-RAC 27
Public Service Electric & Gas Company	G	GR19120002	written	Dec-19	Gas System Modernization Program II (GSMPII) - Second Roll-In
Public Service Electric & Gas Company	E/G	ER19091302 & GR19091303	written	Aug-19	Tax Adjustment Clauses (TACs)
Public Service Electric & Gas Company	E/G	ER19070850	written	Jul-19	Societal Benefits Charge (SBC) / Cost Recovery
Public Service Electric & Gas Company	E/G	ER19060764 & GR19060765	written	Jun-19	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, S4All, S4AEXT, S4AEXT II, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	G	GR19060766	written	Jun-19	Gas System Modernization Program II (GSMPII) - First Roll-In
Public Service Electric & Gas Company	G	GR19060761	written	Jun-19	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	E	ER19060741	written	Jun-19	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	E/G	EO18060629 & GO18060630	oral	Jun-19	Energy Strong II / Revenue Requirements & Rate Design
Public Service Electric & Gas Company	G	GR19060698	written	May-19	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E	ER19040523	written	May-19	Non-Utility Generation Charge (NGC) / Cost Recovery
Public Service Electric & Gas Company	E/G	EO18101113 & GO18101112	oral	May-19	Clean Energy Future - Energy Efficiency Program Approval
Public Service Electric & Gas Company	E	ER19040530	written	Apr-19	Madison 4kV Substation Project (Madison & Marshall)
Public Service Electric & Gas Company	E/G	EO18101113 & GO18101112	written	Dec-18	Clean Energy Future - Energy Efficiency Program Approval
Public Service Electric & Gas Company	E/G	GR18121258	written	Nov-18	Remediation Adjustment Charge-RAC 26
Public Service Electric & Gas Company	E	EO18101115	written	Oct-18	Clean Energy Future - Energy Cloud Program (EC)
Public Service Electric & Gas Company	E	EO18101111	written	Oct-18	Clean Energy Future-Electric Vehicle And Energy Storage Programs (EVES)
Public Service Electric & Gas Company	G	GR18070831	written	Jul-18	Gas System Modernization Program (GSMP) - Third Roll-In
Public Service Electric & Gas Company	E/G	ER18070688 & GR18070689	written	Jun-18	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, S4All, S4AEXT, S4AEXT II, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	E	ER18060681	written	Jun-18	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	G	GR18060675	written	Jun-18	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	E/G	EO18060629 & GO18060630	written	Jun-18	Energy Strong II / Revenue Requirements & Rate Design
Public Service Electric & Gas Company	G	GR18060605	written	Jun-18	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E/G	ER18040358 & GR18040359	written	Mar-18	Energy Strong / Revenue Requirements & Rate Design - Eighth Roll-in
Public Service Electric & Gas Company	E/G	ER18030231	written	Mar-18	Tax Cuts and Job Acts of 2017

LIST OF PRIOR TESTIMONIES

Company	Utility	Docket	Testimony	Date	Case / Topic
Public Service Electric & Gas Company	E/G	GR18020093	written	Feb-18	Remediation Adjustment Charge-RAC 25
Public Service Electric & Gas Company	E/G	ER18010029 & GR18010030	written	Jan-18	Base Rate Proceeding / Cost of Service & Rate Design
Public Service Electric & Gas Company	E	ER17101027	written	Sep-17	Energy Strong / Revenue Requirements & Rate Design - Seventh Roll-in
Public Service Electric & Gas Company	G	GR17070776	written	Jul-17	Gas System Modernization Program II (GSMP II)
Public Service Electric & Gas Company	G	GR17070775	written	Jul-17	Gas System Modernization Program (GSMP) - Second Roll-In
Public Service Electric & Gas Company	G	GR17060720	written	Jul-17	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	E/G	ER17070724 & GR17070725	written	Jul-17	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, S4All, S4AEXT, S4AEXT II, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	E	ER17070723	written	Jul-17	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	G	GR17060593	written	Jun-17	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E/G	ER17030324 & GR17030325	written	Mar-17	Energy Strong / Revenue Requirements & Rate Design - Sixth Roll-in
Public Service Electric & Gas Company	E/G	EO14080897	written	Mar-17	Energy Efficiency 2017 Program
Public Service Electric & Gas Company	E/G	ER17020136	written	Feb-17	Societal Benefits Charge (SBC) / Cost Recovery
Public Service Electric & Gas Company	E/G	GR16111064	written	Nov-16	Remediation Adjustment Charge-RAC 24
Public Service Electric & Gas Company	E	ER16090918	written	Sep-16	Energy Strong / Revenue Requirements & Rate Design - Fifth Roll-in
Public Service Electric & Gas Company	E	EO16080788	written	Aug-16	Construction of Mason St Substation
Public Service Electric & Gas Company	E	ER16080785	written	Aug-16	Non-Utility Generation Charge (NGC) / Cost Recovery
Public Service Electric & Gas Company	G	GR16070711	written	Jul-16	Gas System Modernization Program (GSMP) - First Roll-In
Public Service Electric & Gas Company	G	GR16070617	written	Jul-16	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	E/G	ER16070613 & GR16070614	written	Jul-16	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, S4All, S4AEXT, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	E	ER16070616	written	Jul-16	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	G	GR16060484	written	Jun-16	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E	EO16050412	written	May-16	Solar 4 All Extension II (S4Allext II) / Revenue Requirements & Rate Design
Public Service Electric & Gas Company	E/G	ER16030272 & GR16030273	written	Mar-16	Energy Strong / Revenue Requirements & Rate Design - Fourth Roll-in
Public Service Electric & Gas Company	E/G	GR15111294	written	Nov-15	Remediation Adjustment Charge-RAC 23
Public Service Electric & Gas Company	E	ER15101180	written	Sep-15	Energy Strong / Revenue Requirements & Rate Design - Third Roll-in
Public Service Electric & Gas Company	E/G	ER15070757 & GR15070758	written	Jul-15	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, S4All, S4AEXT, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	E	ER15060754	written	Jul-15	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	G	GR15060748	written	Jul-15	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	G	GR15060646	written	Jun-15	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E/G	ER15050558	written	May-15	Societal Benefits Charge (SBC) / Cost Recovery
Public Service Electric & Gas Company	E	ER15050558	written	May-15	Non-Utility Generation Charge (NGC) / Cost Recovery
Public Service Electric & Gas Company	E/G	ER15030389 & GR15030390	written	Mar-15	Energy Strong / Revenue Requirements & Rate Design - Second Roll-in
Public Service Electric & Gas Company	G	GR15030272	written	Feb-15	Gas System Modernization Program (GSMP)
Public Service Electric & Gas Company	E/G	GR14121411	written	Dec-14	Remediation Adjustment Charge-RAC 22
Public Service Electric & Gas Company	E/G	ER14091074	written	Sep-14	Energy Strong / Revenue Requirements & Rate Design - First Roll-in
Public Service Electric & Gas Company	E/G	EO14080897	written	Aug-14	EEE Ext II
Public Service Electric & Gas Company	G	ER14070656	written	Jul-14	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	E/G	ER14070651 & GR14070652	written	Jul-14	Green Programs Recovery Charge (GPRC)-Including CA, DR, EEE, EEE Ext, S4All, S4AEXT, SLII, SLIII / Cost Recovery
Public Service Electric & Gas Company	E	ER14070650	written	Jul-14	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	G	GR14050511	written	May-14	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E/G	GR14040375	written	Apr-14	Remediation Adjustment Charge-RAC 21
Public Service Electric & Gas Company	E/G	ER13070603 & GR13070604	written	Jun-13	Green Programs Recovery Charge (GPRC)-Including DR, EEE, EEE Ext, CA, S4All, SLII / Cost Recovery
Public Service Electric & Gas Company	E	ER13070605	written	Jul-13	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	G	GR13070615	written	Jun-13	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	G	GR13060445	written	May-13	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	E/G	EO13020155 & GO13020156	written/oral	Mar-13	Energy Strong / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	G	GO12030188	written/oral	Mar-13	Appliance Service / Tariff Support
Public Service Electric & Gas Company	E	ER12070599	written	Jul-12	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	E/G	ER12070606 & GR12070605	written	Jul-12	RGGI Recovery Charges (RRC)-Including DR, EEE, EEE Ext, CA, S4All, SLII / Cost Recovery
Public Service Electric & Gas Company	E	EO12080721	written/oral	Jul-12	Solar Loan III (SLIII) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E	EO12080721	written/oral	Jul-12	Solar 4 All Extension(S4Allext) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	G	GR12060489	written	Jun-12	Margin Adjustment Charge (MAC) / Cost Recovery
Public Service Electric & Gas Company	G	GR12060583	written	Jun-12	Weather Normalization Charge / Cost Recovery
Public Service Electric & Gas Company	E/G	ER12030207	written	Mar-12	Societal Benefits Charge (SBC) / Cost Recovery
Public Service Electric & Gas Company	E	ER12030207	written	Mar-12	Non-Utility Generation Charge (NGC) / Cost Recovery
Public Service Electric & Gas Company	G	GR11060338	written	Jun-11	Margin Adjustment Charge (MAC) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	G	GR11060395	written	Jun-11	Weather Normalization Charge / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E	EO11010030	written	Jan-11	Economic Energy Efficiency Extension (EEEext) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E/G	ER10100737	written	Oct-10	RGGI Recovery Charges (RRC)-Including DR, EEE, CA, S4All, SLII / Cost Recovery
Public Service Electric & Gas Company	E/G	ER10080550	written	Aug-10	Societal Benefits Charge (SBC) / Cost Recovery
Public Service Electric & Gas Company	E	ER10080550	written	Aug-10	Non-Utility Generation Charge (NGC) / Cost Recovery
Public Service Electric & Gas Company	E/G	GR09050422	written/oral	Mar-10	Base Rate Proceeding / Cost of Service & Rate Design
Public Service Electric & Gas Company	E	ER10030220	written	Mar-10	Solar Pilot Recovery Charge (SPRC-Solar Loan I) / Cost Recovery
Public Service Electric & Gas Company	E	EO09030249	written	Mar-09	Solar Loan II(SLII) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E/G	EO09010056	written	Feb-09	Economic Energy Efficiency(EEE) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E	EO09020125	written	Feb-09	Solar 4 All (S4All) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E	EO08080544	written	Aug-08	Demand Response (DR) / Revenue Requirements & Rate Design - Program Approval
Public Service Electric & Gas Company	E/G	ER10100737	written	Jun-08	Carbon Abatement (CA) / Revenue Requirements & Rate Design - Program Approval

Attachment D
Schedule SS-GCIP-2

PUBLIC SERVICE ELECTRIC AND GAS
CONSERVATION INCENTIVE PROGRAM
CALCULATION OF GCIP RATES

	GCIP Rate	RSG	GSG	LVG	Total	
(1)	CIP Carry-Forward	$10,648,498	$567,155	($248,994)	$10,966,659	See Attachment A, Schedule 1 - 3, Page 1
(2)	CIP Weather	$92,221,506	$13,887,002	$3,110,539	$109,219,047	See Attachment A, Schedule 5, Page 1
(3)	CIP Non-Weather	($9,514,060)	($1,477,019)	$737,198	($10,253,880)	See Attachment A, Schedule 5, Page 1
(4)	**Total CIP Deferral**	**$93,355,944**	**$12,977,138**	**$3,598,743**	**$109,931,825**	(4) = (1) + (2) + (3)
(5)	CIP Non-Weather Savings Recovery (Refund)				**($10,253,880)**	See Attachment A, Schedule 5, Page 1 for Refund or Page 2 for Recovery
(6)	CIP Allocation of Non-Weather Savings Cap	93%	14%	-7%	**100%**	(6) = (3) / Total (3)
(7)	CIP Non-Weather Allocation	($9,514,060)	($1,477,019)	$737,198	**($10,253,880)**	(7) = Total (5) * (6)
(8)	CIP Weather	$92,221,506	$13,887,002	$3,110,539	**$109,219,047**	(2)
(9)	WNC Ending Balance				**$2,840**	
(10)	CIP Allocation of Weather	84%	13%	3%	**100%**	(10) = (2) / Total (2)
(11)	CIP Allocation of WNC Ending Balance	$2,398	$361	$81	**$2,840**	(11) = Total (9) * (10)
(12)	CIP Carry-Forward Recovery	$10,648,498	$567,155	($248,994)	**$10,966,659**	(12) = (1)
(13)	**CIP (Refund) / Charge**	**$93,358,342**	**$12,977,499**	**$3,598,824**	**$109,934,665**	(13) = (7) + (8) + (11) + (12)
(14)	Projected Use (000) *	1,541,120	292,706	759,862		Attachment A Schedules 1 - 3, Page 1
		RSG	**GSG**	**LVG**		
(15)	CIP Rate	0.060578	0.044336	0.004736		(15) = (13) / ((14) * 1000)
(16)	CIP Rate w/ Assessment	0.060736	0.044451	0.004748		(16) = (15) * (1 / (1 - (0.21% + 0.05%))
(17)	CIP Rate w/SUT	0.064760	0.047396	0.005063		(17) = (16) * 1.06625

TYPICAL RESIDENTIAL GAS BILL IMPACTS

The effect of the proposed changes in the Gas Conservation Incentive Program (GCIP) on typical residential gas bills, if approved by the Board, is illustrated

Residential Gas Service - Average Monthly Bill				
If Your Average Monthly Therm Use Is:	Then Your Present Monthly Bill (1) Would Be:	And Your Proposed Monthly Bill (2) Would Be:	Your Monthly Bill Change Would Be:	And Your Percent Change Would Be:
14	$22.95	$23.46	$0.50	2.20 %
28	37.31	38.32	1.01	2.70
51	60.92	62.72	1.81	2.97
87	97.77	100.85	3.08	3.15
101	112.31	115.90	3.58	3.19
151	164.24	169.63	5.38	3.28

(1) Based upon Delivery Rates and Basic Gas Supply Service (BGSS-RSG) charges in effect May 1, 2023, and assumes that the customer receives commodity service from Public

(2) Same as (1) except includes increase in the GCIP.

Residential Gas Service - Monthly Winter Bill				
If Your Monthly Winter Therm Use Is:	Then Your Present Monthly Winter Bill (3) Would Be:	And Your Proposed Monthly Winter Bill (4) Would Be:	Your Monthly Winter Bill Change Would Be:	And Your Percent Change Would Be:
25	$34.46	$35.35	$0.89	2.58 %
50	60.32	62.10	1.78	2.95
100	113.15	116.71	3.56	3.15
172	188.42	194.54	6.12	3.25
200	217.66	224.77	7.11	3.27
300	322.17	332.85	10.68	3.32

(3) Based upon Delivery Rates and Basic Gas Supply Service (BGSS-RSG) charges in effect May 1, 2023, and assumes that the customer receives commodity service from Public

(4) Same as (3) except includes increase in the GCIP.

PUBLIC SERVICE ELECTRIC AND GAS COMPANY **XXX Revised Sheet No. 48**
Superseding
B.P.U.N.J. No. 16 GAS **XXX Revised Sheet No. 48**

CONSERVATION INCENTIVE PROGRAM

CHARGE APPLICABLE TO RATE SCHEDULES RSG, GSG, LVG (Per Therm)

	Conservation Incentive Program	Conservation Incentive Program including SUT
RSG	$0.060736~~0.027367~~	$0.064760~~0.029180~~
GSG	$0.044451~~0.027807~~	$0.047396~~0.029649~~
LVG	$0.004748~~0.003779~~	$0.005063~~0.004029~~

Conservation Incentive Program

This charge shall be applicable to the rate schedules listed above. The Conservation Incentive Program shall be based on the differences between actual and allowed usage per customer during the preceding annual period. The Conservation Incentive Mechanism shall be determined as follows:

I. DEFINITION OF TERMS AS USED HEREIN

1. Actual Number of Customers
– the Actual Number of Customers ("ANC") shall be determined on a monthly basis for each of the Customer Class Groups to which the Conservation Incentive Program ("CIP") Clause applies. The ANC shall equal the aggregate actual monthly Service Charge revenue for each class of customers subject to the CIP as recorded on the Company's books, divided by the service charge rate applicable to such class of customers in each Customer Class Group.

2. Actual Usage Per Customer
– the Actual Usage per Customer ("AUC") shall be determined in therms on a monthly basis for each of the Customer Class Groups to which the CIP applies. The AUC shall equal the aggregate actual booked sales for the month as recorded on the Company's books divided by the ANC for the corresponding month.

3. Adjustment Period
– shall be the year beginning immediately following the conclusion of the Annual Period.

4. Annual Period
– shall be the twelve consecutive months from October 1 of one calendar year through September 30 of the following calendar year.

5. Average 13 Month Common Equity Balance
– shall be the average of the beginning and ending common equity balances based on the latest publically available financials available before the end of the Annual Period. The Company shall provide the most recently available actual months plus forecasted data at the time of each Initial Filing. The forecasted data will be updated with actuals once the financial statements for the months have been disclosed.

6. Baseline Usage per Customer
– the Baseline Usage per Customer ("BUC") shall be stated in therms on a monthly basis for each of the Customer Class Groups to which the CIP applies. The BUC shall be rounded to the nearest one tenth of one therm.

The BUC shall be reset each time new base rates are placed into effect through a base rate case.

PUBLIC SERVICE ELECTRIC AND GAS COMPANY **XXX Revised Sheet No. 48A**
Superseding
B.P.U.N.J. No. 16 GAS **XXX Revised Sheet No. 48A**

CONSERVATION INCENTIVE PROGRAM (Continued)

7. Customer Class Group
– for purposes of determining and applying the CIP, customers shall be aggregated into three separate recovery class groups. The Customer Class Groups shall be as follows:

Group I: RSG
Group II: GSG
Group III: LVG

8. Forecast Annual Usage
– the Forecast Annual Usage ("FAU") shall be the projected total annual throughput for all customers within the applicable Customer Class Group. The FAU shall be estimated based on normal weather.

9. Margin Revenue Factor
– the Margin Revenue Factor ("MRF") shall be the weighted-average margin rate as quoted in the individual service classes to which the CIP applies. The MRFs by Customer Class Group are as follows:

Group I (RSG): $0.437483~~0.429888~~
Group II (GSG): $0.328242~~0.324386~~
Group III (LVG): $0.046383~~0.045992~~

The MRF shall be reset each time new base rates are placed into effect, including Infrastructure Investment Program ("IIP") or all other future base rate changes.

10. Degree Days (DD)
– the difference between 65°F and the mean daily temperature for the day. The mean daily temperature is the simple average of the 24 hourly temperature observations for a day.

11. Actual Calendar Month Degree Days
– the accumulation of the actual Degree Days for each day of a calendar month.

12. Normal Calendar Month Degree Days
– the level of calendar month degree days to which the weather portion of the CIP applies.

The normal calendar month Degree Days will be the twenty-year average of the National Oceanic and Atmospheric Administration (NOAA) First Order Weather Observation Station at the Newark airport and will be updated annually. The base level of normal HDD for the defined winter period months for the 2023~~2~~-2024~~3~~ Winter Period are set forth in the table below:

Month	Normal Heating Degree Days
October 2023~~2~~	225.14~~227.51~~
November 2023~~2~~	515.50~~522.85~~
December 2023~~2~~	810.29~~816.04~~
January 2024~~3~~	1,005.68~~989.30~~
February 2024~~3~~	868.22~~837.70~~
March 2024~~3~~	682.63~~684.17~~
April 2024~~3~~	355.17~~354.26~~
May 2024~~3~~	123.16~~127.88~~

13. Winter Period
– shall be the eight consecutive calendar months from October of one calendar year through May of the following calendar year.

PUBLIC SERVICE ELECTRIC AND GAS COMPANY **XXX Revised Sheet No. 48B**
Superseding
B.P.U.N.J. No. 16 GAS **XXX Sheet No. 48B**

CONSERVATION INCENTIVE PROGRAM
(Continued)

14. Degree Day Consumption Factors
– the use per degree day component of the gas sales equations by month used in forecasting firm gas sales for the applicable rate schedules. Degree day Consumption Factors for the 20232-20243 Winter Period are set forth below and presented as therms per degree day:

	RSG-Residential		Commercial			Industrial		
Month			GSG		LVG	GSG		LVG
	Heating	Non- Heating	Heating	Non- Heating		Heating	Non- Heating	
Oct.-232	183,348 160,811	-	-	-	88,624 89,348	633 -	-	7,326 7,928
Nov.-232	269,657 244,433	2,352 5,658	34,861 37,013	2,625 2,590	88,624 89,348	1,220 1,219	139 142	7,321 7,923
Dec.-232	269,443 272,345	3,088 6,946	51,188 51,766	3,709 3,693	88,624 89,348	2,154 2,163	259 207	7,315 7,918
Jan.-243	303,067 297,514	3,111 8,083	52,644 51,990	3,907 3,887	90,462 88,519	2,463 2,467	234 235	7,452 7,781
Feb.-243	291,037 285,968	2,723 7,641	54,216 54,048	4,014 3,995	90,462 88,519	1,934 1,935	138	7,445 7,774
Mar.-243	293,337 285,699	3,012 7,871	55,149 54,105	4,047 4,008	90,462 88,519	2,215 2,217	243 239	7,437 7,767
Apr.-243	285,355 283,018	3,138 8,577	57,596 55,742	4,118 4,082	90,462 88,519	1,748 1,746	229 232	7,428 7,758
May-243	209,054 203,907	3,458 8,809	29,705 21,407	3,863 3,758	90,462 88,519	1,160 1,112	163 150	7,418 7,747

II. BASELINE USE PER CUSTOMER

The BUC for each Customer Class Group by month are as follows:

Month	RSG	GSG	LVG
Oct.	38.7	110.8	2,350.0
Nov.	87.6	172.0	3,486.2
Dec.	144.9	320.4	5,220.9
Jan.	180.6	421.1	6,506.4
Feb.	153.5	351.6	5,940.9
Mar.	124.5	275.8	5,478.7
Apr.	70.4	170.7	3,703.5
May	37.0	80.1	2,037.8
Jun.	21.0	49.2	1,477.0
Jul.	18.0	58.5	1,374.6
Aug.	18.0	50.5	1,379.9
Sep.	19.5	52.6	1,322.8
Total Annual	**913.7**	**2,113.3**	**40,278.7**

PUBLIC SERVICE ELECTRIC AND GAS COMPANY **XXX Revised Sheet No. 48**
Superseding
B.P.U.N.J. No. 16 GAS **XXX Revised Sheet No. 48**

CONSERVATION INCENTIVE PROGRAM

CHARGE APPLICABLE TO RATE SCHEDULES RSG, GSG, LVG (Per Therm)

	Conservation Incentive Program	Conservation Incentive Program including SUT
RSG	$0.060736	$0.064760
GSG	$0.044451	$0.047396
LVG	$0.004748	$0.005063

Conservation Incentive Program

This charge shall be applicable to the rate schedules listed above. The Conservation Incentive Program shall be based on the differences between actual and allowed usage per customer during the preceding annual period. The Conservation Incentive Mechanism shall be determined as follows:

I. DEFINITION OF TERMS AS USED HEREIN

1. Actual Number of Customers
– the Actual Number of Customers ("ANC") shall be determined on a monthly basis for each of the Customer Class Groups to which the Conservation Incentive Program ("CIP") Clause applies. The ANC shall equal the aggregate actual monthly Service Charge revenue for each class of customers subject to the CIP as recorded on the Company's books, divided by the service charge rate applicable to such class of customers in each Customer Class Group.

2. Actual Usage Per Customer
– the Actual Usage per Customer ("AUC") shall be determined in therms on a monthly basis for each of the Customer Class Groups to which the CIP applies. The AUC shall equal the aggregate actual booked sales for the month as recorded on the Company's books divided by the ANC for the corresponding month.

3. Adjustment Period
– shall be the year beginning immediately following the conclusion of the Annual Period.

4. Annual Period
– shall be the twelve consecutive months from October 1 of one calendar year through September 30 of the following calendar year.

5. Average 13 Month Common Equity Balance
– shall be the average of the beginning and ending common equity balances based on the latest publically available financials available before the end of the Annual Period. The Company shall provide the most recently available actual months plus forecasted data at the time of each Initial Filing. The forecasted data will be updated with actuals once the financial statements for the months have been disclosed.

6. Baseline Usage per Customer
– the Baseline Usage per Customer ("BUC") shall be stated in therms on a monthly basis for each of the Customer Class Groups to which the CIP applies. The BUC shall be rounded to the nearest one tenth of one therm.

The BUC shall be reset each time new base rates are placed into effect through a base rate case.

PUBLIC SERVICE ELECTRIC AND GAS COMPANY **XXX Revised Sheet No. 48A**
Superseding
B.P.U.N.J. No. 16 GAS **XXX Revised Sheet No. 48A**

CONSERVATION INCENTIVE PROGRAM
(Continued)

7. Customer Class Group
– for purposes of determining and applying the CIP, customers shall be aggregated into three separate recovery class groups. The Customer Class Groups shall be as follows:

Group I: RSG
Group II: GSG
Group III: LVG

8. Forecast Annual Usage
– the Forecast Annual Usage ("FAU") shall be the projected total annual throughput for all customers within the applicable Customer Class Group. The FAU shall be estimated based on normal weather.

9. Margin Revenue Factor
– the Margin Revenue Factor ("MRF") shall be the weighted-average margin rate as quoted in the individual service classes to which the CIP applies. The MRFs by Customer Class Group are as follows:

Group I (RSG): $0.437483
Group II (GSG): $0.328242
Group III (LVG): $0.046383

The MRF shall be reset each time new base rates are placed into effect, including Infrastructure Investment Program ("IIP") or all other future base rate changes.

10. Degree Days (DD)
– the difference between 65ºF and the mean daily temperature for the day. The mean daily temperature is the simple average of the 24 hourly temperature observations for a day.

11. Actual Calendar Month Degree Days
– the accumulation of the actual Degree Days for each day of a calendar month.

12. Normal Calendar Month Degree Days
– the level of calendar month degree days to which the weather portion of the CIP applies.

The normal calendar month Degree Days will be the twenty-year average of the National Oceanic and Atmospheric Administration (NOAA) First Order Weather Observation Station at the Newark airport and will be updated annually. The base level of normal HDD for the defined winter period months for the 2023-2024 Winter Period are set forth in the table below:

Month	Normal Heating Degree Days
October 2023	225.14
November 2023	515.50
December 2023	810.29
January 2024	1,005.68
February 2024	868.22
March 2024	682.63
April 2024	355.17
May 2024	123.16

13. Winter Period
– shall be the eight consecutive calendar months from October of one calendar year through May of the following calendar year.

PUBLIC SERVICE ELECTRIC AND GAS COMPANY **XXX Revised Sheet No. 48B**
Superseding
B.P.U.N.J. No. 16 GAS **XXX Sheet No. 48B**

CONSERVATION INCENTIVE PROGRAM
(Continued)

14. Degree Day Consumption Factors
– the use per degree day component of the gas sales equations by month used in forecasting firm gas sales for the applicable rate schedules. Degree day Consumption Factors for the 2023-2024 Winter Period are set forth below and presented as therms per degree day:

	RSG-Residential		Commercial			Industrial		
Month			GSG		LVG	GSG		LVG
	Heating	Non- Heating	Heating	Non- Heating		Heating	Non- Heating	
Oct.-23	183,348	-	-	-	88,624	633	-	7,326
Nov.-23	269,657	2,352	34,861	2,625	88,624	1,220	139	7,321
Dec.-23	269,443	3,088	51,188	3,709	88,624	2,154	259	7,315
Jan.-24	303,067	3,111	52,644	3,907	90,462	2,463	234	7,452
Feb.-24	291,037	2,723	54,216	4,014	90,462	1,934	138	7,445
Mar.-24	293,337	3,012	55,149	4,047	90,462	2,215	243	7,437
Apr.-24	285,355	3,138	57,596	4,118	90,462	1,748	229	7,428
May-24	209,054	3,458	29,705	3,863	90,462	1,160	163	7,418

II. BASELINE USE PER CUSTOMER

The BUC for each Customer Class Group by month are as follows:

Month	RSG	GSG	LVG
Oct.	38.7	110.8	2,350.0
Nov.	87.6	172.0	3,486.2
Dec.	144.9	320.4	5,220.9
Jan.	180.6	421.1	6,506.4
Feb.	153.5	351.6	5,940.9
Mar.	124.5	275.8	5,478.7
Apr.	70.4	170.7	3,703.5
May	37.0	80.1	2,037.8
Jun.	21.0	49.2	1,477.0
Jul.	18.0	58.5	1,374.6
Aug.	18.0	50.5	1,379.9
Sep.	19.5	52.6	1,322.8
Total Annual	**913.7**	**2,113.3**	**40,278.7**

NOTICE TO PUBLIC SERVICE ELECTRIC AND GAS COMPANY GAS CUSTOMERS

In the Matter of the Petition of Public Service Electric and Gas Company for Approval of Changes in its Gas Conservation Incentive Program (2023 PSE&G Gas Conservation Incentive Program Rate Filing)

Notice of Filing and Notice of Public Hearings

BPU Docket No.

TAKE NOTICE that, on June 1, 2023, Public Service Electric and Gas Company ("PSE&G", or "Company") filed a Petition and supporting documentation with the New Jersey Board of Public Utilities ("Board" or "BPU") seeking Board approval for the cost recovery associated with the Gas Conservation Incentive Program ("GCIP" or "Program").

On September 23, 2020, the Board issued an Order approving the Clean Energy Future – Energy Efficiency Program in Docket Nos. GO18101112 and EO18101113 ("Order"). In this Order, the Board approved a Conservation Incentive Program ("CIP") that removes the Company's disincentive for promoting conservation by truing up actual usage to a baseline per customer established in its last approved base rate case.

Under the Company's proposal, PSE&G seeks Board approval to recover approximately $109.9 million which represents the total weather impact of $109.2 million from the warmer than normal weather, partially offset by the non-weather GCIP deferral subject to the GCIP savings test of ($10.3) million, and CIP carry-forward recovery of $11 million.

The proposed GCIP charges, if approved by the Board, are shown in Table #1.

The approximate effect of the proposed impact on typical gas residential monthly bills, if approved by the Board, is illustrated in Table #2.

Based on the filing, the average monthly impact of the proposed rates to the typical residential gas customer using 172 therms in a winter month and 86.7 average monthly therms (1,040 annually) would be an increase in the average monthly bill from $97.77 to $100.85, or $3.08 or approximately 3.15%.

Any rate adjustments with resulting changes in bill impacts found by the Board to be just and reasonable as the result of the Company's Petition may be modified and/or allocated by the Board in accordance with the provisions of N.J.S.A. 48:2-21 and for other good and legally sufficient reasons to any class or classes of customers of the Company. Therefore, the described charges may increase or decrease based upon the Board's decision. PSE&G's costs addressed in the Petition and Update will remain subject to audit by the Board, and Board approval shall not preclude or prohibit the Board from taking any such actions deemed appropriate as a result of any such audit.

Any assistance required by customers in ascertaining the impact of the proposed rate increase will be provided by the Company upon request.

The Petition is available for review at the PSEG website: http://www.pseg.com/pseandgfilings.

PLEASE TAKE FURTHER NOTICE that due to the COVID-19 Pandemic, virtual public hearings are scheduled on the following date and times so that members of the public may present their views on the Petition. Information provided at the public hearings will become part of the record and considered by the Board.

DATE: TBD
TIMES: 4:30 p.m. and 5:30 p.m.
Join: Join Zoom Meeting
https://pseg.zoom.us/j/92846158128?pwd=czBtZHE5ZTh1Z1FveGlmSVg0R1NuQT09#success

Go to www.zoom.com and choose "Join a Meeting" at the top of the web page. When prompted, use Meeting number 928 4615 8128 to access the meeting. -or-

Join by phone (toll-free):
Dial In: (888) 475-4499
Meeting ID: 928 4615 8128

When prompted, enter the Meeting ID number to access the meeting.

Representatives from the Company, Board Staff and the New Jersey Division of Rate Counsel will participate in the virtual public hearings. Members of the public are invited to participate by utilizing the link or dial-in number set forth above and may express their views on the Petition. In order to encourage full participation in this opportunity for public comment, please submit any requests for needed accommodations, such as interpreters and/or listening assistance, 48 hours prior to the above hearings to the Board Secretary at board.secretary@bpu.nj.gov.

Comments may be submitted directly to the specific docket listed above using the "Post Comments" button on the Board's https://publicaccess.bpu.state.nj.us. Comments are considered public documents for purposes of the State's Open Public Records Act. Only public documents should be submitted using the "Post Comments" button on the Board's Public Document Search tool. Any confidential information should be submitted in accordance with the procedures set forth in N.J.A.C. 14:1-12.3. Due to the COVID-19 pandemic, certain rules requiring paper submissions have been temporarily waived. In addition to hard copy submissions, confidential information may also be filed electronically via the Board's e-filing system or by email to the Secretary of the Board. Please include "Confidential Information" in the subject line of any email. Instructions for confidential e-filing are found on the Board's webpage. https://www.nj.gov/bpu/agenda/efiling/.

Emailed and/or written comments may also be submitted to:
Secretary of the Board
44 South Clinton Ave., 1st Floor
PO Box 350
Trenton, NJ 08625-0350
Phone: 609-913-6241
Email: board.secretary@bpu.nj.gov

Table #1
Gas CIP Charges

	GCIP Charges per Therm	
Rate Schedule	**Present Charge (Including SUT)**	**Proposed Charge (Including SUT)**
RSG	$0.029180	$0.064760
GSG	0.029649	0.047396
LVG	0.004029	0.005063

Table #2
Residential Gas Service

If Your Monthly Winter Therm Use Is:	Then Your Present Monthly Winter Bill (1) Would Be:	And Your Proposed Monthly Winter Bill (2) Would Be:	Your Monthly Winter Bill increase Would Be:	And Your Monthly Percent increase Would Be:
25	$34.46	$35.35	$0.89	2.58%
50	60.32	62.10	1.78	2.95
100	113.15	116.71	3.56	3.15
172	188.42	194.54	6.12	3.25
200	217.66	224.77	7.11	3.27
300	322.17	332.85	10.68	3.32

(1) Based upon current Delivery Rates and Basic Gas Supply Service (BGSS-RSG) charges in effect May 1, 2023, and assumes that the customer receives commodity service from Public Service Electric and Gas Company.
(2) Same as (1) except includes the proposed GCIP.

Danielle Lopez
Associate Counsel-Regulatory

PUBLIC SERVICE ELECTRIC AND GAS COMPANY