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October 19, 2020

Electronic Filing

Aida Camacho-Welch
Office of the Secretary
NJ Board of Public Utilities
44 South Clinton Avenue, 3rd Floor
P. O. Box 350
Trenton, NJ 08625-0350

Re: In the Matter of the Petition of South Jersey Gas Company for Approval of New Energy Efficiency Programs and Associated Cost Recovery Pursuant to the Clean Energy Act
BPU Docket No. GO20090618

Dear Ms. Camacho-Welch:

In accordance with Administrative Determination Letter dated October 16, 2020, enclosed please find an updated Petition and supporting documents for South Jersey Gas Company ("South Jersey" or "Company") the enclosed filing provides the following updates to in the above-referenced proceeding. Specifically, the Company has updated its September 25, 2020 filing in this proceeding to address the calculation of the Company's consolidated tax adjustment ("CTA"), which includes the following changes:

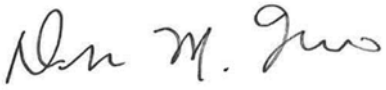
1. The addition of Paragraph 61 and Schedule P-1 to the Petition; and

2. An updated Exhibit B, updating the MFR Index to identify the location of the Company's CTA calculation pursuant to MFR I.a.

The Petition and supporting documents have been filed electronically today through the Board's e-filing program. Due to the pandemic, and in accordance with the New Jersey Board of Public Utilities ("BPU") March 19, 2020 and May 20, 2020 Orders issued in BPU Docket No. EO20030254, hard copies are not being provided at this time, but can be provided at a later time, as needed.

If you have any questions, please feel free to contact me directly.

Respectfully,



Deborah M. Franco

DMF:caj
Enclosure

cc: See attached Service List

IN THE MATTER OF THE PETITION OF SOUTH JERSEY GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT
BPU DOCKET NO. GO20090618

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IN THE MATTER OF THE PETITION OF SOUTH JERSEY GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT
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IN THE MATTER OF THE PETITION OF SOUTH JERSEY GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT
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IN THE MATTER OF THE PETITION OF SOUTH JERSEY GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT
BPU DOCKET NO. GO20090618

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STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF SOUTH JERSEY GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT.	:	**PETITION** **BPU DOCKET NO. _____**

CASE SUMMARY, PETITION, TESTIMONY AND SCHEDULES

October 19, 2020

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF SOUTH JERSEY GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT	:	**CASE SUMMARY** **BPU DOCKET NO. _____**

South Jersey Gas Company ("South Jersey" or "Company") files this Petition with the Board of Public Utilities ("Board") seeking authorization to implement new Energy Efficiency Programs ("EEPs") and to recover costs associated with the EEPs through the existing cost recovery mechanism, the Energy Efficiency Tracker ("EET"), pursuant to N.J.S.A. 48:3-98.1. The Board first authorized South Jersey to offer EEPs, and to implement the EET, in July 2009. Since that time, South Jersey has made multiple filings seeking approval to implement EEPs that complement and supplement the offerings of the New Jersey Clean Energy Program, encourage customers to reduce their overall energy usage and create jobs. The Board has also approved the recovery of EEP-related costs through the EET.

Through this Petition and the accompanying Direct Testimony and Schedules, South Jersey seeks Board approval to implement new EEPs for a three-year period commencing July 1, 2021, with a total budget of approximately $167 million ("EEP V" or "Program"). The new proposed programs include: Core Programs: Residential: Efficient Products, Existing Homes: Home Performance with Energy Star, Commercial & Industrial ("C&I"): Energy Solutions for Business: Direct Install, Energy Solutions for Business: Prescriptive and Custom, Multi-Family; Utility Led Programs: Residential: Home Energy Reports, Existing Homes: Quick Home Energy Check-Up, Moderate Income Weatherization and Energy Saving Trees, Energy Solutions for

Business: Energy Management, Energy Solutions for Business: Engineered Solutions and Pilot Programs: Residential Demand Response, C&I Demand Response and Innovative and Synergistic Approaches. South Jersey is also seeking authorization to recover all costs associated with the EEPs and that it be permitted to earn a return on and of investments associated with these programs through its EET, set forth in Rider "N" of the Company's Tariff.

Consistent with the 2019 New Jersey Energy Master Plan and the Clean Energy Act of 2018, these programs solidify South Jersey's commitment to the State's climate priorities and advancing New Jersey's clean energy goals in a manner that will benefit customers, the environment and the State's green economy, including the creation of approximately 2,826 direct and/or indirect job year equivalents.

If approved by the Board, the impact of the proposed EEPs on the bill of a residential heating customer using 100 therms during a winter month would be an increase of $1.27, or 0.9%.

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF SOUTH JERSEY GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT	:	**PETITION** **BPU DOCKET NO. _____**

TO THE HONORABLE BOARD OF PUBLIC UTILITIES:

Petitioner, South Jersey Gas Company ("South Jersey" or "Company"), a public utility corporation of the State of New Jersey, with its principal office at One South Jersey Place, Atlantic City, New Jersey, hereby petitions the Board of Public Utilities ("Board") for approval of proposed Energy Efficiency Programs ("EEPs") and associated cost recovery through its existing Energy Efficiency Tracker ("EET"), pursuant to N.J.S.A. 48:3-87.8 et seq. and 48:3-98.1 et seq. and, in support thereof, states as follows:

I. INTRODUCTION

1. South Jersey is a corporation duly organized under the laws of the State of New Jersey and is a public utility engaged in the transmission, distribution, transportation, and sale of natural gas in its service territory within the State of New Jersey. Said service territory includes all or portions of the following counties: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem. Within its service territory, South Jersey serves approximately 402,000 customers.

2. South Jersey is subject to regulation by the Board for the purposes of ensuring safe, adequate and proper natural gas service pursuant to N.J.S.A. 48:2-23.3.

3. Through this Petition and the accompanying Direct Testimony and Schedules, South Jersey seeks Board approval to implement new EEPs for a three-year period commencing July 1, 2021, with a total budget of approximately $167 million ("EEP V" or "Program"). South Jersey also seeks approval to recover costs associated with the EEPs described herein through the existing EET. Consistent with the New Jersey 2019 Energy Master Plan ("EMP") and the Clean Energy Act of 2018 ("CEA"), with this filing, South Jersey is solidifying its commitment to the State's climate priorities and advancing New Jersey's clean energy goals in manner that will benefit customers, the environment and the State's green economy. Specifically, economic models show that South Jerseys proposed EE investments and programs could generate approximately 2,826 direct and/or indirect job year equivalents.[1]

II. BACKGROUND

4. On January 13, 2008, New Jersey enacted a series of statutes to implement the Regional Greenhouse Gas Initiative within the State ("2008 RGGI Legislation").[2] In enacting the 2008 RGGI Legislation, the Legislature found that the State's public utilities play a critical role in reducing energy usage and greenhouse gas ("GHG") emissions. To this end, Section 13 of the 2008 RGGI Legislation, N.J.S.A. 48:3-98.1, authorizes an electric or natural gas utility to provide and invest in energy efficiency and conservation programs in its service territory on a regulated basis and provides that the electric or natural gas utility may seek cost recovery for any such programs by filing a petition with the Board. Cost recovery for EEPs under the 2008 RGGI Legislation may include a return on equity, the establishment of incentives and the development of a rate mechanism that breaks the link between utility revenues and customer usage. The eligible

[1] Based upon an IMPLAN analysis as described in the Direct Testimony of Isaac Gabel-Frank.
[2] P.L. 2007, c. 340.

ratemaking treatment can provide for the inclusion of certain related investments in rate base or the recovery of such costs through another BPU-approved method.

5. On May 12, 2008, the Board issued an Order (the "May 2008 Order") establishing the procedures by which electric and natural gas utilities can seek approval of energy efficiency and conservation programs on a regulated basis, as authorized by N.J.S.A. 48:3-98.1.[3] The May 2008 Order also set forth certain Minimum Filing Requirements ("MFRs") to be included with any such filings with the Board. On October 20, 2017, the Board issued an Order (the "October 2017 Order") revising and superseding the MFRs adopted in the May 2008 Order.[4]

6. On May 23, 2018, Governor Murphy signed into law the CEA, P.L. 2018, c. 17, which supports and expands upon the 2008 RGGI Legislation.[5] The CEA aims to overhaul the existing energy systems in New Jersey, with the goals of growing the economy, building sustainable infrastructure, creating well-paying local jobs, reducing carbon emissions, and improving public health to ensure a cleaner environment for current and future residents. The CEA is designed to allow the State to achieve its goal of 100% clean energy by 2050 through the implementation of mandated energy reduction requirements, as well as other clean energy strategies.

7. Pursuant to Section 3 of the CEA, the Board issued an Order regarding the establishment of EE and Peak Demand Reduction ("PDR") targets and directing utilities to establish EE and PDR programs to achieve those targets.[6]

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[3] In re Electric Public Utilities and Gas Public Utilities Offering Energy Efficiency and Conservation Programs, Investing In Class I Renewable Energy Resources, and Offering Class I Renewable Energy Programs in Their Respective Service Territories on a Regulated Basis Pursuant to N.J.S.A. 48:3-98.1, BPU Docket No. EO08030164 (May 12, 2008).

[4] I/M/O Electric Public Utilities and Gas Public Utilities Offering Energy Efficiency and Conservation Programs, Investing in Class 1 Renewable Energy Resources Pursuant to N.J.S.A. 48:3-98.1 – Minimum Filing Requirements, Order Pursuant to N.J.S.A. 48:3-98.1(c) (Oct. 20, 2017).

[5] P.L. 2018, c. 17 (N.J.S.A. 48:3-87.8 et seq.).

[6] See, In The Matter Of The Implementation Of P.L. 2018, c. 17 Regarding The Establishment Of Energy Efficiency And Peak Demand Reduction Programs, et al, Order Directing The Utilities To Establish Energy Efficiency And Peak

8. In the June 2020 Order, the Board stated that EE programs provide a means to address the significant threat posed to New Jersey by climate change as well as the health and economic impacts of the COVID-19 pandemic. The Board stated that "EE helps reduce [GHG] emissions and mitigate climate impacts while bolstering the economy."[7] The Board noted that the labor-intensive characteristics of EE projects will strengthen the State's job market, as increased achievement of EE will produce substantial clean energy job growth in New Jersey. Further, EE projects will reduce energy use and, consequently, energy bills for New Jersey consumers, freeing up consumer funds for use in other sectors of the economy. As such, EE can support New Jersey's economy by "creating thousands of green jobs [and] provid[ing] long term benefits for participants, such as reducing utility bills and improving health, comfort, and safety.[8]

9. The Board further noted that"[t]he CEA emphasizes the importance of EE and 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." [9] The CEA specifically requires the utilities to reduce electricity and natural gas usage in their respective service territories and directs the BPU to require that:

a) Each electric public utility achieve annual electricity usage reductions of at least 2%, relative to the average annual usage in its service territory within five years of implementation of its electric energy efficiency program; and

Demand Reduction Programs ("June 2020 Order"), BPU Docket Nos. QO19010040; QO19060748; and QO17091004. (June 10, 2020).

[7] Id. at 2.

[8] Id.

[9] Id. at 2. Along with South Jersey, New Jersey's electric and gas public utilities include Atlantic City Electric Company ("ACE"), Butler Power and Light Company ("Butler"), Elizabethtown Gas Company ("Elizabethtown"), Jersey Central Power & Light Company ("JCP&L"), New Jersey Natural Gas Company ("NJNG"), Public Service Electric and Gas Company ("PSE&G"), and Rockland Electric Company ("RECO") (collectively, "utilities").

b) Each natural gas public utility achieve annual natural gas usage reductions of at least 0.75%, relative to the average annual usage in its service territory, within five years of implementation of its gas energy efficiency program.[10]

The Board may mandate reductions that exceed these amounts based on a market potential study, "until the reduction in energy usage reaches the full economic, cost-effective potential in each service territory."[11]

10. The Board also noted that EE is "one of the seven key strategies" identified in the EMP and will play an essential role in meeting the State's long-term clean energy goals. According to the Board's June 2020 Order, EE initiatives are "one of the easiest and cheapest resources in our fight against the global climate crisis." EE programs are available for all sectors and offer a wide variety of targeted incentives for residents and businesses with varying needs throughout the state.[12]

11. New Jersey must meet targets set forth in the CEA in a way that is consistent with the principles expressed in both the CEA and the EMP. The Board found that the EE transition contemplated by the CEA and EMP were designed with the following primary objectives:

a) Afford access to EE programs for all market segments and for all New Jersey residents and businesses, regardless of geographic location;

b) Decrease energy burdens for all customers, with a specific focus on increasing affordability for lower income customers and those living in environmental justice communities;

[10] Id. (citing N.J.S.A. 48:3-87.9(a)).
[11] N.J.S.A. 48:3-87.9(a).
[12] June 2020 Order at 3 (citing https://www.nj.gov/emp/docs/pdf/2020_NJBPU_EMP.pdf).

c) Ensure that low and moderate-income communities share the same level of access to the benefits associated with EE investments as wealthier communities;

d) Increase accountability and reporting of spending and savings related to EE and peak demand reduction;

e) Reduce costs for energy saved through reliable and consistent program delivery;

f) Reduce administrative costs passed through to ratepayers; and

g) Expand job opportunities and increased economic benefits of EE for New Jersey.[13]

12. The CEA also aims to ensure that all consumers have access to EE programs and initiatives, regardless of income. The Board acknowledged that the CEA calls for the Board to adopt programs that "ensure universal access to energy efficiency measures, and serve the needs of low-income communities," and that the EMP establishes priorities of "affordability, equity, environmental justice, economic development, decarbonization, and public health" in implementing the EE transition.[14] The purpose of these objectives is to reduce the current inequity of access to EE programs and infrastructure in the State, which results in an imbalance in the energy burden experienced by consumers. The Board noted that research shows that low-income households can devote greater than three times more of their income to energy bills than the average higher-income household. The potential long-term negative economic impacts of the inequitable access to EE is a reality that has been exacerbated by the COVID-19 pandemic.[15]

[13] Id. at 3.
[14] Id. (citing N.J.S.A. 48:3-87(g)).
[15] Id. (citing https://www.energy.gov/eere/slsc/low-income-community-energy-solutions).

13. As stated by the Board in its June 2020 Order, EE is an "immediate and long-term component of reducing energy costs and improving health and safety for all households." The Board aims to integrate EE with other government efforts designed to promote public health, safety, and comfort, including, but not limited to, weatherization, lead removal, improving household determinants of residents' health, and other programs. The Board noted that a holistic approach coordinating or combining the delivery of services to New Jersey residents can begin to address the identified health, safety and economic inequities. This is particularly important in the "uncharted territory" presented by the COVID-19 pandemic, the impact of which are "being felt more by those with existing significant energy burdens." As such, improving energy affordability through EE is more important than ever.[16] The next generation of EE in New Jersey will be central to meeting the current climate crisis challenge while providing significant benefits to residents through state programs and a growing clean energy workforce.

14. In order to achieve the robust goals of the CEA, Staff proposed recommendations to transition in the New Jersey framework for EE, as set forth in the June 2020 Order. The Board approved Staff's recommendations, with specific directives set in the June 2020 Order and discussed herein. The recommendations and specific directives will be supported by anticipated future modifications and will help ensure that the State meets its goal of 100% clean energy by 2050.[17]

15. As noted above, the CEA directed the Board to require the utilities to develop EE and PDR programs to achieve the energy reduction goals set forth in the CEA. The CEA further requires 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

[16] Id. at 3-4.
[17] Id. at 4, 37.

to achieve those reductions.[18] The Board was also required to adopt quantitative performance indicators ("QPIs") that "shall establish reasonably achievable targets for energy usage reductions and peak demand reductions."[19] Finally, the CEA required the Board to institute a stakeholder process to evaluate facets of the EE transition, including "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."[20] The stakeholder process was required to include an "an independent advisory group charged with studying the evaluation, measurement, and verification ("EM&V") process for EE and PDR programs."[21]

The Board's June 2020 Order Findings and Directives

Utility Programs:

16. The Board directed the utilities to use the results of the demographic analysis report conducted by the utilities, as required by the CEA, to design EE and PDR programs that maximize access and participation by all customers. The Board further directed utilities to publish the results of the demographic analysis on the Division of Clean Energy's website.

17. The Board directed the utilities to administer a suite of core programs that serve the residential, commercial and industrial, and multifamily sectors as set forth in the June 2020 Order, and that are consistently available throughout the State, as set forth in Staff's recommendations. The Board stated that the programs should include "coordinated and common program elements," as Staff recommended, to ensure consistency in delivery of core programs and facilitate participation by customers and contractors as recommended by Staff. The Board stated that these program elements will also advance key policy goals, including improving access to programs and

[18] Id. at 6, (citing N.J.S.A. 48:3- 87.9(b)).
[19] N.J.S.A. 48:3- 87.9(c).
[20] June 2020 Order at 6 (citing N.J.S.A. 48:3- 87.9(f)(1)).
[21] Id..

expanding EE job opportunities for "local, underrepresented, and disadvantaged workers and businesses." The Board further directed the utilities to work with Staff, where possible, to develop program designs that complement and do not compete with State-administered programs.[22]

18. The Board approved Staff's guidelines for the cost to achieve energy savings for the utility core programs and directed utilities to provide justification if costs to achieve savings for their proposed core programs fell outside Staff's guidelines, such as improving access to programs by low to moderate income customers, and expanding opportunities for EE jobs for local, underrepresented, and disadvantaged workers and businesses. Further, the Board directed that, where applicable, the utilities shall collaborate with Staff to develop program designs and requirements that are complementary to and non-competitive with the designs and requirements of State-administered programs. In areas where electric and gas service territories overlap, the Board further directed utilities to design program structures that produce coordinated, consistent program delivery and allocates costs and savings among the utilities. The Board approved Staff's guidelines for the cost of utility core programs to achieve energy savings and directed the utilities to provide justification if they propose core programs whose costs to achieve fall outside of these guidelines.[23]

19. The Board adopted the revised Minimum Filing Requirements ("MFRs") recommended by Staff, set forth in Appendix B of the June 2020 Order. The Board directed the utilities to file three-year program petitions by September 25, 2020, for approval by the Board by May 1, 2021 and implementation beginning July 1, 2021.

[22] Id. at 37.
[23] Id. at 37-38.

20. The Board adopted Staff's recommendation that utilities be permitted to make certain adjustments to budgets and incentives for core programs and other utility-led initiatives in a manner consistent with the provisions of the June 2020 Order. [24]

Additional Utility Initiatives, Pilots, and Program Enhancements:

21. The Board adopted Staff's recommendations to allow utilities to propose additional initiatives and program enhancements. The Board stated that these additional utility initiatives can be developed collaboratively and filed by all utilities, developed and filed individually, or piloted in individual territories and eventually considered for adoption by other utilities as additional initiatives or core programs to be administered by some or all utilities.[25]

Co-Managed Programs:

22. The Board adopted Staff's recommendation that the utilities and the State to continue to co-manage the low-income program offerings through the Comfort Partners program and to explore and pursue options for increasing access to EE and PDR for low-income customers through the Comfort Partners program or other opportunities in a co-managed format. The Board also directed Staff and the utilities to develop three-year program plans for these co-managed programs and submit joint filings with the Board as part of the State's annual budget process.[26]

Performance Targets:

23. The Board accepted Staff's recommendations for establishing utility-specific and State targets for net energy use reduction as a percentage of load, as well as Staff's recommendations about what energy savings utilities may and may not apply in assessing compliance with their targets. The Board directed the utilities to report on energy use reduction

[24] Id. at 13-14, 37-38.
[25] Id. at 11, 38.
[26] Id. at 39.

for PY1, but did not establish a PY1 energy reduction target, and adopted the energy use reduction targets and their associated weights for PY2 and PY3. The Board further directed the utilities to file annual QPI values in response to the established targets within their program filings consistent with Staff's recommendations. The Board also adopted Staff's recommendations that the average of energy usage in the prior three years in each utility's territory be used to determine whether the utility has achieved its energy use reduction targets.

24. For Petitioner, South Jersey, the energy use reduction targets established by the Board,[27] are as follows:

Program Year[28]	**Overall Utility-Specific Annual Energy Use Reduction Target** *Net Savings (% of retail sales)*	**Utility Program Annual Energy Savings Target** *Net Savings (% of retail sales)*
PY1	No energy use reduction targets	
PY2	0.50%	0.34%
PY3	0.75%	0.51%
PY4	0.95%	0.65%
PY5	1.10%	0.75%

Annual Utility Petitions:

25. The Board directed each utility to file an annual petition no later than 75 days following the end of each PY to demonstrate (1) compliance with the EE and PDR programs; (2) compliance with the performance targets; and (3) and cost recovery of the programs, including any performance incentives or penalties. The annual filings must be consistent with the MFRs established in the June 2020 Order.

Cost Recovery:

26. The Board directed each utility to include in the required annual filing a request for recovery of all reasonable and prudent costs related to the utility's EE and PDR program costs on

[27] Id. at 20-22.
[28] Program Years ("PYs") are the twelve months ending June 30. PY1 is July 1, 2021 through June 30, 2022; PY2 through PY5 are the successive 12 month periods ended June 30.

a full and current basis. Costs are to be recovered through a surcharge and shall include, but not be limited to, recovery of and on capital investment and recovery of the revenue impact of sales losses resulting from implementation of the programs.

27. The Board further accepted the following cost recovery recommendations from Staff regarding cost recovery of program investments: (1) amortization of program investments over a 10-year period; (2) no cap at this time on the customer distribution rate or customer bill associated with program investments; and (3) use of the capital structure established in each utility's most recent base rate case as the carrying costs for program investments, incorporating both the cost of debt and the Return On Equity ("ROE"), with no basis point reduction on the ROE.

28. The Board found that the lost revenue recovery mechanism adopted in New Jersey should "encourage, not hinder, active utility participation in EE investments by removing the utilities' throughput incentive and enabling the utilities to aggressively endorse and pursue EE while providing adequate ratepayer protections." As such, the Board directed utilities and Staff to collaborate with Rate Counsel to develop a Conservation Incentive Program ("CIP") that could apply to all New Jersey utilities.[29] As noted by the Board, the SJG and NJNG CIP mechanisms are reasonable and appropriate and will remain in place.[30]

29. The Board adopted Staff's recommendation that each utility's potential incentive and penalty take the form of a ROE adjustment applied to EE and PDR program investment, with the Weighted Average Cost of Capital ("WACC") comprising the utility's cost of debt and the ROE. Staff recommended that performance incentive and penalty structure scale linearly based on the utility's performance, as follows:

[29] Meetings regarding the development of a CIP were held with Board Staff, Rate Counsel and the other utilities held in August, 2020. Id. at 39.
[30] See id. at 39-40 and Appendix A.

a) A utility that achieves between 110% and 150% of its QPI targets receive an incentive up to a maximum of 50 basis points above its base ROE;

b) A utility that achieves between 90% and 110% of its QPI targets receive neither an incentive nor a penalty;

c) A utility that achieves between 50% and 90% of its QPI target receive a penalty of up to 200 basis points below its base ROE; and

d) A utility that fails to achieve 50% of its QPI target be found to be non-compliant and receive a penalty of 0.75% of its base rate distribution revenue in the previous year.

The Board found that Staff's proposed performance incentive and penalty structure to be reasonable. The Board further adopted Staff's recommendation to include no award of incentives or assessment of penalties until after the conclusion of PY5, based on PY5 performance and agreed that the Board may exercise its discretion in levying penalties for performance results that are due to circumstances outside of utility control, such as COVID-19.[31]

EM&V:

30. The Board found that the standard, transparent, and replicable statewide approach to EM&V recommended by Staff will serve to ensure the successful evaluation, measurement, and verification of the State's EE programs. To this end, the Board directed all utilities to report energy savings from EE and PDR programs using the standards set forth in the Technical Resource Manual, referred to as the Protocols to Measure Resource Savings ("Protocols"). The Board further directed Staff to complete a comprehensive update to the Protocols through an RFP or other

[31] Id. at 28, 40.

appropriate process, and to work with the EM&V working group and program administrators to continuously updated.[32]

31. The Board directed State and utility program administrators to (1) report energy use reductions in both gross and net savings, (2) use net savings for all aspects of program review, including compliance and cost-effectiveness testing, and (3) use a net-to-gross ("NTG") value of 1.0 for all programs until more New Jersey-specific NTG values for specific programs are developed.[33]

Minimum Filing Requirements ("MFRs"):

32. The MFRs for petitions under N.J.S.A. 48:3-98.1, which apply to EE and PDR program petitions, currently comprise six sections and encompass the information that electric and gas public utilities submit about their program proposals on the following topics: general filing requirements, program description, additional filing information, cost recovery mechanism, benefit-cost analysis, and EM&V. Pursuant to N.J.S.A. 48:3-87.9(d)(3), which requires filings with implementation and reporting plans and EM&V strategies to determine the energy usage and peak demand reductions achieved by approved programs, as well as details of expenditures and resultant reductions in energy usage and peak demand, the Board adopted Staff's proposed revisions to the MFRs in the June 2020 Order. The revised MFRs are set forth in Appendix B to the June 2020 Order and Exhibit B attached hereto. [34]

[32] Id. at 41.
[33] Id.

[34] Id. at 24, Appendix B. As stated in the June 2020 Order, "The proposed MFRs add requirements for program descriptions, implementation, marketing, quality assurance, QPIs, EM&V, and reporting plans that are consistent with Staff's recommendations herein. The proposed MFRs remove existing requirements for comparisons to other utility programs and to state energy policy. They also remove certain requirements – including information about market barriers, impact on the competitive marketplace, job creation, emissions savings – that will be evaluated through the EM&V process." Id.at 24.

Reporting:

33. The Board directed the utilities to submit public reports to the Board according to the revised MFRs and adopted Staff's recommendations for quarterly progress reports, annual progress reports, and triennial progress reports.[35]

Tracking:

34. The Board directed the utilities to work with their contractors to ensure that the utilities' independent tracking systems will receive, track, and be used to report to the Board all required information related to the implementation of EE and PDR programs and that, where appropriate, these systems integrate into any statewide tracking systems developed for similar purposes.[36]

South Jersey EE Filing History

35. Based on the 2008 RGGI Legislation and the May 2008 Order, South Jersey has made multiple filings in BPU Docket Nos. EO09010059 and GO09010057, GO12050363, GR15010090, and GO18030350 seeking approval to implement EEPs that complemented or supplemented existing programs offered through NJCEP and for approval of an associated cost recovery rider mechanism, the Energy Efficiency Tracker ("EET").[37] In the July 2009 Order, the June 2013 Order, the August 2015 Order, and the October 2018 Order, the BPU adopted the terms

[35] Id. at 42.
[36] Id.
[37] I/M/O Energy Efficiency Programs and Associated Cost Recovery Mechanisms and In the Matter of the Petition of South Jersey Gas Company for Approval of Energy Efficiency Program (EEP) with an Associated Energy Tracker (EET) Pursuant to N.J.S.A. 48:3-98.1; and to Modify Rate Schedule EGS-LV, BPU Docket Nos. EO09010056 and GO09010057, Decision and Order Approving Stipulation (July 24, 2009) ("July 2009 Order"); I/M/O Petition of South Jersey Gas Company for Approval of an Energy Efficiency Program ("EEP") with an Associated Energy Efficiency Tracker ("EET") Pursuant to N.J.S.A. 48:3-98.1, Order, BPU Docket No. GO12050363 (June 21, 2013) ("June 2013 Order"); I/M/O Petition of South Jersey Gas Company for Approval to Continue Its Energy Efficiency Programs and Energy Efficiency Tracker Pursuant to N.J.S.A. 48:3-98.1, Order Approving Stipulation, BPU Docket No. GO15010090 (Aug. 19, 2015) ("August 2015 Order"); I/M/O Petition of South Jersey Gas Company for Approval to Continue Its Energy Efficiency Programs ("EEP IV") and Energy Efficiency Tracker Pursuant to N.J.S.A. 48:3-98.1, Order Adopting Stipulation (Oct. 29, 2018) (October 2018 Order").

of Stipulations entered into among representatives from the BPU Staff, the New Jersey Division of Rate Counsel ("Rate Counsel") and South Jersey (the "Parties") approving the implementation of EEPs and the associated cost recovery mechanism. Cost recovery was through creation of the EET, which consisted of two parts. The first part of the EET allowed the Company to earn a return on the investment and recover the amortization of the regulatory asset ("RA") to be created upon South Jersey's balance sheet. The second part of the EET allowed the Company to recover incremental operating and maintenance ("O&M") expenses associated with the EEPs.

36. In the instant proceeding, South Jersey is seeking Board approval to implement new EEPs for a three-year period commencing July 1, 2021, consistent with the June 2020 Order and in furtherance of the State goals and policies set forth in the CEA and EMP. The programs are further described in the testimony and supporting schedule of Peter Druckenmiller included with the submission of this Petition.

III. PROGRAM DESCRIPTION

37. In this filing, South Jersey South Jersey proposes to build upon the success of South Jersey's prior EEPs with the new programs that have been developed in response to market demands, the June 2020 Order and the EMP, and customer needs. South Jersey respectfully requests approval to implement the new EEPs over a three-year period beginning on July 1, 2021 or such date set in a Board order approving the EEPs.

38. South Jersey proposes to implement and invest in the following EEPs:

- Core Programs:
  - Residential:
    - Efficient Products: This program provides incentives for Efficient Products, including retail products, appliance rebates, HVAC equipment, and appliance recycling.
    - Existing Homes: Home Performance with ENERGY STAR
  - Multi-Family

    - Commercial:
        - Energy Solutions for Business: Direct Install
        - Energy Solutions for Business: Prescriptive and Custom
- Utility-Led Programs:
    - Residential
        - Home Energy Reports
        - Existing Homes: Quick Home Energy Check-Up (QHEC)
        - Existing Homes: Moderate Income Weatherization:
        - Energy Saving Trees
    - Commercial
        - Business Solutions for Business: Engineered Solutions
        - Business Solutions for Business: Energy Management
    - Pilots:
        - Residential Demand Response
        - C&I Demand Response
        - Innovative and Synergistic Solutions

39. A detailed description of each of the EEPs identified above is included in the Direct Testimony of Peter Druckenmiller and Schedule PD-1 included with this filing.

40. Also included herewith is the Direct Testimony of Isaac Gabel-Frank of Gabel Associates. Mr. Gabel-Frank's Cost Benefit Analysis ("CBA"), summarized in and supported by his Direct Testimony, demonstrates the quantified beneficial nature of the Company's proposal. Specifically, Mr. Gabel-Frank's testimony and supporting schedules evaluate the Company's proposed EEP V programs using the six tests proscribed by the MFRs: the New Jersey Cost Test ("NJCT"), the Total Resource Cost ("TRC") Test, the Participant Cost Test ("PCT"), the Program Administrator Cost ("PAC") Test, the Ratepayer Impact Measure ("RIM") Test, and the Societal Cost Test ("SCT"). The EEP V programs have a benefit-cost ratio of 1.0 or greater in five of the six tests, including a ratio of 1.5 under the NJCT, which the Board identified as the "primary test to evaluate the benefits and costs of EE and PDR programs established in the state pursuant to the

CEA during the first three-year program cycle" in its August 24, 2020 Order.[38] Mr. Gabel-Frank's testimony also identifies non-quantifiable benefits to the State associated with all of the Company's proposed EEPs, which are over and above the CBA.

IV. PROGRAM INVESTMENTS

41. South Jersey proposes a total program investment level of approximately $154.1 million over a three-year period and O&M expenses of approximately $12.8 million. The O&M expenses primarily consist of utility administration, inspections and quality control, and evaluation costs incurred to run the EEPs.

42. The proposed program cost allocation between investment and O&M expenses is summarized below :

	EEP Budget ($ Millions)
Program Investment	$154.1
Operations and Maintenance	$12.8
Total Investment and O&M	$166.9

43. Based on market conditions and the level of market response to each EEP, South Jersey also proposes that it be permitted the flexibility to transfer funding between EEPs after the initial year of the EEP V program, in order to maximize energy savings and program resources in a manner consistent with the June 2020 Order.

V. COST RECOVERY

44. South Jersey requests approval to continue to recover costs associated with the EEPs through the existing EET rate mechanism. As previously approved, the cost recovery will

[38] I/M/O the Implementation of P.L. 2018, c. 17 Regarding the Establishment of Energy Efficiency and Peak Demand Reduction Programs and I/M/O the Clean Energy Act of 2018 – New Jersey Cost Test, BPU Docket Nos. QO19010040 and QO20060389, Order Adopting the First New Jersey Cost Test (Aug. 24, 2020).

consist of two parts. One part will allow the Company to earn a return on the investment and recover the amortization of the regulatory asset. The second part of the EET will recover incremental O&M expenses associated with the EEPs.

45. South Jersey proposed to earn a return on its net investment based upon its most recently authorized ROE and capital structure including income tax effects. The weighted average cost of capital ("WACC") utilized to calculate the return on the unamortized portion of the program investments and to set rates will be 6.90% (8.93% on a pre-tax basis) effective October 1, 2020, which is the WACC utilized to set rates in the Company's most recent base rate case in Docket No. GR20030243.

46. The Company proposes to amortize its Direct Program Investments, which include costs for rebates, energy audits, and other capital expenditures required to implement the EEPs, over a ten-year period in accordance with the June 2020 Order.

47. The cost recovery mechanism and revenue requirements associated with the EEPs are discussed in more detail in the Direct Testimony of Stefany M. Graham.

48. South Jersey requests that the initial revenue requirement for the EEPs and an associated EET rate commence during the month in which the EEPs and associated EET are approved by the Board based on projected expenditures for the EEPs.

49. Based on the foregoing, and the information provided in the attached Direct Testimony and supporting Schedules, South Jersey proposes an initial EET rate associated with the proposed EEPs of $0.012673 per therm, including taxes. This represents an increase of $0.012673 per therm to the current EET rate of $0.016820 per therm, for a total combined EET rate of $0.029493 per therm.

50. As a result of these proposed rates, the bill impact for a typical residential heating customer using 100 therms during a winter month will be an increase of $1.27, or 0.9%, effective on Board approval.

51. Consistent with its currently approved EEPs and EET cost recovery mechanism, South Jersey will continue to file with the Board, on an annual basis, a petition seeking to establish future EET rates and to adjust its EET rates to reflect over and under recoveries.

VI. PROCEDURAL MATTERS AND DIRECT TESTIMONY

52. The May 2008 Order, as modified by and superseded by the Board's October 2017 MFR Order, which was then superseded by the Board's June 2020 Order, established that certain information must be included in any petition for approval to offer energy-efficiency programs in order to permit a comprehensive review of these filings by BPU Staff and Rate Counsel within the statutorily designated 180-day review period. The MFRs detail the information, analyses and data that generally must be included within such a filing. A Schedule of MFR's and their location in the Company's filing is attached hereto as Exhibit B.

53. The May 2008 Order required that a utility must meet with Board Staff and the Division of Rate Counsel at least 30 days prior to filing a petition requesting approval of EEPs to discuss the nature of the program and program cost recovery mechanism to be proposed.

54. Accordingly, South Jersey met with representatives of Board Staff and the Division of Rate Counsel on August 19, 2020 and provided an overview of the relief sought in this Petition, including a description of the proposed EEPs .

55. South Jersey reserves the right to amend this filing should that be necessitated by future modifications or changes to the current NJCEP offerings, incentives, grants, program management, evaluation, statewide policies, overall budget, and/or coordination with other utilities

and state agencies at any time during the review period. Because South Jersey anticipates that any amendment would serve to better align its program with State policy, the Company requests that such amendment be addressed within the original 180-day period.

56. South Jersey has included as part of this filing Energy Efficiency Program Cost-Benefit Analysis Workpapers, attached as Schedule IGF-3 to the Direct Testimony of Isaac Gabel-Frank. Schedule IGF-3 provides detailed workpapers supporting the Cost Benefit Analysis that are contained in a proprietary model. After the execution of an Agreement of Non-Disclosure, a proposed version of which is included with this filing as Exhibit C, Schedule IGF-3 will be provided to the parties.

57. A draft Notice of Filing and of Public Hearing is attached hereto as Exhibit A.

58. Also attached to this Petition, in support of the requests made herein, are the following Direct Testimony and schedules:

Exhibit D: Direct Testimony of Peter Druckenmiller, Program Manager, Energy Efficiency for South Jersey;

Exhibit E: Direct Testimony of Stefany M. Graham, Director, Rates and Regulatory Affairs for SJI Utilities, Inc.; and

Exhibit F: Direct Testimony of Isaac Gabel-Frank, Vice President, Gabel Associates.

59. The Company is serving notice of this filing on the Director, Division of Rate Counsel via electronic mail in lieu of providing hard copies. Due to the COVID-19 pandemic, and in accordance with the BPU's March 19, 2020 and May 20, 2020 Orders issued in BPU Docket No. EO20030254, hard copies cannot be provided at this time, but can be provided later, as needed.

60. Similarly, South Jersey Gas has also served notice of the filing on the Department of Law and Public Safety ("Department of Law") via electronic mail in lieu of providing hard copies, but hard copies can be provided at a later time, as needed.

61. For purposes of complying with N.J.A.C. 14:1-5.12(a)(11), South Jersey has calculated a consolidated tax adjustment in the amount of $0. A consolidated tax savings schedule calculated in accordance with N.J.A.C. 14:1-5.12(a)(11), which is attached to this Petition as Schedule P-1, will be provided to the parties under separate cover pursuant to the Agreement of Non-Disclosure governing this proceeding. As reflected in the Board's regulations, "[a] CTA provides a mechanism that the Board will utilize in rate cases, so that ratepayers should share a specified portion of the tax savings achieved from the filing of a consolidated tax return."[39] As such, the CTA is a rate case item that is not relevant to the Company's proposed EEPs or the related cost recovery. However, the Company has calculated and is providing a CTA in this proceeding solely for the purpose of complying with the MFRs.

VII. CONCLUSION AND REQUEST FOR APPROVAL

For the foregoing reasons, as supported by the Direct Testimony attached to this Petition, South Jersey respectfully requests that the Board issue an Order as follows:

1. Finding that the EEPs are in the public interest and authorizing South Jersey to implement and administer the EEPs under the terms set forth in this Petition and accompanying Exhibits, for a three-year period commencing July 1, 2021 upon Board approval;

2. Authorizing the use of deferred accounting and the recovery of the costs associated with the EEPs through the EET (Rider "N" of the Company's Tariff);

[39] N.J.A.C. 14:1-5.12(a)(11).

3. Approving South Jersey's request for an increase of $0.012673 per therm to its EET rate until the Company submits its next annual EET filing or the Board issues an Order changing such rates;

4. Permitting South Jersey to make adjustments to budgets and incentives for EEPS as permitted by the June 2020 Order; and

5. Granting such other relief as the Board deems just, reasonable and necessary.

Respectfully submitted,

SOUTH JERSEY GAS COMPANY

By: Deborah M. Franco
VP, Clean Energy and Sustainability
South Jersey Industries

Dated: October 19, 2020

Communications addressed to Petitioner
in this case are to be sent to:

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VERIFICATION

I, Deborah M. Franco, of full age, being duly sworn according to law, upon my oath, depose and say:

1. I am Vice President, Clean Energy & Sustainability of SJI and I am authorized to make this verification on behalf of South Jersey Gas Company.

2. I have reviewed the within petition and the information contained therein is true according to the best of my knowledge, information and belief.

Deborah M. Franco, Esq.
Vice President, Clean Energy & Sustainability

Sworn to and subscribed
before me this 19th day
of October 2020

CAROLYN A. JACOBS
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires October 28, 2023

Calculation of Consolidated Tax Adjustment for South Jersey Gas Company
Based on Taxable Income Reported for 2015-2019

Schedule P-1

	2015	2016	2017	2018	2019	(A) Total 2015-2019	(B) Income Companies	(C) Loss Companies	(D) (B)/ Total(B) Income Company Percent of Income Companies Total	(E) Total(C) times (D) Allocate Total of Loss Companies to Income Companies based on Taxable Income Share
Taxable Income/(Loss):										
South Jersey Gas	**$ (16,501,655)**	**$ (153,374,901)**	**$ (83,008,088)**	**$ 29,469,426**	**51,280,728**	**$ (172,134,490)**	**$ -**	**$ (172,134,490)**	**0%**	**$ -**
[redacted]										
[redacted]										
[redacted]										

** The confidential version of this schedule will be provided after the execution of a Non-Disclosure Agreement

Exhibit A

South Jersey Gas Company
Notice of Public Hearings Regarding
Proposed Energy Efficiency Program Rider Rate Increases

On September 25, 2020, South Jersey Gas Company ("Company" or "South Jersey") filed a petition with the New Jersey Board of Public Utilities ("Board") in Docket No. _____ to establish new Energy Efficiency Programs ("EEPs") for a three-year term commencing July 1, 2021. The proposed EEPs and cost recovery mechanism are filed in accordance with the Clean Energy Act of 2018 ("CEA") and the Board's Order dated June 10, 2020 in Docket Nos. QO19010040, QO19060748 and QO17091004 (the "June 2020 Order"). In general, these programs provide monetary incentives and customer education to South Jersey's residential and commercial customers to encourage energy efficiency. The proposed program budget is approximately $167 million over the three-year term.

The Company currently recovers the cost of its EEPs through its EEP Rider rate. The Company's current EEP Rider rate is $0.016820 per therm. The proposed Year 1 EET rate will be $0.012673 per therm. This represents an increase of $0.012673 per therm to the current EET rate of $0.016820 per therm for a total combined EET rate of $0.029493 per therm, to be effective upon issuance of a Board Order. The following chart reflects projections of the potential future rates and bill impacts through 2023:

	Current Program	Program Extension	Increase	100 Therm Bill Change
July 1, 2021	$0.016820	$0.029493	$0.012673	$1.27
July 1, 2022	$0.016820	$0.040123	$0.023303	$2.33
July 1, 2023	$0.016820	$0.055770	$0.038950	$3.90

If the extension is approved, the effect of the Year 1 rate change of $0.012673 per therm on a typical residential customer using an average of 100 therms per month is illustrated below:

Consumption in Therms	Present Bill	Proposed Bill	Change in Bill	Percent Change
100	$142.48	$143.75	$1.27	0.9%

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

Copies of the Petition are available online at
www.southjerseygas.com/About-South-Jersey-Gas/Regulatory-Compliance-Tariff-Information.aspx.

PLEASE TAKE NOTICE that due to the COVID-19 pandemic, a telephonic public hearing will be conducted on the following day and times so that members of the public may present their views on the Company's filing.

Date: TBD; Month Day, Year

Public Hearing 1: 4:30pm

Public Hearing 2: 5:30pm

Dial-In: 1-866-984-3164

Conference ID: TBD followed by #

Representatives from the Company, Board Staff, and Rate Counsel will participate in the telephonic public hearing. Members of the public are invited to participate by utilizing the Dial-In and Conference ID information set forth above and may express their views on this filing. Such comments will be made part of the final record of the proceeding to be considered by the Board. The Board is also accepting written and emailed comments. Although both will be given equal consideration, the preferred method of transmittal is via email to ensure timely receipt while the Board continues to work remotely due to the COVID-19 pandemic. Written comments may be submitted to the Board Secretary, Aida Camacho, at the Board of Public Utilities, 44 South Clinton Avenue, 9th Floor, P.O. Box 350, Trenton, NJ 08625-0350. Email comments should be submitted to: board.secretary@bpu.nj.gov. Please include the name of the petition and the docket number when submitting comments. Written and emailed comments will be provided the same weight as statements made at the hearings. Hearings will continue, if necessary, on such additional dates and times as the Board may designate, to ensure that all interested persons are heard.

South Jersey Gas Company
Melissa Orsen–President and Chief Operating Officer

Exhibit B

In the Matter of the Petition of South Jersey Gas Company For Approval of New Energy Efficiency Programs and Associated Cost Recovery Pursuant to the Clean Energy Act

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
I. General Filing Requirements	
a. The utility shall provide with all filings, information and data pertaining to the specific program proposed, as set forth in applicable sections of N.J.A.C. 14:1-5.11 and N.J.A.C. 14:1-5.12.	SMG-5 - Comparative Balance Sheet 2017 – 2019 SMG-6 - Comparative Income Statement 2017 – 2019 SMG-7 - Balance Sheet at June 2020 SMG-8 - Statement of Operating Revenue at December 2019 SMG-9 - Utility Payments and Accruals to Affiliates SMG-11 - Pro Forma Income Statement SMG -12 – Pro Forma Balance Sheet SMG-14 - Proposed Tariff Sheets Exhibit A - Form of Public Notice Petition, § VI (p. 22) P-1 - Calculation of Consolidated Tax Adjustment for South Jersey Gas Company based on Taxable Income reported for 2015-2019
b. All filings shall contain information and financial statements for the proposed program(s) in accordance with the applicable Uniform System of Accounts that is set forth in N.J.A.C. 14:1-5.12. The utility shall provide the accounts and account numbers that will be utilized in booking the revenues, costs, expenses, and assets pertaining to each proposed program so that they can be properly separated and allocated from other regulated and/or other programs.	SMG-10 - Program Accounting Entries SMG-11- Pro Forma Income Statement SMG-12- Pro Forma Balance Sheet
c. The utility shall provide supporting explanations, assumptions, calculations, and work papers as necessary for each proposed program and cost recovery mechanism petition filed under N.J.S.A. 48:3-98.1. The utility shall provide electronic copies of such supporting information, with all inputs and formulae intact, where applicable.	Exhibit E - Direct Testimony of Stefany M. Graham, §§ III-V (p. 3-10) SMG -1- Annual Revenue Requirements SMG -2- Weighted Average Cost of Capital SMG -3- Derivation of Revenue Factor Exhibit F - Direct Testimony of Isaac Gabel-Frank, §§ III-IV (p. 4-21) PD-1 – Energy Efficiency Program Plan IGF-3 – Cost-Benefit Analysis Workpapers (Confidential)

In the Matter of the Petition of South Jersey Gas Company For Approval of New Energy Efficiency Programs and Associated Cost Recovery Pursuant to the Clean Energy Act

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
	Electronic schedules supporting the cost benefit analysis will be provided upon execution of a Non-Disclosure Agreement agreeable to all parties.
d. The filing shall include testimony supporting the petition, including all proposed programs.	Exhibit D - Direct Testimony of Peter Druckenmiller Exhibit E - Direct Testimony of Stefany M. Graham Exhibit F - Direct Testimony of Isaac Gabel-Frank
e. For any proposed program, the utility shall be subject to the requirements in this and all subsequent Sections. If compliance with Section V of these requirements would not be feasible for a particular program or sub-program, the utility may request an exemption but must demonstrate why such exemption should be granted. Examples of historical situations that have qualified for exemption include programs that had an educational rather than equipment-based focus and programs that introduced novel ideas where documentation supporting estimated costs/benefits may not be easily produced	Not applicable insofar as no exemptions are requested.
f. If the utility is filing for an increase in rates, charges, etc. or for approval of a program that may increase rates/changes to ratepayers in the future, the utility shall include a draft public notice with the petition and proposed publication dates.	Exhibit A – Form of Public Notice
II. Program Description	
a. The utility shall provide a detailed description of each proposed program for which the utility seeks approval, including, if applicable: i. Program description/design ii. Target market segment/efficiency – including eligible customers, properties, and measures/services – and eligibility requirements and processes iii. Existing incentives	Exhibit D – Direct Testimony of Peter Druckenmiller, §§ III-VII (p. 3-6) PD-1 – Energy Efficiency Program Plan, § 3 (p. 5-72) PD-1 – Energy Efficiency Program Plan, Appendix A, B, C (p. 86-113) IGF-8 – Quantitative Performance Indicators

Exhibit B

In the Matter of the Petition of South Jersey Gas Company For Approval of New Energy Efficiency Programs and Associated Cost Recovery Pursuant to the Clean Energy Act

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
iv. Proposed incentives, including incentive payment processes and timeframes v. Program delivery method vi. Customer financing options vii. Customer access to current and historic energy usage data viii. Contractor requirements and role: The utility shall provide a description of the extent to which the utility intends to utilize employees, contractors, or both to deliver the program(s) and, to the extent applicable, a description of contractor requirements, training, and procurement, including for minority-, women-, and veteran-owned businesses. ix. Estimated program participants, by year x. Projected energy savings and associated calculations for each program year • Net annual energy savings • Net annual peak demand savings • Net lifetime energy savings • Net lifetime demand savings • Net lifetime energy savings derived from qualifying low-income customers • Net lifetime energy savings derived from qualifying small commercial customers xi. Program budget, by year xii. Projected program costs, by year, broken down into the following categories, as applicable: capital cost; utility administration; marketing; outside services; incentives (including rebates and low- or no-interest loans); inspections and quality control; and evaluation. To the extent that the Board directs New Jersey's Clean Energy Program ("NJCEP") to report additional categories, the utility shall provide additional categories, as applicable. xiii. Implementation plan for all proposed programs	(*See above*)

In the Matter of the Petition of South Jersey Gas Company For Approval of New Energy Efficiency Programs and Associated Cost Recovery Pursuant to the Clean Energy Act

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
xiv. Marketing plan: The utility shall provide a description of where and how the proposed program(s)/project(s) will be marketed or promoted throughout the demographic segments of the utility's customer base and how it will be done in coordination with statewide marketing. This shall include an explanation of how the specific service, along with prices, incentives, and energy bill savings for each proposed program/project, will be conveyed to customers, where available and applicable. The marketing plan shall also include a description of any known market barriers that may impact the program(s) and strategies to address known market barriers.	(*See above*)
b. The utility shall provide the following information about the proposed portfolio: i. Quality control standards and remediation policies: The utility shall provide a detailed description of the process(es) for ensuring the quality of the programs and resolving any customer complaints related to the program(s). ii. Workforce development and job training partnerships and pipelines for energy efficiency jobs, including for local, underrepresented, and disadvantaged workers iii. Total budget summary, including an annual budget summary iv. Benefit-cost analysis (as defined in Section V) v. EM&V strategies/plan (as defined in Section VI) vi. Assessment of how the programs comprising the portfolio are designed to achieve the targets established pursuant to the utility's quantitative performance indicators (as defined in Section VII) vii. Reporting plan (as defined in Section VIII)	Petition, §§ I, IV Exhibit D – Direct Testimony of Peter Druckenmiller, §§ V-VII (p. 5-17) Exhibit F – Direct Testimony Isaac Gabel-Frank, § III-IV (p. 4-21) IGF-2 – Cost-Benefit Results Summary IGF-3 – Cost-Benefit Analysis Workpapers (Confidential) PD-1 – Energy Efficiency Program Plan, §§ 2, 5, 7, 8, 9, 10 (p. 3-4, 73-74, 78-83) Appendix A (p. 98)
c. In areas where gas and electric service territories overlap, the utility shall also provide a description of the program structure for coordinated, consistent delivery of programs among utilities and	Exhibit D – Direct Testimony of Peter Druckenmiller, § VII (p. 16-17) PD-1 – Energy Efficiency Program Plan, § 6 (p. 75-77)

In the Matter of the Petition of South Jersey Gas Company For Approval of New Energy Efficiency Programs and Associated Cost Recovery Pursuant to the Clean Energy Act

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
allocation of costs and energy savings among the utilities.	
III. Additional Filing Information	
a. The utility shall propose the method for treatment of Renewable Energy Certificates ("RECs"), including solar incentives, or any other renewable energy incentive developed by the Board of Public Utilities ("BPU" or "Board"), including Greenhouse Gas Emissions Portfolio and Energy Efficiency Portfolio Standards including ownership and use of the certificate revenue stream(s).	Not Applicable
b. The utility shall also propose the method for treatment of any air emission credits and offsets, including Regional Greenhouse Gas Initiative carbon dioxide allowances and offsets, including ownership and use of the certificate revenue stream(s). For programs that are anticipated to reduce electricity sales in its service territory, the utility shall quantify the expected associated annual savings in REC, solar incentive, and any other renewable energy incentive costs.	Exhibit G – Direct Testimony Isaac Gabel-Frank, § IV (p. 12) IGF-3 – Cost-Benefit Analysis Workpapers (Confidential)

Exhibit B

In the Matter of the Petition of South Jersey Gas Company For Approval of New Energy Efficiency Programs and Associated Cost Recovery Pursuant to the Clean Energy Act

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
IV. Cost Recovery Mechanism	
a. The utility shall provide appropriate financial data for the proposed program(s), including estimated revenues, expenses, and capitalized investments for each of the first three years of operations and at the beginning and end of each year of the three-year period. The utility shall include pro forma income statements for the proposed program(s) for each of the first three years of operations and actual or estimated balance sheets at the beginning and end of each year of the three-year period.	SMG-11 – Pro Forma Income Statement SMG-12 – Pro Forma Balance Sheet
b. The utility shall provide detailed spreadsheets of the accounting treatment of the proposed cost recovery, including describing how costs will be amortized, which accounts will be debited or credited each month, and how the costs will flow through the proposed program cost recovery method.	Exhibit E - Direct Testimony of Stefany M. Graham, §§ III-VI (p. 3-12) SMG-10 – Program Accounting Entries
c. The utility shall provide a detailed explanation, with all supporting documentation, of the recovery mechanism it proposes to utilize for cost recovery of the proposed program(s), including proposed recovery through the Societal Benefits Charge, a separate clause established for these programs, base rate revenue requirements, government funding reimbursement, retail margin, and/or other mechanisms.	Petition, § IV Exhibit E - Direct Testimony of Stefany M. Graham, §§ III-IV (p. 3-12)
d. The utility's petition for approval, including proposed tariff sheets and other required information, shall be verified as to its accuracy and shall be accompanied by a certification of service demonstrating that the petition was served on the New Jersey Division of Rate Counsel simultaneous to its submission to the	See Verified Petition

In the Matter of the Petition of South Jersey Gas Company For Approval of New Energy Efficiency Programs and Associated Cost Recovery Pursuant to the Clean Energy Act

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
Board.	
e. The utility shall provide a rate impact summary by year for the proposed program(s) and a cumulative rate impact summary by year for all approved and proposed programs showing the impact of individual programs, based upon a revenue requirement analysis that identifies all estimated program costs and revenues for each proposed program on an annual basis. Such rate impacts shall be calculated for each customer class. The utility shall also provide an annual bill impact summary by year for each program, and an annual cumulative bill impact summary by year for all approved and proposed programs showing bill impacts on a typical customer for each class.	SMG-1 - Annual Revenue Requirements SMG-13 - Annual Rate and Bill Impact Summary
f. The utility shall provide, with supporting documentation, a detailed breakdown of the total costs for the proposed program(s), identified by cost segment (capitalized costs, operating expenses, administrative expenses, etc.). This shall also include a detailed analysis and breakdown and separation of the embedded and incremental costs that will be incurred to provide the services under the proposed program(s), with all supporting documentation. Embedded costs are costs that are provided for in the utility's base rates or through another rate mechanism. Incremental costs are costs associated with or created by the proposed program that are not provided for in base rates or another rate mechanism.	PD-1 – Energy Efficiency Program Plan, § 3 (p. 5-72) PD-1 – Energy Efficiency Program Plan, Appendix A (p. 86-98) Exhibit D – Direct Testimony of Peter Druckenmiller, § V (p. 5) IGF-3 – Cost-Benefit Analysis Workpapers (Confidential)
g. The utility shall provide a detailed revenue requirement analysis that clearly identifies all estimated annual program costs and revenues for the proposed program(s), including	SMG-1 - Annual Revenue Requirements

In the Matter of the Petition of South Jersey Gas Company For Approval of New Energy Efficiency Programs and Associated Cost Recovery Pursuant to the Clean Energy Act

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
effects upon rate base and pro forma income calculations.	
h. The utility shall provide, with supporting documentation: (i) a calculation of its current capital structure, as well as its calculation of the capital structure approved by the Board in its most recent electric and/or gas base rate cases, and (ii) a statement as to its allowed overall rate of return approved by the Board in its most recent electric and/or gas base rate cases.	Exhibit E - Direct Testimony of Stefany M. Graham, § III (p. 3-7) SMG-2 - Weighted Average Cost of Capital
i. If the utility is seeking carrying costs for a proposed program, the filing shall include a description of the methodology, capital structure, and capital cost rates used by the utility.	Exhibit E - Direct Testimony of Stefany M. Graham, §§ III, IV (p. 3-10) SMG-4 - Monthly Recovery and Interest Calculation
j. A utility seeking incentives shall provide all supporting justifications and rationales for incentives, along with supporting documentation, assumptions, and calculations. Utilities that have approved rate mechanisms or incentive treatment from previous cases and are not seeking a modification of such treatment through the current filing are not subject to this requirement.	South Jersey is not seeking incentives in this filing.

Exhibit B

In the Matter of the Petition of South Jersey Gas Company For Approval of New Energy Efficiency Programs and Associated Cost Recovery Pursuant to the Clean Energy Act

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
V. Cost Benefit Analysis	
a. The utility shall conduct a benefit-cost analysis of the programs and portfolio using the New Jersey Cost Test, Participant Cost Test, Program Administrator Cost Test, Ratepayer Impact Measure Test, Total Resource Cost Test, and Societal Cost Test that assesses all program costs and benefits from a societal perspective i.e., that includes the combined financial costs and benefits realized by the utility and the customer. The utility may also provide any additional benefit-cost analysis that it believes appropriate with supporting rationales and documentation.	Petition, § III (p. 17) PD-1 – Energy Efficiency Program Plan, § 10 (p. 83) Exhibit F - Direct Testimony of Isaac Gabel-Frank, §§ III, IV (p. 4-21) IGF-2 - Cost-Benefit Analysis Summary IGF-3 – Cost-Benefit Analysis Workpapers (Confidential)
b. The utility must demonstrate how the results of the tests in Section V(a) support Board approval of the proposed program(s), including how the programs are designed to achieve a benefit-to-cost ratio greater than or equal to 1.0 at the portfolio level when using the New Jersey Cost Test.	Petition, § III (p. 17) PD-1 – Energy Efficiency Program Plan, § 2 (p. 3-4) Exhibit F - Direct Testimony of Isaac Gabel-Frank, §§ III, IV, V (p. 4-22) IGF-2 - Cost-Benefit Analysis IGF-3 – Cost-Benefit Analysis Workpapers (Confidential)
c. Renewable energy programs shall not be subject to a benefit-cost test, but the utility must quantify all direct and indirect benefits resulting from such a proposed program as well as provide the projected costs.	Not Applicable
d. The level of energy and capacity savings utilized in these calculations shall be based upon the most recent Protocols to Measure Resource Savings approved by the Board to measure energy savings for NJCEP. To the extent that a protocol does not exist or an alternative protocol is proposed for a filed program, the utility must submit a measurement methodology for the program or contemplated measure for approval by the Board.	Exhibit F - Direct Testimony of Isaac Gabel-Frank, § IV (p. 19-20) IGF-3 – Cost-Benefit Analysis Workpapers (Confidential)

In the Matter of the Petition of South Jersey Gas Company For Approval of New Energy Efficiency Programs and Associated Cost Recovery Pursuant to the Clean Energy Act

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
e. For cost effectiveness calculations, the utility shall also estimate and reflect in the energy and capacity savings any free rider and spillover effects, i.e., savings associated with participating customers who would have implemented energy efficiency or renewable energy measures without N.J.S.A. 48:3-98.1 benefits or incentives.	Exhibit F - Direct Testimony of Isaac Gabel-Frank, § IV (p. 21) IGF-3 – Cost-Benefit Analysis Workpapers (Confidential)
VI. Evaluation, measurement, and verification	
a. The utility shall describe the methodology, processes, and strategies for monitoring and improving program and portfolio performance related to the utility's targets established pursuant to the quantitative performance indicators.	PD-1 – Energy Efficiency Program Plan, § 5 (p. 73-74)
VII. Quantitative Performance Indicators: Targets	
a. The utility shall file quantitative performance indicator ("QPI") values based on the metrics applicable to each program year of the three-year program filing cycle.	Exhibit F - Direct Testimony of Isaac Gabel-Frank, § III (p. 8) IGF-8 – Quantitative Performance Indicators PD-1 – Energy Efficiency Program Plan, § 9 (p. 82)

In the Matter of the Petition of South Jersey Gas Company For Approval of New Energy Efficiency Programs and Associated Cost Recovery Pursuant to the Clean Energy Act

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
b. The utility shall provide a description of how the proposed portfolio achieves the targets established for each utility pursuant to the following QPIs, as applicable for each program year: i. Net annual energy savings ii. Net annual peak demand savings iii. Net lifetime energy savings iv. Net lifetime demand savings v. Net present value of net benefits as determined by the Utility Cost Test vi. Net lifetime energy savings derived from qualifying low-income customers vii. Net lifetime energy savings derived from qualifying small commercial customers	Exhibit F - Direct Testimony of Isaac Gabel-Frank, § III (p. 8) IGF-8 – Quantitative Performance Indicators PD-1 – Energy Efficiency Program Plan, § 9 (p. 82)
VIII. Reporting Plan: **The utility shall provide a plan to comply with the following reporting requirements:**	
a. Quarterly progress reports: No later than 60 days following the end of each quarter, the utility shall submit a user-friendly, public report, with accompanying spreadsheet(s), that includes an overview of program performance, a narrative about customer participation and incentives paid, and results on the following program-level parameters compared to program projections and goals: i. Energy savings: gross and net savings ii. Number of program participants: total, low-income, moderate-income, and small commercial iii. Program expenditures	Exhibit D – Direct Testimony of Peter Druckenmiller, § VI (p. 6-8) PD-1 – Energy Efficiency Program Plan, § 7 (p. 79)

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MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
b. Annual progress reports: No later than 75 days following the end of each program year, the utility shall submit a user-friendly, public report, with accompanying spreadsheet(s), that includes the same program-level data and accompanying progress/performance narratives as those that are included in the quarterly reports. The annual report will show overall progress and performance of programs that are seasonal or cyclical in nature. In addition, the annual report shall include the utility program administrator's initial and final benefit-cost test results for the programs and portfolio (as defined in Section V), assessment of the portfolio's compliance with the targets established pursuant to the QPIs (as defined in Section VII), and any proposed changes or additions for the next year or cycle.	Exhibit D – Direct Testimony of Peter Druckenmiller, § VI (p. 6-8) PD-1 – Energy Efficiency Program Plan, § 7 (p. 79)
c. Triennial reports: i. Progress reports: No later than 90 days following the end of the third program year, the utility shall submit a public report that takes the place of the annual report for that year. This report will be identical to the annual report but will also review the portfolio's data and assess the portfolio's success over the three-year program cycle. ii. Evaluation studies: No later than 365 days following the end of the third program year, the utility shall submit the process and impact evaluations pursuant to requirements issued by the Board. iii.	Exhibit D – Direct Testimony of Peter Druckenmiller, § VI (p. 6-8) PD-1 – Energy Efficiency Program Plan, § 7 (p. 79)

Exhibit C

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF SOUTH JERSEY GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT	**BPU DOCKET NO. _____** **AGREEMENT OF NON-DISCLOSURE OF INFORMATION CLAIMED TO BE CONFIDENTIAL**

It is hereby AGREED, as of the ___ day of ____ 2020, by and among South Jersey Gas Company ("SJG" or "Petitioner"), the Staff of the New Jersey Board of Public Utilities ("Board Staff') and Division of Rate Counsel ("Rate Counsel") (collectively, the "Parties"), who have agreed to execute this Agreement of Non-Disclosure of Information Claimed to be Confidential ("Agreement") and to be bound thereby, that:

WHEREAS, in connection with the above-captioned proceeding before the Board of Public Utilities (the "Board"), Petitioner and/or another party ("Producing Party") may be requested or required to provide petitions, pre-filed testimony, other documents, analyses and/or other data or information regarding the subject matter of this proceeding that the Producing Party may claim constitutes or contains confidential, proprietary or trade secret information, or which otherwise may be claimed by the Producing Party to be of a market-sensitive, competitive, confidential or proprietary nature (hereinafter sometimes referred to as "Confidential Information" or "Information Claimed to be Confidential"); and

WHEREAS, the Parties wish to enter into this Agreement to facilitate the exchange of information while recognizing that under Board regulations at N.J.A.C. 14:1-12.1 et seq., a request for confidential treatment shall be submitted to the Custodian who is to rule on requests made pursuant to the Open Public Records Act ("OPRA"), N.J.S.A. 47:1A-1 et seq.,

unless such information is to be kept confidential pursuant to court or administrative order (including, but not limited to, an Order by an Administrative Law Judge sealing the record or a portion thereof pursuant to N.J.A.C. 1:1-14.1, and the parties acknowledge that an Order by an Administrative Law Judge to seal the record is subject to modification by the Board), and also recognizing that a request may be made to designate any such purportedly confidential information as public through the course of this administrative proceeding; and

WHEREAS, the Parties acknowledge that unfiled discovery materials are not subject to public access under OPRA; and

WHEREAS, the Parties acknowledge that, despite each Party's best efforts to conduct a thorough pre-production review of all documents and electronically stored information ("ESI"), some work product material and/or privileged material ("Protected Material") may be inadvertently disclosed to another Party during the course of this proceeding; and

WHEREAS, the undersigned Parties desire to establish a mechanism to avoid waiver of privilege or any other applicable protective evidentiary doctrine as a result of the inadvertent disclosure of Protected Material;

NOW, THEREFORE, the Parties hereto, intending to be legally bound thereby, DO HEREBY AGREE as follows:

1. The inadvertent disclosure of any document or ESI which is subject to a legitimate claim that the document or ESI should have been withheld from disclosure as Protected Material shall not waive any privilege or other applicable protective doctrine for that document or ESI or for the subject matter of the inadvertently disclosed document or ESI if the Producing Party, upon becoming aware of the disclosure, promptly requests its return and takes reasonable precautions to avoid such inadvertent disclosure.

2. Except in the event that the receiving party or parties disputes the claim, any documents or ESI which the Producing Party deems to contain inadvertently disclosed Protected Material shall be, upon written request, promptly returned to the Producing Party or destroyed at the Producing Party's option. This includes all copies, electronic or otherwise, of any such documents or ESI. In the event that the Producing Party requests destruction, the receiving party shall provide written confirmation of compliance within thirty (30) days of such written request. In the event that the receiving party disputes the Producing Party's claim as to the protected nature of the inadvertently disclosed material, a single set of copies may be sequestered and retained by and under the control of the receiving party until such time as the Producing Party has received final determination of the issue by the Board of Public Utilities or an Administrative Law Judge, provided that the Board has not modified or rejected an order by the Administrative Law Judge.

3. Any such Protected Material inadvertently disclosed by the Producing Party to the receiving party pursuant to this Agreement shall be and remain the property of the Producing Party.

4. Any Information Claimed to be Confidential that the Producing Party produces to any of the other Parties in connection with the above-captioned proceeding and pursuant to the terms of this Agreement shall be specifically identified and marked by the Producing Party as Confidential Information when provided hereunder. If only portions of a document are claimed to be confidential, the producing party shall specifically identify which portions of that document are claimed to be confidential. Additionally, any such Information Claimed to be Confidential shall be provided in the form and manner prescribed by the Board's regulations at N.J.A.C. 14:1-12.1 et seq., unless such information is to be kept confidential

pursuant to court or administrative order. However, nothing in this Agreement shall require the Producing Party to file a request with the Board's Custodian of Records for a confidentiality determination under N.J.A.C. 14:1-12.1 et seq. with respect to any Information Claimed to be Confidential that is provided in discovery and not filed with the Board.

5. With respect to documents identified and marked as Confidential Information, if the Producing Party's intention is that not all of the information contained therein should be given protected status, the Producing Party shall indicate which portions of such documents contain the Confidential Information in accordance with the Board's regulations at N.J.A.C. 14:1-12.2 and 12.3. Additionally, the Producing Party shall provide to all signatories of this Agreement full and complete copies of both the proposed public version and the proposed confidential version of any information for which confidential status is sought.

6. With respect to all Information Claimed to be Confidential, it is further agreed that:

(a) Access to the documents designated as Confidential Information, and to the information contained therein, shall be limited to the Party signatories to this Agreement and their identified attorneys, employees, and consultants whose examination of the Information Claimed to be Confidential is required for the conduct of this particular proceeding.

(b) Recipients of Confidential Information shall not disclose the contents of the documents produced pursuant to this Agreement to any person(s) other than their identified employees and any identified experts and consultants whom they may retain in connection with this proceeding, irrespective of whether any such expert is retained specially and is not expected to testify, or is called to testify in this proceeding. All consultants or experts of any Party to this Agreement who are to receive copies of documents produced pursuant to this

Agreement shall have previously executed a copy of the Acknowledgement of Agreement attached hereto as "Attachment 1," which executed Acknowledgement of Agreement shall be forthwith provided to counsel for the Producing Party, with copies to counsel for Board Staff and the Rate Counsel.

(c) No other disclosure of Information Claimed to be Confidential shall be made to any person or entity except with the express written consent of the Producing Party or their counsel, or upon further determination by the Custodian, or order of the Board, the Government Records Council or of any court of competent jurisdiction that may review these matters.

7. The undersigned Parties have executed this Agreement for the exchange of Information Claimed to be Confidential only to the extent that it does not contradict or in any way restrict any applicable Agency Custodian, the Government Records Council, an Administrative Law Judge of the State of New Jersey, the Board, or any court of competent jurisdiction from conducting appropriate analysis and making a determination as to the confidential nature of said information, where a request is made pursuant to OPRA, N.J.S.A. 47:1A-1 et seq. Absent a determination by any applicable Custodian, Government Records Council, an Administrative Law Judge, the Board, or any court of competent jurisdiction that a document(s) is to be made public, the treatment of the documents exchanged during the course of this proceeding and any subsequent appeals is to be governed by the terms of this Agreement.

8. In the absence of a decision by the Custodian, Government Records Council, an Administrative Law Judge, or any court of competent jurisdiction, the acceptance by the undersigned Parties of information which the Producing Party has identified and marked as Confidential Information shall not serve to create a presumption that the material is in fact entitled to any special status in these or any other proceedings. Likewise, the affidavits

submitted pursuant to N.J.A.C. 14:1-12.8 shall not alone be presumed to constitute adequate proof that the Producing Party is entitled to a protective order for any of the information provided hereunder.

9. In the event that any Party seeks to use the Information Claimed to be Confidential in the course of any hearings or as part of the record of this proceeding, the Parties shall seek a determination by the trier of fact as to whether the portion of the record containing the Information Claimed to be Confidential should be placed under seal. Furthermore, if any Party wishes to challenge the Producing Party's designation of the material as Confidential Information, such Party shall provide reasonable notice to all other Parties of such challenge and the Producing Party may make a motion seeking a protective order. In the event of such challenge to the designation of material as Confidential Information, the Producing Party, as the provider of the Information Claimed to be Confidential, shall have the burden of proving that the material is entitled to protected status. However, all Parties shall continue to treat the material as Confidential Information in accordance with the terms of this Agreement, pending resolution of the dispute as to its status by the trier of fact.

10. Confidential Information that is placed on the record of this proceeding under seal pursuant to a protective order issued by the Board, an Administrative Law Judge, provided that the Board has not modified or rejected an order by the Administrative Law Judge, or any court of competent jurisdiction shall remain with the Board under seal after the conclusion of this proceeding. If such Confidential Information is provided to appellate courts for the purposes of an appeals from this proceeding, such information shall be provided, and shall continue to remain, under seal.

11. This Agreement shall not:

(a) Operate as an admission for any purpose that any documents or information produced pursuant to this Agreement are admissible or inadmissible in any proceeding;

(b) Prejudice in any way the right of the Parties, at any time, on notice given in accordance with the rules of the Board, to seek appropriate relief in the exercise of discretion by the Board for violations of any provision of this Agreement.

12. Within forty five (45) days of the final Board Order resolving the above-referenced proceeding, all documents, materials and other information designated as "Confidential Information," regardless of format, shall be destroyed or returned to counsel for the Producing Party. In the event that such Board Order is appealed, the documents and materials designated as "Confidential Information" shall be returned to counsel for the Producing Party or destroyed within forty-five (45) days of the conclusion of the appeal.

Notwithstanding the above return requirement, Board Staff and Rate Counsel may maintain in their files copies of all pleadings, briefs, transcripts, discovery and other documents, materials and information designated as "Confidential Information," regardless of format, exchanged or otherwise produced during these proceedings, provided that all such information and/or materials that contain Information Claimed to be Confidential shall remain subject to the terms of this Agreement. The Producing Party may request consultants who received Confidential Information who have not returned such material to counsel for the Producing Party as required above to certify in writing to counsel for the Producing Party that the terms of this Agreement have been met upon resolution of the proceeding.

13. The execution of this Agreement shall not prejudice the rights of any Party to seek relief from discovery under any applicable law providing relief from discovery.

14. The Parties agree that one original of this Agreement shall be created for each of the signatory parties for the convenience of all. The signature pages of each original shall be executed by the recipient and transmitted to counsel of record for the Petitioner, who shall send a copy of the fully executed document to all counsel of record. The multiple signature pages shall be regarded as, and given the same effect as, a single page executed by all Parties.

IN WITNESS THEREOF, the undersigned Parties do HEREBY AGREE to the form and execution of this Agreement.

SOUTH JERSEY GAS COMPANY

By: _____
Deborah M. Franco
VP, Clean Energy and Sustainability

GURBIR S. GREWAL
ATTORNEY GENERAL OF THE
STATE OF NEW JERSEY
Attorney for the Staff of the
New Jersey Board of Public Utilities

By: _____
Terel Klein
Deputy Attorney General

STEFANIE BRAND, ESQ.
DIRECTOR
NEW JERSEY
DIVISION OF RATE COUNSEL

By: _____
Assistant Deputy Rate Counsel

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF SOUTH JERSEY GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT	:	**BPU DOCKET NO. _____** **AGREEMENT OF NON-DISCLOSURE OF INFORMATION CLAIMED TO BE CONFIDENTIAL**

ACKNOWLEDGMENT OF AGREEMENT

The undersigned is an attorney, employee, consultant and/or expert witness for the Division of Rate Counsel or an intervenor who has received, or is expected to receive, Confidential Information provided by South Jersey or by another party ("Producing Party") which has been identified and marked by the Producing Party as "Confidential Information." The undersigned acknowledges receipt of the Agreement of Non-Disclosure of Information Claimed to be Confidential and agrees to be bound by the terms of the Agreement.

Dated: By: _____

(Name, Title and Affiliation)

Company Name:

EXHIBIT D

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

DIRECT TESTIMONY

OF

PETER DRUCKENMILLER

Program Manager, Energy Efficiency
SJI Utilities, Inc.

On Behalf of
South Jersey Gas Company

September 25, 2020

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Peter Druckenmiller. My business address is One South Jersey Place, Atlantic City New Jersey, 08401.

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

A. I am employed by South Jersey Gas Company ("SJG" or "Company") as Program Manager – Energy Efficiency Programs.

Q. What is the scope of your duties at SJG?

A. I manage all residential and commercial energy efficiency programs for SJG.

Q. Please briefly summarize your educational background and industry-related experience.

A. I have a Bachelor of Arts degree in Economics and Business Administration from Ursinus College. I have 15 years' experience in the natural gas business including energy efficiency program implementation. I joined the South Jersey Gas team in July 2019 as the Program Manager – Energy Efficiency Programs. In my current position as Program Manager, I manage program activities within the Company's Energy Efficiency Department and provide subject matter expertise in energy efficiency program designs. I also represent the Company in civic and regulatory forums related to conservation and energy efficiency.

Prior to serving the Company in my current role, I was the Manager of Energy Efficiency Implementation for a number of utilities' programs in Pennsylvania for five years. Prior to energy efficiency implementation, I have served in several roles in natural gas transportation, and in scheduling and trading, working with portfolios through the Mid-Atlantic utilities.

II. PURPOSE OF TESTIMONY

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

A. The purpose of my testimony is to provide an overview of the Company's proposed Energy Efficiency Program ("EEP" or "EEP V Program") offerings that consist of the Core Programs for the Residential, Multifamily and C&I sectors; Utility-Led Programs; and Pilots. These offerings are described in Schedule PD-1. The proposed EEPs are filed in accordance with the Clean Energy Act of 2018 ("CEA") and the Board's Order dated June 10, 2020 in Docket Nos. QO19010040, QO19060748 and QO17091004 (the "June 2020 Order"). My testimony also provides information responsive to certain Minimum Filing Requirements ("MFRs") required pursuant to the June 2020 Order as referenced in the MFR Index attached to the Petition as Exhibit B.

Q. Does your testimony include any illustrative schedules?

A. Yes. My testimony includes Schedule PD-1, which was prepared under my direction and supervision. This schedule contains information responsive to various MFRs, including the EEP V Program Plan, and contains a breakdown of, expenditures, participants, savings, and emissions data.

III. PROGRAM OVERVIEW

Q. Please describe the proposed EEP V Program.

A. Through the EEP V Program, the Company is proposing to invest up to $154.1 million and spend approximately $12.8 million in operations and maintenance ("O&M") expenses related to its EEPs over a three-year period and beyond. The EEPs proposed in the EEP V

Program serve the Residential, Multi-Family, and Commercial and Industrial ("C&I") sectors, and also include several Pilot programs. A list of the proposed programs and subprograms in EEP V Program is set forth in Table 1 below. Detailed program descriptions for each of the proposed EEPs are attached hereto as Schedule PD-1, as required in MFR Section II.a.

Table 1: EEP Programs and Subprograms

Type	Sector	Program
Core	Residential	Efficient Products
Core	Residential	Home Performance w/Energy Star
Core	C&I	Energy Solutions for Business - Prescriptive/Custom
Core	C&I	Energy Solutions for Business - Direct Install
Core	Cross	Multi-Family
Utility Led	Residential	Home Energy Reports
Utility Led	Residential	Quick Home Energy Check Up
Utility Led	Residential	Moderate Income Weatherization
Utility Led	Residential	Energy Saving Trees
Utility Led	C&I	Energy Solutions for Business - Energy Management
Utility Led	C&I	Energy Solutions for Business - Engineered Solutions
Utility Led	Pilot	Residential Demand Response
Utility Led	Pilot	C&I Demand Response
Utility Led	Pilot	Innovative and Synergistic Solutions

IV. PARTICIPATION AND BENEFITS

Q. Please describe the participation rates related to SJG's EEP V.

A. Table 2 below contains a summary of participation rates for EEP V:

Table 2: EEP V Participation Rates

Subprogram	PY 1	PY 2	PY 3	Total
Behavior	150,000	150,000	150,000	**450,000**
Efficient Products	25,817	28,547	40,456	**94,819**
Existing Homes HPwES	200	260	360	**820**
Existing Homes QHEC	850	1,200	1,500	**3,550**
Existing Homes Moderate Income Weatherization	350	400	700	**1,450**
Energy Saving Trees	1,500	1,500	1,500	**4,500**
Multi-Family	652	1,072	1,353	**3,077**
Energy Solutions for Business: Prescriptive / Custom	843	852	1,133	**2,828**
Energy Solutions for Business: Engineered Solutions	1	1	4	**6**
Energy Solutions for Business: Energy Management	0	2	5	**7**
Direct Install	15	18	25	**58**
Total	**180,228**	**183,852**	**197,036**	**561,115**

Q. Please summarize the benefits achieved through SJG's proposed EEP V Program.

A. SJG developed the proposed EEP V to expand availability of energy efficiency initiatives for its customer base. This effort is directed to all customer groups, including but not limited to those most in need of support and those most challenging to reach, such as, residential moderate income, commercial small businesses, and local government customers. The proposed EEPs will reduce natural gas and electric bills, reduce greenhouse gas emissions, increase employment and associated economic activity, and reduce local pollution, consistent with the goals of New Jersey Energy Master Plan, the New Jersey Global Warming Response Act, the Act Concerning the Reduction of Greenhouse Gas Emissions, and the CEA.

The South Jersey Gas Energy Efficiency Program Plan, included in Schedule PD-1 attached hereto, is a cost-effective portfolio of energy efficiency programs that achieve the state policy goals of the Board. The programs provide energy savings opportunities to all customers in the SJG service territory and ensure low-to-moderate income customers

have equal opportunity to realize program benefits. The portfolio also puts SJG on a trajectory to meet the program year five energy savings target mandated in the CEA, as set forth below in Table 3.

Table 3: Actual and Projected EEP Energy Savings

	PY 1	PY 2	PY 3
Period	Jul 21 - Jun 22	Jul 22 - Jun 23	Jul 23 - Jun 24
Projected Consumption Baseline (therm)	487,984,698	468,121,131	453,879,642
Utility Savings Target (%)		0.34%	0.51%
Utility Savings Target (therm)		1,591,612	2,314,786
Projected SJG Savings (therm)	2,007,669	2,081,342	2,738,402

V. PROGRAM BUDGET AND DURATION

Q. What is the Company's proposed overall program investment and administrative cost budget?

A. As noted above, SJG is proposing an investment budget of approximately $154.1 million and an O&M budget of approximately $12.8 million, for a total overall program budget of approximately $167 million. This budget reflects incremental costs that will be incurred in connection with the proposed EEPs. A summary of the proposed expenditures for each EEP, including a breakdown by cost category, is shown on Schedule PD-1. In accordance with the authority set forth in the June 2020 Order, SJG will have the flexibility to modify program budgets and incentive levels to best adapt to market conditions.

The impact of the savings and spending summarized above is a significant benefit to participants, customers, and society as a whole. In its entirety, the subprograms proposed in the Program Plan result in approximately $201 million in participant bill savings and 0.6 million tons of avoided CO2 emissions.

Q. Please summarize the proposed time period for which these investments will be made.

A. In accordance with the June 2020 Order, the Company is requesting that the EEP V Program commence July 1, 2021 and continue for a period of three years through June 30, 2024.

VI. DATA & REPORTING

Q. What data does SJG intend to collect and evaluate for the proposed programs?

A. The Company or a third-party vendor will identify and implement appropriate information technology ("IT") systems to track and report program participation and energy savings data. These systems will operate in coordination with existing Company systems or be built-out, as appropriate, to meet the specific program tracking and regulatory reporting requirements. The systems will transmit data feeds with the Statewide Coordinator to facilitate data sharing between utilities for dual-fuel programs.

The IT systems capabilities will include, but will not be limited to the following functions:

- Program monitoring reports;
- Invoicing coordination between utilities and third-party vendors;
- Evaluation, Measurement and Verification ("EM&V") data extracts; and
- Regulatory reporting extracts.

Processes to ensure data quality and data security will be put in place and monitored on a routine basis to ensure program reporting accuracy and customer data protections. Additionally, the Company has collected financial reporting in terms of investments, operating and administrative costs, and the number of program participants who have applied for loans, as well as the value of those pending financial commitments.

Q. Please describe the proposed reporting mechanism.

A. Pursuant to the Board's June 2020 Order, the Company shall submit public reports to the Board according to the reporting framework outlined below and as required by the revised MFRs. The Company will establish standard report formats in collaboration with the other utilities.

Quarterly progress reports: No later than 60 days following the end of each quarter, the Company shall submit a user-friendly public report, with accompanying spreadsheet(s), that includes an overview of program performance, a narrative about customer participation and incentives paid, and results on the following program-level parameters compared to program projections and goals:

i. Energy savings;

ii. Number of program participants: total, moderate-income, and small commercial; and

iii. Program expenditures

Annual progress reports: No later than 75 days following the end of each program year, the Company shall submit a user-friendly public report, with accompanying spreadsheet(s), that includes the same program-level data and accompanying progress/performance narratives as those that are included in the quarterly reports. The annual report will show overall progress and performance of programs that are seasonal or cyclical in nature. In addition, the annual report shall include the Company program administrator's initial and final benefit-cost test results for the programs and portfolio (as defined in Section V of the

MFRs), assessment of the portfolio's compliance with the targets established pursuant to the quantitative performance indicators ("QPIs") (as defined in Section VII of the MFRs), and any proposed changes or additions for the next year or cycle. The annual progress reports will demonstrate the Company's compliance with the targets established pursuant to the QPIs. If requested, the Company will provide end use, measure level, and/or other program data within 30 days to Staff.

Triennial progress reports: No later than 90 days following the end of the Program Year 3, the Company shall submit a public report that takes the place of the annual report for that year. This report would be identical to the annual report but will also review the portfolio's data and assess the portfolio's success over the three-year program cycle.

VII. ADDITIONAL MINIMUM FILING REQUIREMENTS

Q. Please describe the extent to which the Company intends to utilize employees, contractors or both to deliver the EEP V Program.

A. The Company will provide the management, administration, and implementation of the programs through internal operations or under supervised support of third-party vendors. The program teams will monitor the following program elements for each utility-administered program:

- Progress to goal;
- Projects completed;
- Energy savings;
- Customers served; and

- Budgets.

The Company will also keep abreast of industry trends, market research, and best practices, inclusive of those from the other New Jersey utilities, in order to consider possible enhancements to the programs and ensure best-quality program implementation and performance.

Further details regarding the vendor selection process and contractors required for each program are reflected in Schedule PD-1.

Q. Please describe the process for resolving customer complaints related to these programs.

A. Customer complaints relating to the design, delivery, or administration of any SJG subprogram may be made through various customer contact personnel/departments, including the customer service toll-free number. The customer can subsequently direct its complaint to the BPU if they feel the complaint has not been resolved. In all instances, the immediate issue would be referred to the most appropriate subprogram management personnel to investigate and resolve.

SJG will attempt to resolve disputes with its customers informally in the first instance. Disputes that involve administration of the subprogram that cannot be resolved informally will be resolved through the BPU's existing process for customer complaints within the appropriate Division or the Office of Administrative Law. Disputes between SJG and vendors will be resolved in accordance with contract provisions. Disputes under the subprogram that involve monetary claims or civil damages that cannot be decided by the BPU will be resolved in an appropriate court of law.

Q. Please describe SJG's process for customer data protection and security.

A. The Company will maintain and protect customer data from unlawful dissemination consistent with applicable law, including all New Jersey statutory and BPU regulatory obligations. SJG will implement privacy and data handling policies and procedures that are consistent with its customer data security protections and any applicable BPU regulations and statutory obligations. The Company will not sell or share any individual customer information or aggregated customer data, except as specified. SJG may share customer information or aggregated customer data with outside third-party implementation contractors, vendors, or trade allies to implement and/or evaluate SJG's energy efficiency programs, and these companies shall use that information/data for the sole purpose of Program implementation and evaluation.

Q. Please describe the marketing efforts that SJG will engage in to promote the proposed EEPs to its customers.

A. To support a consistent statewide approach for program marketing and to support statewide awareness of energy efficiency programs and efforts, the Company will collaborate with partnering utilities on marketing materials and broad customer-awareness language. The Company will also participate in and support efforts of the BPU Marketing Working Group ("MWG") to determine appropriate measures for joint and statewide marketing efforts.

In addition to supporting the statewide marketing efforts, the Company anticipates using traditional utility channels (*i.e.* bill inserts); mail, print, radio, and online advertising; email blasts; social media; outreach events (*i.e.*, community fairs); and indirect outreach through other stakeholders, including contractors, green teams, and community groups, to help increase awareness and education of the EEPs. Further detail on marketing efforts for each EEP is reflected in Schedule PD-1.

Q. What are the potential market barriers to the proposed programs, if any, and how do the proposed programs address these market barriers?

A. Some of the primary market barriers that impact the proposed EEPs include the initial cost for comprehensive home retrofits, customer awareness and engagement, contractor awareness and training. See Schedule PD-1 for market barriers by program and how SJG plans to address them.

Initial Cost of Comprehensive Home Retrofits: Comprehensive home retrofits are more expensive and require more participant investment and commitment. Customers must be willing and able to invest in more expensive energy-efficiency projects. SJG addresses this barrier by offering all program services at no additional cost to income-qualified customers.

Customer Awareness and Engagement: The particular customer awareness and engagement issues, and SJG's plans to address these issues, depends on the particular EEP and the market segment it serves. For both Residential Efficient Products and Multi-Family, eligible participants may be unaware of energy-efficiency opportunities and programs because the segment has historically not been well served by traditional energy-efficiency programs. To address this barrier, this program was designed specifically to support the residential and multi-family segments. SJG will execute targeted outreach strategies to ensure that relevant customers are aware of program opportunities and consider energy efficiency in equipment investments and long-term planning. The program will also prepare and distribute successful case studies of prior participants and their experiences and energy savings. To increase awareness among customers with English as a second language, SJG will develop and provide outreach materials in Spanish.

SJG intends to be an active participant in both the Equity and Marketing Working groups and expects to address the need and cost for developing materials in a broader range of languages as part of those discussions.

The C&I Direct Install program targets small businesses, non-profit organizations, schools and faith-based organizations for energy efficiency measures. These customers typically have limited resources and time to consider or prioritize energy efficiency and may have efficiency needs not well aligned with traditional commercial demand side management ("DSM") programs targeted at larger customers. This program is intended to confront these market barriers by providing turnkey, direct installation of efficiency measures tailored to these eligible customers at no cost, while identifying additional efficiency opportunities directly on-site, and directly soliciting eligible customers for participation. This personalized approach builds trust and achieves results while increasing the likelihood of further participation referrals. To increase participation rates among a diverse demographic, SJG may include focused outreach efforts to reach minority- and women-owned small businesses, and start-ups by engaging with business groups and organizations that support these customers. Partner business groups might include the New Jersey Chamber of Commerce and the United States Small Business Administration. SJG will also explore providing outreach materials in Spanish to reach Spanish-speaking business owners.

For the Commercial Prescriptive program, Commercial and Industrial customers may not be aware of the benefits of installing efficient equipment and/or may lack the time and resources to pursue replacing existing equipment with energy efficient equipment. To address this barrier, SJG will educate customers on the benefits of installing efficient

equipment through targeted marketing, ensure that incentives are easily accessible, and encourage market transformation and stocking of efficient equipment through midstream incentives. Through outreach efforts, SJG will seek to partner with retail and wholesale entities to promote program offerings, and will focus marketing, education, and outreach efforts on the trade ally community to ensure that trade allies are aware of available incentives and are prepared to serve customers. To increase participation rates among a diverse demographic of Commercial and Industrial customers, SJG may include focused outreach efforts to reach minority- and women-owned small businesses, as well as start-up companies. SJG may also engage with business groups and organizations that support these customers, such as the New Jersey Chamber of Commerce and the United States Small Business Administration. SJG will also explore providing outreach materials in Spanish to reach Spanish-speaking business owners in this segment.

Split incentives: Multi-family properties can face challenges for energy efficiency improvements since the owner generally does not pay the utility bills and may not reap the full benefit of any energy efficiency investment. To address this barrier, SJG will market to both landlords and tenants to assure that those exposed to energy costs are able to participate in the program, provide low- and no-cost measures at no cost to the tenant or the landlord, and offer comprehensive approaches for multi-family, including application, technical and engineering support to design cost-effective projects with benefits for owners and renters. SJG may also provide technical and outreach assistance to property owners and managers in developing and marketing green properties.

Landlord/Tenant Arrangements: Split incentives between landlord/tenants with respect to who pays for energy use versus who owns the energy-using equipment present a

challenge for investment decisions. This presents a unique challenge because the investor in the equipment does not experience an immediate benefit. To address this barrier, the Company's EEPs will be marketed to both landlords and tenants to assure that those exposed to energy costs are aware of and able to participate in the EEPs. SJG will also employ strategies to ensure that landlords understand the long-term benefits of participating in EEPs. SJG may also provide technical and outreach assistance to property owners and managers in developing and marketing green properties to attract tenants.

For C&I Direct Install and Commercial Prescriptive, split incentives between landlord/tenants with respect to who pays for energy use versus who owns the energy-using equipment presents a unique challenge because the investor in the equipment does not experience an immediate benefit. The subprogram will employ strategies to help the landlord understand the long-term benefits of participating. This subprogram will be marketed to both landlords and tenants to assure that those exposed to energy costs and investments are able to participate in the program. SJG may also provide technical and outreach assistance to property owners and managers in developing and marketing green properties.

Q. Do the Company's proposed programs contain offerings that help to mitigate COVID-19 impacts on customers and support economic stimulus?

A. Yes. To help our customers deal with the challenges of the pandemic and facilitate economic recovery, SJG is proposing to defer customer loan repayments associated with the on-bill repayment plan for the first year of the program -- July 1, 2021 – June 30, 2022. This option will encourage customers that have been financially impacted by COVID-19

to participate in the Company's EEPs, providing them the opportunity to reduce their energy consumption and lower their bills at a time when they need it most.

Q. Will the proposed programs generate incremental economic activity in the energy efficiency/conservation marketplace? If so, what impact, if any, on competition may be created?

A. By investing in energy efficiency, SJG will be injecting millions of dollars into New Jersey's economy which will help to create jobs and spur additional business spending. In addition, reductions in energy costs to residents and business results in increased disposable income and net revenue and allows residents and businesses to spend more money within the state. With the implementation of the Company's proposed programs, economic models show that our investment could generate approximately 2,826 direct and/or indirect jobs-year equivalents.[1] Further detail on potential job creation for each EEP is reflected in Schedule PD-1.

With regard to competition, the Company's EEP was designed in collaboration with the other utilities and the BPU and is not intended to compete with offerings or services provided by another utility or the BPU.

Q. In areas where gas and electric service territories overlap, please describe how the programs will be coordinated and how savings and costs will be allocated among the utilities.

A. The New Jersey investor-owned electric and gas utilities are collaborating in order to implement programs in a consistent manner and develop supportive processes, procedures, requirements, and forms. To support the coordinated delivery of Core and certain

[1] Based upon an IMPLAN analysis as described in the Direct Testimony of Isaac Gabel-Frank

Additional program offerings in situations that involve gas and electric savings opportunities in overlapping utility territories, the utilities have established a framework that will align key program elements through use of Interconnected Tracking Systems supported by use of a Statewide Coordinator System, aligned Utility Responsibilities, and Coordinated Program Elements as further described below. This structure will support the coordinated delivery of appropriate energy efficiency measures in the following Program or Sub-program offerings:

Core Offerings

- Energy Efficient Products
- Home Performance with ENERGY STAR
- Multi-Family
- Direct Install
- Prescriptive and Custom Measures

Additional Utility-Led Offerings

- Moderate-Income Weatherization
- Quick Home Energy Check-Up
- Engineered Solutions
- Energy Management

To support consistency across the state and to align the above coordinated program offerings, the utilities will contract with a single third-party entity to serve as a Statewide Coordinator ("SWC") for measures and costs that impact more than one utility in situations where gas and electric service territories overlap. Please see Schedule PD-1 for an overview of the SWC.

Q. Please describe the proposed Evaluation, Measurement and Verification plan.

A. SJG recognizes the importance of incorporating EM&V into the EEPs. EM&V can help assess whether program objectives are being achieved, document energy and non-energy benefits and inform future program development. Schedule PD-1 provides an overview that will address common definitions of the types of evaluations and primary evaluation objectives, the philosophy of monitoring and improving program performance, and EM&V budget considerations.

Q. Please describe the proposed workforce development plan.

A. SJG recognizes the importance of developing and supporting strong Workforce Development Programs. There needs to be a strong pool of qualified candidates ready for companies to hire to meet the increased demand for the energy efficiency programs and projects as the utilities implement programs to strive to meet the new energy savings targets required by the CEA. Schedule PD-1 provides information regarding training needs and career paths, trade ally needs, and contracting provisions.

Q. Does this conclude your testimony?

A. Yes, it does.

VERIFICATION

I, W. Peter Druckenmiller, of full age, being duly sworn according to law, upon my oath, depose and say:

1. I am Program Manager, Energy Efficiency and Conservation of South Jersey Gas Company ("Company") and I am authorized to make this verification on behalf of the Company.

2. I have reviewed the within petition and the information contained therein is true according to the best of my knowledge, information and belief.

W. Peter Druckenmiller
Program Manager, Energy Efficiency and Conservation

Sworn to and subscribed
before me this 25th day
of September 2020

CAROLYN A. JACOBS

NOTARY PUBLIC OF NEW JERSEY

My Commission Expires October 28, 2023

September 25, 2020

South Jersey Gas Company

Energy Efficiency Program Plan
July 2021 – June 2024

Prepared by:
South Jersey Gas Company

Table of Contents

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1. INTRODUCTION

South Jersey Gas Company ("SJG") delivers safe, reliable, affordable natural gas and promotes energy efficiency to more than 400,000 residential, commercial and industrial customers in the seven southernmost counties of New Jersey. SJG's service territory covers over 2,500 square miles across 113 municipalities and includes all of Atlantic, Cape May, Cumberland, and Salem counties and parts of Burlington, Camden, and Gloucester counties.

SJG works to bring best in class utility service and programs to its vast array of residential, commercial, and industrial customers. Presently, SJG offers multiple Energy Efficiency ("EE") programs to its customers including:

- Residential Efficient Products Program – provides customers with access to a SJG online portal designed to raise awareness and increase access to low and moderately priced energy efficiency products including: LED light bulbs, low-flow water devices, smart thermostats, and energy saving tips.
- Residential Home Assessment with Direct Install Program - offers customers with single-family homes a subsidized home energy assessment for $49 that includes the installation of low-cost measures such as LED lighting, low-flow water devices, and smart power strips at no additional cost, along with personalized recommendations to further expand on energy efficiency measures.
- Residential Retrofit Weatherization Program - offers low-to-moderate income customers an energy audit, energy education and weatherization services that includes direct install of measures like insulation and, air and duct sealing, as needed, at no cost.
- Online Energy Audit – offers homeowners a customized, real-time energy audit based on behavioral patterns to help customers better understand their energy usage and provides easy to implement recommendations to reduce consumption and improve energy-efficiency.
- Home energy reports – Customers receive home energy reports which provide information on current energy usage and recommendations on how to reduce usage in the future.
- C&I Engineered Solutions Program - provides municipalities, universities, schools, hospitals, and non-profit facilities tailored energy-efficiency solutions and financing assistance to take on largescale energy-efficiency projects.
- OCE Program Financing – SJG has been providing low to no interest loans for eligible customers for OCE programs.

SJG is proposing to substantially increase the number of program offerings available to its customer base, as well as expand into the commercial and industrial sectors with a suite of programs that will help businesses reduce costs and save energy. The details of these expansion are provided herein and are consistent with the New Jersey Energy Master Plan[1] ("EMP"), the

[1] https://nj.gov/emp/

New Jersey Global Warming Response Act[2] ("GWRA"), the Act Concerning the Reduction of Greenhouse Gas Emissions[3] ("RGGI law"), and the Clean Energy Act[4] ("CEA") of 2018.

[2] www.njleg.state.nj.us/2006/Bills/PL07/112_.HTM
[3] https://www.njleg.state.nj.us/2006/Bills/PL07/340_.PDF
[4] https://www.njleg.state.nj.us/2018/Bills/PL18/17_.HTM

2. PORTFOLIO OVERVIEW

The SJG EE Portfolio consists of Core, Utility-Led, and Pilot programs over three years between 2021 and 2024which aim to increase energy efficiency throughout the South Jersey Gas service territory. This Program Plan provides customers with a mix of existing and new energy efficiency programs administered by SJG. The graph below illustrates the expected annual incremental natural gas savings from the programs proposed herein.

The Program Plan consists of the following programs:

Table 1: SJG Portfolio Overview

Type	Sector	Program
Core	Residential	Efficient Products
Core	Residential	Home Performance w/Energy Star
Core	C&I	Energy Solutions for Business - Prescriptive/Custom
Core	C&I	Energy Solutions for Business - Direct Install
Core	Cross	Multi-Family
Utility Led	Residential	Home Energy Reports
Utility Led	Residential	Quick Home Energy Check Up
Utility Led	Residential	Moderate Income Weatherization

Type	Sector	Program
Utility Led	Residential	Energy Saving Trees
Utility Led	C&I	Energy Solutions for Business - Energy Management
Utility Led	C&I	Energy Solutions for Business - Engineered Solutions
Utility Led	Pilot	Residential Demand Response
Utility Led	Pilot	C&I Demand Response
Utility Led	Pilot	Innovative and Synergistic Solutions

The impact of the savings and spending of the Portfolio results in a significant benefit to participants, customers, and society as a whole. In its entirety, the subprograms proposed in this Program Plan result in approximately $201 million in participant bill savings and 0.6 million tons of avoided CO_2 emissions. From a cost benefit perspective, the entire portfolio of programs results in New Jersey Cost Test score of 1.5 and a Societal Cost Test score of 4.1. The cost-benefit ratios for each of the sectors, as well as the overall portfolio, are summarized in the table below.

Table 2: CBA Overview

Sector/Program	NJCT	SCT	TRC	PCT	PAC	RIM
Res	1.6	4.6	1.0	2.6	1.1	0.7
C&I	1.3	3.2	0.8	2.1	0.9	0.7
LMI	6.4	12.4	3.2	8.1	3.2	1.1
Total Portfolio	1.5	4.1	1.0	2.5	1.1	0.7
Behavior	1.7	2.1	1.3	2.7	1.3	0.7
Efficient Products	2.0	6.6	1.3	3.0	1.4	0.8
Existing Homes HPwES	1.1	2.4	0.7	1.8	0.9	0.6
Existing Homes QHEC	3.9	8.1	2.8	8.0	2.2	1.0
Existing Homes Moderate Income Weatherization	0.7	1.3	0.4	1.8	0.4	0.3
Energy Saving Trees	6.4	12.4	3.2	8.1	3.2	1.1
Multi-Family	2.5	5.3	1.7	3.9	1.9	1.0
Energy Solutions for Business: Prescriptive and Custom	4.3	9.5	2.8	5.1	3.4	1.8
Energy Solutions for Business: Engineered Solutions	1.0	2.4	0.6	1.7	0.8	0.7
Energy Solutions for Business: Energy Management	1.8	4.5	1.0	3.0	1.0	0.9
Energy Solutions for Business: Direct Install	2.5	5.0	1.7	3.9	1.4	0.9
Pilots	0.0	1.4	0.0	1.0	0.0	0.0

3. PROGRAM DESCRIPTIONS

SJG will administer the following programs to engage customers and encourage the pursuit of energy efficient solutions from single transactions to comprehensive upgrades. SJG will strive to provide customized guidance wherever possible and provide supporting resources to make energy-efficient retrofits more accessible for all customers.

The subprogram descriptions begin with core programs for residential, commercial, industrial, and multifamily. Then, the SJG led initiatives are outlined, followed by the pilot subprograms.

3.1. Residential Core Subprograms

Efficient Products: This program provides incentives for Efficient Products, including retail products, appliance rebates, HVAC equipment, and appliance recycling.

Existing Homes: Home Performance with ENERGY STAR: This sub-program provides incentives to encourage customers to pursue comprehensive upgrades to their home.

3.1.1. Efficient Products

This program will promote the installation of ENERGY STAR and other high-efficiency electric and natural gas equipment by residential customers by offering a broad range of energy efficient equipment and appliances through a variety of channels, including an online marketplace, downstream rebates to customers (including but not limited to in-store or online), up-front rebates, reduced point of sale costs, a midstream or upstream component and a network of trade allies and in collaboration with local foodbank and non-profit organizations serving customers in need. The program will provide incentives for energy efficient lighting, appliances, electronics, and heating and cooling equipment, as well as other energy efficiency products (e.g. smart thermostats, water saving measures, weatherization items, and prepackaged kits). Measures range in type and price, but include both electric and natural gas technologies that improve energy efficiency in the home. The program may include customer opportunities at no up-front cost to engage and introduce customers to energy savings opportunities and achieve energy savings. Up-front rebates will also be offered to reduce initial costs on some purchases, and on-bill repayment or access to financing with similar terms will be available to further reduce first cost barriers for select products. The program is designed to provide easy and cost-effective access to energy efficient measures through customers' preferred channels and also provide a means to encourage customers to take the first steps toward energy-efficiency.

The program is designed to:

- Provide incentives for products that reduce energy use in the home and information about other programs that encourage the installation of high efficiency equipment, such as lighting, HVAC units, other heating and cooling equipment, electronics and appliances.

- Provide midstream incentives to retailers and/or distributors to increase sales of ENERGY STAR or other energy efficient products.
- Continue to support and/or provide downstream approaches for certain measures to ensure market is properly supported.
- Provide a marketing mechanism for retailer and high efficiency product suppliers to promote energy efficient equipment and products to end users.
- Ensure the participation process is clear, easy to understand and simple for the customer and contractor.
- Provide online or other channels for customers that include but are not limited to online and in-store eligibility options to acquire select ENERGY STAR products, as well as low and moderately priced energy-saving products.
- Recognize unique barriers that low- and moderate-income customers face and employ strategies to address those barriers, including no cost measures and/or enhanced incentives where appropriate.
- Utilize energy efficiency kits to introduce and promote energy efficiency technologies that can be easily installed in the home. The kits will serve as a gateway to other programs by including energy efficiency and conservation educational materials and promotional materials for other program opportunities, including the utility, Comfort Partners and NJCEP programs.
- Provide energy efficiency kits to local foodbank and non-profit organizations and at energy assistance outreach events to reach low- to moderate-income customers, with schools to promote energy efficiency education in classrooms, to new movers, customers upon request, and within utility marketplaces to support customer engagement.

This program will increase adoption of energy efficient equipment and products by harnessing the unique utility customer relationship to positively impact the entire sales process surrounding efficient equipment, from education and awareness of customers, engagement with trade ally contractors and equipment distributors and retailers, to on-bill repayment or access to financing with similar terms for select products.

The utilities will use their brand and customer outreach infrastructure to increase the availability, awareness, and customer uptake of energy efficient products. On-bill repayments or access to financing with similar terms will be available to customers to cover the remaining cost (after applying the rebate discount) for the balance of the efficient product cost for select products and services.

Utility staff and/or a third-party implementation contractor(s) will be selected to assist with the administration, oversight, and delivery of the program. Activities will include in the launch of a statewide online marketplace with utility-specific interfaces, efforts to raise awareness of the program, on-going refinements to the list of eligible measures, validating customer eligibility and processing incentives and conducting outreach to and securing partnerships with retailers, wholesalers, distributors, manufacturers and trade allies to assure all customers are able to easily purchase energy efficient products and equipment through the program. Customer engagement and sales channels may include:

- **Post Purchase (Downstream) Rebates**: Rebates will be made available to customers after they have made their purchase. Applications may be available online or in stores to submit either electronically or in hard copy with proof-of-purchase.
- **Online Marketplace**: This online marketplace is an easy to use source for the online purchase of efficient products and services. Participants will be able to browse energy efficient equipment and appliances and purchase through the marketplace which will offer instant rebates and may offer the option for on-bill repayments or access to financing with similar terms for select products.
- **Point of Sale Rebates**: Prescriptive rebates will be made available at the point of sale for selected products. The utilities will also explore the viability of using a digital, smartphone-based application platform, to enable customers to purchase efficient equipment at traditional consumer retail outlets and instantly redeem rebates at point-of-sale in both physical stores and online. Allowing easy access to rebates encourages customers to purchase qualifying efficient products.
- **Appliance Recycling**: Rebates will be provided to customers for recycling qualifying, inefficient, operating appliances. Offering an incentive for the drop off or pick-up and removal of an appliance prevents the appliance from being maintained as a second unit or transferred to another customer.
- **Midstream or Upstream Rebates**: The utilities will pursue a midstream or upstream rebate component to encourage purchase of certain efficient equipment. The utilities will work with retail partners (such as Home Depot, Lowes, etc.), distributors or manufacturers to assure that measures are available throughout the state. Midstream or upstream rebates encourage market transformation and wider availability of efficient equipment. Efficient products that are rebated via a midstream or upstream approach may be passed on or discounted to the customer at the retail level. Utilities may also offer downstream rebate programs to ensure customers and trade allies are properly supported.
- **Trade Allies**: The utilities will establish a network of trade allies to promote certain components of the program with a consistent experience to the customer where applicable. The trade ally network will consist of qualified installation contractors, plumbers, electricians, and other trade service professionals who meet all applicable statewide requirements for performing the respective service (e.g. HVAC license, insurance requirements). Trade allies will be able to leverage the program and offer customers rebates through their normal course of business.
- **Community Partners**: The utilities will partner with foodbanks and other community organizations serving customers in need to help reduce the energy burden of those customers with no-cost energy efficient products and to raise the awareness of other energy efficiency and energy assistance programs available to help.

By developing relationships with both program and trade allies, the program will develop a broad reach across the marketplace, and also solicit feedback from the marketplace to ensure incentives and measures are impacting the market as designed. Targeted program and trade allies may include:

- Efficient equipment retailers, distributors and manufacturers

- HVAC & appliance contractors
- General contractors, plumbers, electricians, and other trade service professionals

Regardless of the delivery mechanism, the utilities will take steps to ensure customers are made aware of utility engagement in helping to off-set up-front costs of the efficient products.

Target Market or Segment (MFR II.a.ii)

The target market for this program will be all electric and/or natural gas customers served by at least one investor-owned utility in New Jersey. The program is focused on promoting the sale and installation of efficient electric and natural gas equipment across all major residential end-use categories, and can be easily promoted to program allies, trade allies and customers via straightforward prescriptive rebates. Technologies incentivized through this program include lighting, HVAC, other heating/cooling equipment, electronics, appliances, smart thermostats, water saving measures, weatherization items, pre-packaged kits, and other efficient products. The program will also promote the retirement, recycling, and replacement of old refrigerators, freezers, and other inefficient appliances.

The utilities may offer enhanced incentives for Low-to-Moderate income (LMI) customers (up to 400% of federal poverty level) for certain products to assure that the program reaches all customer types. Eligibility for these enhanced incentives can be determined based on screening an individual customer however the utilities will also explore implementing automatic eligibility for enhanced incentives based upon a physical location (e.g. census tract, environmental justice community, Urban Enterprise Zone) to encourage more activity in LMI communities.

Marketing Plan (MFR II.a.xiv)

The utilities will implement both multi-pronged direct and indirect marketing campaigns to promote this program. Customers will be exposed to broad-based energy efficiency awareness campaigns, web-based engagement and information, digital advertising, social media and hard-copy materials to promote awareness, as well as tie-ins with other programs. Retailers, wholesalers, distributors, manufacturers and trade allies will be contacted directly and through trade associations to develop networks and promote involvement in the program where applicable. The utilities will also look to leverage the behavior program for ‘warm leads’ into the program through both the home energy reports and online audit tool. In addition, the kits provided through this Program will include pamphlets and literature recommending customers visit utilities online portals and marketplace, further increasing engagement.

Targeting and promotion within this program will be enabled through intelligence gained through other residential programs or offerings, primarily Behavioral Home Energy Reports, Existing Homes, and other activity in the Efficient Products program. The utilities will explore opportunities to provide customized information to customers with prioritized action items, to maximize availability and uptake.

A combination of strategies will be used to train and support retailers, distributors and other program allies, including media advertising, outreach community forums, events, and direct outreach to customers. Marketing activities may include:

- Point of purchase displays and materials, joint advertising, coupons, and special "instant sales events"
- Public relations materials
- Brochures that describe the benefits and features of the program including application forms and processes. The brochures will be available for various public awareness events (community events, presentations, seminars etc.)
- Bill inserts, bill messages, email, Facebook, Twitter and other social media platforms, pop-up stores.
- Company website content providing program information resources, contact information, online application forms, online retail store and links to other relevant service and information resources
- Customer representatives trained to promote the program to their customers
- Presence at conferences and public events used to increase general awareness of the program and distribute program promotional materials

The primary market barriers that impact this program include:

- **Initial Cost of Efficient Equipment:** Relative to the market baseline, efficient equipment often carries a higher upfront cost but a lower lifetime operating cost. Customers often may not fully value the lifetime operating cost advantage of efficient equipment and, as a result, higher upfront cost is a barrier to purchasing efficient equipment. To address this barrier, incentives are provided to the customer to reduce the initial cost. On-bill repayment or access to financing with similar terms will also help mitigate the up-front cost barrier.
- **Customer Awareness and Engagement:** Residential customers may not be aware of the benefits of installing efficient equipment and/or lack the time and resources to pursue efficient equipment when replacing existing equipment. To address this barrier, the utilities will educate customers on the benefits of installing efficient equipment through targeted marketing, ensure that incentives are easily accessible, and encourage market transformation and stocking of efficient equipment through midstream incentives. Through outreach efforts, the utilities will seek to partner with retail and wholesale entities to promote program offerings, and also focus marketing, education, and outreach efforts on the trade ally community to ensure that trade allies are aware of available incentives and prepared to serve customers. To increase awareness among customers with English as a second language, utilities may develop and provide outreach materials in Spanish. The utilities intend to be active participants in both the Equity or Marketing Working groups and expect to address the need and cost for developing materials in a broader range of languages as part of those discussions.
- **Landlord/Tenant Arrangements:** Split incentives between landlord/tenants with respect to who pays for energy use vs. who owns the energy-using equipment challenge investment decisions. To address this barrier, the program will be marketed to both landlords and tenants to assure that those exposed to energy costs are able to participate in the program.

- **Sufficient Stocking and Availability of Efficient Products:** The utilities will look for opportunities to develop and promote a midstream component for specific equipment to encourage high levels of participation via incenting midstream market actors and/or directly discounting the cost of the efficient equipment at the point of sale.

The utilities will seek to manage all barriers to program success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. The utilities established customer communication channels, data, and brand in the marketplace will all be leveraged to deliver best-practice programs that identify and confront market barriers on an ongoing basis. To the extent possible, the utilities will cross-promote programs to spread awareness of the range of efficiency opportunities proposed in this plan.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)

The utilities and/or third-party implementation contractors will be responsible for identifying and engaging retail and wholesale entities dealing in energy efficient equipment to on-board them with the program vision, eligible efficient products, rebates, and ways to participate. Additionally, the utility and/or third-party implementation contractors will engage trade allies, including local HVAC, electrical, plumbing, and other contractors to educate them on program benefits and build a trade ally network which will reliably install energy efficient equipment for participating customers. The utility and/or third-party implementation contractors will also monitor participation to assess the effectiveness of outreach efforts, incentive levels, delivery methods, and both program ally and trade ally availability to provide suggestions to assure that the program is continually providing customers with their needs. The utility and/or a third-party implementation contractor will be responsible for the management of the online marketplace. The utilities will oversee the build-out of the online marketplace as well as the retail and Trade Ally network, which may be administered by third-party implementation contractors. The utility and/or third-party implementation contractors will also process the online instant rebates, verify eligibility of customers and manage the delivery of items purchased on the website.

To select qualified third-party implementation contractors, the utilities will prioritize criteria including but not limited to:

- Experience delivering similar programs or initiatives
- Resources and marketing strength
- Cost
- The amount of business placed with minority, women, veteran and service-disabled veteran owned businesses (“MWVBEs”).
- By allowing participants to select a trade ally they are comfortable with for select products, the program reduces barriers to entry related to knowledge of energy efficiency, confidence in assessments, and measure installation. The utilities will perform customer satisfaction and other quality assurance and quality control activities to monitor, ensure program and verify quality standards are met.

Existing and Proposed Incentives Ranges (MFR II.a.iii) (MFR II.a.iv)

The utilities propose to provide a range of incentives depending on the measure type, subject to changes based upon customer response and marketplace changes over the plan period. Incentives will vary depending on the specific product, the incremental cost of the high-efficiency technology, and the product maturity in the marketplace. Refer to Appendix B for the Summary of Proposed Incentive Ranges for this program.

Incentives will be available in several ways and are adapted to the retail partner needs and market response. Strategies may include:

- Mail-in applications available from the retailer and the program website or directly from contractors
- Online rebate forms
- Point of Sale or In-store "Instant Reward" coupons that are redeemed in-store at the time of purchase.
- Special sale events in retail stores
- Manufacturer buy down to Retailer
- Midstream or Upstream incentives to retailers, distributors or manufacturers to encourage them to stock and promote efficient products or to provide product incentives at time of purchase
- Partnerships with community groups, schools, and/or non-profit organizations

Incentives may change based on market prices, as well as manufacturer and distributor co-funding. Other incentive alternatives may be used as the market evolves and new and innovative customer, program ally and trade ally engagement opportunities become apparent.

In instances where incentives are not immediate, the utilities will complete consumer or contractor payments within 60 days following completion of contractor work, submission of complete and required paperwork, and completion of program requirements such as necessary field inspections (if required).

Customer Financing Options (MFR II.a.vi)

Refer to Appendix C for the Summary of Proposed Financing for this program.

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG residential customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data. Customers can also access historic usage data through the SJG home energy report portal usage using the Green Button option.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

The table below summarizes the projected participation and savings associated with this program. All values are annual incremental totals, and do not incorporate savings achieved in prior years.

Participation estimates are calculated as the sum of forecasted measure-level participation units, and each unit of participation is based on a measure-specific forecasted savings unit of measure. Savings estimates are based on projected participation during each year of the forecast period.

Table 3. Efficient Products Estimated Participation and Savings

Metric	PY1	PY2	PY3
Estimated Participants[5]	25,817	28,547	40,456
Projected Net Annual Natural Gas Savings (therms)	1,061,256	1,150,471	1,619,822
Projected Net Lifetime Natural Gas Savings (therms)	11,897,386	12,593,402	16,915,445
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	0	0	0
Projected Net Annual Electric Savings (kWh)	968,521	1,075,211	1,608,056
Projected Net Lifetime Electric Savings (kWh)	7,331,899	8,135,474	12,146,095
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	0	0	0
Projected Net Annual Peak Demand Savings (kW)	0	0	0
Projected Net Lifetime Peak Demand Savings (kW)	2	2	2

For customers in areas where gas and electric service territories overlap, the utilities will use the Statewide Coordinator to allocate costs and energy savings for shared measures. Refer to Section 6 for a description of the role of the Statewide Coordinator.

Program Budget (MFR II a.xi) (MFR II.a.xii)

The following table provides the subprogram budget broken down by the following categories: capital cost; utility administration; marketing; outside services; incentives (including rebates and low- or no- interest loans); inspections and quality control; and evaluation.

Table 4. Efficient Products Estimated Program Expenditures by Cost Category and Year

Cost Category	PY1	PY2	PY3
Capital Cost	0	0	0
Utility Administration	452,039	450,502	567,769
Marketing	212,522	219,083	285,631
Outside Services	1,286,630	1,278,064	1,605,266

[5] Due to the nature of the Products Programs, this will be reflected as the total number of units.

Incentives-rebates and other	4,537,569	4,765,869	6,325,063
Incentives-financing	11,396,753	11,396,753	13,676,103
Inspections and Quality Control	69,171	59,733	63,251
Evaluation	828,917	766,626	862,910
Total	18,783,601	18,936,629	23,385,992

3.1.2. Existing Homes: Home Performance with ENERGY STAR

Home Performance with ENERGY STAR ("HPwES") will provide a holistic approach for customers to explore and invest in the efficiency and comfort of their homes. All participants in this subprogram must have an initial energy audit performed directly by a qualified HPwES contractor or auditor. That audit will develop an energy efficiency action-plan that includes recommendations for upgrades and available incentives. To ensure the upgrades are accessible to customers, there will be financing available through either an On-Bill Repayment Program or access to financing with similar terms.

This subprogram is designed to review the entire status of a home, including equipment and envelope to achieve deeper energy savings. The program will follow guidelines and qualifying criteria associated with the U.S. Environmental Protection Agency HPwES (HPwES) program subject to as-needed enhancements to maximize participation and cost-effective energy savings opportunities. The utilities will also seek to increase the number of contractors certified to offer customers the U.S. Department of Energy Home Energy Score ("HES") to help customers understand how HPwES improvements can improve the efficiency and comfort of their home.

Target Market or Segment (MFR II.a.ii)

HPwES will be available to all single-family and single-family attached (1 to 4 unit properties) electric and/or natural gas customers served by at least one of the investor owned utilities in New Jersey.

As noted, all customers will start with a comprehensive energy audit or through upgrading from a QHEC. Potential measures incentivized through this program include but are not limited to insulation, air sealing, smart thermostats, and HVAC. All HPwES projects must include air sealing and insulation.

Marketing Plan (MFR II.a.xiv)

The utilities will utilize many marketing avenues to assure subprogram awareness and participation is maximized. These include traditional marketing avenues, such as web-based engagement and information, digital advertising, media advertising, and hard-copy materials to promote awareness among trade allies and customers. The utilities will also cross promote this subprogram to participants in other energy efficiency program offerings. Information garnered from other programs, such as the Residential Behavioral and Residential Efficient Products could

also be used to identify prime candidates for participation in this HPwES subprogram. For example, a review of usage data contained in Home Energy Reports from the Residential Behavioral Subprogram could allow the utilities to identify customers who are particularly susceptible to changes in weather and would be ideal candidates for an audit. Likewise, the Residential Efficient Products program could provide leads to customers interested in energy efficiency. Most importantly, the QHEC subprogram was specifically designed to educate, engage and provide immediate energy savings to customers and identify strong leads for candidates that would benefit from participating in this HPwES program.

The primary market barriers that impact this subprogram include:

- **Initial Cost of Comprehensive Home Retrofits:** Home retrofits are more expensive and involved than purchasing efficient equipment and therefore, require more participant investment and commitment. Customers must be willing and able to invest in more expensive energy efficiency projects. The utilities address this barrier by offering incentives and On-Bill Repayment Programs or access to financing with similar terms.
- **Traditional Credit Screening:** Many customers interested in pursuing comprehensive projects may not be able to pass traditional credit screening (e.g. requirements for debt to equity ratio) despite having a proven track record for paying their utility bills on time. The utilities will explore solutions to help more customers access this incentive through either an OBRP approach or access to financing with similar terms that relies on a review of utility payment history and bankruptcy check to ensure customers who have a proven track record have the opportunity to participate or through innovative approaches.
- **Customer Awareness and Engagement:** Many customers are unaware of the "whole house" approach to energy efficiency or the fact that building science exists. The utilities will work to address this by:
    - continuing to educate customers about the HPwES subprogram and how both the structure and equipment work together
    - highlighting the extra training that participating contractors must have
    - identifying how the shell measure improvements can improve their comfort within the home
    - noting that an audit includes health and safety testing
    - reinforcing that the investments in equipment and shell measures may increase the value of their home.

  To increase awareness among customers with English as a second language, SJG will develop and provide outreach materials in Spanish. SJG intends to be active participation in both the Equity or Marketing Working groups and expect to address the need and cost for developing materials in a broader range of languages as part of those discussions.
- **Trade Ally Awareness and Training:** To meet the participation goals, sufficient HPwES contractors must be available to undertake the work. The utilities will address this barrier by trying to recruit more HVAC contractors to secure the additional certification necessary to participate in this program, including pursuing initiatives that align with the Workforce Development Working Group strategies to include more local, underrepresented and disadvantaged workers.

The utilities will seek to manage all barriers to program success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. The utilities established customer communication channels, data, and brand in the marketplace will all be leveraged to deliver best-practice programs that identify and confront market barriers on an ongoing basis.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)-

The utilities will administer this HPwES subprogram and may also choose to select a third-party implementation contractor to manage delivery of this subprogram.

Utility staff and/or third-party implementation contractors will oversee all aspects of the subprogram, including training and engagement, QA/QC, and rebate processing. There will be a significant focus on developing, training, and growing a qualified trade ally network. This will include trade ally training sessions, workshops, and market development events to grow and develop the trade ally network, with a priority placed on encouraging them to integrate home efficiency performance into their business and become Building Performance Institute (BPI) certified contractors. Utility staff and/or third-party implementation contractors will maintain a close relationship with trade allies to ensure consistent subprogram delivery experience and high customer satisfaction. Utility staff and/or third-party implementation contractors will also take on the responsibility of providing an additional layer of customer support as needed and conducting selective verification of trade ally installation work.

Trade allies will consist of companies employing BPI-certified professionals to complete HPwES audits and energy-saving projects. In order to facilitate trade ally access to participants, utilities or the third-party implementation contractor will maintain a list of companies and professional services where customers can find local trade allies based on geography and other criteria.

Selection of third-party implementation contractors will prioritize criteria including but not limited to:

- Experience delivering similar subprograms or initiatives
- Knowledge of the current marketplace
- Ability to educate and train contractors
- Local presence
- Cost
- The amount of business placed with minority, women, veteran and service disabled veteran owned businesses (“MWVBEs”).

The utilities will encourage all participating contractors to also look for opportunities to promote measures from the Residential Efficient Products Subprogram, such as home appliances (e.g. clothes washers) to increase energy savings and leverage those incentives.

Existing and Proposed Incentives Ranges (MFR II.a.iii) (MFR II.a.iv)

The utilities will provide incentives to encourage customers to implement the measures recommended during their audit. Incentives will be calculated based on modeled savings through a sliding scale up to an overall project cap. Modeled savings will be based upon software that will use consistent calculations across territories. As the utilities work to launch midstream incentives for HVAC measures through the EE Products program, there is a recognition that a baseline incentive may be provided when a participating contractor secures the equipment from a participating distributor or retailer. The utilities intend to adjust the calculation of the incentive when an incentive has already been provided through a midstream path. However, the utilities have a shared intention to have the value of an HVAC measure being installed through this program be higher than a standalone HVAC equipment installation to ensure that customers are encouraged to pursue comprehensive upgrades and to recognize additional energy savings associated with improving the building shell.

Consistent with current practices for the New Jersey HPwES program, the utilities are proposing an incentive range for a Contractor Production incentive and separate scale for incentives for multi-family properties.

Refer to Appendix B for the Summary of Proposed Incentive Ranges for this program.

The utilities and/or third-party implementation contractors will complete consumer or contractor payments within 60 days following completion of contractor work, submission of complete and required paperwork, and completion of program requirements such as necessary field inspections (if required).

Customer Financing Options (MFR II.a.vi*)*

Refer to Appendix C for the Summary of Proposed Financing for this program.

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG residential customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data. Customers can also access historic usage data through the SJG home energy report portal usage using the Green Button option.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

The table below summarizes the projected participation and savings associated with this subprogram. All values are annual incremental totals, and do not incorporate savings achieved in prior years. In the context of the HPwES program, participants are defined as households that complete a HPwES project. Savings estimates are based on projected participation during each year of the forecast period.

Table 5. HPwES Estimated Participation and Savings - Represents all savings from lead utility projects

Metric	PY1	PY2	PY3
Estimated Participants	200	260	360
Projected Net Annual Natural Gas Savings (therms)	65,981	85,775	118,766
Projected Net Lifetime Natural Gas Savings (therms)	1,121,678	1,458,182	2,019,021
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	0	0	0
Projected Net Annual Electric Savings (kWh)	195,457	254,094	351,823
Projected Net Lifetime Electric Savings (kWh)	3,322,774	4,319,606	5,980,993
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	0	0	0
Projected Net Annual Peak Demand Savings (kW)	7	9	12
Projected Net Lifetime Peak Demand Savings (kW)	115	149	206

For customers in areas where gas and electric service territories overlap, the utilities will use the Statewide Coordinator to allocate costs and energy savings. Refer to Section 6 for a description of the role of the Statewide Coordinator.

Program Budget (MFR II a.xi) (MFR II.a.xii)

The following table provides the subprogram budget broken down by the following categories: capital cost; utility administration; marketing; outside services; incentives (including rebates and low- or no- interest loans); inspections and quality control; and evaluation.

Table 6. HPwES Estimated Program Expenditures by Cost Category and Year

Cost Category	PY1	PY2	PY3
Capital Cost	0	0	0
Utility Administration	87,743	108,232	142,310
Marketing	41,251	52,634	71,593
Outside Services	249,740	307,052	402,358
Incentives-rebates and other	880,760	1,144,988	1,585,368
Incentives-financing	1,540,000	2,002,000	2,772,000

Inspections and Quality Control	13,426	14,351	15,854
Evaluation	125,930	149,268	187,990
Total	2,938,850	3,778,524	5,177,473

3.2. Commercial & Industrial Core Subprograms

Direct Install: This subprogram provides a no-cost audit and direct install measures, and incentives for comprehensive retrofit projects. Non-residential customer can also receive financing for project costs.

Energy Solutions for Business: Prescriptive and Custom: This subprogram provides prescriptive and custom measures for lighting, HVAC, controls, and other C&I equipment.

3.2.1. Direct Install

The C&I Direct Install Program is focused on installation of efficiency measures for small businesses, non-profit organizations, municipalities, schools and faith-based organizations ("eligible customers") that typically lack the time, knowledge, or financial resources necessary to investigate and pursue energy efficiency. The program is designed to provide eligible customers with easy investment decisions for the direct installation of energy efficiency projects. The program will pay a percentage of the up-front cost to install the recommended energy efficiency measures, with the participating customer contributing the balance of the project not covered by the incentive. The program will also provide a repayment option to the customer for their required contribution. The no-cost energy assessment mitigates the time constraints and knowledge barriers while the reduced overall costs and repayment options mitigate up-front cost barriers and assist participants in making decisions, which otherwise would be time-consuming and difficult to justify. The C&I Direct Install program plays an important role in the marketplace because private providers of energy efficiency services typically do not target smaller customers due to the lower overall profit for their services when compared with larger non-residential customers. For these reasons, small businesses, non-profit organizations, municipalities, schools, and faith-based organizations are often hard to reach, and the program fills an important gap by targeting, promoting, and delivering efficiency services to these customers directly.

The energy assessment will be provided to customers free of charge and will offer recommendations on energy efficiency measures to reduce energy usage and costs. Standard basic energy savings measures may also be provided or installed at no cost at the time of the energy assessment to support customer engagement, participation, and energy savings.

The program will also focus on the smallest customers within the eligible customer segment. SJG anticipates portions of the program to be directed at restaurants, small offices, convenience stores and other small independent businesses that often are left behind in less-comprehensive energy

efficiency programs. Through a number of delivery mechanisms, SJG will assure that all eligible business types are able to participate in this program.

Target Market or Segment (MFR II.a.ii)

The program seeks to address the most cost-effective measures (e.g. LED lighting retrofits) but will also address all measure retrofits that would comprise a cost-effective project. Examples of end-use categories covered by the program include lighting, HVAC, controls, refrigeration, food service, motors, low-flow devices, pipe wrap and domestic hot water equipment.

The program will be divided into two tiers of eligibility, determined by the customer's individual facility peak electrical demand over the last 12 months. Tier 1 will serve the smallest of the eligible customer base, specifically focusing on customers with an average individual facility peak electrical demand of up to 100 kW. Tier 1 will also include customers up to 200 kW within an Urban Enterprise Zone, Opportunity Zone, and owned or operated by a local government, K-12 public schools. Additionally, customers with an average peak demand from 101 – 200 kW that are located within designated opportunity zones or Urban Enterprise Zones ("UEZ") may also qualify for Tier 1 status. Tier 2 will serve the larger segment of small non-residential customers, with an average individual facility peak electrical demand of 101 - 200 kW. This figure may be increased by the electric utility to ensure the program is properly addressing the market in the electric utility's service territory.

Marketing Plan (MFR II.a.xiv)

The C&I Direct Install Program will be marketed to customers through a combination of direct outreach by program staff, and/or the third-party implementation contractor, web-based engagement and customer information analytics, digital advertising, and hard-copy materials to promote awareness among trade allies and customers. Direct outreach may include visits to customer premises to distribute hard-copy program materials, inform customers about the program directly, and solicit participation. Additionally, SJG may engage community partners, including chambers of commerce and other local organizations including those comprised of underrepresented and socially or economically disadvantaged individuals. SJG will also consider the potential to utilize customer information analytics or other targeted energy education outreach to identify and target customers best suited for participation in the program. The collective marketing plan strategy is useful for enrolling eligible customers that may be interested in participating but have not heard of the program and do not have the time or resources to prioritize investigating energy efficiency opportunities or reaching out to SJG.

The primary market barriers that impact this program include:

- **Customer Awareness and Engagement:** Small businesses, non-profit organizations, schools and faith-based organizations typically have limited resources and time to consider or prioritize energy efficiency and may have efficiency needs not well aligned with traditional commercial demand side management ("DSM") programs targeted at larger customers. This program is intended to confront these market barriers by providing turnkey, direct installation of efficiency measures tailored to these eligible customers at no

cost, while identifying additional efficiency opportunities directly on-site, and through directly soliciting eligible customers for participation. This personalized approach builds trust and achieves results while increasing the likelihood of further participation referrals. To increase participation rates among a diverse demographic, utilities may include focused outreach efforts to reach minority- and women-owned small businesses, and start-ups by engaging with business groups and organizations that support these customers. Partner business groups might include the Chamber of Commerce, and the Small Business Administration. Utilities may also explore providing outreach materials in Spanish to reach Spanish-speaking business owners.

- **Initial Cost of Efficiency Investments:** Recommended energy efficiency projects that go beyond direct-install measures will require more participant investment and commitment. This barrier will be addressed through offering incentives and a repayment option, as well as through operating a program that is flexible and easy for small business customers to utilize.
- **Landlord/Tenant Arrangements:** Split incentives between landlord/tenants with respect to who pays for energy use versus who owns the energy-using equipment presents a unique challenge because the investor in the equipment does not experience an immediate benefit. The subprogram will employ strategies to help the landlord understand the long-term benefits of participating. This subprogram will be marketed to both landlords and tenants to assure that those exposed to energy costs and investments are able to participate in the program. Utilities may also provide technical and outreach assistance to property owners and managers in developing and marketing green properties.

SJG will seek to manage barriers to program success through a commitment to monitoring program performance and feedback channels for assessing effective program design, delivery, outreach, and marketing/advertising, and improvement opportunities. SJG's established customer communication channels, data, and brand in the marketplace will all be leveraged to deliver best-practice programs that identify and confront market barriers on an ongoing basis. To the extent possible, SJG will cross-promote program offerings to spread awareness of the range of efficiency opportunities proposed in this plan.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)

The C&I Direct Install Program interfaces with customers via either direct solicitation or upon customer request. All participants receive a site visit, including a free on-site energy assessment to identify energy efficiency retrofit opportunities. Standard basic energy savings measures may also be provided at no cost at the time of the energy assessment for eligible Tier 1 customers, to support customer engagement, participation, and energy savings. Following the energy assessment, participants are provided with a report assessing the site and recommending investments that could further improve the energy efficiency of the facility.

Based on the results of the energy assessment report, the program will offer to initially pay a percentage of the project cost to install the recommended energy efficiency measures with the participating customer (and/or landlord). The program will also provide a payment option to the customer (and/or landlord) for their portion of the project cost. SJG will provide for the installation of all work and assure it is completed on time and to specifications. This approach frees up the

participant, who may not have the time or resources to dedicate to project implementation. The distinction between Tier 1 and Tier 2 eligibility criteria will ensure that eligible customers, even those that are the smallest and often overlooked, receive ample focus. The simple, turnkey solution provides eligible customers with the initial site visit, energy assessment, and installation of recommended efficiency measures at no initial cost to participants.

SJG will administer and manage the program with the support of third-party implementation contractor(s) and/or utility staff. The third-party implementation contractor or Utility Staff will have responsibility for most delivery tasks and customer outreach on behalf of SJG. If used, the third-party implementation contractor will work closely with SJG to optimize the program offering, including, but not limited to:

- Initial participant recruitment, energy assessment, and equipment installation;
- Program data tracking;
- Direct customer outreach/program delivery strategy;
- Development of measure mix;
- Marketing;
- Promotion of emerging technology;
- Customer satisfaction.

Existing and Proposed Incentives Ranges (MFR II.a.iii) (MFR II.a.iv)

Both tiers of the program will encompass many of the same benefits, including a simple, turnkey solution for eligible customers, which requires no up-front investment. The initial site visit, energy assessment, and installation of recommended energy efficiency measures are provided at no initial cost to participants. The utilities propose to provide an incentive level of up to 70-80% of the project costs, and to continue discussions to determine the appropriate level and at what level the incentive is applied to best promote the completion of comprehensive projects while maintaining overall program cost effectiveness. Additionally, the utilities plan to coordinate on the methodologies and calculations used to determine energy savings and program incentives.

For Tier 1 customers, standard basic energy savings measures may be installed at no cost during the time of the energy assessment. The program will offer to pay up to 80% of the project cost to install the recommended energy efficiency measures with the participating customer (and/or landlord) repaying the balance not covered through the incentive either in a lump sum or through an available repayment option. Customers located in an Urban Enterprise Zone, Opportunity Zone, owned or operated by a local government or K-12 public schools will also qualify for Tier 1 status, up to an average individual facility peak electrical demand of 200 kW.

Tier 2 will serve the larger segment of eligible customers, with an average individual facility peak electrical demand of 101 - 200 kW over the past 12 months. Incentives up to 70% of the total project cost will be offered.

Refer to Appendix B for a list of incentives.

Customer Financing Options (MFR II.a.vi)

The participating customer (and/or landlord) will repay the balance not covered through the incentive either in a lump sum or through an interest free financing option with a term of five years. Refer to Appendix C for the Summary of Proposed Financing for this program.

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG commercial customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

The table below summarizes the projected participation and savings associated with this program. All values are annual incremental totals, and do not incorporate savings achieved in prior years. Participation estimates are calculated as the sum of expected number of small businesses participating in the program. Savings estimates are based on projected participation during each year of the forecast period.

Table 7. C&I Direct Install Participation and Savings

Metric	PY1	PY2	PY3
Estimated Participants	15	18	25
Projected Net Annual Natural Gas Savings (therms)	20,713	24,856	34,522
Projected Net Lifetime Natural Gas Savings (therms)	310,699	372,839	517,832
Projected Net Lifetime Natural Gas Savings from Qualifying Small-Business Customers (therms)	310,699	372,839	517,832
Projected Net Annual Electric Savings (kWh)	692,442	830,930	1,154,070
Projected Net Lifetime Electric Savings (kWh)	10,386,630	12,463,956	17,311,050
Projected Net Lifetime Electric Savings from Qualifying Small-Business Customers (kWh)	10,386,630	12,463,956	17,311,050
Projected Net Annual Peak Demand Savings (kW)	19	23	32
Projected Net Lifetime Peak Demand Savings (kW)	288	346	480

Program Budget (MFR II a.xi) (MFR II.a.xii)

The following table provides the subprogram budget broken down by the following categories: capital cost; utility administration; marketing; outside services; incentives (including rebates and low- or no- interest loans); inspections and quality control; and evaluation.

Table 8. C&I Direct Install Estimated Program Expenditures by Cost Category and Year

Cost Category	PY1	PY2	PY3
Capital Cost	0	0	0
Utility Administration	67,772	77,167	101,777
Marketing	31,862	37,527	51,202
Outside Services	192,897	218,921	287,757
Incentives-rebates and other	680,292	816,351	1,133,821
Incentives-financing	236,619	283,942	394,365
Inspections and Quality Control	10,370	10,232	11,338
Evaluation	47,699	52,189	65,931
Total	1,267,511	1,496,329	2,046,191

3.2.2. Energy Solutions for Business: Prescriptive and Custom

The C&I Prescriptive and Custom Measure subprogram will promote the installation of high-efficiency electric and/or natural gas equipment by SJG C&I customers, either via the installation of prescriptive or custom measures or projects. The subprogram provides prescriptive based incentives to commercial and industrial customers. Depending on the product, incentives can be realized through midstream or upstream channels, or downstream incentives for certain products. These measures will incent energy efficient lighting, appliances, heating and cooling equipment, and food service equipment, among other efficiency measures. Type and value of incentive provided will range and will include electric and/or natural gas technologies that improve energy efficiency. Up-front rebates will be offered to reduce initial costs and some purchases may qualify for low to no-interest financing to further reduce first cost barriers. Prescriptive measures are designed to provide easy and cost-effective access to energy efficient measures through customers' preferred channels.

Prescriptive rebates are designed to:

- Provide incentives to facility owners and operators for the installation of high efficiency equipment and controls
- Promote the marketing of high efficiency measures by trade allies such as electrical contractors, mechanical contractors, and their distributors to increase market demand.
- Ensure the participation process is clear and simple

Prescriptive incentives will increase adoption of energy efficient equipment by harnessing SJG's unique customer relationships to positively impact the entire sales process surrounding efficient

equipment, from education and awareness with customers, engagement with trade ally contractors and equipment distributors, to financing opportunities for the high efficiency equipment.

The subprogram also includes custom measures that provide calculated or performance-based incentives for electric and natural gas efficiency opportunities for commercial, industrial, and other non-residential customers that are non-standard and not captured by prescriptive opportunities. Calculated or performance-based incentives are designed to reduce the customer's capital investment for qualifying energy efficient equipment, to retrofit specialized processes and applications and/or to implement qualifying high efficiency building shell or systems improvements. Typical custom measures that are eligible for incentives are either less common measures or efficiency opportunities in specialized applications that may include manufacturing or industry-specific processes, or non-traditional use cases. In many cases, custom efficiency projects are more complex than prescriptive equipment replacement.

The subprogram may also develop a midstream approach, work with retailers, contractors, distributors and/or manufacturers for midstream or upstream incentives or point of purchase buydowns for select measures such as lighting, HVAC, food service and agriculture.

Potential participants are required to submit an application for pre-approval to reserve funding. The Utility and/or implementation contractors will develop electronic rebate application forms that will guide applicants through eligibility guidelines, subprogram requirements, terms and conditions, and general information. In addition, the Utility and/or implementation contractors will provide applications in web ready formats to ensure participants have easy access to the forms. The pre-approval process provides for the review of the customer's proposed project to confirm measure eligibility and incentive budget availability. This also supports the Company's subprogram management because it communicates projects that are in the pipeline. If accepted and pre-approved by SJG, a timeline is established for project completion to qualify for a rebate. The typical lead time for completing a custom project is 90 to 120 days but can be longer depending on the complexity of the project. Large projects, or subsets of projects, may be required to undergo pre-and post-inspection to validate project energy savings. Approved projects may also be eligible for low to no cost financing to further reduce first-cost barriers.

Target Market or Segment (MFR II.a.ii)

The C&I Prescriptive and Custom Measures subprogram will be available to all commercial, industrial, and other non-residential customers located within SJG's service territory. This subprogram is focused on promoting the sale and installation of efficient electric and/or natural gas equipment across all major end-use categories and can be easily promoted to trade allies and customers via straightforward prescriptive rebates, or more complex custom rebates. Potential technologies incentivized through prescriptive measures include energy efficient lighting, appliances, heating and cooling equipment, and food service equipment, among other efficiency measures. Customers pursuing custom incentives will generally be customers with more complex needs and non-standard efficiency opportunities. Typically, this include building types such as light/heavy industrial, manufacturing, data centers, and distribution centers, among others.

Marketing Plan (MFR II.a.xiv)

The C&I Prescriptive and Custom Measures subprogram will engage with customers and trade allies at multiple levels, including broad-based energy efficiency awareness campaigns, direct outreach by subprogram staff and representatives, web-based engagement and information, digital advertising, and hard-copy materials to promote awareness among trade allies and customers. In some cases, subprogram staff and representatives will reach out directly to large customers. Use of appropriate types of media are anticipated to be included in the marketing plan, such as direct mail, email, print, and digital media. Engagement with trade associations (e.g. builders, architects, engineers, equipment distributors, professional and contractor associations, etc.) will also be important venues for SJG to present information about the subprogram, raise awareness and encourage participation.

Marketing will be used to target specific customer sectors to ensure awareness in the subprogram and enhance participation. The Utility and/or implementation contractor will target various market sectors (i.e. education, medical/health care, manufacturing, retail, food service) to enhance participation and promote a cross-section of measures applicable to each market. Since prescriptive retrofits are generally one-for-one replacements, measure-specific collateral pieces will be developed for new measures or enhanced for continuing measures. These will be delivered to sectors most likely to utilize the specific technology. Fact sheets, mailings, post cards, e-blasts, and on-location seminars will all be used to promote specific measures. Custom marketing efforts require a consistent and directed outreach to trade allies and associations, The Utility and/or implementation contractors will be required to develop and implement a marketing plan to identify and target customers to connect them to appropriate measures using e-blasts, webinars, on-site seminars, and large customer publications, among other marketing and outreach initiatives. Further, in order to attract multiple measure participation, the Utility and/or implementation contractor will outreach via sectors, as well as to trade allies and associations such as architects, engineers and professional associations. Targeted advertisements in industry/trade publications will also be required to bring awareness to the opportunities and savings available through the Custom offering. The utilities anticipate developing a coordinated marketing approach with the Office of Clean Energy to ensure a simple and streamlined program offering.

The primary market barriers that impact this subprogram include:

- **Initial Cost of Efficient Equipment:** Relative to the market baseline, efficient equipment often carries a higher upfront premium but a lower lifetime operating cost. Purchasers often may not fully value the lifetime operating cost advantage of efficient equipment and as a result, higher upfront cost is a barrier to purchasing efficient equipment. To address this barrier, incentives are provided to the customer to reduce the initial cost through a variety of channels including at midstream and downstream points. Access to financing for certain measures will also help address this barrier.
- **Customer Awareness and Engagement:** Commercial and Industrial customers may not be aware of the benefits of installing efficient equipment and/or lack the time and resources to pursue efficient equipment when replacing existing equipment. To address this barrier, SJG will educate customers on the benefits of installing efficient equipment through

targeted marketing, ensure that incentives are easily accessible, and encourage market transformation and stocking of efficient equipment through midstream incentives. Through outreach efforts, SJG will seek to partner with retail and wholesale entities to promote program offerings, and also focus marketing, education, and outreach efforts on the trade ally community to ensure that trade allies are aware of available incentives and prepared to serve customers.

- **Landlord/Tenant Arrangements:** Split incentives between landlords, who own the energy-using equipment, and tenants, who pay for energy use, challenge the incentive to participate in the program. This program will be marketed to both landlords and tenants to assure those exposed to energy costs are able to participate in program
- **Sufficient Stocking and Availability of Efficient Products:** To support a robust marketplace for efficient equipment, SJG will promote midstream incentives for specific equipment types to encourage participation via incentives for distributors or retailers to stock and promote the purchase of or for directly marking down the cost of the efficient equipment at the point of sale

SJG will seek to manage barriers to subprogram success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. SJG's established customer communication channels, data, and brand in the marketplace will all be leveraged to deliver best-practice programs that identify and confront market barriers on an ongoing basis. SJG will cross-promote programs and subprograms to spread awareness of the range of efficiency opportunities proposed in this plan.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)

SJG may outsource some or all of the implementation of this subprogram to an implementation contractor who would be responsible for defined functions, which could include administration, marketing, application processing and documentation regarding purchased products and processing incentives and rebates. The Company will perform overall administration and oversight of the subprogram. To maximize customer participation and streamline the customer experience, SJG will use its strong customer and marketplace relationships to support multiple implementation strategies to achieve subprogram goals.

- **Trade Allies:** SJG and/or the implementation contractor will target trade allies (e.g. electricians, HVAC contractors, lighting retailers and distributors, building energy managers, etc.) to promote the efficiency opportunities and incentives to their clients. Trade allies will be able to leverage the subprogram and offer customers rebates through their normal course of business. By developing relationships with trade allies, the subprogram will develop a broad reach across the marketplace and solicit feedback to ensure incentives and measures are impacting the market as designed. Examples of targeted trade ally firms include:
    - Design, engineering, and controls firms
    - HVAC distributors, contractors, and retail providers
    - Food service retailers and service providers
    - Commercial lighting distributors and wholesalers

- **Retail:** SJG subprogram staff, the implementation contractor, and field representatives will work with retailers and distributors that directly target C&I customers, so they are aware of the participation process and available equipment incentives. SJG and/or implementation contractor will also provide support and assistance to retailers or distributors to support identification and promotion of qualifying energy efficient products. This will also include training and instruction to participating retailers and distributors about the SJG application forms.
- **Midstream:** SJG and/or the implementation contractor may promote a midstream component for specific equipment types to encourage purchase of efficient equipment via directly marking down the cost of the efficient equipment at the point of sale. Midstream rebates encourage market transformation and wider availability of efficient equipment. SJG anticipates offering midstream point of sale discounts across numerous equipment types, including, but not limited to: LED lighting, HVAC, and food service equipment. Efficient products that are rebated via a midstream approach will not be eligible for rebates in any other SJG rebate program. The Utility and/or implementation contractor will also provide support and assistance to distributors to support identification and promotion of qualifying energy efficient products. This will also include training and instruction to participating distributors as well as enrollment of distributors to participate in midstream subprogram offerings
- **Digital:** The subprogram will be marketed directly to C&I customers on the SJG website, where customers will have easy access to information regarding eligible equipment and savings opportunities, how to participate, and incentives across all efficient equipment types and end-uses.
- **Targeted Customer Outreach:** SJG staff may choose to reach out directly to large business and commercial customers to develop relationships with energy and facilities managers, operations staff, and procurement personnel. Subprogram staff can help facilitate completion of rebate applications and serve as a direct resource to these customers, providing technical support and helping to assist customers in identifying efficiency opportunities.
- **Technical Customer Assistance:** An important element of the C&I Prescriptive and Custom Measures subprogram is the availability of technical support. The Utility and/or implementation contractor will provide technical support to customers on the application of the energy efficiency measures and technologies included in this subprogram, including supporting project identification, developing energy savings calculations, and assessing project economics as required.

Measurement & Verification ("M&V") for projects above a certain estimated incentive size, or projects that do not have reliable information to accurately forecast energy savings may require energy monitoring before and after project implementation to determine savings and incentive amounts.

Contractor Requirements and Role

It is anticipated that any third-party implementation contractor will work closely with SJG to optimize the subprogram's strategic direction, including, but not limited to, the following activities:

- Offered incentive levels and strategies
- Customer satisfaction
- Measurement and verification during on-site visits
- Subprogram data tracking
- Rebate payments

SJG may select a qualified third-party implementation contractor (or contractors) based on, but not limited to, the following factors:

- Technical Approach
- Organizational and Management Capability
- Experience
- Cost
- The amount of business placed with minority, women, veteran, and service-disabled veteran owned businesses ("MWVBEs").

A comprehensive contractor agreement, containing information about equipment certification (such as DLC lighting, etc.), licensing, insurance requirements and more, will be developed and provided to all participating contractors.

Utility Service Area Overlap

For customers in areas where gas and electric service territories overlap, the utilities will use the Statewide Coordinator to allocate costs and energy savings for shared measures. Refer to Section 6 for a description of this role.

Existing and Proposed Incentives Ranges (MFR II.a.iii) (MFR II.a.iv)

The utilities propose to provide a range of incentives depending on the measure type, subject to changes based upon customer response and market conditions over the plan period. Incentives will vary depending on factors including but not limited to the specific product, the incremental cost of the high-efficiency technology, and the product maturity in the marketplace. Refer to Appendix B for the Summary of Proposed Incentive Ranges for this program.

In instances where incentives are not immediate, the utilities will complete consumer or contractor payments within 60 days following completion of contractor work, submission of complete and required paperwork, and completion of program requirements such as necessary field inspections (if required).

Customer Financing Options (MFR II.a.vi)

The participating customer will repay the balance not covered through the incentive either in a lump sum or through a financing option.

Refer to Appendix C for the Summary of Proposed Financing for this program.

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG commercial customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

The table below summarizes the projected participation and savings associated with this subprogram. All values are annual incremental totals, and do not incorporate savings achieved in prior years. Participants are defined as measures in the context of the prescriptive and custom subprogram. Savings estimates are based on projected participation during each year of the forecast period.

Table 9. C&I Prescriptive and Custom Participation and Savings -Represents all savings from lead utility projects

Metric	PY1	PY2	PY3
Estimated Participants	843	852	1,133
Projected Net Annual Natural Gas Savings (therms)	77,700	79,631	106,305
Projected Net Lifetime Natural Gas Savings (therms)	176,888	195,968	266,582
Projected Net Lifetime Natural Gas Savings from Qualifying Small-Business Customers (therms)	0	0	0
Projected Net Annual Electric Savings (kWh)	617,447	712,827	978,696
Projected Net Lifetime Electric Savings (kWh)	14,216,211	15,696,446	21,335,814
Projected Net Lifetime Electric Savings from Qualifying Small-Business Customers (kWh)	0	0	0
Projected Net Annual Peak Demand Savings (kW)	36	38	51
Projected Net Lifetime Peak Demand Savings (kW)	878	913	1,223

Subprogram Budget (MFR II a.xi) (MFR II.a.xii)

The following table provides the subprogram budget broken down by the following categories: capital cost; utility administration; marketing; outside services; incentives (including rebates and low- or no- interest loans); inspections and quality control; and evaluation.

Table 10. C&I Prescriptive and Custom Estimated Program Expenditures by Cost Category and Year

Cost Category	PY1	PY2	PY3
Capital Cost	0	0	0
Utility Administration	34,265	36,394	47,081

Marketing	16,109	17,699	23,685
Outside Services	97,527	103,250	133,112
Incentives-rebates and other	343,949	385,017	524,489
Incentives-financing	293,178	354,691	445,161
Inspections and Quality Control	5,243	4,826	5,245
Evaluation	33,144	35,086	41,834
Total	823,416	936,962	1,220,607

3.3. Multi-Family Program

This program addresses multifamily structures with three or more units. As such, there can be significant variation in the types of structures served under this Program ranging from residential type dwelling with three units to large garden apartment complexes to multi-story high rise buildings. In order to meet the specific needs of each customer, the Multi-Family Program will provide, in conjunction with the customer, a structured screening review to identify and develop the project plan for the customer. Potential program services include customer engagement with energy efficiency education through energy assessments, installation of standard energy savings measures, comprehensive energy savings opportunities including prescriptive equipment replacement, custom retrofit projects and engineered solutions and emergency equipment replacement. In addition, the Multifamily Program will provide On-Bill Repayment or access to financing with similar terms and enhanced incentives for low income/affordable housing properties

The Multi-Family Program will seek to work with each customer to determine and package the best energy savings opportunities based on the Company's current program offerings (e.g. direct installation of standard energy savings measures, prescriptive equipment replacement, custom retrofit or engineered solutions), with an emphasis to encourage more comprehensive projects wherever possible. Customers will begin participation in the Multi-Family Program with a screening to identify and develop a project plan. The initial screening may include an energy assessment and installation of standard energy savings measures to help encourage program participation. The assessment will also identify additional energy savings opportunities and develop the project plan that is the best fit for each specific customer and building.

Applications to this program will be reviewed to determine the project plan depending on the type of housing stock and ownership structure. The screening process will consider various factors to create a project plan that will deliver a high level of energy savings in the most cost-effective manner. Examples of these factors include, but are not limited to:

- Building size
- Number of units

- If the facility is being served by a central plant
- If there are individual heating and cooling units
- If there are building envelope/weatherization opportunities
- Application review with a potential virtual site inspection
- Application review with potential telephone interview with Property Management
- An on-site pre-scoping audit may be performed

Depending upon the screening results and the customer's interests, a customer's project plan could include direct installation of standard energy savings measures, incentives for prescriptive equipment replacement, custom retrofit opportunities, or a Comprehensive Engineered Solutions project. The measures within the project plan will be consistent with the terms and conditions of the Company's applicable residential and/or commercial & industrial program offerings (e.g. Existing Homes, Efficient Products, Energy Solutions for Business). Therefore, the project plan can include prescriptive measures with set energy-savings and/or custom projects with savings on a project basis. Please refer to these program descriptions for more information on these program offerings and the associated terms and conditions, including delivery methods and contractor roles.

Target Market or Segment (MFR II.a.ii)

All multi-family buildings with three or more units that are served by at least one investor owned utility are eligible to participate. The Program targets multi-family property owners, property managers, and residents, who, because of the building owner – tenant relationship, have always had difficulty investing in energy efficiency equipment. The utilities will also target outreach to economically qualified occupants and owners of multifamily buildings who are eligible for enhanced incentives. Eligibility for these enhanced incentives can be automatic based upon the type of property that has a Low or Moderate-Income designation (e.g. New Jersey Housing and Mortgage Financing Agency qualified, Housing Authorities) or by a physical location (e.g. census tract, environmental justice community, Urban Enterprise Zone). The program may refer prospective customers to Comfort Partners as appropriate.

Marketing Plan (MFR II.a.xiv)

The marketing strategy will focus on informing property owners, managers, associations, tenant groups, municipalities, and community organizations about the availability and benefits of the program and how to participate. Marketing activities will also target lower and moderate-income multi-family sector. Key elements of the marketing strategy may include:

- Targeted outreach through direct mailings and presentations to inform property owners, managers, apartment associations, tenant groups, municipalities and community organizations about the benefits of the program and participation processes
- Brochures highlighting the benefits and features of the program as well as the enrollment and participation processes
- Website content providing program information resources and contact information
- In-person visits by program representatives to properties with three or more units

- Energy assessments of properties may include the direct installation of standard energy savings measures to engage, educate and promote the building owners or facility managers to participate in the other program offerings targeting deeper savings.

The primary market barriers that impact this program include:

- **Business/Operational Constraints:** Multi-family properties often have unique operational and time constraints that act as a barrier to implement energy efficiency projects. This barrier will be addressed by ensuring the program operates cooperatively with participants, provides program participation and technical assistance, and offers timely incentives and financing support.
- **Customer Awareness and Engagement:** Eligible participants may be unaware of energy efficiency opportunities and programs because the segment has historically not been well served by traditional energy efficiency programs. To address this barrier, this program was designed specifically to support the multi-family segment. The utilities will execute targeted outreach strategies to ensure that relevant customers are aware of program opportunities and consider energy efficiency in equipment investments and long-term planning. The program will also prepare and distribute successful case studies of prior participants and their experiences and energy savings.
- **Cost Effectiveness:** Efficiency upgrades require an initial investment that is recovered by lower long-run operating costs and non-energy benefits. Multi-family projects may carry longer payback periods than traditional energy efficiency projects due to the unique needs of the segment. To address this barrier, incentives and access to OBRP or similar financing options will be provided to the customer to reduce the initial cost. The utilities will also communicate the non-energy benefits offered by many efficiency upgrades that may not be captured in the cost/benefit analysis to further promote efficiency upgrades to customers.

Additionally, the utilities considered the following market barriers identified in the Utility Demographic and Firmographic Profile 2020 Study[6].

- **Split incentives:** Multi-family properties can face challenges for energy efficiency improvements since the owner generally does not pay the utility bills and may not reap the full benefit of any energy efficiency investment. To address this barrier, the utilities will market to both landlords and tenants to assure that those exposed to energy costs are able to participate in the program, provide low- and no-cost measures at no cost to the tenant or the landlord, and offer comprehensive approaches for multi-family, including application, technical and engineering support to design cost-effective projects with benefits for owners and renters.

[6] The purpose of this study was to examine the demographics and firmographics of all customers in the service territories of each of the electric and gas public utilities in New Jersey. This is to comply with P.L. 2018, c. 17, codified at N.J.S.A. 48:3-51-87 et seq., commonly known as the Clean Energy Act of 2018 ("Clean Energy Act" or "CEA"), as well as in response to the New Jersey Board of Public Utilities (NJBPU) Order Docket Nos. QO19010040 and QO19060748 (dated October 7, 2019), which directed the utilities to complete a demographic analysis pursuant to the Clean Energy Act. The study was released on April 30, 2020 and can be found here.

- **Complex buying process:** There can be a broad range of potential energy efficiency investments, but it can be challenging to identify which strategies may be the most beneficial for owners and/or tenants. To address this barrier, the program will provide customized screening and on-going support to help find the best solution for the customer and include incentives to encourage the customer to implement the recommended solutions.

The utilities will seek to manage all barriers to program success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. The utilities will leverage their established customer communication channels, data, and brand in the marketplace to identify and confront market barriers on an ongoing basis.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)

The Multi-Family Program will be delivered in coordination between both the Lead Utility and the Partner Utility (where applicable) and/or qualified third-party implementation contractor(s) with experience delivering similar programs. Because of the unique and varied nature of the multi-family market Program representatives will build relationships with property management companies, owners, associations and their members to recruit participation in the Program. The Program will assist customers as necessary to coordinate scheduling of the Energy Assessment and direct installations and will provide program and technical support to complete program and rebate application requirements.

Delivery of energy-saving measures will be dependent on the project plan and may include direct install standard energy savings measures, installation of prescriptive measures, or custom projects. It may be necessary to schedule appointments for the installation of energy saving measures in the individual living units and common areas. In-unit HVAC tune-ups may also be offered to the property owner or tenant. The installation crews are trained on the technical and educational aspects of the energy saving devices installed and leave educational materials in each unit describing the work performed and explaining the energy-saving benefits.

Existing and Proposed Incentives (MFR II.a.iii) (MFR II.a.iv)

The following table provides a summary of the existing and proposed incentives for each of the potential components of the project plan for each building under the Multi-family Program.

Program Component/Service	Existing Incentive[7]	Proposed Incentive
Energy Assessment with installation of	N/A	• Energy Assessment with the equipment and installation costs for the standard energy

[7] Existing incentives generally represent currently available NJCEP incentives. For Engineered Solutions, they would represent the incentives currently approved for the New Jersey utilities that currently run this program.

standard energy savings measures		savings measures will be provided to eligible properties with "Up to 100%" of the cost provided by the program.
Prescriptive Equipment replacement and custom retrofit projects	• See the list of existing incentives in the descriptions of the Residential and Commercial & Industrial programs currently available for the prescriptive equipment replacement and custom retrofits	• Same value as incentives offered through the Residential and Commercial & Industrial programs applicable for the prescriptive equipment replacement and custom retrofits • Includes enhanced incentives offered for properties that are located in qualifying target areas or for LMI qualified customers.
Engineered Solutions	• No cost ASHRAE Level I, II, or III audit. • Program will buy-down the simple payback of the recommended energy efficiency project cost for approved measures by up to six years, with the resulting payback not less than three years.	• No cost ASHRAE Level I, II, or III audit. • Program will buy-down the simple payback of the recommended energy efficiency project cost for approved measures by up to six years, with the resulting payback not less than three years.

Refer to Appendix B for the Summary of Proposed Incentive Ranges.

Customer Financing Options (MFR II.a.vi)

Program Component/Service	**Existing Incentive**
Prescriptive Equipment replacement and custom retrofit projects	Same financing option as available through the Residential and Commercial & Industrial programs applicable for select prescriptive equipment replacement and custom retrofit projects
Engineered Solutions	After the project incentive buy-down, the remaining project costs may be repaid by participants at no to low interest financing through an OBRP or other financing option with similar terms. Properties eligible for the Enhanced Low to Moderate Income incentive will be eligible for up to a 10-year repayment term.

Refer to Appendix C for the Summary of Proposed Financing.

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG residential customers will have access to customer data through the online customer service portal and through the home energy report portal using the Green Button option.

SJG commercial customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

The table below summarizes the projected participation and savings associated with this Program. All values are annual incremental totals, and do not incorporate savings achieved in prior years. Savings estimates are based on projected participation during each year of the forecast period.

Table 11. Multifamily Program Estimated Participation and Savings

Metric	PY1	PY2	PY3
Estimated Participants	652	1,072	1,353
Projected Net Annual Natural Gas Savings (therms)	18,001	30,899	42,768
Projected Net Lifetime Natural Gas Savings (therms)	242,927	427,180	614,772
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	0	0	0
Projected Net Annual Electric Savings (kWh)	813,087	1,498,101	2,086,409
Projected Net Lifetime Electric Savings (kWh)	12,842,277	24,269,398	34,609,314
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	0	0	0
Projected Net Annual Peak Demand Savings (kW)	12	22	32
Projected Net Lifetime Peak Demand Savings (kW)	194	377	549

For customers in areas where gas and electric service territories overlap, the utilities will use the Statewide Coordinator to allocate costs and energy savings. Refer to Section 6 for a description of the role of the Statewide Coordinator.

Program Budget and Project Costs by Year

The following table provides projected program costs, by year, broken down into the following categories, as applicable: capital cost; utility administration; marketing; outside services; incentives (including rebates and low- or no- interest loans); inspections and quality control; and evaluation.

Table 12. Multifamily Program Estimated Program Expenditures by Cost Category and Year

Cost Category	PY1	PY2	PY3
Capital Cost	0	0	0
Utility Administration	58,126	105,736	143,320
Marketing	27,328	51,420	72,101
Outside Services	165,443	299,971	405,212
Incentives	583,470	1,118,585	1,596,617
Incentives-financing	245,108	490,217	735,325
Inspections and Quality Control	8,894	14,020	15,966
Evaluation	43,103	76,309	100,607
Total	1,131,473	2,156,258	3,069,148

3.4. Residential Additional Utility Led Subprograms

Home Energy Reports: This program initially includes behavioral initiatives and energy education. This program can reach a significant portion of the utility customer base, including low-to moderate-income segment and share personalized education, including guidance on low and no-cost energy saving strategies.

Existing Homes: Quick Home Energy Check-Up (QHEC): This subprogram helps customers understand their best opportunities to save energy through an in-home consultation and also secure energy savings during that visit through the direct installation of energy saving measures. It will be designed to help renters as well as homeowners and promotes additional energy savings opportunities and upgrades available to the customer.

Existing Homes: Moderate Income Weatherization: This subprogram provides an opportunity for low to moderate income customers to receive no cost energy efficiency measures and upgrades.

Energy Saving Trees: This subprogram will provide energy saving trees to residential customers. The trees will also provide other benefits, including carbon reduction.

Note: Comfort Partners, the comprehensive energy efficiency solution for low income customers in New Jersey, is not addressed within this filing since it is intended to be run as a Co-Managed Program under Societal Benefits Clause funding which is not the subject of this proceeding.

3.4.1. Home Energy Reports

The Home Energy Report ("HER") subprogram builds on several years of experience in driving residential customer behavior change through the delivery of data and information about home energy consumption through personalized reports. This program is a proven method to reduce energy consumption and save customers money. HERs provide energy information through different lenses to help customers better understand energy use patterns, including:

- Monthly energy consumption for the home
- Comparison of energy use to similar homes
- Savings opportunities for customers
- Ways to engage in energy efficiency programs
- Energy savings tips
- How to engage with utilities

HERs are provided to customers through multiple channels including direct mail and email. This information is provided to customers to gain better insights into their own energy use as well as inform them how they compare to their peers. This comparison is a significant driver of behavior change in customers.

HERs lead to greater customer satisfaction and better engagement with the energy efficiency programs and the utility company. Part of this satisfaction comes from the targeted information that can be provided to customers including personalized energy efficiency recommendations and information on how to participate in SJG energy efficiency programs.

Target Market or Segment (MFR II.a.ii)

The residential behavioral program will be offered to a subset of single-family residential customers in SJG territory. The actual number of participants will be established by SJG and its HER contractor to ensure an adequate sample size, control group size, and targeted savings goals. This group will be reviewed regularly to ensure that the savings are maximized in a cost effectively manner.

Marketing Plan (MFR II.a.xiv)

HERs are provided to customers at no cost, and customers may choose to opt-out, rather than opt-in to receive the HERs. Therefore, this program requires no direct marketing to acquire program participants. This program will enable marketing of other SJG energy efficiency programs and specific energy savings opportunities for customers.

The market barriers for this program include:

- **Customer Attention:** Customers may not read the reports and act on potential savings opportunities. To address this barrier, SJG intends to communicate with the customer in the way that is best for them. Reports will be delivered by mail, by email, and through a web portal. This multi-mode communications strategy will allow customers to engage based on their level of comfort and be made aware of how their decisions impact energy

usage. SJG will know in real time how customers are responding to the program (because savings are estimated on a regular interval) and can make adjustments to the treatment group and delivery mechanism as needed.

- **Customer Understanding of Opportunities:** Customers may not understand the opportunities to save energy in their homes and how to engage in these opportunities. To address this barrier, messaging in the HERs will include customized, easy to understand recommendations for customers based on their usage data. Reports will also include information on how customers can engage with SJG's additional energy efficiency programs.
- **Customer Indifference / Habits:** Customers may have well established poor energy use habits and may be indifferent to making any behavioral changes. The awareness of energy usage in comparison to peers may not impact every customer, but in the aggregate, there is a measurable behavioral change.

SJG will seek to manage all barriers to program success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. SJG established customer communication channels, data, and branding in the marketplace will all be leveraged to deliver best-practice programs that identify and confront market barriers on an ongoing basis. To the extent possible, SJG will cross-promote programs to spread awareness of the range of efficiency opportunities proposed in this plan.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)

HERs will be delivered by a competitively selected contractor. This contractor will be asked to provide hard copy mail-delivered reports and email reports. SJG will work with the selected HER contractor to determine the best suite of options to deliver to customers, including high usage warnings, targeted energy efficiency recommendations, and other updates on usage.

These reports will be provided to customers at no charge and customers will be permitted to opt-out of the program at any time.

To select qualified third-party implementation contractors, SJG will prioritize criteria including but not limited to:

- Experience delivering similar programs or initiatives
- Resources and marketing strength
- Cost
- The amount of business placed with minority, women, veteran and service-disabled veteran owned businesses ("MWVBEs").

Existing and Proposed Incentives Ranges (MFR II.a.iii) (MFR II.a.iv)

The HER program and associated service is provided at no cost to SJG customers and they are able to opt-out at any time.

Customer Financing Options (MFR II.a.vi)

The HER subprogram will not utilize financing.

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG residential customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data. Customers can also access historic usage data through the SJG home energy report portal usage using the Green Button option.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

The table below summarizes the projected participation and savings associated with this program. All values are annual incremental totals, and do not incorporate savings achieved in prior years. Participants in the context of the home energy report subprogram are defined as a customer receiving reports over a one-year period. Savings estimates are based on projected participation during each year of the forecast period.

Table 13. Home Energy Report Program Estimated Participation and Savings

Metric	PY1	PY2	PY3
Estimated Participants	150,000	150,000	150,000
Projected Net Annual Natural Gas Savings (therms)	634,197	556,939	466,642
Projected Net Lifetime Natural Gas Savings (therms)	1,358,284	1,192,817	999,426
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	0	0	0
Projected Net Annual Electric Savings (kWh)	0	0	0
Projected Net Lifetime Electric Savings (kWh)	0	0	0
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	0	0	0
Projected Net Annual Peak Demand Savings (kW)	0	0	0
Projected Net Lifetime Peak Demand Savings (kW)	0	0	0

For customers in areas where gas and electric service territories overlap, the utilities will use the Statewide Coordinator to allocate costs and energy savings for shared measures. Refer to Section 6 for a description of the role of the Statewide Coordinator.

Program Budget (MFR II a.xi) (MFR II.a.xii)

The following table provides the subprogram budget broken down by the following categories: capital cost; utility administration; marketing; outside services; incentives (including rebates and low- or no- interest loans); inspections and quality control; and evaluation.

Table 14. Home Energy Report Estimated Program Expenditures by Cost Category and Year

Cost Category	PY1	PY2	PY3
Capital Cost	0	0	0
Utility Administration	46,875	46,875	46,875
Marketing	0	0	0
Outside Services	0	0	0
Incentives-rebates and other	937,500	937,500	937,500
Incentives-financing	0	0	0
Inspections and Quality Control	0	0	0
Evaluation	48,770	44,468	40,447
Total	1,033,145	1,028,843	1,024,822

3.4.2. Existing Homes: Quick Home Energy Check-Up (QHEC)

The Quick Home Energy Check-Up ("QHEC") subprogram is an Additional Utility Led Initiative intended to provide residential customers with an understanding of opportunities to save energy and help them start saving energy immediately by providing some standard energy saving measures at no additional cost to participants. Interested customers will sign up for a QHEC to be performed by a qualified energy auditor. SJG intends to launch the subprogram using a participating contractor. During the visit, the auditor will perform a walk-through of the customer's home with the customer to provide education about the opportunities to save energy. The auditor may also identify any health and safety issues observed as well as larger opportunities for energy savings, including making referrals to other energy efficiency programs and program opportunities based on the needs for that premise and the customer's interest in pursuing additional upgrades. This may include sharing information about the products and incentives available under the Energy Efficient Products program, the potential for comprehensive upgrades through either the HPwES subprogram, the Moderate-Income Weatherization sub-program, or the Comfort Partners program. This no-risk subprogram addresses all customer demographics and is intended to appeal to and provide benefits to both renters and homeowners.

The QHEC subprogram will be available to all single-family and single-family attached (1 to 4 unit properties)[8] electric and/or natural gas customers served by at least one of the participating investor owned utilities in New Jersey. Standard energy efficiency measures installed during that

[8] Properties larger than 4 units will be referred for consideration in the Multifamily Program.

visit may include but not be limited to LED bulbs, energy and water saving showerheads, kitchen faucet aerators, bathroom faucet aerators, gaskets, power strips and other energy saving measures. All participants will receive a QHEC report that confirms the findings during the appointment and summarizes the measures received and the recommendations made. The QHEC report will also highlight incentives available to support the implementation of those recommendations, including educating customers about how to pursue the recommendations through other program and sub-program opportunities as well as the availability of enhanced incentives. There are also additional options through other program and subprogram offerings for Low-to-Moderate income ("LMI") customers (up to 400% of Federal Poverty Level or potential automatic eligibility based on physical location) and access to OBRP or financing with similar terms. Eligibility for these enhanced incentives can be determined based on screening an individual customer but the utilities also intend to explore implementing automatic eligibility for enhanced incentives based upon a physical location (e.g. census tract, environmental justice community, Urban Enterprise Zone) to encourage more activity in LMI communities.

Marketing Plan (MFR II.a.xiv)

SJG will utilize various marketing channels to assure subprogram awareness and participation is maximized. These may include traditional marketing channels, such as web-based engagement and information, digital advertising, media advertising, and printed materials. SJG also plan to cross promote this subprogram to participants in other energy efficiency program offerings. Information garnered from other program and subprogram offerings, such as the Residential Behavioral and Residential Efficient Products could also be used to identify prime candidates for participation in this QHEC subprogram. For example, a review of usage data contained in Home Energy Reports from the Residential Behavioral Subprogram would allow the SJG to identify customers who are particularly susceptible to changes in weather and would be ideal candidates for a QHEC. Likewise, the Residential Efficient Products program would provide leads to customers interested in energy efficiency. Most importantly, the QHEC subprogram was specifically designed to engage and provide immediate energy savings to customers and identify strong leads for candidates that would benefit from participating in other programs.

The primary market barriers that impact this subprogram include:

- **Customer Awareness and Engagement:** Residential customers may not be fully aware of energy-efficiency opportunities for their home. This subprogram addresses this barrier by providing an independent professional assessment. SJG will focus on promoting the subprogram to underrepresented demographics. SJG will also provide outreach materials in Spanish and can reach younger demographics through a robust digital marketing plan. SJG will also focus outreach efforts on reaching the highest gas users.
- **Up-front Cost of a Home Energy Assessment:** Many customers would not be interested or have the ability to pay the cost for an assessment. This subprogram addresses this barrier by offering the QHEC at no additional cost to the customer .
- **Split Incentives:** Many renters may not consider participating in energy efficiency programs because they don't own the premise and don't have a role in decisions regarding equipment replacement or structural improvements. This subprogram addresses this

barrier by providing simple energy efficiency measures that provide immediate energy savings and don't require landlord approval to install or use (e.g. smart strips, LEDs).

SJG will seek to manage all barriers to program success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. SJG's established customer communication channels, data, and brand in the marketplace will all be leveraged to deliver best-practice programs that identify and confront market barriers on an ongoing basis.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)

The QHEC in-home assessment will be delivered by a network of third-party contractors who are trained to perform the home energy assessments and install measures. Customers will enroll in the program by calling SJG's toll-free number, signing up online, or enrolling directly with a participating contractor. When it comes time for the visit, the contractor will arrive and inspect different parts of the house and equipment. This assessment will include reviewing:

- Lighting throughout the house
- Heating and cooling systems
- Insulation in walls, basements, and attics
- Appliances
- Windows and doors
- Water heating equipment

Based on the assessment the contractor will install direct install measures including LED light bulbs, hot water pipe insulation, efficient showerheads, faucet aerators, and smart power strips. Following the installation there will be a meeting with the customer to present a home energy assessment report with customized recommendations for further energy efficiency upgrades.

Contractors are the primary delivery method for the QHEC program. For the in-home assessment path, SJG will select qualified contractors based on a rolling request for qualifications process. These contractors will have responsibility for delivering the in-home assessment, installing measures, and providing home energy reports to customers. These contractors will also be responsible for marketing their services on their website and through other channels.

To select qualified third-party implementation contractors, SJG will prioritize criteria including but not limited to:

- Experience delivering similar programs or initiatives
- Resources and marketing strength
- Cost
- The amount of business placed with minority, women, veteran and service-disabled veteran owned businesses ("MWVBEs").

Existing and Proposed Incentives (MFR II.a.iii) (MFR II.a.iv)

SJG will provide the QHEC to their interested customers at no additional cost, including the installation of standard energy efficiency measures that are appropriate for their home. Participating customers will also benefit from receiving energy efficiency conservation tips, recommendations and referrals to other energy efficiency programs based upon the opportunities identified for their home.

This program provides a no-cost audit and no-cost direct install measures, therefore there is no direct incentive payment to the customer to process.

Customer Financing Options (MFR II.a.vi)

Financing is not applicable for this program.

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG residential customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data. Customers can also access historic usage data through the SJG home energy report portal usage using the Green Button option.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

The table below summarizes the projected participation and savings associated with this program. All values are annual incremental totals, and do not incorporate savings achieved in prior years. A participant is defined as a completed job at a customer home in the context of the QHEC subprogram. Savings estimates are based on projected participation during each year of the forecast period.

Table 15. QHEC Estimated Participation and Savings

Metric	PY1	PY2	PY3
Estimated Participants	850	1,200	1,500
Projected Net Annual Natural Gas Savings (therms)	24,029	33,923	42,404
Projected Net Lifetime Natural Gas Savings (therms)	183,912	259,640	324,550
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	0	0	0
Projected Net Annual Electric Savings (kWh)	736,033	1,039,105	1,298,882
Projected Net Lifetime Electric Savings (kWh)	8,514,127	12,019,944	15,024,931
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	0	0	0
Projected Net Annual Peak Demand Savings (kW)	8	11	14
Projected Net Lifetime Peak Demand Savings (kW)	90	127	159

For customers in areas where gas and electric service territories overlap, the utilities will use the Statewide Coordinator to allocate costs and energy savings for shared measures. Refer to Section 6 for a description of the role of the Statewide Coordinator.

Program Budget (MFR II a.xi) (MFR II.a.xii)

The following table provides the subprogram budget broken down by the following categories: capital cost; utility administration; marketing; outside services; incentives (including rebates and low- or no- interest loans); inspections and quality control; and evaluation.

Table 16. QHEC Estimated Program Expenditures by Cost Category and Year

Cost Category	PY1	PY2	PY3
Capital Cost	0	0	0
Utility Administration	40,963	54,873	65,136
Marketing	19,258	26,685	32,768
Outside Services	116,592	155,673	184,160
Incentives-rebates and other	411,188	580,500	725,625
Incentives-financing	0	0	0
Inspections and Quality Control	6,268	7,276	7,256
Evaluation	21,390	27,534	31,306
Total	615,660	852,541	1,046,250

3.4.3. Existing Homes: Moderate-Income Weatherization

The Moderate-Income Weatherization subprogram provides an opportunity for low- to moderate-income customers to receive energy efficiency measures and upgrades at no additional cost. Income eligible customers will undergo an audit and then receive direct install measures (such as showerheads, faucet aerators, and LED bulbs) and weatherization measures (insulation, air sealing, and duct sealing). Homeowners with nonfunctional heating and/or cooling systems may also be eligible to receive repairs or replacement at no additional cost. The subprogram will include a cap on each project with additional funding for health and safety expenses.

During the audit, customers will receive installation of low-cost measures such as LED lighting, energy-saving aerators, showerheads, smart thermostats and smart power strips at no additional cost, in addition to behavioral suggestions to improve efficiency of the home and a review of thermostat and water heating setpoints. Based on the in-home audit recommendations, the participant may also be given the opportunity for additional building envelope measures to be

installed at no additional cost. These measures include air sealing and building insulation. Also, customers with nonfunctional heating and cooling equipment may receive repairs or new equipment.

Target Market or Segment (MFR II.a.ii)

The Moderate-Income Weatherization subprogram will be available to all income-qualified single-family homes served by at least one investor-owned utility in New Jersey. To qualify for this subprogram, the customer's household income must be above the Comfort Partners program eligibility and up to 400% of Federal Poverty Income Guidelines. Eligibility for these enhanced incentives can be determined based on screening an individual customer but SJG also intends to explore implementing automatic eligibility for enhanced incentives based upon a physical location (e.g. census tract, environmental justice community, Urban Enterprise Zone) or based upon participation in a qualifying program (e.g. PAGE assistance program) to encourage more activity in LMI communities.

Marketing Plan (MFR II.a.xiv)

SJG will utilize many marketing avenues to educate potential eligible customers about the subprogram. These include traditional marketing avenues, such as web-based engagement and information, digital advertising, and hard-copy materials to promote customer awareness. SJG intends to cross market this subprogram and pursue additional marketing opportunities through other program offerings, such as through Home Energy Reports, where information garnered could be used to identify potential participants for this subprogram. For example, a review of usage data contained in Home Energy Reports could allow SJG to identify customers who are particularly susceptible to changes in weather and would be ideal candidates for an audit and comprehensive weatherization. SJG will also look at customers that did not qualify for the Comfort Partners program that might be eligible for this subprogram. Finally, SJG customer service personnel will work to promote the subprogram and educate customers on energy efficiency and the programs available to assist them.

The primary market barriers that impact this subprogram include:

- **Initial Cost of Comprehensive Home Retrofits:** Comprehensive home retrofits are more expensive and require more participant investment and commitment. Customers must be willing and able to invest in more expensive energy-efficiency projects. SJG addresses this barrier by offering all subprogram services at no additional cost to income- qualified customers.
- **Customer Awareness and Engagement:** Many customers are unaware of the "whole house" approach to energy-efficiency or the fact that building science exists. SJG will work to address this by:
    - continuing to educate customers about the subprogram and how both the structure and equipment work together;
    - highlighting the extra training and BPI certification that contractors must have;
    - identifying how the shell measure improvements can improve their comfort within the home;

- noting that the subprogram includes health and safety testing and repairs to allow energy-saving measures to be installed;
- reinforcing that the installation of equipment and shell measures may increase the value of their home.

To increase subprogram participation among historically underrepresented demographics, SJG will provide outreach materials in Spanish, and reach younger demographics through a robust digital marketing plan.

- **Awareness and Training:** To meet the participation goals, sufficient qualified contractors must be available to undertake the work. SJG and/or their third-party implementation contractors will address this barrier by trying to recruit qualified contractors to participate in this subprogram, including pursuing initiatives that align with the Workforce Development Working Group strategies to include more local, under-represented and disadvantaged workers.
- **Customer Skepticism:** Customers may be skeptical of the motivation behind energy efficiency programs. To address this skepticism, SJG will provide outreach and messaging from credible sources, including community groups, and local leaders in low to moderate income areas.
- **Complex Buying Process:** There can be a broad range of potential energy efficiency investments, but it can be challenging to identify which strategies may be the most beneficial. This sub-program addresses this barrier by providing free installation of low hanging fruit measures, and technical guidance and support in implementing more extensive and costly measures.

SJG will seek to manage all barriers to success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. SJG's established customer communication channels, data, and brand in the marketplace will all be leveraged to deliver best-practice programs that identify and confront market barriers on an ongoing basis.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)

SJG staff and/or third-party implementation contractors will oversee all aspects of the subprogram, including contractor training and engagement, quality assurance and fulfillment of subprogram services. The in-home energy audit and efficiency improvements will be conducted by third-party implementation contractors and/or program contractors. There will be a significant focus on developing and training qualified contractors. SJG and/or third-party implementation contractors will oversee their staff and subcontractors and engage contractors to educate them on the subprogram benefits to reliably complete the in-home audits and install energy efficient equipment and improvements for participating customers. SJG and/or third-party implementation contractors will also verify eligibility of customers and will maintain a close relationship with contractors to ensure consistent subprogram delivery experience and high customer satisfaction. SJG and/or third-party implementation contractors will also monitor

participation to assess the effectiveness of outreach efforts and that the subprogram is effectively achieving participation and serving customers. SJG staff and/or third-party contractors will also take on the responsibility of providing an additional layer of customer support as needed and conducting selective verification of contractor installation work.

Contractors will consist of companies employing BPI-certified professionals to complete audits and energy-saving projects.

Selection of third-party implementation contractors will prioritize criteria including but not limited to:

- Experience delivering similar subprograms or initiatives;
- Knowledge of the current marketplace;
- Ability to educate and train contractors;
- Local presence;
- Cost;
- The amount of business placed with minority, women, veteran, and service-disabled veteran owned businesses.

Existing and Proposed Incentives Ranges (MFR II.a.iii) (MFR II.a.iv)

The customer may receive no-cost energy efficiency measures and upgrades with a per project cap for weatherization measures and an additional cap on health and safety expenses. Additional information on incentives is contained in Exhibit B.

Customer Financing Options (MFR II.a.vi)

The program provides a no-cost audit and 100% incentives; therefore no financing of project costs is necessary.

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG residential customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data. Customers can also access historic usage data through the SJG home energy report portal usage using the Green Button option.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

The table below summarizes the projected participation and savings associated with this program. All values are annual incremental totals, and do not incorporate savings achieved in prior years. A participant is defined as a completed job at a customer home in the context of the Moderate Income Weatherization subprogram. Savings estimates are based on projected participation during each year of the forecast period.

Table 17. Moderate Income Weatherization Estimated Participation and Savings

Metric	PY1	PY2	PY3
Estimated Participants	350	400	700
Projected Net Annual Natural Gas Savings (therms)	57,536	65,755	115,072
Projected Net Lifetime Natural Gas Savings (therms)	1,056,388	1,207,301	2,112,777
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	1,056,388	1,207,301	2,112,777
Projected Net Annual Electric Savings (kWh)	319,231	364,835	638,462
Projected Net Lifetime Electric Savings (kWh)	4,257,989	4,866,273	8,515,978
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	4,257,989	4,866,273	8,515,978
Projected Net Annual Peak Demand Savings (kW)	8	10	17
Projected Net Lifetime Peak Demand Savings (kW)	153	175	305

For customers in areas where gas and electric service territories overlap, the utilities will use the Statewide Coordinator to allocate costs and energy savings for shared measures. Refer to Section 6 for a description of the role of the Statewide Coordinator.

Program Budget (MFR II a.xi) (MFR II.a.xii)

The table below summarizes the projected participation and savings associated with this subprogram. All values are annual incremental totals, and do not incorporate savings achieved in prior years. Savings estimates are based on projected participation during each year of the forecast period.

Table 18. Moderate Income Weatherization Estimated Program Expenditures by Cost Category and Year

Cost Category	PY1	PY2	PY3
Capital Cost	0	0	0
Utility Administration	261,256	283,309	470,815
Marketing	122,827	137,775	236,856
Outside Services	743,608	803,740	1,331,145
Incentives-rebates and other	2,622,487	2,997,128	5,244,974
Incentives-financing	0	0	0

Inspections and Quality Control	39,977	37,564	52,450
Evaluation	136,424	142,160	226,284
Total	3,926,579	4,401,677	7,562,523

3.4.4. Energy Saving Trees

This program will promote planting of energy saving trees by residential customers in the SJG service territory. Trees save energy in two distinct ways, providing shade and blocking wind. Trees save electricity consumed through air conditioning in the summer by providing shade to homes and can also save on heating costs in the cooler months by blocking wind. The type of tree varies depending on the application and desired aesthetics. This is not a new program concept. Other electric utilities have offered this program to customers for years. Tucson Electric Power in Arizona is an example of a utility offering this measure through its energy efficiency programs approved by the Arizona Corporation Commission.[9]

The trees program is also consistent with the State of New Jersey policy goal to reduce carbon emissions. Trees reduce atmospheric carbon emissions through sequestration of carbon during growth. SJG has quantified the avoided carbon emissions and included the savings as a benefit of the program.

Target Market or Segment (MFR II.a.ii)

The target market for this program will be all residential natural gas customers served by SJG.

Marketing Plan (MFR II.a.xiv)

SJG will utilize many marketing avenues to assure subprogram awareness and participation is maximized. These include traditional marketing avenues, such as web-based engagement and information, digital advertising, media advertising, and hard-copy materials to promote awareness among trade allies and customers. SJG will also cross promote this subprogram to participants in other energy efficiency program offerings.

The primary market barriers that impact this program include:

- **Initial Cost of Efficient Equipment:** Trees can be costly to purchase. To address this barrier, incentives are provided to the customer to reduce the initial cost.
- **Customer Awareness and Engagement:** Residential customers may not be aware of the energy savings benefits of planting trees and/or lack the time and resources to plant trees. To address this barrier, the utilities will educate customers on the benefits of planting energy saving trees through targeted marketing.

[9] *See* Arizona Corporation Commission Decision No. 75450.

SJG will seek to manage all barriers to program success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. SJG established customer communication channels, data, and brand in the marketplace will all be leveraged to deliver best-practice programs that identify and confront market barriers on an ongoing basis. To the extent possible, SJG will cross-promote programs to spread awareness of the range of efficiency opportunities proposed in this plan.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)

SJG intends to deliver this program through a several keys steps. First, SJG will work with local nurseries to establish distribution partnerships for the trees. For this effort, SJG will pay the program incentive directly to the nurseries to distribute the trees. Second, SJG plans to work with other contractors to obtain, deliver, and plant the trees on-site and to the customer's agreed-upon specifications. Third, the customer will be informed about the specifics of the tree, how to care for it, and appropriate timing of maintenance. Finally, the contractor will check up on the tree via at least one on-site visit to ensure adaptation to the location.

Existing and Proposed Incentives Ranges (MFR II.a.iii) (MFR II.a.iv)

There is no existing incentive for this program because it is not currently offered.

SJG proposes to distribute and plant the trees to customers at no cost.

Customer Financing Options (MFR II.a.vi)

Financing is not applicable to this program.

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG residential customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data. Customers can also access historic usage data through the SJG home energy report portal usage using the Green Button option.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

The table below summarizes the projected participation and savings associated with this program. All values are annual incremental totals, and do not incorporate savings achieved in prior years. Participants are estimated as number of trees planted. Savings estimates are based on projected participation during each year of the forecast period.

Table 19. Trees Subprogram Estimated Participation and Savings

Metric	PY1	PY2	PY3
Estimated Participants[10]	1,500	1,500	1,500
Projected Net Annual Natural Gas Savings (therms)	4,337	4,337	4,337
Projected Net Lifetime Natural Gas Savings (therms)	130,109	130,109	130,109
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	0	0	0
Projected Net Annual Electric Savings (kWh)	96,854	96,854	96,854
Projected Net Lifetime Electric Savings (kWh)	2,905,618	2,905,618	2,905,618
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	0	0	0
Projected Net Annual Peak Demand Savings (kW)	0	0	0
Projected Net Lifetime Peak Demand Savings (kW)	0	0	0

For customers in areas where gas and electric service territories overlap, the utilities will use the Statewide Coordinator to allocate costs and energy savings for shared measures. Refer to Section 6 for a description of the role of the Statewide Coordinator.

Program Budget (MFR II a.xi) (MFR II.a.xii)

The following table provides the subprogram budget broken down by the following categories: capital cost; utility administration; marketing; outside services; incentives (including rebates and low- or no- interest loans); inspections and quality control; and evaluation.

Table 20. Trees Estimated Program Expenditures by Cost Category and Year

Cost Category	PY1	PY2	PY3
Capital Cost	0	0	0
Utility Administration	7,472	7,090	6,732
Marketing	3,513	3,448	3,387
Outside Services	21,266	20,113	19,035
Incentives-rebates and other	75,000	75,000	75,000
Incentives-financing	0	0	0

[10] Due to the nature of the Products Programs, this will be reflected as the total number of units.

Inspections and Quality Control	1,143	940	750
Evaluation	3,902	3,557	3,236
Total	112,295	110,147	108,140

3.5. Commercial & Industrial Additional Utility-Led Programs

Energy Solutions for Business: Engineered Solutions: This subprogram provides tailored energy efficiency savings for medium to large commercial customers, including municipalities, universities, schools, hospitals, and non-profit entities.

Energy Solutions for Business: Energy Management: This subprogram provides incentives to C&I customers to more efficiently manage energy consumption at facilities. The subprogram includes incentives for several approaches to energy management focused on optimizing equipment and processes at commercial facilities.

3.5.1. Energy Solutions for Business: Engineered Solutions

The Energy Solutions for Business-Engineered Solutions subprogram will provide tailored energy-efficiency assistance to public service entities, such as municipalities, universities, schools, hospitals and healthcare facilities, ("MUSH"), and non-profit entities. The subprogram will provide guided consultative service throughout delivery to assist customers in identifying and undertaking large energy-efficiency projects, while requiring no up-front funding from the customer.

Through this subprogram, customers will be provided with an in-depth audit of their facilities as well as a detailed assessment and recommendation of energy-efficiency measures that could be economically installed. Customer incentives are determined on a project-by-project basis. Selection of trade allies will be subject to a competitive solicitation process. In addition to the calculated project-by-project incentive, participants will have the option to pay back the non-incentive portion of the project costs through on-bill repayments or access to financing with similar terms. Through this subprogram design, participants in market segments that have typically been underserved are able to achieve greater energy savings.

Target Market or Segment (MFR II.a.ii)

C&I MUSH and non-profit entities and other businesses who are seeking comprehensive solutions that can't be served by either the Direct Install or Prescriptive and Custom Measures subprograms located within SJG's service territory are eligible to participate in this subprogram. The subprogram will provide energy audits and incentives to entities that directly serve the public, but often have difficultly investigating and investing in energy-efficiency. The measures included in this subprogram may include HVAC, building envelope, motors, lighting, controls, and other building systems, energy efficiency and energy consuming equipment.

Marketing Plan (MFR II.a.xiv)

SJG will leverage existing relationships with municipalities, universities, schools and other public agencies to promote the subprogram, and will conduct further outreach through school, university and municipal associations. The subprogram will leverage SJG's existing relationships and communication channels with customers through subprogram staff and account management/customer service personnel. In addition, the subprogram will work with hospitals, healthcare facilities, and non-profits to increase awareness of the subprogram.

The primary market barriers that impact this subprogram include:

- **Business/Operational Constraints:** These facilities often have unique operational constraints that act as a barrier to implement energy-efficiency projects. This barrier will be addressed by ensuring the subprogram operates cooperatively with participants by accommodating operational and capital investment cycles. SJG will offer timely incentive and financing support and provide technical assistance from specialized professionals who understand each facility's core production processes and operating issues.
- **Risk, Uncertainty, and Hidden Costs:** These market segments may be particularly averse to risk and the potential for hidden costs in efficiency upgrades. To mitigate risk and uncertainty concerns SJG will publicly communicate cycles of energy efficiency funding to serve as an investment signal for customers and trade allies.
- **Customer Awareness and Engagement:** Eligible participants may be unaware of energy-efficiency opportunities and programs because the segment has historically not been well served by traditional energy-efficiency programs. To address this barrier, this subprogram was designed specifically to support the segment. The subprogram will include a targeted outreach strategy to ensure that relevant customers are aware of subprogram opportunities and consider energy-efficiency in equipment investments and long-term planning. The subprogram will prepare and distribute successful case studies of prior participants and their experiences and energy savings.
- **Cost-Effectiveness:** Efficiency upgrades require an initial investment that is recovered by lower long-run operating costs and non-energy benefits. These projects often carry longer payback periods than traditional energy-efficiency projects due to the unique needs of the segment (e.g. hospital & health buildings). To address this barrier, incentives and on-bill repayment or access to financing with similar terms is provided to the customer to reduce the initial cost, and subprogram will endeavor to communicate the non-energy benefits offered by many efficiency upgrades that are not well captured in traditional cost/benefit analysis.

SJG will seek to manage all barriers to program success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. SJG's established customer communication channels, data, and brand in the marketplace will all be leveraged to deliver best-practice programs that identify and confront market barriers on an ongoing basis. To the extent possible, SJG will cross-promote programs to spread awareness of the range of efficiency opportunities proposed in this plan.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)

SJG will retain qualified vendors to undertake the audit and engineering services required to deliver this program. Participants will contract with preferred installation trade allies to install the measures included in projects.

The program delivery will typically occur in four steps:

- **Audit:** SJG will assess the required level of an American Society of Heating, Refrigerating, and Air Conditioning Engineers ("ASHRAE") audit to perform, based on the complexity of the facility and the potential energy efficiency measures; an investment grade audit may not be required for all facilities. SJG will then select a subprogram trade ally to perform the appropriate level energy audit and prepare a customized audit report that includes a list of recommended energy efficiency upgrades. SJG and our Partner Utility will then review the recommended energy efficiency upgrades with the customer to determine whether to proceed with a project.
- **Engineering Analysis of Project:** Based on the audit results and customer feedback, an engineering analysis may be required. SJG, as the Lead Utility, will conduct a screening of the payback and project cost effectiveness and recommend the selected energy-efficiency measures for the project. SJG will review the project with the Customer for customer agreement on the approved project and coordinate with the Partner Utility as necessary. SJG and a subprogram engineering trade ally will work with the customer to prepare a Scope of Work and other project documents, which will be used by the customer to obtain installation cost estimates for the approved project.
- **Scope of Work/Contractor Bids:** The customer will issue a Scope of Work to obtain competitive bids to complete the identified and approved project. SJG and the subprogram engineering trade ally and the customer will review and evaluate the bids/costs received, and the customer will make the final decision on bid selection. Following bid selection, the proposed project is again screened for cost effectiveness.
- **Measures Installation and Inspections:** SJG and the subprogram engineering trade ally, acting as construction administration agent, will monitor project progress and will release project funds based on the following payment structure:
    - Stage 1: Project Contracting Stage - The first progress payment of up to 30% of the installation cost can be issued to the customer to initiate the project.
    - Stage 2: Construction Stage - A pre-defined series of progress payments totaling up to 50% of total project commitment can be issued.
    - Stage 3: Project Completion and Commissioning - When the project is 100% complete, a final inspection and final project true-up will be performed; remaining progress payments will be issued.

The final payment based on the results of project true-up is determined and issued only if the final inspection is successfully completed and approved. If the final costs are less than the estimated project commitment, the final payment will be adjusted down to reflect the actual costs. If the final costs are greater than the estimated project commitment, the final payment will not be adjusted and will be paid according to the executed agreements and contracts specifying original costs.

The progress payment schedule described above is designed to ensure that customers can pay their installation contractors on a timely basis. Project progress and the project cash flow will be monitored and verified by the SJG and the trade ally engineering firm with updates to the Partner Utility as appropriate.

SJG will select qualified subprogram trade allies to undertake all auditing and engineering work associated with the subprogram. SJG will also monitor participation to assess the effectiveness of outreach efforts, incentive levels, delivery methods, and subprogram trade ally and installation contractor availability and provide suggestions for improvement. The installation contractor(s) will adhere to the project specifications recommended by SJG and the subprogram engineering trade ally and set forth between the installation contractor and the customer.

Selection of subprogram trade allies will prioritize criteria including but not limited to:

- Experience delivering similar subprograms or initiatives;
- Knowledge of the current marketplace;
- Resources and marketing strength;
- Local presence;
- Cost;
- The amount of business placed with minority, women, veteran and service disabled veteran owned businesses.

By allowing participants to select a trade ally they are comfortable with for select products (either through an existing relationship or by reference from SJG), the program reduces barriers to entry related to knowledge of energy efficiency, confidence in assessments, and measure installation. SJG will perform customer satisfaction and other quality assurance and quality control activities to monitor, ensure program and verify quality standards are met.

SJG's service territory overlaps with Atlantic City Electric Company ("ACE"), and there will be coordination between the utilities for customer projects that span both service territories. For customers that are served by both SJG and ACE, SJG will take the lead in coordinating the audit with a contractor common to both utilities. The measures selected for the project will determine which utility takes the lead role with the customer; if the measures are predominately gas, SJG will take the lead, and if the measures are predominately electric, ACE will lead. Both utilities will be part of the measure selection, engineering analysis, and final inspection of the project. Savings will be allocated by fuel based on the projected energy savings of the project. Each utility will be responsible for providing incentives for their respective fuel, and costs will be split in proportion to savings on a MMBtu basis, or as negotiated by the utilities per project.

Existing and Proposed Incentives Ranges (MFR II.a.iii) (MFR II.a.iv)

The subprogram will provide a 100% incentive for an up-front ASHRAE audit, the specific audit level will be determined on a project by project basis based on the complexity of the facility and the potential energy efficiency measures. In addition, SJG will buy-down the simple payback of the recommended energy-efficiency project cost for approved measures by up to six years, with the resulting payback not less than three years. After the project incentive buy-down, the remaining

project costs may be funded by the subprogram with participants repaying the balance of the project costs through OBRP or access to financing with similar terms.

SJG will retain the option and flexibility to adjust the incentive offered to participants to enable a whole-building approach that will include additional energy efficiency measures in the project.

The full cost of the energy efficiency projects (including engineering, transaction costs and cost of construction) will be covered through a combination of program incentive and customer repayments. Detail on program incentives is provided in Appendix B.

Customer Financing Options (MFR II.a.vi)

SJG will provide interest free on-bill repayment for customers to repay the non-incentive portion of the project over time.

Refer to Appendix C for the Summary of Proposed Financing for this program.

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG commercial customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

The table below summarizes the projected participation and savings associated with this subprogram. All values are annual incremental totals, and do not incorporate savings achieved in prior years. Estimated participants in the context of the Engineered Solutions sub-program are number of completed projects committed. Savings estimates are based on projected participation during each year of the forecast period.

Table 21. Engineered Solutions Program Estimated Participation and Savings -Represents all savings from lead utility projects

Metric	PY1	PY2	PY3
Estimated Participants	1	1	4
Projected Net Annual Natural Gas Savings (therms)	43,918	43,918	175,672
Projected Net Lifetime Natural Gas Savings (therms)	878,361	878,361	3,513,442
Projected Net Lifetime Natural Gas Savings from Qualifying Small-Business Customers (therms)	0	0	0
Projected Net Annual Electric Savings (kWh)	613,552	613,552	2,454,209
Projected Net Lifetime Electric Savings (kWh)	12,271,044	12,271,044	49,084,177
Projected Net Lifetime Electric Savings from Qualifying Small-Business Customers (kWh)	0	0	0
Projected Net Annual Peak Demand Savings (kW)	17	17	68
Projected Net Lifetime Peak Demand Savings (kW)	342	342	1,367

Program Budget (MFR II a.xi) (MFR II.a.xii)

The following table provides the subprogram budget broken down by the following categories: capital cost; utility administration; marketing; outside services; incentives (including rebates and low- or no- interest loans); inspections and quality control; and evaluation.

Table 22. Engineered Solutions Estimated Program Expenditures by Cost Category and Year

Cost Category	PY1	PY2	PY3
Capital Cost	0	0	0
Utility Administration	118,574	131,601	409,242
Marketing	55,747	63,998	205,880
Outside Services	337,496	373,348	1,157,060
Incentives-rebates and other	1,190,250	1,392,204	4,559,044
Incentives-financing	713,980	835,153	2,734,748
Inspections and Quality Control	18,144	17,449	45,590
Evaluation	99,060	105,648	314,676
Total	2,533,251	2,919,401	9,426,240

3.5.2. Energy Solutions for Business: Energy Management

The C&I Energy Management subprogram targets energy savings for existing commercial and industrial facilities by providing a holistic approach to improving building energy performance through maintenance, tune-up and retro-commissioning services for existing buildings and through the implementation of energy savings strategies that improve the overall operation and energy performance of buildings and building systems. This subprogram compliments the Prescriptive/Custom and Engineered Solutions subprograms which focus on capital equipment replacement or process improvement investments by improving the energy performance of a building by maintaining, adjusting and optimizing the systems within the building and the implementation of complimentary energy savings measures. The program also provides paths to track the ongoing building energy performance by using retro-commissioning and strategic energy management strategies, which ensures continued energy performance. By implementing these measures, customers also receive ancillary benefits including improved occupant comfort, lower maintenance costs, and extended equipment life.

This subprogram includes measures that focus on specific energy efficiency measures and management practices that can be categorized as follows:

Building Operations

Building Operations measures provide multiple paths for a customer to implement building tune-up and maintenance services. These measures are designed to focus on midsize commercial and industrial customers and include the following:

- HVAC Tune-Up: Provides for a tune-up of central HVAC systems, Mini-Splits and Packaged Terminal units, and include the following measures:
  - Refrigeration charge correction (if needed)
  - Cleaning evaporator and condenser coils
  - Filter changes
  - Verification of proper operation of fans and motors
  - Other minor repairs to refrigerant lines and coils

- Building Tune-Up: Provides a path for customers to implement a Building Tune-Up that will focus on the adjustment and calibration of building systems and controls, diagnostic testing and the installation of other measures that enhance building energy performance and savings. Also includes application of controls to optimize operation of building systems, and includes the following measures:
  - Calibration of building systems and controls, including energy management systems, lighting and HVAC
  - Diagnostic and function tests of applicable major systems and equipment
  - HVAC controls to optimize Roof Top Units (RTU)/Air Handling Units (AHU)
  - Refrigeration controls to optimize refrigeration equipment
  - Lighting upgrades including application of lighting controls and optimization
  - Chiller system controls to optimize chiller performance
  - Other program eligible energy saving measures identified through the building assessment
  - Building Operations Training for qualified personnel to obtain Building Operations Certification (BOC) through a certified training program or other training programs as related to the efficient design, operations and maintenance of buildings.

Retro-Commissioning (RCx)

Retro-Commissioning ("RCx") measures provide a comprehensive assessment of a customer's commercial/industrial building by using a prescribed planning process that includes a building audit, development of an action plan for the building and development of a Measurement and Verification ("M&V") plan to ensure the optimum on-going performance of the building and building systems. A comprehensive assessment of a commercial/industrial building using a prescribed planning and implementation process, including:

1. Audit Phase – Customer confirms intent to participate in the subprogram and registers with SJG. Customer and/or the customer's consultant completes the required level of an American Society of Heating, Refrigerating, and Air Conditioning Engineers ("ASHRAE") audit based on the complexity of the facility, develops a retro-commissioning implementation plan, including project timelines and plan to implement audit identified operation and maintenance measures. There may be opportunities to complete this Phase without a full ASHRAE level audit.
2. Setup Phase - Contracted services to implement the plan are verified, long-term monitoring and reporting is developed and initiated, and a project plan is implemented by the customer.
3. M&V Phase - Savings verification and rebate payment from implementation of the plan is completed.

Typical Retro-Commissioning measures include, but are not limited to:

- Optimizing chiller and boiler operations to better match building load conditions
- Reducing ventilation in over-ventilated areas
- Fixing ventilation dampers that are open when they should be closed or vice versa
- Decreasing supply air pressure setpoint and system rebalancing
- Aligning zone temperature setpoints to match the building's actual operating schedule
- Virtual Commissioning (VCx)

As an option to performing an on-site audit to develop a retro-commissioning plan, VCx option provides eligible customers with an analysis of their building's energy performance by using meter usage data, other data and building modeling to identify and recommend energy efficiency measures and operational changes to improve a building's overall energy performance. The analysis will foster participation in the utility's other programs by identifying and encouraging customers to implement other energy efficiency improvements. The VCx process can also utilize benchmarking and peer comparison metrics to help determine energy performance to identify facilities that are underperforming. This offering can also use continuous engagement, monitoring and periodic reviews of customer's energy usage to ensure that implemented measures or changes have been successfully completed. The use of building analysis using remote analysis techniques will also help customers to participate in the programs because of limited access to customer's facilities due to concerns and restrictions such as COVID-19.

Strategic Energy Management (SEM)

The Strategic Energy Management ("SEM") component of this subprogram is designed to optimize energy consumption for larger C&I customers through long term management of major energy using systems. SEM provides a holistic approach that is focused on management of existing systems and processes (including behavior), as well as tracking and benchmarking performance to identify and evaluate energy optimization efforts. SEM is a long-term effort typically focused on developing and executing an energy management strategy. This strategy is formulated through a series of site and/or remote visits and interviews with building owners and staff to specifically develop a Strategic Energy Management Plan ("SEMP") for the customer's facility. The SEMP

will be reviewed with the customer by the utility and/or its third-party implementation contractor on a scheduled basis. This plan may include:

- Revisions or improvements to an existing Building Automation System or the addition and initiation of the use of a Building Automation System to monitor and control the buildings components and systems. The implementation or improvements to a system or the review of an existing system, can include the proper training for building operators to achieve maximum efficiency.
- Development of a maintenance plan for existing building components and or systems to identify best practices in building performance and an interactive monitoring of system components by both staff and sponsoring utilities.
- Ongoing engagement to track energy usage and performance, assist with planning energy efficiency projects, and interact with facility personnel to adopt energy efficiency strategies and behaviors.
- Utilizing other subprogram offerings, including: Prescriptive/Custom measures, Building Tune-Up, RCx, and VCx.
- Using building modeling and benchmarking to compare customer's usage and performance to cohort of similar facilities and VCx to track energy usage and performance over time.
- Application of whole building energy modeling tools that can model buildings for both operational and capital improvements.
- Scheduling of attendance of customer personnel to attend educational workshops, webinars and group/individual training sessions with cohorts of facility managers (e.g. Building Operations Training).

Customers can participate by application to the subprogram or will be contacted directly by subprogram personnel. The subprogram will retrieve customer demographics and obtain customer agreement for the services to be provided and handle on-going customer engagement. Incentives for improvements recommended by the subprogram will be issued after the retrofit is completed. SJG and/or a third-party implementation contractor will develop rebate application forms for this subprogram that will guide applicants through eligibility guidelines, terms and conditions, and general program information requirements. In addition, the subprogram will provide applications in web-ready formats to ensure participants and potential customers have easy access to the forms.

Target Market or Segment (MFR II.a.ii)

The C&I Energy Management subprogram will be available to all commercial, industrial, and other non-residential customers located within SJG's service territory with buildings and building systems.

Building Operations measures target existing commercial buildings and is particularly relevant for medium building types that utilize traditional building systems and controls.

Retro-commissioning targets existing commercial buildings and is particularly relevant for medium to large building types utilizing a building energy management system.

SEM targets existing large to very large commercial and industrial customers and building types and is particularly relevant to customers with significant energy use who commit to on-going participation and engagement across the organization including various levels of management and decision making.

Marketing Plan (MFR II.a.xiv)

Marketing will specifically target commercial, industrial and government entities within SJG's service territory depending upon the subprogram offering. Given the subprogram's breadth of offerings, the subprogram can provide basic HVAC tune up services to medium sized commercial customers up to providing Retro-Commissioning services for the larger C&I customers that have building management technology that controls the daily operations of building lighting and HVAC systems. In many cases, customers do not maintain nor operate their existing building equipment or energy management systems, so the subprogram will focus on bringing those systems back to peak operating performance and/or implementing control schemes that will enhance the operations of those systems as well as implementing energy saving technologies that will focus on building energy savings.

SJG will leverage existing relationships with commercial and industrial customers to promote the overall subprogram. The subprogram will be specifically marketed as a comprehensive solution for a customer to improve the energy performance of their building by utilizing many of the services that the subprogram offers. The subprogram will leverage the utility's existing relationships and communication channels with customers through subprogram staff and account management teams.

The primary market barriers that impact this subprogram include:

- **Business/Operational Constraints:** These facilities often have unique operational constraints that act as a barrier to implement energy-efficiency projects and the maintenance of equipment. This barrier will be addressed by ensuring the subprogram operates cooperatively with participants, provides technical assistance, maintenance services and offers timely incentives and financing support. SJG may also engage directly with businesses to facilitate completion of subprogram applications and utility staff will serve as a direct resource to these customers.
- **Customer Awareness and Engagement:** Eligible participants may be unaware of energy-efficiency opportunities and programs because the segment has historically not been well served by traditional energy-efficiency programs. To address this barrier, this subprogram was designed specifically to support the segment. SJG will execute a targeted outreach strategy to ensure that relevant customers are aware of subprogram opportunities and consider energy-efficiency in building tune-ups, retro-commissioning and strategic energy management opportunities that will cover both short term and longer planning needs in those facilities. The subprogram will also prepare and distribute successful case studies of prior participants and their experiences and energy savings.
- **Awareness and Training:** To meet participation goals to evaluate the effectiveness of the program, sufficient qualified contractors must be available to undertake the work. SJG will address this barrier by trying to recruit qualified contractors to participate in this

subprogram, including pursuing initiatives that align with the Workforce Development Working Group strategies to include more local, under-represented and disadvantaged workers.

SJG will seek to manage all barriers to subprogram success through a commitment to applying best practices in subprogram design, delivery, outreach, and marketing/advertising. SJG's established customer communication channels, data, and brand in the marketplace will all be leveraged to deliver a best-practice subprogram that identify and confront market barriers on an ongoing basis. To the extent possible, SJG will cross-promote other programs and subprograms to spread awareness of the range of efficiency opportunities proposed in this plan.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)

SJG will perform overall administration and oversight of the subprogram and may also choose to select third-party implementation contractors to manage delivery of this subprogram. SJG staff and/or third-party implementation contractors will oversee all aspects of the subprogram. SJG and/or third-party implementation contractors will be responsible to administer, promote and provide the subprogram to customers including staffing, processes ensuring quality and other controls supporting successful subprogram implementation. SJG staff and/or third-party implementation contractors will conduct the marketing, management, and implementation aspects of this subprogram. Marketing will target specific customer sectors, program allies and partners to ensure awareness in the subprogram and enhance customer participation. Additional target marketing will be completed to enhance participation among hard to reach customers.

SJG staff and/or third-party implementation contractors will select qualified subprogram trade ally contractors to undertake all subprogram services. Installation and maintenance trade allies must adhere to the project specifications developed by the utility and/or third-party implementation contractors. SJG will leverage its existing and or develop a network of engaged trade allies, including local construction, electrical, plumbing and other contractors, to educate them on subprogram benefits and assist with building an approved trade ally network which will reliably maintain and install energy-efficient equipment for participating customers.

SJG staff and/or third-party implementation contractors will also monitor participation to assess the effectiveness of outreach efforts, incentive levels, delivery methods, and subprogram trade ally availability and provide suggestions for improvement.

Selection of third-party implementation contractors and subprogram trade allies will prioritize criteria including but not limited to:

- Experience delivering similar subprograms or initiatives
- Knowledge of the current marketplace
- Resources and marketing strength
- Local presence

- Cost
- The amount of business placed with minority, women, veteran and service disabled veteran owned businesses ("MWVBEs").

Existing and Proposed Incentives Ranges (MFR II.a.iii) (MFR II.a.iv)

Incentives for this subprogram are structured around the measure categories that focus on specific energy efficiency measures and management practices as follows:

HVAC Tune-Up: Fixed incentives for the implementation of the tune-up measures based on the size of the HVAC units.

Building Tune-Up: Incentives that cover up to 70% of the project cost with a project cap of $75,000 and up to 70% of the cost to attend qualified BOC training up to $1,000 per person.

Retro-Commissioning: Incentives to cover up to 50% of the initial cost to perform the required ASHRAE level audit, and the remaining cost upon the customer commitment to implementation of energy efficiency measures defined by the audit. The customer will also be paid a custom incentive for the implementation of the energy efficiency measures determined through the audit. The total audit and project incentive will be capped at up to 70% of the project cost.

Strategic Energy Management: A third-party implementation contractor may perform an engineering assessment of the Customer's facility to develop a SEMP or the Customer may choose to utilize a consultant of their choosing to perform an engineering assessment to develop the SEMP. Customers who utilize a consultant will receive an incentive to cover up to 50% of the initial cost of the engineering assessment, with the remaining cost upon the customer commitment to implementation of energy efficiency measures defined by the SEMP process. A tiered incentive structure for Customer engineering assessment will be utilized based upon square footage of Customer's facility. The SEMP will identify short, medium, and long-term goals for the customer and will set identifiable metrics for mapping to the plan. For the implementation of the energy efficiency measures determined by the SEMP, the customer will be paid an incentive that is commensurate with the applicable Commercial & Industrial Program offering that the measures are attributed.

Refer to Appendix B for the Summary of Proposed Incentive Ranges for this subprogram.

The utilities and/or third-party implementation contractors will complete customer contractor payments within 60 days following completion of contractor work, submission of complete and required paperwork, and completion of program requirements such as necessary field inspections (if required)

Customer Financing Options (MFR II.a.vi)

Refer to Appendix C for the Summary of Proposed Financing for this program.

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG commercial customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

The table below summarizes the projected participation and savings associated with this subprogram. All values are annual incremental totals, and do not incorporate savings achieved in prior years. Savings estimates are based on projected participation during each year of the forecast period.

Table 23. Energy Management Estimated Participation and Savings

Metric	PY1	PY2	PY3
Estimated Participants	0	2	5
Projected Net Annual Natural Gas Savings (therms)	0	4,837	12,092
Projected Net Lifetime Natural Gas Savings (therms)	0	96,732	241,831
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	0	0	0
Projected Net Annual Electric Savings (kWh)	0	124,514	311,284
Projected Net Lifetime Electric Savings (kWh)	0	2,490,273	6,225,682
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	0	0	0
Projected Net Annual Peak Demand Savings (kW)	0	3	8
Projected Net Lifetime Peak Demand Savings (kW)	0	61	152

Program Budget (MFR II a.xi) (MFR II.a.xii)

The following table provides the subprogram budget broken down by the following categories: capital cost; utility administration; marketing; outside services; incentives (including rebates and low- or no- interest loans); inspections and quality control; and evaluation.

Table 24. Energy Management Program Estimated Program Expenditures by Cost Category and Year

Cost Category	PY1	PY2	PY3
Capital Cost	0	0	0
Utility Administration	0	13,482	32,007
Marketing	0	6,556	16,102

Outside Services	0	38,248	90,494
Incentives-rebates and other	0	142,626	356,564
Incentives-financing	0	28,500	71,250
Inspections and Quality Control	0	1,788	3,566
Evaluation	0	8,117	18,457
Total	0	239,316	588,440

3.6. Pilot Subprograms

Residential Demand Response Pilot Subprogram: This pilot subprogram will test various approaches to residential natural gas demand response measures and programs for the next three-year cycle.

C&I Demand Response Pilot Subprogram: This pilot subprogram will test various approaches to C&I natural gas demand response measures and programs for the next three-year cycle.

Innovative and Synergistic Approaches Pilot Subprogram: This pilot subprogram will allow SJG to explore and test various energy efficiency measures and program design approaches. The energy savings targets in the next three-year cycle will be challenging and the information learned from this pilot will allow SJG to better position itself to meet these goals.

Because of the nature of these pilot programs, the program budget has been designed to accommodate multiple designs and to test potential program delivery methods. The following table provides the budget for all three pilots broken down by the following categories: capital cost; utility administration; marketing; outside services; incentives (including rebates and low- or no- interest loans); inspections and quality control; and evaluation.

Table 25 – Pilots Estimated Program Budget

Cost Category	PY1	PY2	PY3
Capital Cost	0	0	0
Utility Administration	149,432	141,790	134,647
Marketing	70,254	68,954	67,738
Outside Services	425,326	402,255	380,692
Incentives-rebates and other	1,500,000	1,500,000	1,500,000
Incentives-financing	0	0	0

Inspections and Quality Control	22,866	18,800	15,000
Evaluation	78,031	71,148	64,715
Total	2,245,910	2,202,947	2,162,791

3.6.1. Residential Demand Response

This pilot will test a Direct Load Control ("DLC") demand response ("DR") offering to residential customers through a program that will cycle off heating systems via Wi-Fi controlled thermostats. DLC programs aim to reduce gas usage at a customer site by reducing load for a few hours, or the whole day. This is typically done by raising a thermostat setting by about two degrees over a multi-hour window. To participate in a DLC program, a customer must have a smart thermostat installed that can be controlled by Wi-Fi. Customers opt-in to the program and receive a financial incentive upon enrollment and another financial incentive based on successful participation. Events are typically called a few times during the winter on days of anticipated high gas system demand.

This pilot will be used to test different technologies, thermostat vendors, and incentive offerings for a formal DLC program offering. This DLC offering will be most effective if AMI is widely available to all SJG customers because it would be used to verify the savings from the participation in the DR pilots. This pilot will be used to test various delivery methods and technologies that would be could be used hand in hand with AMI technology when available to all SJG gas customers.

Target Market or Segment (MFR II.a.ii)

This program is available to all individually metered residential customers with compatible central heating systems. SJG will determine compatible thermostat types and focus on enrolling customers who have existing compatible thermostats. This pilot will set a target number of customers for installation and enrollment.

Marketing Plan (MFR II.a.xiv)

Pilot programs are unique in nature, and the marketing plan for the pilot will reflect that fact. As such, the pilot will not be marketed broadly to all customers while SJG tests different delivery and enrollment methods. SJG will identify customer who have previously installed Wi-Fi thermostats and make them aware of the pilot using direct mail and email marketing.

The primary market barriers that impact this program include:

- **Initial Cost of Efficient Equipment:** The initial cost of a Wi-Fi enabled thermostat and availability of Wi-Fi may be a barrier to enrollment. To address this barrier SJG will offer incentives for the installation of Wi-Fi enabled thermostats that are compatible with the pilot program.
- **Customer Awareness and Engagement:** Residential customers may not be aware of the benefits of participating in a demand response offering and installing Wi-Fi enabled

thermostats. SJG will continue its work with promoting the installation of connected thermostats and will focus on thermostats that will be eligible for this pilot program. Regarding engagement, once customers enroll in the program, the adjustments to their thermostats is automatic, and customers can opt out of an event simply by adjusting their thermostat.

SJG will seek to manage all barriers to program success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. Established SJG customer communication channels, data, and brand in the marketplace will all be leveraged to deliver best-practice programs that identify and confront market barriers on an ongoing basis. To the extent possible, SJG will cross-promote programs to spread awareness of the range of efficiency opportunities proposed in this plan.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)

SJG will work with a third-party implementation contractor who has experience working with residential DLC programs to oversee enrollment of customers and the dispatch of events. SJG will work closely with the third-party contractors to conduct customer outreach/marketing and monitoring the effectiveness of the outreach efforts. The third-party contractor will monitor enrollment goals.

To select qualified third-party implementation contractors, SJG will prioritize criteria including but not limited to:

- Experience delivering similar programs or initiatives
- Resources
- Cost
- The amount of business placed with minority, women, veteran and service disabled veteran owned businesses ("MWVBEs").

Existing and Proposed Incentives Ranges (MFR II.a.iii) (MFR II.a.iv)

Incentives will be reviewed at different times during the process, but there will be three primary ways to offer incentives in a DLC pilot:

- Incentives for purchase and installation of Wi-Fi enabled thermostats
- Incentives for enrollment in DLC program
- Incentives for successful participation in the program based on a certain number for events per season.

Customer Financing Options (MFR II.a.vi)

Not applicable.

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG residential customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data. Customers can also access historic usage data through the SJG home energy report portal usage using the Green Button option.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

Because of the novel nature of this pilot program the number of participation and energy savings are not available. Energy savings are one of the main factors that will be studied during the pilot period of this sub-program.

The Statewide Coordinator will not allocate any costs for this sub-program as it is a pilot.

Program Budget (MFR II a.xi) (MFR II.a.xii)

The pilot budget is provided in section 3.6 above.

3.6.2. C&I Demand Response

Electric demand response programs have been used across the US as a way to reduce electricity use, particularly at times of grid peaks. In electric DR programs, customer reduce or shift their usage in response to a signal from the grid operator or a financial mechanism. Gas DR is similar in that it reduces gas demand on a pipeline system at times of peak usage, transfers dependence on use of oil for electricity generation, and can ultimately lead to reduced need to pipeline expansion.

Natural gas usage is highest in the winter months when gas is used for both space heating and electrical generation needs. When extreme cold weather hits regions like the northeast US, constraints on natural gas pipelines can lead to spikes in natural gas and electricity prices. This means that gas DR programs can lead to two primary system benefits: 1) reducing price volatility and costs in electric markets; and 2) reducing need for gas pipeline capacity.

One barrier is metering infrastructure. Many customers (both residential and C&I) do not have AMI for gas and their participation in gas DR programs would not be able to be measured properly. Wide availability of AMI to all SJG gas would eliminate this barrier and help ensure that customers experience the full benefits of this program.

Load Curtailment (or performance-based) programs are designed for larger C&I customers with firm service (e.g. not interruptible service) to reduce their usage over a 24-hour period after receiving a signal from the utility. Generally, companies will work with a curtailment service provider (“CSP”) who will aggregate multiple customers and provide guidance on the best ways to reduce load. In load curtailment programs customers are generally given 24-48 hours notice of an event and will reduce their load by shutting down of processes, reducing central heating, shutting down combined heat and power systems, and other methods. Customers that enroll in the

program must meet specific metering specifications. Customers can be paid incentives for being enrolled and providing capacity in the program, and then also paid incentives for their measured participation in the programs.

Target Market or Segment (MFR II.a.ii)

The target market for this pilot will be large C&I customers with large gas loads and CSPs.

Marketing Plan (MFR II.a.xiv)

This pilot will not be marketed; rather SJG will work with customers and partners to identify potential projects and delivery methods that would be relevant to this pilot program.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)

SJG will recruit large C&I customers and CSPs and this pilot program would be ready for deployment in the first winter after SJG efficiency programs launch, with opportunities being evaluated on a rolling basis. The delivery method and contractor roles would depend on the specific projects and delivery methods.

Existing and Proposed Incentives Ranges (MFR II.a.iii) (MFR II.a.iv)

The incentives would depend on the specific projects and delivery methods and will be tested through this pilot program.

Customer Financing Options (MFR II.a.vi)

Not applicable

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG commercial customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

Because of the novel nature of this pilot program the number of participation and energy savings are not available. Energy savings are one of the main factors that will be studied during the pilot period of this sub-program.

The Statewide Coordinator will not allocate any costs for this sub-program as it is a pilot.

Program Budget (MFR II a.xi) (MFR II.a.xii)

The pilot budget is provided in section 3.6 above.

3.6.3. Innovative and Synergistic Approaches

The Innovative and Synergistic Approaches ("ISA") pilot is designed to deploy innovative energy efficiency technologies and delivery methods to SJG's Residential and C&I customers with the goal of integrating these new methods as part of SJG's offerings. The demonstration of new technologies will allow SJG and its customers to test new delivery pathways in order to enhance existing program delivery. The goal of these demonstration projects will be to identify offerings for new markets and customer segments and to better serve underserved markets. These projects may include market ready technologies that are not deployed in the programs, customer education offerings, innovative approaches to delivering energy efficiency to customers, and other projects that meet the criteria of the ISA program. Some potential examples include:

- Backup Generation Incentives could provide residential and commercial customers with incentives to install efficient, gas-fired backup generation at their homes and facilities. As superstorms and extreme weather events become more common, assisting customers that are interested in purchasing back-up generators focus on more efficient and longer lasting technologies will not only help the environment, but also help residents and small business better prepare for the next major outage event.
- Building Operator Certification[11] ("BOC") is a national training and certification for buildings engineers and maintenance personnel. This credential is taught in a classroom setting to buildings operations personnel and gives them skills to help save energy through the operations of their facilities. The Level I courses focus on building systems including HVAC, HVAC controls, lighting indoor air quality, benchmarking energy performance and opportunities for operational efficiency. As of 2015, a number of utilities are claiming between 119,000 kWh-215,000 kWh and up to 1,564 therms per credentialed operator and these savings are supported by evaluation studies. The class is a significant commitment for companies as it requires 7 days of classroom time, $1,900 in tuition, and a passing grade on the final exam. SJG can provide an incentive for each student who completes the program.
- Deep Energy Retrofits ("DER") are energy conservation projects that aim to reduce energy consumption in a building by 50% though a whole building approach. A pilot program could target commercial buildings to explore different energy reduction strategies and their cost effectiveness. A primary strategy in DERs are significant building shell improvements, through thick internal insulation or though external insulation. Other strategies include replacing heating, cooling, and hot water systems and improvements to ductwork. A program could be considered to provide incentives for buildings being constructed to a higher standard, as well as modeling subsidies, and incentives for design teams.

[11] https://www.theboc.info/

Target Market or Segment (MFR II.a.ii)

All Residential and C&I customer could potentially benefit from this pilot program. SJG will explore technologies with broad application, as well as technologies and delivery methods that would be pertinent to specific segments like commercial real estate and industrial customers. The markets impacted by this pilot will be determined by the projects undertaken.

Marketing Plan (MFR II.a.xiv)

SJG will work with customers and partners to identify potential projects and delivery methods that would be relevant to this pilot program. Effective marketing efforts may also be tested in this pilot to determine the most effective means of reaching customers.

Implementation Plan, Delivery Method, and Contractor Roles (MFR II.a.v) (MFR II.a.viii) (MFR II.c) (MFR II.a.xiii)

The delivery method and contractor roles would depend on the specific projects and delivery methods.

Existing and Proposed Incentives Ranges (MFR II.a.iii) (MFR II.a.iv)

The incentives would depend on the specific projects and delivery methods.

Customer Financing Options (MFR II.a.vi)

Not applicable

Customer Access to Current and Historic Energy Usage Data (MFR II.a.vii)

SJG residential customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data. Customers can also access historic usage data through the SJG home energy report portal usage using the Green Button option.

SJG commercial customers have access to usage data through My Account, the online customer service portal, where they can pull up to 24 months of usage data.

Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x)

Because of the novel nature of this pilot program the number of participation and energy savings are not available. Energy savings are one of the main factors that will be studied during the pilot period of this sub-program.

The Statewide Coordinator will not allocate any costs for this sub-program as it is a pilot.

Program Budget (MFR II a.xi) (MFR II.a.xii)

The pilot budget is provided in section 3.6 above.

4. DATA SECURITY AND CUSTOMER COMPLAINT RESOLUTION

4.1. Customer Complaint Resolution

Customer complaints relating to the design, delivery, or administration of any SJG subprogram may be made through various customer contact personnel/departments including the customer service toll free number or directly to the NJ BPU. In all instances, the immediate issue would be referred to the most appropriate subprogram management personnel to investigate and resolve.

SJG will attempt to resolve disputes with its customers informally in the first instance. Disputes that involve administration of the subprogram that cannot be resolved informally will be resolved through the NJ BPU's existing process for customer complaints within the appropriate Division or the Office of Administrative Law. Disputes between SJG and vendors will be resolved in accordance with contract provisions. Disputes under the subprogram that involve monetary claims or civil damages that cannot be decided by the NJ BPU will be resolved in an appropriate court of law.

4.2. Data Protection and Security

The Company will maintain and protect customer data from unlawful dissemination consistent with applicable law, including all New Jersey statutory and BPU regulatory obligations. SJG will implement privacy and data handling policies and procedures that are consistent with its customer data security protections and any applicable BPU regulations and statutory obligations. The Company will not sell or share any individual customer information or aggregated customer data, except as specified. SJG may share customer information or aggregated customer data with outside third-party implementation contractors, vendors, or trade allies to implement and/or evaluate SJG's energy efficiency programs, and these companies shall use that information/data for the sole purpose of Program implementation and evaluation.

5. EVALUATION, MEASUREMENT & VERIFICATION

The utilities recognize the importance of incorporating Evaluation, Measurement and Verification ("EM&V") into the energy-efficiency programs. EM&V can help assess whether program objectives are being achieved, document energy and non-energy benefits and inform future program development. This overview will address common definitions of the types of evaluations and primary evaluation objectives, the philosophy of monitoring and improving program performance, and EM&V budget considerations. Proposed budgets for evaluation are reflected in Appendix A.

Further, the utilities are not including a detailed Evaluation Plan for the Core Programs as part of this filing because of the clear intention of the June 10th Board Order for the evaluation plans to be developed in collaboration with the soon to be formed EM&V Working Group. All of the utilities are interested in being active participants in this EM&V Work Group to share both program experiences and understand the interests and concerns of the other stakeholders. The utilities anticipate that this new EM&V workgroup will provide significant input that will shape the slate of evaluation activities for this first triennial program cycle. Further, we expect that there will be a robust discussion of which types of evaluations make the most sense in the early stages of this transition. Accordingly, the utilities did not want to prejudge the outcome of the EM&V work group efforts with our own recommendations, but we have included sufficient funding to support the anticipated evaluation work within our filing.

Common definitions and objectives

The State and Local Energy Efficiency Action Network ("SEE Action") offers resources, discussion forums, and technical assistance to state and local policymakers as they seek to advance energy efficiency. Their Energy Efficiency Program Impact Evaluation Guide from December 2012 identified three primary objectives for evaluations.

- **Document the benefits** (i.e., impacts) of a program and determine whether the subject program (or portfolio of programs) met its goals
- **Identify ways to improve current and future programs** through determining why program-induced impacts occurred
- **Support energy demand forecasting and resource planning** by understanding the historical and future resource contributions of energy efficiency as compared to other energy resources.

That same guide provides the following standard categories of evaluations:

- **Impact evaluations:** assessments that determine and document the direct and indirect benefits of an energy efficiency program. Impact evaluation involves real-time and/or retrospective assessments of the performance and implementation of an efficiency program or portfolio of programs. Program benefits, or impacts, can include energy

and demand savings and non-energy benefits (sometimes called co-benefits, with examples being avoided emissions, and water savings). Impact evaluations can also include cost-effectiveness analyses aimed at identifying relative program costs and benefits of energy-efficiency as compared to other energy resources, including both demand- and supply-side options.

- **Process evaluations:** formative, systematic assessments of an energy-efficiency program from both a customer and program administrator viewpoint. They document program operations and identify and recommend improvements that are likely to increase the program's efficiency or effectiveness for acquiring energy-efficiency resources, and improve the customer experience with the program.
- **Market evaluations:** assessments of structure or functioning of a market, the behavior of market participants, and/or market changes that result from one or more program efforts. Market evaluation studies may include estimates of the current market role of energy-efficiency (market baselines), as well as the potential role of efficiency in a local, state, regional, or national market (potential studies). Market evaluation studies indicate how the overall supply chain and market for energy-efficiency products works and how they have been affected by a program(s). These evaluations can also include assessments of other societal, customer, or utility benefits of Energy Efficiency programs, such as the economic and job creation impacts of the programs, health benefits to society, or T&D benefits to utilities. And finally, these studies can also be used to inform changes to the portfolio of efficiency measures to be offered to customers, or the savings achieved by the measures.

Monitoring and Improving Program and Portfolio Performance

There is a feedback loop among program design and implementation, impact evaluation, and process evaluation. Program design and implementation, and evaluation are elements in a cyclical feedback process. Initial program design is informed by prior baseline and market potential studies. Ongoing impact evaluation quantifies whether a program is meeting its goals and may raise questions related to program processes and design. Process evaluation tells the story behind how the impact was achieved, and points the way toward improving program impacts by providing insight into program operations. Thus, the three elements work together to create a better, more effective program.

Budget Considerations for EM&V work

As noted, proposed budgets for evaluation are reflected in Exhibit A. These budgets were established with consideration of the industry standard of reserving 3% to 5% of budget for this type of work.[12]

[12] https://www.aceee.org/toolkit/2020/02/evaluation-measurement-verification

6. GAS AND ELECTRIC UTILITY OVERLAP ISSUES AND STATEWIDE COORDINATOR

In response to the New Jersey Board of Public Utilities' Order (see BPU DOCKET NOS. QO1901040, QO19060748 & QO17091004 dated June 10, 2020), directing each electric public utility and gas public utility in the State of New Jersey to establish energy efficiency ("EE") and peak demand reduction ("PDR") programs pursuant to the Clean Energy Act of 2018, the New Jersey investor-owned electric and gas utilities are collaborating in order to implement programs in a consistent manner and develop supportive processes, procedures, requirements, and forms.

Coordinated Program Offerings

To support the coordinated delivery of Core and certain Additional program offerings in situations that involve gas and electric savings opportunities in overlapping utility territories, the Utilities have established a framework that will align key program elements through use of Interconnected Tracking Systems supported by use of a Statewide Coordinator System, aligned Utility Responsibilities, and Coordinated Program Elements as further described below. This structure will support the coordinated delivery of appropriate energy efficiency measures in the following Program or Sub-program offerings:

Core Offerings

- Energy Efficient Products
- Home Performance with ENERGY STAR
- Multi-Family
- Direct Install
- Prescriptive and Custom Measures

Additional Utility-Led Offerings

- Moderate-Income Weatherization
- Quick Home Energy Check-Up
- Engineered Solutions
- Energy Management

Interconnected Tracking Systems

To support consistency across the state and to align the above coordinated program offerings, the utilities will contract with a single third-party entity to serve as a Statewide Coordinator ("SWC") for measures and costs that impact more than one utility in situations where gas and electric service territories overlap. This entity, to be selected through a competitive procurement process, will provide a software platform to cross-reference eligible customers, identify the local gas and

electric company serving the customer, identify completed and in-progress efficiency projects, and perform independent allocations of energy savings and costs for coordinated program offerings. These costs and savings will be allocated between the Utility that provides the program services (i.e. "Lead Utility") and the Utility with whom the services were coordinated (i.e. "Partner Utility').

In areas where gas and electric service territories overlap, the utilities will design program elements that support consistent delivery of the above coordinated program offerings among all of the utilities to enable the SWC to allocate shared costs and energy savings appropriately based on the fuel types impacted by EE measures.

Statewide Coordinator System Responsibilities

- Serve as a central platform to ensure data minimums required for coordinated data elements, exchange protocols, and serve as a repository for shared measure costs and shared savings for applicable programs.
- Track participation specific to utility programs that require coordination (e.g. screen prior participation in coordinated program offerings)
- Serve as a clearing house for pre-determined data formats and exchanges
- Perform allocation of dual-fuel or partner-fuel savings and cost for customers with separate gas and electric utilities, sharing of costs, investments, and applicable to customer financing
- Determine and provide supporting reports respective to utility invoice balances for allocation of shared measure costs (e.g. costs of respective measures and share of costs)
- Provide monthly reports of coordinated program activity so that customer participation and program results may be tracked

Utility Responsibilities

The Utilities will implement certain program operations through either internal resources, or under contract with third-party implementation contractor(s) ("TPIC"), outside of the Statewide Coordinator system. By retaining these functions, the Utilities can maintain a strong line of sight to program operations and still work collaboratively with the other Utilities in offering coordinated programs to New Jersey customers. These functions include, where appropriate:

- Customer enrollment
- Developing consistent enrollment forms to collect agreed-upon customer information to share between the utilities
- Screening and qualifying contractors for Utility programs
- Customer care functions
- Marketing of programs
- Providing in-home/business auditing or direct-install of efficiency measures
- Communicating availability of customer financing options
- Integrating with other Utility or Co-managed programs

- Sponsoring EE program applications including paying initial incentives to customers and contractors
- Invoicing peer Utility partners for coordinated program costs

Coordinated Program Elements

As envisioned by the Board's direction on coordinated program offerings, the Utilities' programs are designed in a way to minimize customer confusion and present consistent opportunities for customer participation with access to both electric and gas measures simultaneously, where appropriate. The utilities recognize that programs will evolve after initial launch and commit to ongoing collaborative efforts among the Utilities to continue program alignment. Central to both initial launch and ongoing efforts will be a focus by the Utilities to standardize the following wherever possible:

- Common forms for contractors and customers with uniform field requirements
- Contractor minimum requirements and credentials for applicable programs
- Eligible customers and property requirements
- Eligible measures
- Incentive structures through use of an agreed-upon standard range
- Software platforms or interfaces to be used by market contractors
- Targeted bonus approaches for customers that meet specific policy priorities (e.g. income qualified, targeted geographic locations,)

7. IMPLEMENTATION PLAN (MFR II.a.xiii)

South Jersey Gas will pursue the following implementation plan across the portfolio. Program descriptions for individual programs include additional information to supplement the general implementation plan shown below.

Program Administration

The Company will provide the management, administration, and implementation of the programs through internal operations or under supervised support of third-party vendors. The program teams will monitor the following program elements for each utility-administered program:

- Progress to goal
- Projects completed
- Energy savings
- Customers served
- Budgets

The Company will also keep abreast of industry trends, market research, best practices from other New Jersey utilities and best practices to consider possible enhancements to the programs and ensure best-quality program implementation and performance.

Marketing Collaboration

To support a consistent statewide approach for program marketing and to support statewide awareness of energy efficiency programs and efforts, the Company will collaborate with partnering utilities on marketing materials and broad customer-awareness language. The Company will also participate in and support efforts of the NJ BPU Marketing working groups to determine appropriate measures for joint and statewide marketing efforts.

In addition, to supporting the statewide marketing efforts, the Company anticipates using both traditional utility channels (*i.e.* bill inserts), mail, print, radio, online advertising, email blasts, social media, outreach events (*i.e.*, community fairs) and indirect outreach through other stakeholders that can help to increase awareness and education. Other stakeholders include contractors, green teams and community groups.

Customer Service and Call Center

The Company will utilize telephone, website, and other customer-facing tools to provide energy efficiency program customer support and service.

Listed below are the typical responsibilities of the customer support representatives:

- Handle inquiries related to the Energy Efficiency Programs
- Facilitate electronic or postal delivery of requested information
- Provide program application support and status updates

- Resolve issues or complaints.

Any customer complaints will be escalated to the appropriate department within the Company and handled through standard customer service practices.

IT, Data Tracking, and Reporting

The Company or third-party vendor will identify and implement appropriate IT systems to track and report program participation and energy-saving data. These systems will be in coordination with existing Company systems or built-out appropriately to meet the specific program tracking and regulatory reporting requirements. The systems will transmit data feeds with the Statewide Coordinator to facilitate data sharing between utilities for dual-fuel programs.

The IT systems capabilities will include, but is not limited to the following functions:

- Program monitoring reports
- Invoicing coordinating utilities and third-party vendors
- EM&V data extracts
- Regulatory reporting extracts

Processes to ensure data quality and data security will be put in place and monitored on a routine basis to ensure program reporting accuracy and customer data protections.

Program Quality Assurance and Quality Control

The Company will deploy routine quality assurance and quality control measures to ensure its internal and vendor processes are meeting the goals and objectives of the program. Such measures may include routine program performance reviews, vendor meetings, customer participation surveys, and project inspections. Additionally, any Trade Ally or Participating Contractor will undergo a thorough onboarding review to ensure that participating contractors are licensed, insured, and that they fully understand program requirements before performing any work on behalf of the Company and program. Further, routine review periods to ensure consistent program deployment and execution. The Company will take corrective actions for non-compliance and conformance with program objectives or Company standards.

8. WORKFORCE DEVELOPMENT

The utilities recognize the importance of developing and supporting strong Workforce Development Programs. There needs to be a strong pool of qualified candidates ready for companies to hire to meet the increased demand for the energy efficiency programs and projects as the utilities implement programs to strive to meet the new energy savings targets required by the Clean Energy Act. This overview will address thoughts on training needs and career paths, trade ally needs, and contracting provisions. However, the utilities are not including a detailed Workforce Development Plan for the Core Programs as part of this filing because of the clear direction in the June 10th Board Order for the workforce development and job training partnerships and pipelines to be developed in collaboration with the State and the Workforce Development Working Group and Equity Working Group.

SJG is interested in being an active participant in the Workforce Development Working Group to share anticipated program hiring needs and understand the interests, feedback and concerns of the other stakeholders. The utilities anticipate that this new work group will provide significant input that will shape the recommended slate of programs and policies to develop a robust pipeline of workers able to meet the needs of a growing energy efficiency industry in New Jersey and to ensure that local, underrepresented, and disadvantaged workers are included in those opportunities.

Training Needs and Career Paths

In order for the utilities to reach the aggressive energy efficiency goals established by the Clean Energy Act, New Jersey will need to significantly increase the number of trained professionals and skilled trade persons who are proficient in meeting the needs of residential, commercial and multi-family projects, such as:

- Auditors
- HVAC technicians
- Plumbers
- Electricians
- Seal-up and insulation contractors
- Engineers
- Analysts (energy modeling and evaluation, customer service, financial tracking, cost benefit analysis, demographic analysis)
- Program staff with a strong understanding of the approved energy efficiency programs and supporting administrative staff
- Outreach Specialists

We recognize that these positions require a broad range of technical training and educational experience and that it is in our interest to partner with New Jersey based vocational institutions, community colleges, universities, community-based organizations, and non-profits. We anticipate that most of these entities will have some level of representation with either the Workforce Development Working Group or the Equity Working Group and look forward to hearing their

input. We expect the discussion within those working groups will include insights from successful models in other states and other industries as well as efforts already underway in New Jersey. Taking into account recommendations from those groups and funding from either the State or what the utilities are reserving within these filings, we hope to start to launch programs in Spring of 2021.

Trade Ally Needs

While ensuring there is trained staff available is a critical path, the utilities also recognize there must be a pool of employers interested in hiring these individuals. While the utilities will be hiring some individuals directly and will see strong interest from implementers and trade allies under direct contracts with the utilities, we recognize that we must also engage the open market to understand the needs of contractors and other firms. Organizations like the New Jersey Air Conditioning Contractors Association (NJACCA), the New Jersey Association of Plumbing, Heating, and Cooling Contractors (NJPHCC) and the New Jersey Association of Energy Engineers (NJAEE) provide industry leadership and guidance to energy businesses, and should be included in the Working Group to guide policies and program designs that will meet the needs of existing and new contractors.

With the Equity lens in mind, we expect the Working Groups to also explore paths that can help Women and Minority Owned Businesses grow and thrive in the Clean Energy Economy. The potential for coaching or incubator programs could ensure that underrepresented individuals have a greater chance to share in management and ownership opportunities.

Contracting Provisions

The utilities will be following internal procurement protocols for the services that will be secured to implement our programs. We are all willing to include the amount of business placed with minority, women, veteran and service disabled veteran owned businesses ("MWVBEs") as part of our rating criteria when evaluating contract proposals.

Budget Considerations for Workforce Development Programs

Proposed budgets for Workforce Development Programs are $150,000 per year for all three program years. These budgets were established to ensure that there is adequate funding to launch and maintain programs during this initial triennial period. In the event that the State identifies adequate funding from other sources to support these types of programs, the utilities may be able to reduce their planned expenditures.

9. QUANTITATIVE PERFORMANCE INDICATORS (MFR VII.a. & MFR VII.b.)

The following section outlines the quantitative performance indicators ("QPI") for the first three-year cycle. The following metrics will be tracked and reported:

1. Annual energy savings (Th)
2. Annual demand savings (peak day Th)
3. Lifetime energy savings (Th)
4. Lifetime of persisting demand savings (peak day Th-yr.)
5. Net present value of utility cost test net benefits ($)
6. Low income lifetime savings (Th)
7. Small business lifetime savings (Th)

The following table shows the SJG planned value, by program year, for each of the seven metrics.

Table 26 – SJG QPIs

QPI Metric	PY 1	PY 2	PY 3
Annual Energy Savings (therm)	2,007,669	2,081,342	2,738,402
Annual Demand Savings (Pk therm)	297	301	391
Lifetime Energy Savings (therm)	17,356,632	18,812,531	27,655,786
Lifetime of Persisting Demand Savings (Pk therm)	2,517	2,661	3,883
NPV of UCT Net Benefits ($)	1,444,346	1,472,719	2,036,585
Low-Income Lifetime Savings (therm)[13]	1,056,388	1,207,301	2,112,777
Small Business Lifetime Savings (therm)[14]	310,699	372,839	517,832

[13] Based on Moderate-Income Weatherization Program
[14] Based on C&I Direct Install Program

10. COST EFFECTIVENESS

This section summarizes the approach and results of the cost effectiveness analysis for the SJG proposed portfolio of programs. The cost effectiveness analysis for the SJG portfolio was conducted according to best practices of cost benefit analysis for energy efficiency programs and guidance from the BPU on the New Jersey Cost Test.[15] While the primary cost effectiveness testing in New Jersey is the New Jersey Cost Test, results for the five California Standard Practice Manual tests are also presented for informational purposes. The table below shows the results of the cost effectiveness testing, including the net benefits and cost benefit ratio for all six tests for each program by program year.

10.1. Results of Cost-Benefit Analysis

The portfolio of programs contained in this plan is cost effective based upon the New Jersey Cost Test, as well as under the Societal Cost Test, which captures a wider array of program benefits. The follow chart provides the cost-benefit results for each sector for the New Jersey Cost Test, as well as for the five tests prescribed in the California Standard Practice Manual.

Table 27 – CBA Results

Sector/Program	NJCT	SCT	TRC	PCT	PAC	RIM
Res	1.6	4.6	1.0	2.6	1.1	0.7
C&I	1.3	3.2	0.8	2.1	0.9	0.7
LMI	6.4	12.4	3.2	8.1	3.2	1.1
Total Portfolio	1.5	4.1	1.0	2.5	1.1	0.7
Behavior	1.7	2.1	1.3	2.7	1.3	0.7
Efficient Products	2.0	6.6	1.3	3.0	1.4	0.8
Existing Homes HPwES	1.1	2.4	0.7	1.8	0.9	0.6
Existing Homes QHEC	3.9	8.1	2.8	8.0	2.2	1.0
Existing Homes Moderate Income Weatherization	0.7	1.3	0.4	1.8	0.4	0.3
Energy Saving Trees	6.4	12.4	3.2	8.1	3.2	1.1
Multi-Family	2.5	5.3	1.7	3.9	1.9	1.0
Energy Solutions for Business: Prescriptive and Custom	4.3	9.5	2.8	5.1	3.4	1.8

[15] New Jersey Board of Public Utilities. Order Adopting the First New Jersey Cost Test. Docket Nos. Q019010040 and Q020060389. August 24, 2020. bpu.state.nj.us/bpu/pdf/boardorders/2020/20200824/8A%20-%20ORDER%20New%20Jersey%20Cost%20Test.pdf.

Energy Solutions for Business: Engineered Solutions	1.0	2.4	0.6	1.7	0.8	0.7
Energy Solutions for Business: Energy Management	1.8	4.5	1.0	3.0	1.0	0.9
Energy Solutions for Business: Direct Install	2.5	5.0	1.7	3.9	1.4	0.9
Pilots	0.0	1.4	0.0	1.0	0.0	0.0

10.2. Anticipated Economic Development and Job Creation

By investing in energy efficiency, SJG will be injecting millions of dollars into New Jersey's economy which will help to create jobs and spur additional business spending. In addition, reductions in energy costs to residents and business results in increased disposable income and net revenue and allows residents and businesses to spend more money within the state. The following chart shows the expected job-year created related to SJG's energy efficiency programs.

Table 28 – Estimated Job-Year Creation

Program	Direct Job Creation	Indirect + Induced Job Creation	Total Job Creation
Behavior	1	5	**6**
Efficient Products	844	891	**1,736**
Existing Homes HPwES	69	65	**134**
Existing Homes QHEC	13	55	**68**
Existing Homes Moderate Income Weatherization	83	14	**96**
Energy Saving Trees	3	21	**25**
Multi-Family	33	125	**158**
Energy Solutions for Business: Prescriptive and Custom	99	79	**178**
Energy Solutions for Business: Engineered Solutions	130	102	**232**
Energy Solutions for Business: Energy Management	15	11	**26**
Direct Install	42	33	**75**
Pilots	59	23	**82**
Portfolio Costs	28	-16	**12**
Total	**1,419**	**1,407**	**2,826**

The following chart shows the expected economic value-added activity created by SJG's energy efficiency programs.

Table 29 – Estimated Economic Value Added

Program	Value Added to GDP (NPV)	Value Added to GDP (Nominal)
Behavior	985,409	684,088
Efficient Products	136,975,065	160,620,834

Existing Homes HPwES	8,994,070	11,752,813
Existing Homes QHEC	5,030,830	7,342,366
Existing Homes Moderate Income Weatherization	8,120,598	9,957,629
Energy Saving Trees	1,058,647	2,566,453
Multi-Family	9,336,144	16,938,012
Energy Solutions for Business: Prescriptive and Custom	7,338,233	14,563,407
Energy Solutions for Business: Engineered Solutions	11,190,557	22,519,755
Energy Solutions for Business: Energy Management	1,049,385	1,870,456
Direct Install	4,717,446	7,372,233
Pilots	8,990,715	8,476,685
Portfolio Costs	1,687,632	748,905
Total	**205,474,731**	**265,413,637**

10.3. Environmental Emissions Savings

The SJG energy efficiency programs will also significantly decrease localized and global emissions that cause harm to human health and are directly linked to climate change. The following chart shows the expected emissions reductions stemming from SJG's energy efficiency programs.

Table 30 – Estimated Environmental Emissions Savings

Program	CO_2 Emissions Reduction (tons)	SO_2 Emissions Reduction (tons)	NOx Emissions Reduction (tons)
Behavior	20,474	0	16
Efficient Products	259,754	11	199
Existing Homes HPwES	34,988	5	25
Existing Homes QHEC	26,262	14	15
Existing Homes Moderate Income Weatherization	36,230	7	26
Energy Saving Trees	6,989	3	4
Multi-Family	48,926	27	28
Energy Solutions for Business: Prescriptive and Custom	32,905	19	19
Energy Solutions for Business: Engineered Solutions	71,926	28	47
Energy Solutions for Business: Energy Management	7,013	3	4
Direct Install	31,205	15	18
Pilots	0	0	0
Total	**576,670**	**133**	**401**

APPENDIX A – PROGRAM PARTICIPATION, SAVINGS, AND COST DETAILS

Participation and Savings Estimates

Table 31 – Estimated Participants

Participants

Subprogram	1	2	3	Total
Behavior	150,000	150,000	150,000	**450,000**
Efficient Products	25,817	28,547	40,456	**94,819**
Existing Homes HPwES	200	260	360	**820**
Existing Homes QHEC	850	1,200	1,500	**3,550**
Existing Homes Moderate Income Weatherization	350	400	700	**1,450**
Energy Saving Trees	1,500	1,500	1,500	**4,500**
Multi-Family	652	1,072	1,353	**3,077**
Energy Solutions for Business: Prescriptive and Custom	843	852	1,133	**2,828**
Energy Solutions for Business: Engineered Solutions	1	1	4	**6**
Energy Solutions for Business: Energy Management	0	2	5	**7**
Direct Install	15	18	25	**58**
Total	**180,228**	**183,852**	**197,036**	**561,115**

Table 32 – Annual Gas Savings

Gas Consumption Savings (therms) - Incremental Annual

Subprogram	1	2	3	Total
Behavior	634,197	556,939	466,642	**1,657,778**
Efficient Products	1,061,256	1,150,471	1,619,822	**3,831,550**
Existing Homes HPwES	65,981	85,775	118,766	**270,522**
Existing Homes QHEC	24,029	33,923	42,404	**100,356**
Existing Homes Moderate Income Weatherization	57,536	65,755	115,072	**238,364**
Energy Saving Trees	4,337	4,337	4,337	**13,011**
Multi-Family	18,001	30,899	42,768	**91,669**
Energy Solutions for Business: Prescriptive and Custom	77,700	79,631	106,305	**263,635**
Energy Solutions for Business: Engineered Solutions	43,918	43,918	175,672	**263,508**
Energy Solutions for Business: Energy Management	0	4,837	12,092	**16,928**
Direct Install	20,713	24,856	34,522	**80,091**
Total	**2,007,669**	**2,081,342**	**2,738,402**	**6,827,413**

Table 33 – Annual Gas Capacity Savings

Gas Demand Capacity Savings (therms) - Incremental Annual

Subprogram	1	2	3	Total
Behavior	105	92	77	**274**
Efficient Products	173	186	262	**621**
Existing Homes HPwES	11	14	20	**45**
Existing Homes QHEC	0	0	0	**0**
Existing Homes Moderate Income Weatherization	0	0	0	**0**
Energy Saving Trees	1	1	1	**2**
Multi-Family	0	0	0	**0**
Energy Solutions for Business: Prescriptive and Custom	0	0	0	**0**
Energy Solutions for Business: Engineered Solutions	7	7	29	**44**
Energy Solutions for Business: Energy Management	0	1	2	**3**
Direct Install	0	0	0	**0**
Total	**297**	**301**	**391**	**988**

Table 34 – Lifetime Gas Savings

Gas Consumption Savings (therms) - Lifetime

Subprogram	1	2	3	Total
Behavior	1,358,284	1,192,817	999,426	**3,550,526**
Efficient Products	11,897,386	12,593,402	16,915,445	**41,406,234**
Existing Homes HPwES	1,121,678	1,458,182	2,019,021	**4,598,881**
Existing Homes QHEC	183,912	259,640	324,550	**768,102**
Existing Homes Moderate Income Weatherization	1,056,388	1,207,301	2,112,777	**4,376,467**
Energy Saving Trees	130,109	130,109	130,109	**390,327**
Multi-Family	242,927	427,180	614,772	**1,284,879**
Energy Solutions for Business: Prescriptive and Custom	176,888	195,968	266,582	**639,438**
Energy Solutions for Business: Engineered Solutions	878,361	878,361	3,513,442	**5,270,163**
Energy Solutions for Business: Energy Management	0	96,732	241,831	**338,563**
Direct Install	310,699	372,839	517,832	**1,201,371**
Total	**17,356,632**	**18,812,531**	**27,655,786**	**63,824,950**

Table 35 – Lifetime Gas Capacity Savings

Gas Demand Capacity Savings (therms) - Lifetime

Subprogram	1	2	3	Total
Behavior	225	198	165	**588**
Efficient Products	1,939	2,039	2,740	**6,719**
Existing Homes HPwES	186	241	334	**761**
Existing Homes QHEC	0	0	0	**0**
Existing Homes Moderate Income Weatherization	0	0	0	**0**
Energy Saving Trees	22	22	22	**65**
Multi-Family	0	0	0	**0**
Energy Solutions for Business: Prescriptive and Custom	0	0	0	**0**
Energy Solutions for Business: Engineered Solutions	145	145	582	**873**
Energy Solutions for Business: Energy Management	0	16	40	**56**
Direct Install	0	0	0	**0**
Total	**2,517**	**2,661**	**3,883**	**9,062**

Table 36 – Annual Electric Savings

Electric Consumption Savings (kWh) - Incremental Annual

Subprogram	1	2	3	Total
Behavior	0	0	0	**0**
Efficient Products	968,521	1,075,211	1,608,056	**3,651,787**
Existing Homes HPwES	195,457	254,094	351,823	**801,375**
Existing Homes QHEC	736,033	1,039,105	1,298,882	**3,074,020**
Existing Homes Moderate Income Weatherization	319,231	364,835	638,462	**1,322,528**
Energy Saving Trees	96,854	96,854	96,854	**290,562**
Multi-Family	813,087	1,498,101	2,086,409	**4,397,597**
Energy Solutions for Business: Prescriptive and Custom	617,447	712,827	978,696	**2,308,970**
Energy Solutions for Business: Engineered Solutions	613,552	613,552	2,454,209	**3,681,313**
Energy Solutions for Business: Energy Management	0	124,514	311,284	**435,798**
Direct Install	692,442	830,930	1,154,070	**2,677,442**
Total	**5,052,625**	**6,610,023**	**10,978,744**	**22,641,392**

Table 37 – Annual Electric Demand Savings

Electric Demand Savings (kW) - Incremental Annual

Subprogram	1	2	3	Total
Behavior	0	0	0	**0**
Efficient Products	0	0	0	**1**
Existing Homes HPwES	7	9	12	**28**
Existing Homes QHEC	8	11	14	**34**
Existing Homes Moderate Income Weatherization	8	10	17	**35**
Energy Saving Trees	0	0	0	**0**
Multi-Family	12	22	32	**65**
Energy Solutions for Business: Prescriptive and Custom	36	38	51	**125**
Energy Solutions for Business: Engineered Solutions	17	17	68	**102**
Energy Solutions for Business: Energy Management	0	3	8	**11**
Direct Install	19	23	32	**74**
Total	**107**	**133**	**234**	**474**

Table 38 – Lifetime Electric Savings

Electric Consumption Savings (kWh) - Lifetime

Subprogram	1	2	3	Total
Behavior	0	0	0	**0**
Efficient Products	7,331,899	8,135,474	12,146,095	**27,613,469**
Existing Homes HPwES	3,322,774	4,319,606	5,980,993	**13,623,372**
Existing Homes QHEC	8,514,127	12,019,944	15,024,931	**35,559,002**
Existing Homes Moderate Income Weatherization	4,257,989	4,866,273	8,515,978	**17,640,239**
Energy Saving Trees	2,905,618	2,905,618	2,905,618	**8,716,854**
Multi-Family	12,842,277	24,269,398	34,609,314	**71,720,989**
Energy Solutions for Business: Prescriptive and Custom	14,216,211	15,696,446	21,335,814	**51,248,470**
Energy Solutions for Business: Engineered Solutions	12,271,044	12,271,044	49,084,177	**73,626,265**
Energy Solutions for Business: Energy Management	0	2,490,273	6,225,682	**8,715,955**
Direct Install	10,386,630	12,463,956	17,311,050	**40,161,636**
Total	**76,048,568**	**99,438,033**	**173,139,651**	**348,626,252**

Table 39 – Lifetime Electric Demand Savings

Electric Demand Savings (kW) - Lifetime

Subprogram	1	2	3	Total
Behavior	0	0	0	**0**
Efficient Products	2	2	2	**6**
Existing Homes HPwES	115	149	206	**470**
Existing Homes QHEC	90	127	159	**376**
Existing Homes Moderate Income Weatherization	153	175	305	**633**
Energy Saving Trees	0	0	0	**0**
Multi-Family	194	377	549	**1,119**
Energy Solutions for Business: Prescriptive and Custom	878	913	1,223	**3,014**
Energy Solutions for Business: Engineered Solutions	342	342	1,367	**2,050**
Energy Solutions for Business: Energy Management	0	61	152	**212**
Direct Install	288	346	480	**1,113**
Total	**2,061**	**2,490**	**4,443**	**8,993**

Cost Estimates

Table 40 – Cost Overview

Category	Behavior	Efficient Products	Existing Homes HPwES	Existing Homes QHEC	Existing Homes Moderate Income Weatherization	Energy Saving Trees	Multi-Family	Energy Solutions for Business: Prescriptive and Custom	Energy Solutions for Business: Engineered Solutions	Energy Solutions for Business: Energy Management	Energy Solutions for Business: Direct Install	Pilots	Portfolio Costs	Total
Capital Costs ($)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$609,648	**$609,648**
Utility Administration ($)	$140,625	$1,470,310	$338,285	$160,972	$1,015,380	$21,293	$307,183	$117,740	$659,417	$45,489	$246,716	$425,870	$90,000	**$5,039,279**
Marketing ($)	$0	$717,236	$165,478	$78,712	$497,458	$10,347	$150,849	$57,493	$325,625	$22,658	$120,591	$206,946	$1,050,000	**$3,403,394**
Outside Service ($)	$0	$4,169,959	$959,149	$456,425	$2,878,493	$60,414	$870,627	$333,889	$1,867,903	$128,742	$699,576	$1,208,273	$3,605,434	**$17,238,883**
Rebates, Grants, Loans, and Other Direct Incentives ($)	$2,812,500	$52,098,109	$9,925,116	$1,717,313	$10,864,589	$225,000	$4,769,322	$2,346,485	$11,425,379	$598,940	$3,545,390	$4,500,000	$0	**$104,828,142**
Inspections and Quality Control ($)	$0	$192,154	$43,631	$20,800	$129,991	$2,833	$38,880	$15,314	$81,184	$5,353	$31,940	$56,666	$450,000	**$1,068,747**
Evaluation ($)	$133,684	$2,458,454	$463,188	$80,230	$504,868	$10,695	$220,019	$110,063	$519,384	$26,574	$165,818	$213,894	$750,000	**$5,656,871**
SJG Lead Budget Subtotal	**$3,086,809**	**$61,106,223**	**$11,894,847**	**$2,514,451**	**$15,890,779**	**$330,582**	**$6,356,879**	**$2,980,985**	**$14,878,892**	**$827,756**	**$4,810,031**	**$6,611,648**	**$6,555,082**	**$137,844,964**
Funds Allocated to Partner Electric Utility	$0	-$1,159,131	-$911,122	-$1,051,594	-$1,313,582	-$97,187	-$3,127,351	-$1,718,193	-$3,688,223	-$280,087	-$1,889,187	$0	$0	**-$15,235,656**
Funds Received from Partner Electric Utility													$44,285,436	**$44,285,436**
Total Net SJG Budget	**$3,086,809**	**$59,947,092**	**$10,983,725**	**$1,462,857**	**$14,577,197**	**$233,395**	**$3,229,528**	**$1,262,792**	**$11,190,669**	**$547,669**	**$2,920,844**	**$6,611,648**	**$50,840,518**	**$166,894,744**

Table 41 – Annual Budget Summary ($ millions)

Subprogram	PY 1	PY 2	PY 3	Total
Behavior	$1.0	$1.0	$1.0	**$3.1**
Efficient Products	$18.8	$18.9	$23.4	**$61.1**
Existing Homes HPwES	$2.9	$3.8	$5.2	**$11.9**
Existing Homes QHEC	$0.6	$0.9	$1.0	**$2.5**
Existing Homes Moderate Income Weatherization	$3.9	$4.4	$7.6	**$15.9**
Energy Efficient Trees	$0.1	$0.1	$0.1	**$0.3**
Multi-Family	$1.1	$2.2	$3.1	**$6.4**
Energy Solutions for Business: Prescriptive and Custom	$0.8	$0.9	$1.2	**$3.0**
Energy Solutions for Business: Engineered Solutions	$2.5	$2.9	$9.4	**$14.9**
Energy Solutions for Business: Energy Management	$0.0	$0.2	$0.6	**$0.8**
Energy Solutions for Business: Direct Install	$1.3	$1.5	$2.0	**$4.8**
Pilots	$2.2	$2.2	$2.2	**$6.6**
Portfolio Costs	$3.1	$1.7	$1.7	**$6.6**
SJG Lead Budget Subtotal	**$38.5**	**$40.8**	**$58.6**	**$137.8**
Funds Allocated to Partner Electric Utility	-$3.3	-$4.4	-$7.6	**-$15.2**
Funds Received from Partner Electric Utility	$9.6	$12.8	$22.1	**$44.3**
Total Net SJG Budget	**$44.7**	**$49.2**	**$73.0**	**$166.9**

APPENDIX B – Program Incentives

Residential

Table 42 – Residential Incentive Table

Residential Sector Incentives (not including financing)				
Program	**Measure [1]**	**Rebate Up To Value ($) GDC Consensus Rebate Strategy [2]**	**Unit Basis**	**Total Current Incentives in SJG Territory [5]**
Efficient Products	Clothes Dryer - Tier 2	$300	Per dryer	$300
	EnergyStar Clothes Washer - Tier 1	$50	Per unit	$50
	Energy Star Clothes Washer - Tier 2	$100	Per unit	$100
	Energy Star Dryer	$100	Per dryer	$100
	Smart Thermostat	$125	Per thermostat [3]	$150
	Boiler Outdoor Reset Controls	$200	Per boiler	$200
	Gas Boiler 90% - 95% ($200 supplemental incentive for LMI customers)	$1,000	Per boiler	$800
	Gas Boiler ≥95% ($200 supplemental incentive for LMI customers)	$1,200	Per boiler	$800
	Gas Furnace - Tier 1 (≥ 95%) ($200 supplemental incentive for LMI customers)	$1,000	Per furnace	$750
	Gas Furnace - Tier 2 (≥ 97%) ($200 supplemental incentive for LMI customers)	$1,500	Per furnace	$1,000
	Gas Combi Heat ≥ 95 AFUE ($200 supplemental incentive for LMI customers)	$1,300	Per unit	$1,300
	Gas Combi Heat ≥ 97 AFUE ($200 supplemental incentive for LMI customers)	$1,750	Per unit	$1,550
	Qualifying Gas Heat with Qualifying Gas Water Heat ($200 supplemental incentive for LMI customers)	$1,300	Per unit	$1,300

	HVAC Quality Install	$450	Per unit	New
	Gas Storage Tank Water Heater - Power Vented < 55 gallons ≥ .64UEF	$500	Per unit	$400
	Gas Storage Tank Water Heater - Power Vented WH, ≥ 55 gallons, UEF ≥ .85	$750	Per water heater	$400
	Gas Storage Tank Water Heater - Power Vented Instant WH, UEF ≥ .87	$750	Per water heater	$400
	Indirect-fired Storage Tank Water Heater	$250	Per water heater	$500 *
	Properly Maintained Boiler (Tune-up Boiler)	$250	Per boiler	New
	Properly Maintained Furnace (Tune-up Furnace)	$250	Per furnace	New
	Marketplace Products Other Than Thermostat	50% Discount	Per customer	50% Discount
	Kits	$60	Per customer	50% Discount Free for LMI

Comprehensive Residential Programs

Program	Subprogram	Description	Total Current Incentives in SJG territory
Existing Homes	Home Performance with Energy Star (HPwES)[4] (all rebates not to exceed 50% of costs)	Customer will receive a BPI-certified audit. The following incentive structure will be used: Customer must have a minimum savings percentage of 5% based on modeled reduction of consumption; Rebate is $2,000 + $200 for each percentage point of savings above 5%; Rebate Cap = $6,000. Retain Contractor Production incentive of up to $500.	Tiered incentive cash rebate of 50% of the cost of the measures used to calculate Total Energy Savings, up to $4,000 - $5,000 Contractor production incentive.
	Quick Home Energy Checkup	No up front cost to customer for walk through audit with no cost or low cost measures installed at time of audit.	New

	Moderate Income Weatherization	No up front cost to customer for BPI-certified audit with up to $6,000 of direct install and weatherization measures and up to $1,500 on health and safety expenses.	No up front cost to customer for BPI-certified audit with up to $6,000 of direct install and weatherization measures. Additionally, up to $1,000 on health and safety expenses.
Hybrid Heat	N/A	Up to $2,500 in rebate.	New

Note

1 - The utilities reserve the right to include additional measures that are supported by established protocols or evaluation results in the industry to ensure we include a broad range of energy savings measures to maximize energy savings for customers and avoid market disruption (e.g. new NJCEP measures added in FY21).

2 - All rebates will be offered equal to or less than the "Up To" value.

3 - The total rebate value for a smart thermostat will be up to $125 total between both fuel utilities.

4 - Multi-family HPwES is shown on the Multi-family Schedule.

5 - Totals shown here represent the total value of rebates currently available to customers in SJG's territory through New Jersey's Clean Energy Program and SJG's Program.

* - When paired with a qualifying boiler.

Commercial Prescriptive

Table 43 – Commercial Prescriptive Incentive Table

Commercial Sector Incentives (not including financing)				
Program	**Prescriptive Measure [1]**	**Rebate Up To Value ($) GDC Consensus Rebate Strategy [2]**	**Unit Basis**	**Total (NJCEP & SJG) [4]**
Energy Solutions for Businesses-Prescriptive Measures	95 AFUE Make-up Air Unit	$8	Per kBtu/h	New
	Gas Furnace ≥ 95% AFUE	$1,000	Per unit	$900
	Gas Furnace ≥ 97% AFUE	$1,500	Per unit	$900
	Boiler Economizer Controls	$2,700	Per unit	$2,700
	Boiler Economizer Controls, < 800,000 Btu	$1,200	Per unit	$1,200
	Boiler Economizer Controls, > 4 MMBtu	$2,700	Per unit	$2,700
	Boiler Economizer Controls, 0.8 to 1.6 MMBtu	$1,500	Per unit	$1,500
	Boiler Economizer Controls, 1.6 to 3 MMBtu	$1,800	Per unit	$1,800
	Boiler Economizer Controls, 3 to 3.5 MMBtu	$2,100	Per unit	$2,100
	Boiler Economizer Controls, 3.5 to 4 MMBtu	$2,400	Per unit	$2,400
	Boiler HW Non-condensing, < 300 MBh	$2	Per MBh	$900
	Boiler HW Non-condensing, 300 to 2,500 MBh	$2	Per MBh	$1.75 to 1,500 MBh $1.50 to 2,500 MBh
	Boiler HW Non-condensing, > 2,500 MBh	$2	Per MBh	$1.30
	Boiler Tune-up	$1	Per kBtu/h	New
	Boiler Reset Controls	$1	Per kBtu/h	New
	Boiler, HW Condensing - Tier 1, < 300 MBh	$1,000	Per Boiler	$1,000
	Boiler, HW Condensing - Tier 1, 300 to 2,500 MBh	$3.50	Per MBh	$1.85
	Boiler, HW Condensing - Tier 1, > 2,500 MBh	$3.50	Per MBh	$1.55
	Boiler, HW Condensing - Tier 2, < 300 MBh	$1,200	Per Boiler	$1,000
	Boiler, HW Condensing - Tier 2, 300 to 2,500 MBh	$4	Per MBh	$2.20
	Boiler, HW Condensing - Tier 2, > 2,500 MBh	$4	Per MBh	$2

	Boiler, Steam < 300 MBH Input	$2	Per MBh	$1.40
	Boiler, Steam All Except Natural Draft, 300 to 2,500 MBh	$2	Per MBh	$1.20
	Boiler, Steam All Except Natural Draft, > 2,500 MBh	$2	Per MBh	$1
	Boiler, Steam Natural Draft, ≤ 300 to 2,500 MBh	$1	Per MBh	$1
	Boiler, Steam Natural Draft, > 2,500 MBh	$1	Per MBh	$0.70
	Commercial Combination Oven/Steamer	$2,000	Per oven/steamer	$2,000
	Commercial Conveyor Oven	$1,500	Per oven deck	$500
	Commercial Dishwashers, Door Type High Temp	$750	Per unit	$700
	Commercial Dishwashers, Door Type Low Temp	$700	Per unit	$700
	Commercial Dishwashers, Under Counter High Temp	$400	Per unit	$400
	Commercial Dishwashers, Under Counter Low Temp	$400	Per unit	$400
	Commercial Dishwashers, Multiple Tank Conveyor, High Temp	$1,500	Per unit	$1,500
	Commercial Dishwashers, Multiple Tank Conveyor, Low Temp	$1,500	Per unit	$1,500
	Commercial Dishwashers, Single Tank Conveyor, High Temp	$1,500	Per unit	$1,000
	Commercial Dishwashers, Single Tank Conveyor, Low Temp	$1,000	Per unit	$1,000
	Commercial Fryer	$750	Per vat	$749
	Commercial Griddle	$500	Per griddle	$125
	Commercial Rack Oven	$1,000	Per oven	$1,000
	Commercial Steam Cooker	$2,000	Per compartment	$2,000
	Condensing Integrated Boiler and Water Heater	$2,500	Per unit	$1,300
	Condensing Unit Heater, 90% AFUE	$750	Per unit	New
	DHW Pipe Wrap Insulation, < 0.5" dia	$1	Per linear foot pipe	$1
	DHW Pipe Wrap Insulation, > 0.5" dia	$2	Per linear foot pipe	$2
	DHW Storage, Gas-Fired, < 75,000 Btuh, (75 MBH) > 0.67 EF or 0.64 UEF	$350	Per unit	$100
	DHW Storage, Gas-Fired, < 75,000 Btuh, (75 MBH) > 0.87 EF or 0.81 UEF	$500	Per unit	$100

	DHW Storage, Gas-Fired, > 105,000 Btuh (105 MBH), > 82% Et	$500	Per unit	$1.75 per MBH
	DHW Storage, Gas-Fired, > 105,000 Btuh (105 MBH), > 92% Et	$750	Per unit	$3.50 per MBH
	DHW Storage, Gas-Fired, 75,000 to 105,000 Btuh, > 82% Et or .64 UEF	$750	Per unit	$3.50 per MBH
	DHW Storage, Gas-Fired, 75,000 to 105,000 Btuh, > 90% Et or .85 UEF	$500	Per unit	$1.75 per MBH
	DHW, Instant, Gas-Fired, < 200,000 Btuh, > 90% Et or .82 EF or > 0.81 UEF	$750	Per unit	$400
	DHW, Instant, Gas-Fired, > 200,000 Btuh, ≥ 90% Et or .85 UEF	$1,000	Per unit	$400
	Clothes Dryer - High Efficiency	$200	Per dryer	$200
	HE Commercial Cloths Washer	$150	Per washer	New
	ENERGY STAR Gas Convection Oven	$500	Per cavity	$500
	Gas Absorption Chillers, < 100 tons	$450	Per ton	$450
	Gas Absorption Chillers, 100 to 400 tons	$230	Per ton	$230
	Gas Absorption Chillers, > 400 tons	$185	Per ton	$185
	Gas Engine Driven Chillers	$350	Per ton	$350
	Gas-Fired Low-Intensity Infrared Heating Unit < 100MBH	$750	Per unit	$500
	Gas-Fired Low-Intensity Infrared Heating Unit > 100MBH	$500	Per unit	$300
	High Performance Hood (Demand Control Ventilation)	$2,500	Per hood	New
	Medium Pressure Steam Trap, 15 PSIG to 75 PSIG, Tested	$200	Per trap	New
	High Pressure Steam Trap, > 75 PSIG, Tested	$300	Per trap	New
	Hotel Guest Room Occupancy Sensor	$75	Per unit	New
	HVAC with CO2 - Based Control	$250	Per unit	New
	Indirect WH 85% CAE	$250	Per unit	New
	Low Flow Aerators - Tier 1	$2	Per unit	New
	Low Flow Aerators - Tier 2	$2	Per unit	New
	Low Flow Showerheads - Tier 1	$2	Per unit	New
	Low Flow Showerheads - Tier 2	$2	Per unit	New
	Market Avg Eff Spray Valve (1.16 GPM)	$25	Per spray valve	New

	Ozone Laundry Washing Machine	$250	Per lb. of laundry capacity	New
	Pool with Cover	$1,500	Per cover	New
	ROB DX Packaged System, EER = 10.8, 30 tons, AFUE 95%	$3,000	Per ton	$3,000
	Smart Thermostat	$125	Per thermostat [3]	$150
Energy Solutions for Businesses	**Custom Measure [1]**	**Rebate Up To Value (%) GDC Consensus Rebate Strategy [2]**	**Unit Basis**	**Total (NJCEP & SJG) 5**
	Custom Measure	50%	Per Measure	50% of rebate value or $1.60 per therm whichever is less

Note

1 - The utilities reserve the right to include additional measures that are supported by established protocols or evaluation results in the industry to ensure we include a broad range of energy savings measures to maximize energy savings for customers and avoid market disruption (e.g. new NJCEP measures added in FY21).

2 - All rebates will be offered equal to or less than the "Up To" value.

3 - The total rebate value for a smart thermostat will be up to $125 total between both fuel utilities.

4 - Totals shown here represent the total value of rebates currently available to customers in SJG's territory through New Jersey's Clean Energy Program and SJG's Program.

Commercial Comprehensive

Table 44 – Commercial Comprehensive Incentive Table

Comprehensive Commercial Programs (not including financing)			
Program	**Category**	**Description of Approach to Incentives [1 & 2]**	**Existing Incentives [3 & 4]**
Direct Install	Tier 1	For Tier 1 customers, standard basic energy savings measures may be installed at no cost during the time of the energy assessment. The program will offer to pay up to 80% of the project cost to install the recommended energy efficiency measures with the participating customer (and/or landlord) repaying the balance not covered through the incentive either in a lump sum or through an available repayment option. Customers located in an Urban Enterprise Zone, Opportunity Zone, owned or operated by a local government, or K-12 public schools. may also qualify for Tier 1 status, up to an average individual facility peak electrical demand of 200 kW .	NJCEP pays up to 80% of retrofit costs to facilities within an Urban Enterprise Zone, Opportunity Zone, owned or operated by a local government, K-12 public school, or designated as affordable housing. Other types of facilities receive an incentive up to 70% of retrofit costs.
	Tier 2	Tier 2 will serve the larger segment of eligible customers, with an average individual facility peak electrical demand of 101 - 200 kW over the past 12 months. Incentives up to 70% of the total project cost will be offered.	
Energy Management	Retro-commissioning	Incentives to cover up to 50% of the initial cost to perform the required ASHRAE level audit, and the remaining cost upon the customer commitment to implementation of energy efficiency measures defined by the audit. The customer will also be paid a custom incentive for the implementation of the energy efficiency measures determined through the audit. The total audit and project incentive will be capped at up to 70% of the project cost.	N/A - new program
	HVAC Tune Up	Fixed incentives for the implementation of the tune-up measures based on the size of the HVAC units up to $250 value.	N/A - new program

	Building Tune Up	Incentives that cover up to 70% of the project cost with a project cap of $75,000 and up to 70% of the cost to attend qualified BOC training up to $1,000 per person.	N/A - new program
	Strategic Energy Management	Customers who utilize a consultant will receive an incentive to cover up to 50% of the initial cost of the engineering assessment, with the remaining cost upon the customer commitment to implementation of energy efficiency measures defined by the SEMP process. A tiered incentive structure for Customer engineering assessment will be utilized based upon square footage of Customer's facility. The SEMP will identify short, medium, and long-term goals for the customer and will set identifiable metrics for mapping to the plan. For the implementation of the energy efficiency measures determined by the SEMP, the customer will be paid an incentive that is commensurate with the applicable Commercial & Industrial Program offering that the measures are attributed.	N/A - new program
Engineered Solutions	N/A	The subprogram will provide a 100% incentive for an up-front ASHRAE audit, the specific audit level will be determined on a project by project basis based on the complexity of the facility and the potential energy efficiency measures. In addition, SJG will buy-down the simple payback of the recommended energy-efficiency project cost for approved measures by up to six years, with the resulting payback not less than three years. After the project incentive buy-down, the remaining project costs may be funded by the subprogram with participants repaying the balance of the project costs through OBRP or access to financing with similar terms.	Same

Note
1 - The utilities reserve the right to include additional measures that are supported by established protocols or evaluation results in the industry to ensure we include a broad range of energy savings measures to maximize energy savings for customers and avoid market disruption (e.g. new NJCEP measures added in FY21).

2 - All rebates will be offered equal to or less than the "Up To" value.

3 - Represents current incentives and does not including financing incentives.

4 - Totals shown here represent the total value of rebates currently available to customers in SJG’s territory through New Jersey’s Clean Energy Program and SJG’s Program.

Multi-Family

Table 45 – Multi-Family Incentive Table

Multifamily (not including financing)				
Program	**Subprogram**	**Measure [1]**	**Rebate Strategy [2]**	**NJCEP Existing Rebate Strategy [3]**
Multifamily	N/A	Energy Assessment with installation of standard energy savings measures	Energy Assessment with the equipment and installation costs for the standard energy savings measures will be provided to eligible properties with "Up to 100%" of the cost provided by the program.	N/A
		Prescriptive Equipment replacement and custom retrofit projects	- Same value as incentives offered through the Residential and Commercial & Industrial programs applicable for the prescriptive equipment replacement and custom retrofits. - Includes enhanced incentives offered for properties that are located in qualifying target areas or for LMI qualified customers.	Same value as incentives offered through the Residential and Commercial & Industrial programs applicable for the prescriptive equipment replacement and custom retrofits.
		MF Home Performance with ENERGYSTAR	- Tiered incentive cash rebate not to exceed 50% of the cost of the measures used to calculate Total Energy Savings, up to $1,500 per unit. - Maintain contractor production incentive.	- Tiered incentive cash rebate not to exceed 50% of the costs of the measures used to calculate Total Energy Savings, up to $1,500 per unit. - Contractor production incentive of up to $50 per unit.
		MF - Engineered Solutions	- No cost ASHRAE Level I, II, or III audit. - Program will buy-down the simple payback of the recommended energy-efficiency project cost for approved measures by up to six years, with the resulting payback not less than three years.	- No cost ASHRAE Level I, II, or III audit. - Program will buy-down the simple payback of the recommended energy-efficiency project cost for approved measures by up to six years, with the resulting payback not less than three years.

Note

1 - The utilities reserve the right to include additional measures that are supported by established protocols or evaluation results in the industry to ensure we include a broad range of energy savings measures to maximize energy savings for customers and avoid market disruption (e.g. new NJCEP measures added in FY21).

2 - All rebates will be offered equal to or less than the "Up to" value.

3 - Totals shown here represent the total value of rebates currently available to customers in SJG's territory through New Jersey's Clean Energy Program and SJG's Program.

APPENDIX C – Financing Terms by Program

SJG intends to provide on-bill repayment options for residential, multi-family, and commercial programs.

To assist our customers address the challenges of the ongoing pandemic and facilitate economic recovery, SJG is proposing to defer loan repayments associated with the on-bill repayment plan for the first year of the program -- July 1, 2021 – June 30, 2022. This encourages customers that have been financially impacted by COVID-19 to participate in SJG's EEPs, providing them the opportunity to reduce their energy consumption and lower their bills at a time when they need it most.

The following table provides the financing terms for applicable programs.

Table 46 – Summary of SJG Financing Terms

SJG Summary of Financing Terms				
Sector	**Program**	**Subprogram/ Approach**	**Measure /Project**	**Available Financing Terms**
Residential	Efficient Products		Furnace	Up to $6,000 for 7 year term On-Bill Repayment Program ("OBRP") at 0% APR
			Boiler	Up to $6,000 for 7 year term OBRP at 0% APR
			WH Tank	Up to $2,500 for 7 year term OBRP at 0% APR
			WH Tankless	Up to $3,500 for 7 year term at OBRP 0% APR
			A/C	Up to $5,00 for 7 year term OBRP at 0% APR (only when paired with a qualifying piece of natural gas equipment)
			Combined Maximum Financing	Up to $15,000 for 7 year term OBRP at 0% APR
			Special Features to Support Inclusion:	Low-to-Moderate Income Customers will be offered an extended OBRP for 10 year and customers that don't pass SJG credit screening will have the opportunity to apply for a

				loan through a network of local lenders and SJG will buy down the cost of the loan to similar terms as the OBRP.
	Existing Homes	Home Performance with Energy Star (HPwES)	Single Family Homes	Up to $15,000 at 0% APR. Terms will vary based on value of financing- 7 year term for loans up to $10,000 and 10 year term for loans great than or equal to $10,000.
			Special Features to Support Inclusion:	Customers that don't pass SJG credit screening will have the opportunity to apply for a loan through a network of local lenders and SJG will buy down the cost of the loan to similar terms as the OBR
		Behavioral	NA	No financing component needed due to nature of the program
		Quick Home Energy Checkup	NA	No financing component needed due to nature of the program
		Moderate Income Weatherization	NA	No financing component needed due to nature of the program
	Hybrid Heat	Hybrid Heat	Heat pump paired with high efficiency furnace	Up to $15,000 for 7 year term at 0% APR
C&I	Direct Install		Project	Balance of the project cost after rebate at 0% APR for a 5 year term
	Energy Solutions for Business	Prescriptive and Custom	Project	Balance of the project cost after rebate at 0% APR for a 5 year term. Cap of $150K on Prescriptive and $250K on Custom
		Energy Management	Project	Balance of the project cost after rebate at 0% APR for a 5 year term

		Engineered Solutions	Project	Balance of the project cost after rebate at 0% APR for a 5 year term
Multifamily	Multifamily	Multi-family Prescriptive and Custom	Project	Balance of the project cost after rebate at 0% APR for a 5 year term. Cap of $150K on Prescriptive and $250K on Custom
		Multi-family HPwES	Project	Up to $2,000 per unit for 7 year term at 0% APR with an overall max of $250K per project
		Engineered Solutions	Project	Balance of the project cost after rebate at 0% APR for a 5 year term
			Special Features to Support Inclusion:	Properties supporting LMI customers are eligible for a 10 year repayment term

EXHIBIT E

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

DIRECT TESTIMONY

OF

STEFANY M. GRAHAM

Director, Rates and Regulatory Affairs
SJI Utilities, Inc.

On Behalf of
South Jersey Gas Company

September 25, 2020

EXHIBIT E

SCHEDULE INDEX

I. INTRODUCTION

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

A. My name is Stefany M. Graham and I am Director, Rates and Regulatory Affairs for SJI Utilities ("SJIU"). My business address is One South Jersey Place, Atlantic City, NJ 08401.

Q. Please summarize your educational background and industry related experience.

A. I received a Bachelor of Science Degree in Accounting from Pennsylvania State University in 2011 and obtained a Masters in Business Administration Degree with a concentration in Finance from Drexel University in 2015. In October 2014, I joined the Internal Audit Department at South Jersey Industries, Inc. ("SJI"), and subsequently accepted the role of Senior Rate Analyst in the Rates and Revenue Requirement Department in May 2015. In December 2017, I was promoted to Manager, Rates and Regulatory Initiatives for South Jersey Gas Company ("SJG" or the "Company") and most recently appointed to my current role as Director, Rates and Regulatory Affairs for SJIU overseeing Rates and Regulatory Affairs for SJG and its sister New Jersey public utility, Elizabethtown Gas Company.

In my current role, I manage the Company's Rate Department activities, including the preparation and coordination of all rate case, revenue-related and other filings before the New Jersey Board of Public Utilities ("BPU" or the "Board"). Prior to my employment at SJI, I worked for the Big Four public accounting firm of Deloitte, LLP as an auditor for a diverse client base, as well as

in the Internal Audit Department at Virtua Health. I am a member of the American Gas Association ("AGA") and the New Jersey Utilities Association ("NJUA"), where I serve on the Finance and Regulations Committee.

II. PURPOSE OF TESTIMONY

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

A. The purpose of my testimony is to address the revenue requirements and cost recovery mechanism associated with the Company's proposed Energy Efficiency Programs ("EEPs"). The proposed EEPs and cost recovery mechanism are filed in accordance with the Clean Energy Act of 2018 ("CEA") and the Board's Order dated June 10, 2020 in Docket Nos. QO19010040, QO19060748 and QO17091004 (the "June 2020 Order"). My testimony also provides information responsive to certain Minimum Filing Requirements ("MFRs") required pursuant to the June 2020 Order, which established the procedures by which electric and natural gas utilities may seek approval of energy efficiency and conservation programs on a regulated basis. The proposed EEPs and the related investments and operating and maintenance ("O&M") budgets are described in detail in the Direct Testimony of Peter Druckenmiller, Program Manager, Energy Efficiency.

III. REVENUE REQUIREMENTS

Q. Please provide a brief description of the revenue requirements for the proposed EEPs.

A. The revenue requirements for the proposed EEPs are detailed on the attached Schedule SMG-1. The revenue requirement components vary with the type of incentive provided to customers. The proposed EEPs can be divided into two general types of incentives: Loan Program Investments and Direct Program Investments. The On-Bill Repayment Program (Loan Program) Investment category is comprised of the loan incentives that will be provided by the Company through the Residential: Efficient Products Program, Existing Homes Home Performance with Energy Start ("HPwES") Program, Multi-Family Program, and Energy Solutions for Business. The Direct Program Investments category is comprised of grants and energy audits, as well as other capitalizable expenditures required to implement the proposed programs. These incentives are discussed in further detail by Company witness Druckenmiller.

The total program revenue requirements are calculated by adding the revenue requirements for the Direct Program Investments and the Loan Program Investments. The revenue requirement components also include accumulated amortization of the direct investments, accumulated deferred income tax ("ADIT"), pre-tax weighted average cost of capital ("WACC"), incremental pre-tax O&M expense, and a revenue factor, as discussed in further detail below. The determination of revenue requirements is consistent with previous BPU approvals of SJG's EEPs.

Q. Please provide the revenue requirement calculation for the Direct Program Investments.

A. The Direct Program Investment revenue requirement calculation is as follows:

Revenue Requirement = ((Direct Program Net Investment * Pre-Tax WACC) + Incremental Pre-Tax O&M Expense + Pre-Tax Amortization) * Revenue Factor

Q. Likewise, please provide the revenue requirement calculation for the Loan Program Investments.

A. The Loan Program Investment revenue requirement calculation is as follows:

Revenue Requirement = ((Loan Program Net Investment * Pre-Tax WACC) + Incremental Pre-Tax O&M Expense) * Revenue Factor

Q. Please explain how the net investment is calculated for the Direct Program Investments and Loans.

A. Direct Program net investments are comprised of the cumulative program investments, less the accumulated amortization, less the accumulated deferred income tax. Loan Program net investments are calculated as the cumulative program investments, less loan repayments.

Q. Please explain which investments are amortized and the amortization period.

A. Only the Direct Program Investments will be amortized. The Company proposes an amortization period of ten (10) years, consistent with the June 2020 Order.

Q. How is the ADIT calculated and applied?

A. The ADIT is only applicable to the Direct Program Investments revenue requirement. The ADIT is calculated as the accumulated Direct Program Investments, less accumulated amortization, multiplied by a 28.11% tax rate. The 28.11% tax rate is a combination of the Federal income tax rate of 21% and the State corporate business tax of 9%.

Q. What is the basis for the rate of return used to calculate the revenue requirements?

A. The Company is using a rate of return ("ROR") of 6.90%, or 8.93% on a pre-tax basis, effective October 1, 2020. This is the WACC utilized to set rates in the Company's most recent base rate case in Docket No. GR20030243. Any change in the WACC authorized by the Board in a subsequent base rate case will be reflected in the subsequent monthly revenue requirement calculations. Any change in the revenue requirement resulting from the change in the WACC will not be included in the monthly interest calculation for over and under recoveries until the date of the next scheduled annual true-up but in any event, no later than October 1 of the subsequent year. In addition, any changes to current tax rates would be reflected

in an adjustment to the Pre-Tax WACC. The WACC calculation is attached hereto as Schedule SMG-2.

Q. What assumptions and types of expenses are included in the incremental O&M used to calculate the revenue requirement?

A. Consistent with the prior approval of the Company's EEP IV Extension Program, South Jersey is seeking to recover O&M expenses, which primarily consist of utility administration, inspections and quality control, and evaluation costs incurred to run the EEPs.

Q. Please explain the basis for the revenue factor used to calculate the revenue requirements.

A. The revenue factor reflects tax adjustments for Public Utility Assessment Tax ("PUA") and bad debt allowance. The Company is using a revenue factor of 1.01928, which is the revenue factor utilized to set rates in the Company's most recent base rate case in Docket No. GR20030243 and further removing the Federal and State corporate business tax. The calculation of this revenue factor is attached hereto as Schedule SMG-3.

IV. COST RECOVERY MECHANISM

Q. Please describe the cost recovery mechanism proposed by the Company for the recovery of costs associated with the EEPs.

A. The proposed cost recovery mechanism is consistent with the cost recovery mechanism approved by the Board for the Company's current EEPs. The Company recovers its costs associated with the EEPs through the Energy Efficiency Tracker ("EET"), which is set forth in Rider "N" to the Company's Tariff. Total EEP revenue requirements for an annual period are calculated and recovered though a volumetric charge applicable to all firm throughput. Rider "N" also includes provisions for the treatment of any over- or under-recoveries. Recovery of the revenue requirements associated with the Company's proposed EEP program will be accomplished by deriving a rate associated with the EEP revenue requirements and adding it to the Company's currently approved EET rate. The forecasted recovery of the EEP year one revenue requirement is attached hereto as Schedule SMG-4.

Q. Please explain how the rate associated with the Company's proposed EEPs is derived.

A. The total revenue requirement equals the sum of the Direct Program Investment revenue requirement and the Loan Program Investment revenue requirement. The total revenue requirement is divided by the applicable firm throughput to derive the rate per therm, excluding taxes.

Q. What is the basis for the therms used to calculate the rate?

A. The initial recovery rate for the proposed EEPs is based on forecasted revenue requirements for the period July 1, 2021 to June 30, 2022. Annual true-up filings

covering the recovery period of July 1st to June 30th will be submitted in July each year. The forecasted volumes for the initial recovery period are 532,916,436 therms. These volumes reflect firm consumption for all rate classes that are charged the EET. In forecasting its customer consumption, the Company utilizes 10 years of historical usage and 20 years of normalized weather data.

Q. How will the Company account for any over/under recoveries?

A. Consistent with the cost recovery mechanism approved by the Board for the Company's current EEPs, the Company will defer any over/under-recovery of the actual revenue requirements compared to revenues. In calculating the monthly interest on net over- and under-recoveries, the interest rate shall be based on the Company's monthly average Short-Term Debt rate. The calculation of monthly interest is attached hereto as Schedule SMG-4.

Q. Please provide the initial EET rate associated with the Company's proposed EEPs, as well as the associated customer bill impacts.

A. The EET rate and annual customer bill impact associated with the initial six (6) years of the EEP program are included in Schedule SMG-1. The proposed Year 1 EET rate will be $0.012673 per therm, including taxes, and $0.011886 per therm, excluding taxes. This represents an increase of $0.012673 per therm to the current EET rate of $0.016820 per therm (including taxes), for a total combined EET rate of $0.029493 per therm (including taxes), to be effective upon issuance of a Board Order. The bill impact for a residential heating customer using 100 therms during

a winter month will be an increase of $1.27, or 0.9%. The cumulative annual bill impacts for all approved and proposed programs, for all rate classes, are provided in Schedule SMG-13.

V. CONSERVATION INCENTIVE PROGRAM (CIP)

Q. Is the Company proposing any changes to SJG's CIP?

A. No, the Company will maintain the CIP as it currently exists in accordance with the Board's Order dated May 21, 2014 in Docket No. GR13030185.

VI. ADDITIONAL MINIMUM FILING REQUIREMENTS

Q. Please provide a comparative balance sheet for the most recent three-year period.

A. Please see the attached Schedule SMG-5, which reflects the Company's balance sheets as of December 31st for 2019, 2018, and 2017, as stated in the Company's annual SEC 10K filings.

Q. Please provide a comparative income statement for the most recent three-year period.

A. Please see the attached Schedule SMG-6, which reflects the Company's income statement for the year ending December 31st for 2019, 2018, and 2017.

Q. Please provide a balance sheet with the most recent date available.

A. Please see the attached Schedule SMG-7, which reflects the Company's balance sheet as of June 30, 2020.

Q. Please provide a statement of the amount of revenue derived in the calendar year last preceding the institution of this proceeding from the intrastate sales of natural gas.

A. Please see the attached Schedule SMG-8 which lists the Company's intrastate revenue for the year ending December 31, 2019 by customer class.

Q. Please provide a schedule of payments and accruals made to affiliated companies.

A. Please see the attached Schedule SMG-9 listing payments and accruals made to affiliated companies for the year ending December 31, 2019.

Q. Please provide the accounts and account numbers that will be utilized in booking revenue, costs, expenses and assets pertaining to each proposed program and indicate which accounts will be debited or credited monthly.

A. Please see the attached Schedule SMG-10 which provides the account numbers for all accounting entries related to each EEP as well as which accounts will be debited or credited monthly.

Q. Please provide pro forma income statements and balance sheets for the program for each of the first three years of operations and actual or estimated balance sheets at the beginning and end of each year of said three-year period.

A. Please see the attached Schedule SMG-11 and Schedule SMG-12 for the pro forma income statement and balance sheets, respectively. The schedules reflect the first three years of the program.

Q. Please provide an annual cumulative rate impact summary for all approved and proposed programs as well as a cumulative bill impact summary by year for all approved and proposed programs.

A. Please see the attached Schedule SMG-13 for the annual rate impacts and bill impacts by year.

Q. Please provide proposed tariff sheets associated with the proposed EEPs.

A. Please see the attached Schedule SMG-14 for the proposed tariff sheets and Rider "N", in redlined form.

Q. Does this conclude your testimony?

A. Yes, it does.

VERIFICATION

I, Stefany M. Graham, of full age, being duly sworn according to law, upon my oath, depose and say:

1. I am Director, Rates and Regulatory Affairs of SJI Utilities Inc., the parent company to South Jersey Gas Company ("Company") and I am authorized to make this verification on behalf of the Company.

2. I have reviewed the within petition and the information contained therein is true according to the best of my knowledge, information and belief.

Stefany M. Graham
Director, Rates & Regulatory Affairs

Sworn to and subscribed
before me this 25th day
of September 2020

CAROLYN A. JACOBS
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires October 28, 2023

South Jersey Gas Company
Energy Efficiency Tracker - 2021 Extension (EET V)
Annual Revenue Requirements

	Year 1	Year 2	Year 3
DIRECT PROGRAM INVESTMENTS			
Annual Investment	$ 21,636,866	$ 27,317,496	$ 40,387,843
Cumulative Investment	$ 21,636,866	$ 48,954,362	$ 89,342,205
Less Accumulated Amortization	$ (976,059)	$ (4,368,467)	$ (11,093,268)
Less Accumulated Deferred Tax	$ (5,807,753)	$ (12,533,095)	$ (21,995,776)
Net Investment	$ 14,853,054	$ 32,052,800	$ 56,253,161
Rate of Return (Pre Tax)	8.93%	8.93%	8.93%
Required Net Operating Income	$ 719,325	$ 2,156,920	$ 4,038,877
Incremental O&M Pre Tax	$ 2,615,053	$ 2,740,893	$ 3,598,128
Pre Tax Amortization	$ 976,059	$ 3,392,408	$ 6,724,801
Operating Income	$ 4,310,438	$ 8,290,222	$ 14,361,807
Revenue Factor	1.01928	1.01928	1.01928
Revenue Requirement Excluding SUT	$ 4,393,533	$ 8,450,038	$ 14,638,669
LOAN PROGRAM INVESTMENTS			
Annual Investment	$ 14,296,957	$ 16,109,227	$ 21,025,766
Less Loan Repayments	$ (162,430)	$ (3,539,084)	$ (6,931,820)
Net Investment	$ 14,134,527	$ 12,570,142	$ 14,093,946
Cumulative Investment	$ 14,134,527	$ 26,704,669	$ 40,798,615
Rate of Return (Pre Tax)	8.93%	8.93%	8.93%
Required Net Operating Income	$ 752,776	$ 1,970,709	$ 3,189,865
Incremental O&M Pre Tax	$ 1,151,336	$ 1,165,245	$ 1,544,240
Operating Income	$ 1,904,112	$ 3,135,954	$ 4,734,105
Revenue Factor	1.01928	1.01928	1.01928
Revenue Requirement Excluding SUT	$ 1,940,819	$ 3,196,408	$ 4,825,367
RATE CALCULATION			
Revenue Requirement For Direct Investments Excluding SUT	$ 4,393,533	$ 8,450,038	$ 14,638,669
Revenue Requirement For Loans Programs Excluding SUT	$ 1,940,819	$ 3,196,408	$ 4,825,367
Prior Year (Over)/Under Recovered Deferred Balance Including Carrying Costs	$ -	$ 403	$ 3,359
Total Revenue Requirements	$ 6,334,352	$ 11,646,849	$ 19,467,395
Therms	532,916,436	532,916,436	532,916,436
Rate Per Therm, Excluding SUT	$ 0.011886	$ 0.021855	$ 0.036530
Rate Per Therm, Including SUT	$ 0.012673	$ 0.023303	$ 0.038950
Annual Bill Impact			
Residential Non Heat (210 Therms)	$ 2.66	$ 2.24	$ 3.28
Residential Heat (727 Therms)	$ 9.21	$ 7.73	$ 11.37
General Service (3,595 Therms)	$ 45.55	$ 38.21	$ 56.25
General Service - Large Volume (178,885 Therms)	$ 2,267.01	$ 1,901.56	$ 2,799.02

South Jersey Gas Company
Energy Efficiency Tracker - 2021 Extension (EET V)
Annual Revenue Requirements

	Year 4	Year 5	Year 6
DIRECT PROGRAM INVESTMENTS			
Annual Investment	$ 6,626,091	$ 2,230,723	$ 166,728
Cumulative Investment	$ 95,968,296	$ 98,199,019	$ 98,365,748
Less Accumulated Amortization	$ (20,458,676)	$ (30,180,816)	$ (40,016,492)
Less Accumulated Deferred Tax	$ (21,225,754)	$ (19,119,917)	$ (16,401,976)
Net Investment	$ 54,283,866	$ 48,898,287	$ 41,947,280
Rate of Return (Pre Tax)	8.93%	8.93%	8.93%
Required Net Operating Income	$ 5,011,814	$ 4,601,758	$ 4,034,466
Incremental O&M Pre Tax	$ -	$ -	$ -
Pre Tax Amortization	$ 9,365,408	$ 9,722,139	$ 9,835,677
Operating Income	$ 14,377,222	$ 14,323,897	$ 13,870,142
Revenue Factor	1.01928	1.01928	1.01928
Revenue Requirement Excluding SUT	$ 14,654,381	$ 14,600,028	$ 14,137,526
LOAN PROGRAM INVESTMENTS			
Annual Investment	$ 2,739,265	$ 1,444,830	$ 98,055
Less Loan Repayments	$ (8,829,420)	$ (8,463,193)	$ (7,722,314)
Net Investment	$ (6,090,155)	$ (7,018,363)	$ (7,624,259)
Cumulative Investment	$ 34,708,461	$ 27,690,098	$ 20,065,839
Rate of Return (Pre Tax)	8.93%	8.93%	8.93%
Required Net Operating Income	$ 3,382,873	$ 2,781,416	$ 2,106,567
Incremental O&M Pre Tax	$ -	$ -	$ -
Operating Income	$ 3,382,873	$ 2,781,416	$ 2,106,567
Revenue Factor	1.01928	1.01928	1.0193
Revenue Requirement Excluding SUT	$ 3,448,087	$ 2,835,035	$ 2,147,177
RATE CALCULATION			
Revenue Requirement For Direct Investments Excluding SUT	$ 14,654,381	$ 14,600,028	$ 14,137,526
Revenue Requirement For Loans Programs Excluding SUT	$ 3,448,087	$ 2,835,035	$ 2,147,177
Prior Year (Over)/Under Recovered Deferred Balance Including Carrying Costs	$ 5,651	$ 10,558	$ 10,598
Total Revenue Requirements	$ 18,108,119	$ 17,445,621	$ 16,295,301
Therms	532,916,436	532,916,436	532,916,436
Rate Per Therm, Excluding SUT	$ 0.033979	$ 0.032736	$ 0.030578
Rate Per Therm, Including SUT	$ 0.036230	$ 0.034905	$ 0.032604
Annual Bill Impact			
Residential Non Heat (210 Therms)	$ (0.57)	$ (0.28)	$ (0.48)
Residential Heat (727 Therms)	$ (1.98)	$ (0.96)	$ (1.67)
General Service (3,595 Therms)	$ (9.78)	$ (4.76)	$ (8.27)
General Service - Large Volume (178,885 Therms)	$ (486.57)	$ (237.03)	$ (411.61)

SOUTH JERSEY GAS COMPANY
ENERGY EFFICIENCY TRACKER - 2021 EXTENSION
WEIGHTED AVERAGE COST OF CAPITAL

Type of Capital	Ratios	Cost Rate	Weighted Cost Rate	After-Tax Weighted Cost Rate	Revenue Conversion Factor	Pre-Tax Weighted Cost Rate
Long-Term Debt	46.00%	3.73%	1.72%	1.23%		1.72%
Common Equity	54.00%	9.60%	5.18%	5.18%	139.10%	7.21%
	100.00%		6.90%	6.42%		8.93%

**Tax Reflects FIT Rate of 21%, effective January 1, 2018*

SOUTH JERSEY GAS COMPANY
ENERGY EFFICIENCY TRACKER - 2021 EXTENSION
DERIVATION OF REVENUE FACTOR

Line No.		
1		
2	Components:	
3		
4	Public Utility Assessment Tax (PUA)	0.2736%
5		
6	Bad Debt Provision (Bad Debt)	1.6497%
7		
8	Operating Revenue	1.0000
9		
10	Revenue Factor Calculation:	
11	1.002736*1.016497=	1.01928

South Jersey Gas Company
Energy Efficiency Tracker - 2021 Extension (EET V)
Monthly Recovery and Interest Calculation

			Projected Jul-21	Projected Aug-21	Projected Sep-21	Projected Oct-21	Projected Nov-21	Projected Dec-21	Projected Jan-22	Projected Feb-22	Projected Mar-22	Projected Apr-22	Projected May-22	Projected Jun-22	Total
1	Period Volumes		19,523,170	18,618,674	19,083,623	18,959,492	37,317,823	60,085,950	89,135,349	86,678,920	76,924,439	56,157,611	28,453,193	21,978,192	532,916,436
2															
3	Recovery Rate		$ 0.011886	$ 0.011886	$ 0.011886	$ 0.011886	$ 0.011886	$ 0.011886	$ 0.011886	$ 0.011886	$ 0.011886	$ 0.011886	$ 0.011886	$ 0.011886	
4															
5	Recoveries		$ 232,052	$ 221,302	$ 226,828	$ 225,353	$ 443,560	$ 714,182	$ 1,059,463	$ 1,030,266	$ 914,324	$ 667,489	$ 338,195	$ 261,233	6,334,245
6															
7	Revenue Requirements Excluding SUT		$ 355,683	$ 384,958	$ 400,926	$ 449,002	$ 473,977	$ 502,192	$ 552,374	$ 578,426	$ 601,023	$ 652,936	$ 677,517	$ 705,337	6,334,352
8															
9	Less Recoveries		$ 232,052	$ 221,302	$ 226,828	$ 225,353	$ 443,560	$ 714,182	$ 1,059,463	$ 1,030,266	$ 914,324	$ 667,489	$ 338,195	$ 261,233	6,334,245
10															
11	Monthly (Over)/Under Recovered Balance		$ 123,631	$ 163,657	$ 174,098	$ 223,650	$ 30,418	$ (211,990)	$ (507,089)	$ (451,840)	$ (313,301)	$ (14,553)	$ 339,323	$ 444,104	$ 107
12															
13	Beginning (Over)/Under Recovered Balance		$ -	$ 123,631	$ 287,288	$ 461,385	$ 685,035	$ 715,453	$ 503,463	$ (3,626)	$ (455,465)	$ (768,767)	$ (783,320)	$ (443,997)	$ -
14															
15	Ending (Over)/Under Recovered Balance		$ 123,631	$ 287,288	$ 461,385	$ 685,035	$ 715,453	$ 503,463	$ (3,626)	$ (455,465)	$ (768,767)	$ (783,320)	$ (443,997)	$ 107	$ 107
16															
17	Average (Over)/Under Recovered Balance (Net of Taxes	71.89%	$ 44,439	$ 147,705	$ 269,111	$ 412,081	$ 503,405	$ 438,139	$ 179,666	$ (165,020)	$ (440,050)	$ (557,898)	$ (441,159)	$ (159,557)	
18															
19	Interest (To Customers) / To Company		$ 44	$ 147	$ 272	$ 419	$ 508	$ 432	$ 174	$ (158)	$ (421)	$ (537)	$ (427)	$ (156)	$ 297
20															
21	Cumulative Interest		$ 44	$ 191	$ 463	$ 882	$ 1,390	$ 1,822	$ 1,996	$ 1,838	$ 1,417	$ 880	$ 452	$ 297	
22															
23	Annual Interest Rate (SJG Avg Borrowing)		1.1925%	1.1941%	1.2113%	1.2212%	1.2101%	1.1838%	1.1622%	1.1493%	1.1486%	1.1551%	1.1628%	1.1705%	

South Jersey Gas
Balance Sheet
As of December 31, 2017, 2018 & 2019

	Period Ending 12/31/2019	Period Ending 12/31/2018	Period Ending 12/31/2017
PROPERTY, PLANT & EQUIPMENT			
Utility Plant, original cost	3,154,736,433	2,907,201,841	2,652,243,751
Accum Deprec & Amortization	(558,634,458)	(523,742,648)	(498,160,660)
Property, Plant & Equip, Net	2,596,101,975	2,383,459,193	2,154,083,091
INVESTMENTS			
Available for Sale Securities	-	-	-
Restricted Investments	4,073,274	1,277,520	2,912,307
Total Investments	4,073,274	1,277,520	2,912,307
CURRENT & ACCRUED ASSETS			
Cash & Temp Cash Invest	2,677,809	1,983,850	1,707,410
Notes Receivable	-	-	-
Accounts Receivable	84,940,436	101,572,319	78,571,342
Accts Rec - Unbilled Revenue	45,016,036	43,270,691	54,979,874
Provision for Uncollectibles	(14,031,681)	(13,643,418)	(13,799,186)
Accts Rec - Assc Companies	2,155,913	2,026,920	619,057
Accts Rec - Affiliated Company	177,158	415,153	368,516
Nat Gas in Storage, Avg Cost	14,838,685	16,335,702	14,931,910
Materials & Supplies, Avg Cost	618,809	619,103	825,341
Accum Deferred Income Taxes	-	-	-
Prepaid Taxes	19,547,377	28,772,390	38,325,997
Derivatives-Energy Assets	16,904,059	5,463,881	7,327,040
Other Prepaids & Current Asset	25,074,235	11,279,821	12,669,029
Total Current & Accr Assets	197,918,836	198,096,412	196,526,330
REGULATORY ASSETS:			
Environmental Remed-Expended	156,278,664	136,226,914	100,327,271
Environmental Remed-Liability	131,261,567	148,071,467	171,695,978
Income Taxes-Flowthru Deprec	-	-	-
Deferred ARO Costs	36,514,953	31,096,481	42,367,898
Deferred Fuel Costs-Net	49,469,130	57,889,372	16,838,270
Deferred Postretirement Ben	-	-	-
CIP AR	-	-	26,651,832
Societal Benefits Costs	1,478,218	2,172,822	2,483,709
Premium for Early Debt Retire	-	-	-
Regulatory Assets - ASC 715	72,010,301	80,120,779	78,211,237
Other Regulatory Assets	41,307,505	30,921,075	23,620,129
MTM Interest Rate Swap	7,856,483	5,867,241	7,027,934
Total	496,176,821	492,366,151	469,224,258
NON-CURRENT ASSETS:			
Accum Deferred Income Taxes	-	-	-
Prepaid Pension	-	-	-
Derivatives- Other			
Unamortized Debt Issue Costs	-	-	-
AR-Merchandise	30,958,205	25,530,774	25,851,024
Der - N/C Energy Related Asset	4,820	14,578	4,777
Other Non-Current Assets	23,322,087	17,490,613	17,372,036
Total Non-Current Assets	54,285,112	43,035,965	43,227,837
Total Assets	3,348,556,018	3,118,235,241	2,865,973,823

South Jersey Gas
Balance Sheet
As of December 31, 2017, 2018 & 2019

	Period Ending 12/31/2019	Period Ending 12/31/2018	Period Ending 12/31/2017
COMMON EQUITY			
Common Stk $2.50 Par Value	5,847,848	5,847,848	5,847,848
Prem on Cap Stk & Misc PIC	355,743,634	355,743,634	355,743,634
Accumulated OCI	(27,874,952)	(22,357,456)	(25,997,099)
Retained Earnings	756,180,196	668,786,544	585,837,939
Total Common Equity	1,089,896,726	1,008,020,570	921,432,322
LONG TERM DEBT	547,161,406	874,506,699	758,052,261
CURRENT & ACCRUED LIABILITIES:			
Notes Payable to Banks	171,300,000	107,500,000	52,000,000
Current Maturities of LTD	417,909,000	18,909,000	63,809,000
AP-Commodity	17,361,226	48,490,361	43,340,551
AP-Other	60,797,299	52,965,815	41,365,222
Derivatives-Energy Liabilities	14,671,226	2,146,189	9,269,753
Derivatives-Other Current	488,486	343,448	388,641
Accts Payable to Assc Comp	9,483,317	12,316,997	16,789,281
A/P Affiliated Comp	268,454	246,157	239,782
Customer Deposits	22,430,497	23,862,105	41,655,614
Accum Deferred Income Taxes	-	-	-
Taxes Accrued	1,906,977	1,890,674	1,760,336
Pension & Postretirement Liability	3,692,583	3,597,406	2,353,228
Environmental Remediation Cost	29,568,566	33,022,266	66,039,705
Interest Accrued	6,789,203	7,133,776	7,615,079
Other Current Liabilities	12,489,765	9,442,853	7,026,915
Total Current & Accrued Liab	769,156,599	321,867,047	353,653,107
DEF CREDITS & NONCURRENT LIAB:			
Pension & Other Post-Retir Ben	99,981,498	96,052,825	88,870,396
Accum Deferred Income Taxes	357,637,363	325,886,195	280,746,262
Investment Tax Credit	-	-	-
Environmental Remediation Cost	101,693,000	115,049,200	105,656,272
Asset Retirement Obligations	96,508,618	79,889,890	58,714,348
Der-N/C Energy Related Liabil	94,844	43,274	170,177
Derivatives-LT	7,367,997	5,523,793	6,639,293
Other NonCurrent Liabilities	4,575,814	4,856,074	4,934,613
Total NonCurrent Liabilities	667,859,134	627,301,251	545,731,361
REGULATORY LIABILITIES:			
Deferred Revenues-Net	-	-	-
Excess Plant Removal Costs	16,333,134	20,805,321	23,295,482
Other Regulatory Liabiltiies	258,149,019	265,734,353	263,809,290
Total Regulatoy Liabilities	274,482,153	286,539,674	287,104,772
Total Capital & Liabilities	3,348,556,018	3,118,235,241	2,865,973,823

South Jersey Gas
Income Statement
For the Years ending 2017, 2018, and 2019 (000s)

	2019 YTD December 31, 2019	2018 YTD December 31, 2018	2017 YTD December 31, 2017
OPERATING REVENUES	569,226	548,000	517,254
OPERATING EXPENSE			
Cost of Sales	211,344	209,649	204,432
Operation	108,638	112,920	98,992
Maintenance	30,899	28,742	19,727
Depreciation	65,965	59,755	53,887
Other Taxes	4,886	4,246	3,729
Total Operating Expense	421,732	415,312	380,767
OPERATING INCOME	147,494	132,688	136,487
OTHER INCOME & EXPENSE NET	4,376	4,685	6,475
INTEREST CHARGES			
Long Term Debt	32,238	30,251	27,436
Short Term Debt & Other	(584)	(2,240)	(2,731)
Total Interest Charges	31,654	28,011	24,705
Income Before Income Taxes	120,216	109,362	118,257
INCOME TAXES			
Current Fed & State Inc Taxes	12,929	(12,765)	-
Deferred Fed & State Inc Taxes	19,893	39,179	45,700
Total Income Taxes	32,822	26,414	45,700
Income from Continuing Ops	87,394	82,948	72,557

South Jersey Gas
Balance Sheet
As of June 30, 2020

	Period Ending 6/30/2020
PROPERTY, PLANT & EQUIPMENT	
Utility Plant, original cost	3,239,032,656
Accum Deprec & Amortization	(587,440,571)
Property, Plant & Equip, Net	2,651,592,085
INVESTMENTS	
Available for Sale Securities	-
Restricted Investments	3,447,735
Total Investments	3,447,735
CURRENT & ACCRUED ASSETS	
Cash & Temp Cash Invest	2,144,039
Notes Receivable	-
Accounts Receivable	91,842,281
Accts Rec - Unbilled Revenue	3,915,008
Provision for Uncollectibles	(14,471,965)
Accts Rec - Assc Companies	124,076
Accts Rec - Affiliated Company	374,746
Nat Gas in Storage, Avg Cost	9,883,527
Materials & Supplies, Avg Cost	618,809
Accum Deferred Income Taxes	-
Prepaid Taxes	28,252,970
Derivatives-Energy Assets	4,699,476
Other Prepaids & Current Asset	22,820,120
Total Current & Accr Assets	150,203,087
REGULATORY ASSETS:	
Environmental Remed-Expended	159,619,279
Environmental Remed-Liability	108,978,411
Income Taxes-Flowthru Deprec	-
Deferred ARO Costs	39,334,580
Deferred Fuel Costs-Net	17,731,455
Deferred Postretirement Ben	-
CIP AR	21,637,826
Societal Benefits Costs	1,660,378
Premium for Early Debt Retire	-
Regulatory Assets - ASC 715	72,010,301
Other Regulatory Assets	52,974,171
MTM Interest Rate Swap	11,407,006
Total	485,353,407
NON-CURRENT ASSETS:	
Accum Deferred Income Taxes	-
Prepaid Pension	-
Derivatives- Other	
Unamortized Debt Issue Costs	-
AR-Merchandise	34,646,729
Der - N/C Energy Related Asset	143,090
Other Non-Current Assets	22,513,339
Total Non-Current Assets	57,303,158
Total Assets	3,347,899,472

South Jersey Gas
Balance Sheet
As of June 30, 2020

	Period Ending 6/30/2020
COMMON EQUITY	
Common Stk $2.50 Par Value	5,847,848
Prem on Cap Stk & Misc PIC	365,243,634
Accumulated OCI	(27,858,126)
Retained Earnings	830,379,882
Total Common Equity	1,173,613,238
LONG TERM DEBT	934,505,258
CURRENT & ACCRUED LIABILITIES:	
Notes Payable to Banks	160,500,000
Current Maturities of LTD	27,909,000
AP-Commodity	10,070,429
AP-Other	36,644,847
Derivatives-Energy Liabilities	2,650,531
Derivatives-Other Current	731,870
Accts Payable to Assc Comp	7,207,414
A/P Affiliated Comp	277,656
Customer Deposits	19,132,768
Accum Deferred Income Taxes	-
Taxes Accrued	1,973,301
Pension & Postretirement Liability	3,692,583
Environmental Remediation Cost	34,995,435
Interest Accrued	9,879,391
Other Current Liabilities	7,690,535
Total Current & Accrued Liab	323,355,760
DEF CREDITS & NONCURRENT LIAB:	
Pension & Other Post-Retir Ben	101,281,757
Accum Deferred Income Taxes	390,841,825
Investment Tax Credit	-
Environmental Remediation Cost	73,982,975
Asset Retirement Obligations	79,819,669
Der-N/C Energy Related Liabil	-
Derivatives-LT	10,675,136
Other NonCurrent Liabilities	4,595,201
Total NonCurrent Liabilities	661,196,563
REGULATORY LIABILITIES:	
Deferred Revenues-Net	-
Excess Plant Removal Costs	13,853,048
Other Regulatory Liabiltiies	241,375,605
Total Regulatoy Liabilities	255,228,653
Total Capital & Liabilities	3,347,899,471

South Jersey Gas
Statement of Gas Operating Revenues
For the twelve months ended December 31, 2019

Operating Revenues:	**2019**
Firm Residential	$ 347,225,691
Firm Commercial	76,295,734
Firm Industrial	3,838,976
Firm Cogen & Electric Gen	3,854,393
Firm Transportation - Residential	10,662,800
Firm Transportation - Commerical	37,936,897
Firm Transportation - Industrial	24,099,585
Firm Transportation - Cogen	6,137,602
Total Firm Operating Revenues	510,051,677
Deferred BGSS	0
CIP Revenue Deferred	(923,077)
All Other Deferred Accts	(758,226)
Total Deferred	(1,681,303)
Interruptible	63,263
Interruptible Transportation	1,222,989
Off-System	51,787,055
Capacity Release & Storage	6,550,137
Other	1,232,137
Total Non-Firm Operating Rev	60,855,581
TOTAL	$ 569,225,956

South Jersey Gas Company
Payments and Accruals to Affiliated Companies
For the 12 months ending December 31, 2019

		2019
1	**Millennium Account Services (meter reading services)**	3,253,869
2	**South Jersey Industries, Inc. (corporate support)**	72,636,978
3	**South Jersey Energy Service Plus (heater conversion installations)**	N/A
4	**South Jersey Energy Service Plus (billing servcies remittances)**	N/A
5	**South Jersey Energy Company (billing service remittances)**	4,708,151
6	**SJI Services, LLC (administrative and professional**	N/A
7	**South Jersey Energy Solutions (accounting support)**	157,491
8	**South Jersey Resources Group, LLC (commodity purchases)**	9,612,674
9	**(a) South Jersey Industries, Inc. includes the following major pass-through items:**	
10	**Common Dividends**	-
11	**Federal Income Taxes**	-
12	**Pension Plan Contributions**	7,356,000
13	**Benefits**	2,813,891
14	**Subtotal of Major Pass-Through Items**	10,169,891

South Jersey Gas Company
Energy Efficiency Program Accounting Entries

		Debit	Credit
To Record Regulatory Asset			
182	Program Investment Regulatory Asset	XXX	
131	Cash		XXX
To Record Incremental O&M			
907	Program O&M Expense	XXX	
131	Cash		XXX
To Amortize Regulatory Asset			
907	Program Investment Amortization Account	XXX	
182	Program Investment Regulatory Asset		XXX
To Record Recovery of Regulatory Asset			
131	Cash	XXX	
484	Clause Revenue		XXX
484	Clause Revenue	XXX	
182	Regulatory Asset		XXX
To Record Over/Under Recovery			
182	Regulatory Asset	XXX	
484	Regulatory Debit		XXX
484	Regulatory Credit	XXX	
253	Regulatory Liability		XXX
To Record Carrying Costs on Under/(Over) Recovered Balance			
182	Regulatory Asset	XXX	
419	Other Income		XXX
253	Regulatory Liability	XXX	
419	Other Income		XXX
To Record Loan Repayment (Reduction to the Regulatory Asset)			
131	Cash	XXX	
907	Customer Loan Expense		XXX
907	Customer Loan Expense	XXX	
182	Regulatory Asset		XXX

South Jersey Gas Company
Energy Efficiency Program - 2021 Extension (EET V)
Pro Forma Income Statement (Program Year)

	Year 1	Year 2	Year 3
Operating Revenues	$ 6,334,352	$ 11,646,446	$ 19,464,036
Incremental O&M Expense	$ (3,766,390)	$ (3,906,139)	$ (5,142,369)
Margin	$ 2,567,962	$ 7,740,307	$ 14,321,667
Amortization of Program Investment	$ (976,059)	$ (3,392,408)	$ (6,724,801)
Operating Income	$ 1,591,903	$ 4,347,899	$ 7,596,866
Interest Expense	$ (210,606)	$ (670,000)	$ (1,176,123)
Income Before Income Taxes	$ 1,381,297	$ 3,677,899	$ 6,420,743
Income Tax Expense (28.11%)	$ (388,283)	$ (1,033,857)	$ (1,804,871)
Net Income	$ 993,014	$ 2,644,042	$ 4,615,872

South Jersey Gas Company
Energy Efficiency Program - 2021 Extension (EET V)
Pro Forma Balance Sheet (Program Year)

	Year 1	Year 2	Year 3
Assets			
Cumulative Investment	$ 35,933,822	$ 79,360,545	$ 140,774,155
Less Accumulated Amortization	$ (976,059)	$ (4,368,467)	$ (11,093,268)
Net Investment	$ 34,957,763	$ 74,992,078	$ 129,680,886
Deferred Tax	$ (5,807,753)	$ (12,533,095)	$ (21,995,776)
Total Asset	$ 29,150,011	$ 62,458,983	$ 107,685,110
Liabilities & Capitalization			
Deferred Income Tax	$ (5,807,753)	$ (12,533,095)	$ (21,995,776)
Total Capitalization	$ 34,957,763	$ 74,992,078	$ 129,680,886
Total Liabilities & Capitalization	$ 29,150,011	$ 62,458,983	$ 107,685,110

South Jersey Gas Company
Energy Efficiency Program - 2021 Extension (EET V)
Annual Bill Summary

		Proposed Residential Non Heat Sales (210 Therms)				Proposed Residential Heat Sales (727 Therms)			
Program Year	Rate	Annual Bill	Change ($)	Change (%)	Cumulative Change (%)	Annual Bill	Change ($)	Change (%)	Cumulative Change (%)
Current Bill	$0.016820	$377.04				$1,083.48			
Year 1	$0.029493	$379.70	$2.66	0.7%	0.7%	$1,092.69	$9.21	0.9%	0.9%
Year 2	$0.040123	$381.94	$2.24	0.6%	1.3%	$1,100.42	$7.73	0.7%	1.6%
Year 3	$0.055770	$385.22	$3.28	0.9%	2.2%	$1,111.79	$11.37	1.0%	2.6%
Year 4	$0.053050	$384.65	($0.57)	-0.1%	2.0%	$1,109.81	($1.98)	-0.2%	2.4%
Year 5	$0.051725	$384.37	($0.28)	-0.1%	1.9%	$1,108.85	($0.96)	-0.1%	2.3%
Year 6	$0.049424	$383.89	($0.48)	-0.1%	1.8%	$1,107.18	($1.67)	-0.2%	2.2%

		Proposed General Service Sales (3,595 Therms)				Proposed General Service Large Volume Sales (178,885 Therms)			
Effective Date	Rate	Annual Bill	Change ($)	Change (%)	Cumulative Change (%)	Annual Bill	Change ($)	Change (%)	Cumulative Change (%)
Current Bill	$0.016820	$4,681.92				$157,701.60			
Year 1	$0.029493	$4,727.47	$45.55	1.0%	1.0%	$159,968.61	$2,267.01	1.4%	1.4%
Year 2	$0.040123	$4,765.68	$38.21	0.8%	1.8%	$161,870.17	$1,901.56	1.2%	2.6%
Year 3	$0.055770	$4,821.93	$56.25	1.2%	3.0%	$164,669.19	$2,799.02	1.7%	4.4%
Year 4	$0.053050	$4,812.15	($9.78)	-0.2%	2.8%	$164,182.62	($486.57)	-0.3%	4.1%
Year 5	$0.051725	$4,807.39	($4.76)	-0.1%	2.7%	$163,945.59	($237.03)	-0.1%	4.0%
Year 6	$0.049424	$4,799.12	($8.27)	-0.2%	2.5%	$163,533.98	($411.61)	-0.3%	3.7%

		Proposed Comprehensive Firm Trans Service				Proposed Large Volume Service			
Effective Date	Rate	Annual Bill	Change ($)	Change (%)	Cumulative Change (%)	Annual Bill	Change ($)	Change (%)	Cumulative Change (%)
Current Bill	$0.016820	$87,645.21				$301,219.57			
Year 1	$0.029493	$91,235.87	$3,590.66	4.1%	4.1%	$307,922.13	$6,702.56	2.2%	2.2%
Year 2	$0.040123	$94,247.68	$3,011.81	3.3%	7.5%	$313,544.18	$5,622.05	1.8%	4.1%
Year 3	$0.055770	$98,680.96	$4,433.28	4.7%	12.6%	$321,819.65	$8,275.47	2.6%	6.8%
Year 4	$0.053050	$97,910.30	($770.66)	-0.8%	11.7%	$320,381.08	($1,438.57)	-0.4%	6.4%
Year 5	$0.051725	$97,534.89	($375.41)	-0.4%	11.3%	$319,680.31	($700.77)	-0.2%	6.1%
Year 6	$0.049424	$96,882.94	($651.95)	-0.7%	10.5%	$318,463.34	($1,216.97)	-0.4%	5.7%

		Proposed Electric Generation Service				Proposed Electric Generation Service Large Volume			
Effective Date	Rate	Annual Bill	Change ($)	Change (%)	Cumulative Change (%)	Annual Bill	Change ($)	Change (%)	Cumulative Change (%)
Current Bill	$0.016820	$176,858.74				$737,616.03			
Year 1	$0.029493	$180,449.39	$3,590.65	2.0%	2.0%	$755,569.31	$17,953.28	2.4%	2.4%
Year 2	$0.040123	$183,461.20	$3,011.81	1.7%	3.7%	$770,628.37	$15,059.06	2.0%	4.5%
Year 3	$0.055770	$187,894.48	$4,433.28	2.4%	6.2%	$792,794.79	$22,166.42	2.9%	7.5%
Year 4	$0.053050	$187,123.82	($770.66)	-0.4%	5.8%	$788,941.48	($3,853.31)	-0.5%	7.0%
Year 5	$0.051725	$186,748.40	($375.42)	-0.2%	5.6%	$787,064.41	($1,877.07)	-0.2%	6.7%
Year 6	$0.049424	$186,096.46	($651.94)	-0.3%	5.2%	$783,804.69	($3,259.72)	-0.4%	6.3%

REDLINE

SOUTH JERSEY GAS COMPANY

Fourteenth Revised Sheet No. 6
B.P.U.N.J. No. 12 - GAS **Superseding Thirteenth Revised Sheet No. 6**

RESIDENTIAL SERVICE (RSG)

APPLICABLE TO USE OF SERVICE FOR:

All residential purposes. Customer may elect Firm Sales Service or Firm Transportation Service. To be eligible for Firm Transportation Service RSG, a customer must hold clear and marketable title to gas that is made available for delivery to the customer's residence on the Company's system.

CHARACTER OF SERVICE Firm Sales Service and Firm Transportation Service.

MONTHLY RATE: [1]

Customer Charge: $10.129375 per month

Delivery Charge:

(a)	Residential Non-Heating Customers Firm Sales Service and Firm Transportation Service	$.~~769450~~ 782123 per therm
(b)	Residential Heating Customers Firm Sales Service and Firm Transportation Service	$.~~875746~~ 888419 per therm

Basic Gas Supply Service ("BGSS") Charge:

All consumption for customers who elect Firm Sales Service.	See Rider "A" of this Tariff.

APPLICABLE RIDERS:

Basic Gas Supply Service Clause:	BGSS charges are depicted in Rider "A" of this Tariff.
Transportation Initiation Clause:	The rates set forth above have been adjusted, as is appropriate, pursuant to Rider "C" of this Tariff.
Societal Benefits Clause:	The rates set forth above have been adjusted, as is appropriate, pursuant to Rider "E" of this Tariff.
Temperature Adjustment Clause:	The rates set forth above have been adjusted, as is appropriate, pursuant to Rider "F" of this Tariff.

[1] Please refer to Appendix A for components of Monthly Rates and Price to Compare

SOUTH JERSEY GAS COMPANY

Fourteenth Revised Sheet No. 10
B.P.U.N.J. No. 12 - GAS **Superseding Thirteenth Revised Sheet No. 10**

GENERAL SERVICE (GSG)

APPLICABLE TO USE OF SERVICE FOR:

All Commercial and Industrial Customers who would not qualify for any other Rate Schedule. A customer qualifying for service under Rate Schedule GSG may elect either Firm Sales Service or Firm Transportation Service. To be eligible for Firm Transportation Service under this Rate Schedule GSG, a customer must hold clear and marketable title to gas that is made available for delivery to customer's facility on the Company's system.

CHARACTER OF SERVICE:

Firm Sales Service or Firm Transportation Service.

MONTHLY RATE: [(1)]

Customer Charge:

$31.955513 per month

Delivery Charges:

Firm Sales Service and Firm Transportation Service	$.~~748003~~ 760676 per therm

Basic Gas Supply Service ("BGSS") Charge:

All consumption for customers who elect Firm Sales Service	See Rider "A" of this Tariff.

LINE LOSS:

Line Loss shall be 1.43% as provided in Special Provision (o).

APPLICABLE RIDERS:

Basic Gas Supply Service Clause:	BGSS charges are depicted in Rider "A" of this Tariff.
Transportation Initiation Clause:	The rates set forth above have been adjusted, as is appropriate, pursuant to Rider "C" of this Tariff.
Societal Benefits Clause:	The rates set forth above have been adjusted, as is appropriate, pursuant to Rider "E" of this Tariff.
Temperature Adjustment Clause:	The rates set forth above have been adjusted, as is appropriate, pursuant to Rider **"**F" of this Tariff.

[(1)] Please refer to Appendix A for components of Monthly Rates and Price to Compare.

SOUTH JERSEY GAS COMPANY

Fourteenth Revised Sheet No. 14
B.P.U.N.J. No. 12 - GAS **Superseding Thirteenth Revised Sheet No. 14**

GENERAL SERVICE – LARGE VOLUME (GSG-LV)

APPLICABLE TO USE OF SERVICE FOR:

All Commercial and Industrial Customers who would not qualify for any other Rate Schedule (other than Rate Schedule GSG), and who has an annualized usage of 100,000 therms or more,. A customer qualifying for service under Rate Schedule GSG-LV may elect either Firm Sales Service or Firm Transportation Service. To be eligible for Firm Transportation Service under this Rate Schedule GSG-LV, a customer must hold clear and marketable title to gas that is made available for delivery to customer's facility on the Company's system.

CHARACTER OF SERVICE:

Firm Sales Service or Firm Transportation Service.

MONTHLY RATE: [(1)]

Customer Charge:

$159.937500 per month

Delivery Charges:

Firm Sales Service and Firm Transportation Service[(2)]

Demand Charge:

D-1FT: $10.245170 per Mcf of Contract Demand

Volumetric Charge:

$.~~481201~~ 493874 per therm

Basic Gas Supply Service ("BGSS") Charge:

All consumption for customers who elect Firm Sales Service — See Rider "A" of this Tariff.

LINE LOSS:

Line Loss shall be 1.43% as provided in Special Provision (o).

[(1)] Please refer to Appendix A for components of Monthly Rates and Price to Compare.
[(2)] See Special Provision (p) of this Rate Schedule GSG-LV, regarding appropriate balancing charges.

SOUTH JERSEY GAS COMPANY

Thirteenth Revised Sheet No. 18
B.P.U.N.J. No. 12 - GAS **Superseding Twelfth Revised Sheet No. 18**

COMPREHENSIVE TRANSPORTATION SERVICE (CTS)

APPLICABLE TO USE OF SERVICE FOR:

All customers having a Firm Contract Demand, and an average annual daily Firm usage of 100 Mcf per day or more. To be eligible for service under this Rate Schedule CTS, a customer must hold clear and marketable title to gas that is made available for delivery to customer's facility on the Company's system. Provided, however, that any customer receiving service under this Rate Schedule CTS prior to August 29, 2003 shall continue to be eligible to receive service under this Rate Schedule CTS, notwithstanding the foregoing, if said customers continues to have a Firm Contract Demand of 100 Mcf per day or more. Further provided, however, that if a customer ceases to receive service under this Rate Schedule CTS, and seeks to return to service under this Rate Schedule CTS, said customer must meet all requirements for eligibility as though applying for service in the first instance.

CHARACTER OF SERVICE:

Firm Transportation Service and Limited Firm Transportation Service

MONTHLY RATE: (1)

Firm:

Customer Charge: $639.750000 per month

Delivery Charges:

Demand Charge: D-1FT: $30.553927 per Mcf of Contract Demand

Volumetric Charges:

All consumption for customers who elected to transfer from Sales Service to Firm Transportation Service per therm	$.~~150090~~ 162763

Limited Firm:

Customer Charge: $106.625000 per month

Delivery Charges:

Volumetric Charges:

All consumption for customers who elected to transfer from Sales Service to Firm Transportation Service per therm	$.~~139061~~ 151734

(1) Please refer to Appendix A for components of Monthly Rates.

SOUTH JERSEY GAS COMPANY

Fifteenth Revised Sheet No. 25
B.P.U.N.J. No. 12 - GAS **Superseding Fourteenth Revised Sheet No. 25**

LARGE VOLUME SERVICE (LVS)

APPLICABLE TO USE OF SERVICE FOR:

Firm Sales Service and Firm Transportation Service pursuant to this Rate Schedule LVS, shall be available to all Industrial Customers with a Contract Demand and a minimum annualized average use of 200 Mcf per day. To be eligible for Firm Transportation Service under this Rate Schedule LVS, a customer must hold clear and marketable title to gas that is made available for delivery to customer's facility on the Company's system.

CHARACTER OF SERVICE:

Firm Sales Service, Limited Firm Sales Service, Firm Transportation Service, and Limited Firm Transportation Service.

MONTHLY RATE: [1]

Firm:

Customer Charge:

$959.625000 per month

Delivery Charge:

Firm Sales Service and Firm Trasnportation Service

Demand Charge:

D-1FT: $17.016071 per Mcf of Contract Demand

Volumetric Charge:

$.~~131195~~ 143868per therm

Basic Gas Supply Service ("BGSS") Charge:

Demand Charge:

D-2: $19.623062 per Mcf of Contract Demand.

Volumetric Charge:

See Rider "A" of this Tariff.

[1] Please refer to Appendix A for components of Monthly Rates.

Issued _____
by South Jersey Gas Company,
M. Orsen, President

Effective with service rendered on and after _____

Filed pursuant to Order in Docket No. _____ of the Board of Public Utilities, State of New Jersey, dated _____

SOUTH JERSEY GAS COMPANY

Twelfth Revised Sheet No. 26
B.P.U.N.J. No. 12 - GAS **Superseding Eleventh Revised Sheet No. 26**

LARGE VOLUME SERVICE (LVS)
(Continued)

Limited Firm:

Customer Charge:

$106.625000 per month

Delivery Charge:

Firm Sales Service and Firm Transportation

Volumetric Charge:

$.~~207029~~ 219702 per therm

Basic Gas Supply Service ("BGSS") Charge:

Applicable to customers who elect Firm Sales Service

Volumetric Charge:

See Rider "A" of this Tariff.

PRICE TO COMPARE:

The Company will provide the Price to Compare for an LVS customer, at said customer's request.

LINE LOSS:

Line Loss shall be 1.43% as provided in Special Provision (h).

MINIMUM BILL:

Sum of monthly Customer Charge and monthly Demand Charges, irrespective of use.

SOUTH JERSEY GAS COMPANY

Thirteenth Revised Sheet No. 31
B.P.U.N.J. No. 12 - GAS **Superseding Twelfth Revised Sheet No. 31**

FIRM ELECTRIC SERVICE (FES)

APPLICABLE TO USE OF SERVICE FOR:

All gas that is purchased or transported to generate electricity. Provided, however, that in order to qualify for this Rate Schedule FES, a customer must have a Winter Daily Contract Demand of 1,000 Mcf per day or more, or a Summer Daily Contract Demand of 2,000 Mcf per day or more, or both. To be eligible for Firm Transportation Service under this Rate Schedule FES, a customer must hold clear and marketable title to gas that is made available for delivery to customer's facility on the Company's system.

CHARACTER OF SERVICE:

Firm Sales Service and Firm Transportation Service.

MONTHLY RATE [(1)] [(2)]

WINTER (November – March):

Demand Charge:

D-1 $3.089100 per Mcf of Winter Daily Contract Demand
D-2 $9.811531 per Mcf of Daily Billing Determinant or $0 for Firm Transportation customers

Volumetric Charge:

C-1: $.~~097000~~ 109673 per therm of consumption
C-2: FES Monthly Commodity Rate, pursuant to Rider "A" and Special Provision (x), OR Customer Owned Gas Clause, Rider "D"
C-3: $.173700 per therm of consumption
C-4: Escalator Rate – Charge may change monthly pursuant to Standard Gas Service Addendum.

Minimum Bill: The monthly D-1 and D-2 charges, irrespective of use.

SUMMER (April – October):

Demand Charge:

D-1 $3.089100 per Mcf of Summer Daily Contract Demand
D-2 $9.811531per Mcf of Daily Billing Determinant or $0 for Firm Transportation customers

Volumetric Charge:

C-1: $.~~097000~~ 109673 per therm of consumption
C-2: FES Monthly Commodity Rate, pursuant to Rider "A" and Special Provision (x), OR Customer Owned Gas Clause, Rider "D"
C-3: $.173700 per therm of consumption
C-4: Escalator Rate – Charge may change monthly pursuant to Standard Gas Service Addendum.

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(1) Please refer to Appendix A for components of Monthly Rates.
(2) Please refer to Special Provision (p)

SOUTH JERSEY GAS COMPANY

Fourteenth Revised Sheet No. 38
B.P.U.N.J. No. 12 - GAS **Superseding Thirteenth Revised Sheet No. 38**

ELECTRIC GENERATION SERVICE (EGS)

APPLICABLE TO USE OF SERVICE FOR:

Residential, commercial and industrial uses for electric generation facilities (excluding back-up generator equipment); all Prime Movers; and all engine driven equipment (whether or not used for electric generation). Provided, however, that in order to be eligible for this Rate Schedule EGS, a customer must have a Firm Daily Contract Demand of less than 200 Mcf per day; provided, however, that a residential EGS customer will have no Firm Daily Contract Demand. To be eligible for Firm Transportation Service under this Rate Schedule EGS, a customer must hold clear and marketable title to gas that is made available for delivery to customer's facility on the Company's system.

CHARACTER OF SERVICE:

Firm Sales Service and Firm Transportation Service

MONTHLY RATE: [1][2]

Residential Customer Charge:

$10.662500 per month

Residential Delivery Charge

Residential Volumetric Charge: $.~~306842~~ 319515 per therm

Commercial and Industrial Customer Charge:

$67.578925 per month

Commercial and Industrial Delivery Charge:

Commercial and Industrial Demand Charge:

D-1 Charge: $8.362812 per Mcf of contract

Volumetric Charges:

Winter Season (effective during billing months of November through March):

All Consumption for Firm Sales Service and Firm Transportation Service

$.~~307993~~ 320666 per therm

[1] Please refer to Appendix A for components of Monthly Rates.
[2] See Special Provision (k) of this Rate Schedule EGS, regarding appropriate balancing charges.

Issued _____
by South Jersey Gas Company,
M. Orsen, President

Effective with service rendered
on and after _____

Filed pursuant to Order in Docket No. _____ of the Board of Public Utilities, State of New Jersey, dated _____

SOUTH JERSEY GAS COMPANY

Fourteenth Revised Sheet No. 39
B.P.U.N.J. No. 12 - GAS **Superseding Thirteen Revised Sheet No. 39**

ELECTRIC GENERATION SERVICE (EGS)
(Continued)

Summer Season (effective during billing months of April through October):

All Consumption for Firm Sales Service and Firm Transportation Service

$.~~276005~~ 288678 per therm

Basic Gas Supply Service ("BGSS") Charge:

Applicable to customers who elect Firm Sales Service

See Rider "A" of this Tariff.

LINE LOSS:

Line Loss shall be 1.43% as provided in Special Provision (p).

APPLICABLE RIDERS:

Basic Gas Supply Service Clause:	BGSS charges are depicted in Rider "A" of this Tariff.
Societal Benefits Clause:	The rates set forth above have been adjusted, as is appropriate, pursuant to Rider "E" of this Tariff.
2017 Tax Act	The rates set forth above have been adjusted, as is appropriate, pursuant to Rider "H" of this Tariff.
Balancing Service Clause	The rates set forth above have been adjusted, as is appropriate, pursuant to Rider "J" of this Tariff. However, also see Special Provision (k) regarding Rider "I".
Energy Efficiency Tracker:	The rates set forth above have been adjusted, as is appropriate, pursuant to Rider "N" of this Tariff.

TERMS OF PAYMENT:

Payment of all bills must be received in full at the Company's designated office within fifteen (15) days of the billing date; provided however, the Company shall take into account any postal service delays of which the Company is advised. If the fifteenth (15th) day falls on a non-business day, the due date shall be extended to the next business day. Should the customer fail to make payment as specified, the Company may, beginning on the twenty-sixth (26th) day, assess simple interest at a rate equal to the prime rate as published in the Money Rates column in The Wall Street Journal. A late payment charge shall not be assessed on a residential customer, or on State, county or municipal government entities.

SOUTH JERSEY GAS COMPANY

Fifteenth Revised Sheet No. 43
B.P.U.N.J. No. 12 - GAS **Superseding Fourteenth Revised Sheet No. 43**

ELECTRIC GENERATION SERVICE – LARGE VOLUME (EGS-LV)

APPLICABLE TO USE OF SERVICE FOR:

All commercial and industrial electric generation facilities; all Prime Movers and all engine driven equipment (whether or not used for electric generation). Provided, however, that in order to be eligible for this Rate Schedule EGS-LV, a customer must have a Firm Daily Contract Demand of 200 Mcf per day or more. To be eligible for Firm Transportation Service under this Rate Schedule EGS-LVS, a customer must hold clear and marketable title to gas that is made available for delivery to customer's facility on the Company's system.

CHARACTER OF SERVICE:

Firm Sales Service, Firm Transportation Service, Limited Firm Sales Service and Limited Firm Transportation Service.

MONTHLY RATE: (1)

Customer Charge:

$456.696200 per month

FIRM:

Demand Charges: (2)

D-1 $24.772951 per Mcf of Firm Daily Contract Demand.
D-2 $21.238498 per Mcf of Firm Daily Contract Demand or $0 for Firm Transportation customers.

Volumetric Charge:

C-1: $.~~076761~~ 089434 per therm of consumption
C-2: As depicted in the Monthly BGSS Subrider of Rider "A" of this Tariff, OR Customer Owned Gas Clause, Rider "D"

Minimum Bill: Monthly D-1 and D-2 charges, irrespective of use.

LIMITED FIRM:

Demand Charge:

D-2 $9.811531 per Mcf of Limited Firm Daily Contract Demand or $0 for Limited Firm Transportation customers

Volumetric Charge: (2)

C-1: $.~~076761~~ 089434 per therm of consumption
C-2: As depicted in the Monthly BGSS Subrider of Rider "A" of this Tariff, OR Customer Owned Gas Clause, Rider "D"
C-3 $.173700 per therm for all consumption within Limited Firm Contract Demand level.[1]

(1) Please refer to Appendix A for components of Monthly Rates.
(2) Please refer to Special Provision (j).

SOUTH JERSEY GAS COMPANY

Thirteenth Revised Sheet No. 60
B.P.U.N.J. No. 12 - GAS **Superseding Twelfth Revised Sheet No. 60**

NATURAL GAS VEHICLE (NGV)

APPLICABLE TO:

This service will be available to Commercial and Industrial customers who will utilize natural gas, for the purpose of providing vehicle fuel at Company-operated fueling stations or at separately metered customer-operated fueling stations.

CHARACTER OF SERVICE:

Firm Sales Service or Firm Transportation Service

COMPRESSED NATURAL GAS VEHICLE SERVICE AT COMPANY OPERATED FUELING STATIONS

This part of the service is available for refueling vehicles with compressed natural gas to customers who refuel at Company operated fueling stations. All service at Company operated fueling stations shall be Firm Sales Service. Provided, however, that in the Company's sole discretion, it may allow for Firm Transportation service for a Customer-specific dedicated dispenser or time fill system (separately metered) at a Company operated fueling station.

Rate for Monthly Consumption

Volumetric Charge

C-1: $0.~~076761~~ 089434 per therm ($0.~~095951~~ 111792 GGE*)

Distribution Charge: $0.210015 per therm ($0.262519 GGE*)

Compression Charge: $0.586530 per therm ($0.733163 GGE*)

Commodity Charges

All consumption for customers who elected Firm Sales Service

Basic Gas Supply Service ("BGSS") Charge:

See Rider "A" of this Tariff.
BGSS rate * GGE Factor 1.25 = GGE

GGE indicates Gasoline Gallon Equivalent. The gasoline gallon equivalent shall be determined in accordance with local standards. The point of sale price to the Customer shall be displayed in gasoline gallon equivalents at public access dispensers at Company operated fueling stations, and shall be calculated as C-1 + Distribution Charge + Compression Charge + New Jersey Motor Vehicle Fuel Tax + Federal Excise Tax + BGSS.

Commodity charges do not include State of New Jersey Motor vehicle fuel tax and Federal Excise Tax. As of July 1, 2011 these taxes were $0.0525 and $0.183 per gallon, respectively and shall be charged at the prevailing rate when applicable. The Company is under no obligation to determine if a customer is exempt from taxation.

SOUTH JERSEY GAS COMPANY

Fourteenth Revised Sheet No. 61
B.P.U.N.J. No. 12 - GAS **Superseding Thirteenth Revised Sheet No. 61**

NATURAL GAS VEHICLE (NGV)
(Continued)

NATURAL GAS VEHICLE SERVICE AT CUSTOMER OPERATED FUELING STATIONS

This part of the service is available for the sale of separately metered uncompressed gas for the use of the customer solely as a vehicle fuel as follows:

The customer agrees to obtain and maintain, at its expense, all necessary certificates, licenses and regulatory approvals and pay all taxes levied on the gas compressed for refueling the customer's vehicles;

If the customer provides natural gas for resale as a motor fuel, the customer will be responsible for collecting and paying all applicable taxes on the gas compressed for resale and on the sale thereof and for the metering of such sale in accordance with local standards and regulations; and

The customer must execute a Standard Gas Service Agreement (NGV) for not less than 12 months and must produce evidence of Land Rights.

Rate for Monthly Consumption

Monthly Customer Charge

The monthly customer charge shall be determined in accordance with the maximum delivery capability requested by the customer.

0-999 Cf/hour	$39.984400
1,000-4,999 Cf/hour	$79.968800
5,000-24,999 Cf/hour	$213.250000
25,000 and greater Cf/hour	$750.074888

Volumetric Charges

C-1: $0.~~076761~~ 089434 per therm ($0.~~095951~~ 111792 GGE)

Distribution Charge: $0.210015 per therm ($0.262519 GGE)

Basic Gas Supply Service ("BGSS") Charge:

All consumption for customers who elect Firm Sales Service See Rider "A" of this Tariff.

Facilities Charge

All consumption for Customers that elect to have the Company construct Compressed Natural Gas ("CNG") fueling facilities located on Customer's property:

C-2: $0.345653 ($0.432066 GGE)

The customer shall pay all related motor vehicle taxes directly to the taxing entity. Such taxes shall be incremental to charges paid to the Company for the cost of receiving service under this rate schedule.

SOUTH JERSEY GAS COMPANY

Fourteenth Revised Sheet No. 62
B.P.U.N.J. No. 12 – GAS **Superseding Thirteenth Revised Sheet No. 62**

NATURAL GAS VEHICLE (NGV)
(Continued)

DELIVERY SERVICE FOR NATURAL GAS VEHICLES

This part of service is available for delivery of customer owned natural gas for use in compression and dispensing equipment at the Customer's premises, as follows:

The customer must purchase under a contract with an initial term of not less than one year an adequate supply of natural gas of a quality acceptable to the Company, and must make arrangements by which such volumes of natural gas can be delivered into the Company's distribution system at the Customer's expense.

By taking service under this part, the Customer warrants that it has good and legal title to all gas supplied to the Company, and agrees to indemnify, defend and hold the Company harmless from any loss, claims or damages in regard to such title.

Rate for Delivery Service

Monthly Customer Charge

The monthly customer charge shall be determined in accordance with the maximum delivery capability requested by the customer.

0-999 Cf/hour	$39.984400
1,000-4,999 Cf/hour	$79.968800
5,000-24,999 Cf/hour	$213.250000
25,000 and greater Cf/hour	$750.074888

Volumetric Charge

C-1**:** $0.~~076761~~ 089434 per therm ($0.~~095951~~ 111792 GGE)

Distribution Charge**:** $0.210015 per therm ($0.262519 GGE)

Facilities Charge

All consumption for Customers that elect to have the Company construct CNG fueling facilities located on Customer's property:

C-2: $0.345653 per therm ($0.432066 GGE)

Sales taxes are not included in the above basic charges. The Company is under no obligation to determine if a customer is exempt from taxation. Customers seeking tax exemption must file verification with the Company.

SOUTH JERSEY GAS COMPANY

Sixth Revised Sheet No. 105
B.P.U.N.J. No. 12 - GAS **Superseding Fifth Revised Sheet No. 105**

RIDER "N"
ENERGY EFFICIENCY TRACKER ("EET")

APPLICABLE TO:

Rate Schedule RSG	-	Residential
Rate Schedule GSG	-	General Service
Rate Schedule GSG-LV	-	General Service- Large Volume
Rate Schedule CTS	-	Comprehensive Transportation Service
Rate Schedule LVS	-	Large Volume Service
Rate Schedule FES	-	Firm Electric Service
Rate Schedule EGS	-	Electric Generation Service
Rate Schedule EGS-LV	-	Electric Generation Service- Large Volume
Rate Schedule IGS	-	Interruptible Gas Service
Rate Schedule ITS	-	Interruptible Transportation Service
Rate Schedule NGV	-	Natural Gas Vehicle

This Rider "N" shall be known as the Energy Efficiency Tracker ("EET"). For financial accounting purposes the Company shall record a return on and a return of investments in energy efficiency programs, as approved by the Board at Docket No. GO09010059, in an Order dated July 24, 2009, Docket No. GO12050363, in an Order dated June 21, 2003, Docket No. GR15010090, in an Order dated August 19, 2015, ~~and~~ Docket No. GO18030350, in an Order dated October 29, 2018 and Docket No. _____, in an Order dated _____ and recover all incremental operating and maintenance expenses of the programs, subject to the EET. Docket No. _____ was filed in accordance with the Clean Energy Act of 2018 ("CEA") and the Board's Order dated June 10, 2020 in Docket Nos. QO19010040, QO19060748 and QO17091004. The calculation will use the weighted average cost of capital as identified in the respective Orders referenced above.

The EET rate will be calculated annually using projected data and subject to a true-up at the end of the EET year ~~(September 30th)~~ with simple interest on net over/under recoveries. Interest associated with over recoveries will be credited against the EET, while interest associated with under recoveries will be charged to the EET. The interest on monthly EET under and over recoveries shall be the interest rate based on the Company's weighted interest rate for the corresponding month obtained on its commercial paper and bank credit lines but shall not exceed the Company's weighted average cost of capital utilized to set rates in its most recent base rate case.

This EET will be effectuated through a volumetric rate applied to customers' bills. The Company shall make an annual EET rate filing in July~~June~~ of each year with a proposed implementation of the revised EET rate in October. Included in the filing will be a list of efficiency programs offered and eligible for recovery under the EET.

The Company shall have the discretion to implement a bill credit or a refund at any time during the EET Year with five (5) days notice to the BPU Staff and the Division of Rate Counsel. The Company shall have the discretion to file a self-implementing EET rate reduction at any time with two (2) weeks notice to the BPU Staff and the Division of Rate Counsel.

Rate Schedules subject to this Rider will be charged the following volumetric rate:

	2019-20 EEP True-UP~~Tariff~~ Rate	EEP Extension Rate	Total Tariff Rate
EET Rate per therm	$0.015736	$0.011856	$0.027592
Applicable Revenue Tax	$0.000039	$0.000030	$0.000069
Total EET Rate per therm	$0.015775	$0.011886	$0.027661
Applicable NJ Sales Tax	$0.001045	$0.000787	$0.001832
EET Rate per therm with NJ Sales Tax	$0.016820	$0.012673	$0.029493

Issued _____
by South Jersey Gas Company,
M. Orsen, President

Effective with service rendered on and after _____

Filed pursuant to Order in Docket No. _____ of the Board of Public Utilities, State of New Jersey, dated _____

SOUTH JERSEY GAS COMPANY
Schedule of Rate Components
Appendix A - Effective _____

RESIDENTIAL GAS SERVICE (RSG) - NONHEAT CUSTOMER	**RIDER**	**RATE**	**PUA**	**NJ SALES TAX**	**TARIFF RATE**
CUSTOMER CHARGE		9.500000		0.629375	**10.129375**
DELIVERY CHARGE (per therm):					
Base Rate		0.678051		0.044921	0.722972
TIC	C	0.001236	0.000003	0.000082	0.001321
SBC:					
RAC	E, G	0.045668	0.000114	0.003033	0.048815
CLEP	E, K	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC		0.075091	0.000159	0.004930	0.080180
CIP	M	(0.111064)	(0.000278)	(0.007376)	(0.118718)
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Balancing Service Charge BS-1	J	0.081498	0.000204	0.005413	0.087115
Balancing Service Charge BUY-OUT PRICE (Applicable to Transportation Customers Only)	J				Rate Set Monthly
TOTAL DELIVERY CHARGE		0.733470	0.000110	0.048544	**0.782123**
BGSS: (Applicable To Sales Customers Only)	A	0.418898	0.001049	0.027822	**0.447769**

SOUTH JERSEY GAS COMPANY
Schedule of Rate Components
Appendix A - Effective _____

RESIDENTIAL GAS SERVICE (RSG) - HEAT CUSTOMER

	RIDER	RATE	PUA	NJ SALES TAX	TARIFF RATE
CUSTOMER CHARGE		9.500000		0.629375	**10.129375**
DELIVERY CHARGE (per therm):					
Base Rate		0.678051		0.044921	0.722972
TIC	C	0.001236	0.000003	0.000082	0.001321
SBC:					
RAC	E, G	0.045668	0.000114	0.003033	0.048815
CLEP	E, K	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC		0.075091	0.000159	0.004930	0.080180
CIP	M	(0.011621)	(0.000029)	(0.000772)	(0.012422)
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Balancing Service Charge BS-1	J	0.081498	0.000204	0.005413	0.087115
Balancing Service Charge BUY-OUT PRICE (Applicable to Transportation Customers Only)	J				Rate Set Monthly
Total Delivery Charge		0.832913	0.000359	0.055148	**0.888419**
BGSS: (Applicable To Sales Customers Only)	A	0.418898	0.001049	0.027822	**0.447769**

SOUTH JERSEY GAS COMPANY
Schedule of Rate Components
Appendix A - Effective _____

GENERAL SERVICE (GSG)

	RIDER	RATE	PUA	NJ SALES TAX	TARIFF RATE
CUSTOMER CHARGE		29.970000		1.985513	**31.955513**
DELIVERY CHARGE (per therm):					
Base Rate		0.566312		0.037518	0.603830
TIC	C	0.001236	0.000003	0.000082	0.001321
SBC:					
RAC	E, G	0.045668	0.000114	0.003033	0.048815
CLEP	E, K	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC		0.075091	0.000159	0.004930	0.080180
CIP	M	(0.019668)	(0.000049)	(0.001306)	(0.021023)
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Balancing Service Charge BS-1	J	0.081498	0.000204	0.005413	0.087115
Balancing Service Charge BUY-OUT PRICE (Applicable to Transportation Customers Only)	J				Rate Set Monthly
Total Delivery Charge		0.713127	0.000339	0.047211	**0.760676**
BGSS: (Applicable To Sales Customers Only using less than 5,000 therms annually)	A	0.418898	0.001049	0.027822	**0.447769**
BGSS: (Applicable To Sales Customers Only using 5,000 therms annually or greater)	A				**RATE SET MONTHLY**

SOUTH JERSEY GAS COMPANY
Schedule of Rate Components
Appendix A - Effective _____

GENERAL SERVICE-LV (GSG-LV)

	RIDER	RATE	PUA	NJ SALES TAX	TARIFF RATE
CUSTOMER CHARGE		150.000000		9.937500	**159.937500**
D-1 Demand Charge (Mcf)		9.608600		0.636570	**10.245170**
DELIVERY CHARGE (per therm):					
Base Rate		0.283532		0.018784	0.302316
TIC	C	0.001236	0.000003	0.000082	0.001321
SBC:					
RAC	E, G	0.045668	0.000114	0.003033	0.048815
CLEP	E, K	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC		0.075091	0.000159	0.004930	0.080180
CIP	M	0.012806	0.000032	0.000851	0.013689
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Balancing Service Charge BS-1	J	0.081498	0.000204	0.005413	0.087115
Balancing Service Charge BUY-OUT PRICE (Applicable to Transportation Customers Only)	J				Rate Set Monthly
Total Delivery Charge		0.462821	0.000420	0.030634	**0.493874**
BGSS: (Applicable Sales Customers Only)	A				**RATE SET MONTHLY**

SOUTH JERSEY GAS COMPANY
Schedule of Rate Components
Appendix A - Effective _____

COMPREHENSIVE TRANSPORTATION SERVICE (CTS)

	RIDER	RATE	PUA	NJ SALES TAX	TARIFF RATE
FIRM					
CUSTOMER CHARGE		600.000000		39.750000	**639.750000**
D-1 Demand Charge (Mcf)		28.655500		1.898427	**30.553927**
DELIVERY CHARGE (per therm):					
Base Rate		0.068773		0.004556	0.073329
SBC:					
RAC	E, G	0.045668	0.000114	0.003033	0.048815
CLEP	E, K	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC		0.075091	0.000159	0.004930	0.080180
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Total Delivery Charge		0.152522	0.000181	0.010060	**0.162763**
Balancing Service Charge BS-1	I	0.081498	0.000204	0.005413	0.087115
Balancing Service Charge BS-1 (Opt Out Provision)	I	0.002570	0.000006	0.000171	0.002747
BUY-OUT PRICE					RATE SET MONTHLY
LIMITED FIRM					
CUSTOMER CHARGE		100.000000		6.625000	**106.625000**
DELIVERY CHARGE (per therm):					
Base Rate		0.058400		0.003900	0.062300
SBC:					
RAC	E, G	0.045668	0.000114	0.003033	0.048815
CLEP	E, K	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC		0.075091	0.000159	0.004930	0.080180
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Total Delivery Charge		0.142149	0.000181	0.009404	**0.151734**
Balancing Service Charge BS-1	I	0.081498	0.000204	0.005413	0.087115
Balancing Service Charge BS-1 (Opt Out Provision)	I	0.002570	0.000006	0.000171	0.002747
BUY-OUT PRICE					RATE SET MONTHLY

SOUTH JERSEY GAS COMPANY
Schedule of Rate Components
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LARGE VOLUME SERVICE (LVS)

	RIDER	RATE	PUA	NJ SALES TAX	TARIFF RATE
FIRM					
CUSTOMER CHARGE		900.000000		59.625000	**959.625000**
D-1 Demand Charge (Mcf)		15.958800		1.057271	**17.016071**
D-2 DEMAND BGSS(Applicable to Sales Customers Only)	A	18.357823	0.045986	1.219252	**19.623062**
DELIVERY CHARGE (per therm):					
Base Rate		0.051052		0.003382	0.054434
SBC:					
RAC	E, G	0.045668	0.000114	0.003033	0.048815
CLEP	E, K	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC		0.075091	0.000159	0.004930	0.080180
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Total Delivery Charge		0.134801	0.000181	0.008886	**0.143868**
Balancing Service Charge BS-1	I	0.081498	0.000204	0.005413	0.087115
Balancing Service Charge BS-1 (Opt Out Provision) (Applicable to Transportation Customers Only)	I	0.002570	0.000006	0.000171	0.002747
Balancing Service Charge CASH OUT CHARGE (CREDIT) (Applicable Transportaton Customers Only)	I				RATE SET MONTHLY
BGSS: (Applicable Sales Customers Only)	A				**RATE SET MONTHLY**
LIMITED FIRM					
CUSTOMER CHARGE		100.000000		6.625000	**106.625000**
DELIVERY CHARGE (per therm):					
Base Rate		0.122174		0.008094	0.130268
SBC:					
RAC	E, G	0.045668	0.000114	0.003033	0.048815
CLEP	E, K	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC		0.075091	0.000159	0.004930	0.080180
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Total Delivery Charge		0.205923	0.000181	0.013598	**0.219702**
Balancing Service Charge BS-1	I	0.081498	0.000204	0.005413	0.087115
Balancing Service Charge BS-1 (Opt Out Provision) (Applicable to Transportation Customers Only)	I	0.002570	0.000006	0.000171	0.002747
BUY-OUT PRICE	I				RATE SET MONTHLY

SOUTH JERSEY GAS COMPANY
Schedule of Rate Components
Appendix A - Effective _____

FIRM ELECTRIC SALES (FES)	**RIDER**	**RATE**	**PUA**	**NJ SALES TAX**	**TARIFF RATE**
WINTER					
D-1 DEMAND (MCF) (Rate is negotiated. Shown here is the benchmark rate.)		2.897200		0.191900	**3.089100**
D-2 DEMAND BGSS(MCF) (Applicable to Sales Customers Only)	A	9.178912	0.022993	0.609626	**9.811531**
DELIVERY CHARGE (per therm):					
SBC:					
RAC	E, G	0.045668	0.000114	0.003033	0.048815
CLEP	E, K	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC		0.075091	0.000159	0.004930	0.080180
EET	N	0.027592	0.000069	0.001832	0.029493
Total Delivery Charge		0.102683	0.000228	0.006762	**0.109673**
C-3 All Therms (Rate is negotiated. Shown here is the benchmark rate.)		0.162900		0.010800	**0.173700**
C-4 Escalator Rate (To be determined as prescribed in the Company's Tariff)					**RATE SET MONTHLY**
Balancing Service Charge CASH OUT CHARGE (CREDIT) (Applicable to Firm Transportatin Customers Only)	I				RATE SET MONTHLY
BGSS: (Applicable To Sales Customers Only)	A				**RATE SET MONTHLY**
SUMMER					
D-1 DEMAND (MCF) (Rate is negotiated. Shown here is the benchmark rate.)		2.897200		0.191900	**3.089100**
D-2 DEMAND BGSS(MCF) (Applicable to Sales Customers Only)	A	9.178912	0.022993	0.609626	**9.811531**
SBC:					
RAC	E, G	0.045668	0.000114	0.003033	0.048815
CLEP	E, K	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
EET	N	0.027592	0.000069	0.001832	0.029493
Total Delivery Charge		0.102683	0.000228	0.006762	**0.109673**
C-3 All Therms (Rate is negotiated. Shown here is the benchmark rate.)		0.162900		0.010800	**0.173700**
C-4 Escalator Rate (To be determined as prescribed in the Company's Tariff)					**RATE SET MONTHLY**
Balancing Service Charge CASH OUT CHARGE (CREDIT) (Applicable to Firm Transportatin Customers Only)	I				RATE SET MONTHLY
BGSS: (Applicable To Sales Customers Only)	A				**RATE SET MONTHLY**

SOUTH JERSEY GAS COMPANY
Schedule of Rate Components
Appendix A - Effective _____

ELECTRIC GENERATION SERVICE (EGS) - RESIDENTIAL	**RIDER**	**RATE**	**PUA**	**NJ SALES TAX**	**TARIFF RATE**
CUSTOMER CHARGE		10.000000		0.662500	**10.662500**
DELIVERY CHARGE (per therm):					
Base Rate		0.134084		0.008883	0.142967
SBC:					
RAC	E, G	0.045668	0.000114	0.003033	0.048815
CLEP	E, K	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC		0.075091	0.000159	0.004930	0.080180
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Balancing Service Charge BS-1	J	0.081498	0.000204	0.005413	0.087115
Total Delivery Charge		0.299331	0.000385	0.019800	**0.319515**
BGSS: (Applicable To Sales Customers Only)	A	0.418898	0.001049	0.027822	**0.447769**

SOUTH JERSEY GAS COMPANY
Schedule of Rate Components
Appendix A - Effective _____

ELECTRIC GENERATION SERVICE (EGS) - COMMERCIAL/INDUSTRIAL	**RIDER**	**RATE**	**PUA**	**NJ SALES TAX**	**TARIFF RATE**
CUSTOMER CHARGE		63.380000		4.198925	**67.578925**
D-1 DEMAND (MCF)		7.843200		0.519612	**8.362812**
DELIVERY CHARGE (per therm):					
Base Rate - Winter Season (Nov - Mar)		0.135163		0.008955	0.144118
Base Rate - Summer Season (Apr - Oct)		0.105163		0.006967	0.112130
SBC:					
RAC	E, G	0.045668	0.000114	0.003033	0.048815
CLEP	E, K	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC		0.075091	0.000159	0.004930	0.080180
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Balancing Service Charge BS-1	J	0.081498	0.000204	0.005413	0.087115
Total Delivery Charge - Winter Season		0.300410	0.000385	0.019872	**0.320666**
Total Delivery Charge - Summer Season		0.270410	0.000385	0.017884	**0.288678**
BGSS: (Applicable To Sales Customers Only)	A				**RATE SET MONTHLY**

SOUTH JERSEY GAS COMPANY
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ELECTRIC GENERATION SERVICE-LV (EGS-LV)	**RIDER**	**RATE**	**PUA**	**NJ SALES TAX**	**TARIFF RATE**
FIRM					
CUSTOMER CHARGE		428.320000		28.376200	**456.696200**
D-1 DEMAND (MCF) (Rate is negotiated. Shown here is the benchmark rate.)		23.233717		1.539234	**24.772951**
D-2 DEMAND BGSS (MCF) (Applicable to Sales Customers Only)	A	19.869101	0.049772	1.319625	**21.238498**
DELIVERY CHARGE (per therm):					
SBC:					
RAC	E, G	0.045668	0.000114	0.003033	0.048815
CLEP	E, K	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
		0.075091	0.000159	0.004930	0.080180
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Total Delivery Charge		0.083749	0.000181	0.005504	**0.089434**
Balancing Service Charge BS-1	I	0.081498	0.000204	0.005413	0.087115
Balancing Service Charge BS-1 (Opt Out Provision)	I	0.002570	0.000006	0.000171	0.002747
Balancing Service Charge CASH OUT CHARGE (CREDIT) (Applicable to Firm Transportatin Customers Onl	I				RATE SET MONTHLY
BGSS: (Applicable To Sales Customers Only)	A				**RATE SET MONTHLY**
LIMITED FIRM					
D-2 DEMAND BGSS(MCF) (Applicable to Sales Customers Only)	A	9.178912	0.022993	0.609626	**9.811531**
DELIVERY CHARGE (per therm):					
SBC:					
RAC	E, K	0.045668	0.000114	0.003033	0.048815
CLEP	E, G	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
		0.075091	0.000159	0.004930	0.080180
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Total Delivery Charge		0.083749	0.000181	0.005504	**0.089434**
C-3 (Rate is negotiated. Shown here is the benchmark rate.)		0.162900		0.010800	**0.173700**
Balancing Service Charge BS-1	I	0.081498	0.000204	0.005413	0.087115
Balancing Service Charge BS-1 (Opt Out Provision)	I	0.002570	0.000006	0.000171	0.002747
Balancing Service Charge CASH OUT CHARGE (CREDIT) (Applicable to Firm Transportatin Customers Onl	I				RATE SET MONTHLY
BGSS: (Applicable To Sales Customers Only)	A				**RATE SET MONTHLY**

SOUTH JERSEY GAS COMPANY
Schedule of Rate Components
Appendix A - Effective _____

YARD LIGHTING SERVICE (YLS)	**RIDER**	**RATE**	**PUA**	**NJ SALES TAX**	**TARIFF RATE**
MONTHLY CHARGE / INSTALL		13.455324		0.891415	**14.346739**
STREET LIGHTING SERVICE (SLS)					
MONTHLY CHARGE / INSTALL		16.461699		1.090588	**17.552287**
INTERRUPTIBLE GAS SALES (IGS)					
Commodity					Rate Set Monthly
SBC:					
RAC	E, K	0.045668	0.000114	0.003033	0.048815
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC:		0.057068	0.000114	0.003733	0.060915
EET	N	0.027592	0.000069	0.001832	0.029493

SOUTH JERSEY GAS COMPANY
Schedule of Rate Components
Appendix A - Effective _____

INTERRUPTIBLE TRANSPORTATION (ITS)		**RIDER**	**RATE**	**PUA**	**NJ SALES TAX**	**TARIFF RATE**
CUSTOMER CHARGE			**100.000000**		**6.625000**	**106.625000**
TRANSPORTATION CHARGE A			**0.028400**		**0.001900**	**0.030300**
SBC:						
RAC		E, K	0.045668	0.000114	0.003033	0.048815
CLEP		E, G	0.018023	0.000045	0.001197	0.019265
USF		E	0.011400	0.000000	0.000700	0.012100
	Total SBC:		0.075091	0.000159	0.004930	0.080180
EET		N	0.027592	0.000069	0.001832	0.029493
TRANSPORTATION CHARGE B			**0.093200**		**0.006200**	**0.099400**
SBC:						
RAC		E, K	0.045668	0.000114	0.003033	0.048815
CLEP		E, G	0.018023	0.000045	0.001197	0.019265
USF		E	0.011400	0.000000	0.000700	0.012100
	Total SBC:		0.075091	0.000159	0.004930	0.080180
EET		N	0.027592	0.000069	0.001832	0.029493
TRANSPORTATION CHARGE C			**0.153200**		**0.010100**	**0.163300**
SBC:						
RAC		E, K	0.045668	0.000114	0.003033	0.048815
CLEP		E, G	0.018023	0.000045	0.001197	0.019265
USF		E	0.011400	0.000000	0.000700	0.012100
	Total SBC:		0.075091	0.000159	0.004930	0.080180
EET		N	0.027592	0.000069	0.001832	0.029493

SOUTH JERSEY GAS COMPANY
Schedule of Rate Components
Appendix A - Effective _____

NATURAL GAS VEHICLE (NGV)		**RATE**	**PUA**	**NJ SALES TAX**	**TARIFF RATE**
COMPANY OPERATED FUELING STATIONS					
DELIVERY CHARGE (per therm):					
SBC					
RAC	E, K	0.045668	0.000114	0.003033	0.048815
CLEP	E, G	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC:		0.075091	0.000159	0.004930	0.080180
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Total Delivery Charge		0.083749	0.000181	0.005504	**0.089434**
DISTRIBUTION CHARGE		0.196474	0.000492	0.0130490	**0.210015**
COMPRESSION CHARGE		0.548712	0.001375	0.036443	**0.586530**
Balancing Service Charge BS-1	I	0.081498	0.000204	0.005413	0.087115
Balancing Service Charge BS-1 (Opt Out Provision) (Applicable for Transportation Customers Only)	I	0.002570	0.000006	0.000171	0.002747
Balancing Service Charge BS-1	J	0.081498	0.000204	0.005413	0.087115
BGSS: (Applicable To Sales Customers Only)	A				**RATE SET MONTHLY**
CUSTOMER OPERATED FUELING STATIONS					
CUSTOMER CHARGE					
0 - 999 CF/hour		37.500000		2.484400	**39.984400**
1,000 - 4,999 CF/hour		75.000000		4.968800	**79.968800**
5,000 - 24,999 CF/hour		200.000000		13.250000	**213.250000**
25,000 or Greater CF/hour		703.470000		46.604888	**750.074888**
DELIVERY CHARGE (per therm):					
SBC					
RAC	E, K	0.045668	0.000114	0.003033	0.048815
CLEP	E, G	0.018023	0.000045	0.001197	0.019265
USF	E	0.011400	0.000000	0.000700	0.012100
Total SBC:		0.075091	0.000159	0.004930	0.080180
EET	N	0.027592	0.000069	0.001832	0.029493
2017 Tax Act	H	(0.018934)	(0.000047)	(0.001258)	(0.020239)
Total Delivery Charge		0.083749	0.000181	0.005504	**0.089434**
DISTRIBUTION CHARGE		0.196474	0.000492	0.013049	**0.210015**
Balancing Service Charge BS-1	I	0.081498	0.000204	0.005413	0.087115
Balancing Service Charge BS-1 (Opt Out Provision) (Applicable for Transportation Customers Only)	I	0.002570	0.000006	0.000171	0.002747
Balancing Service Charge BS-1	J	0.081498	0.000204	0.005413	0.087115
BGSS: (Applicable To Sales Customers Only)	A				**RATE SET MONTHLY**
Facilities Charge (Applicable only to Customers that elect the Company construct Compressed Natural Gas ("CNG") fueling Facilities located on Customer's property)		0.324176		0.021477	**0.345653**

SOUTH JERSEY GAS COMPANY
Appendix A - Effective _____

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Heat Residential Rate Schedule:

	RSG FSS	*RSG-FTS*	*Difference*
BGSS	0.447769	0.000000	0.447769
Base Rate	0.722972	0.722972	0.000000
CLEP	0.019265	0.019265	0.000000
RAC	0.048815	0.048815	0.000000
CIP	(0.012422)	(0.012422)	0.000000
USF	0.012100	0.012100	0.000000
TIC	0.001321	0.001321	0.000000
EET	0.029493	0.029493	0.000000
2017 Tax Act	(0.020239)	(0.020239)	0.000000
BSC "J" BS-1	0.087115	0.087115	0.000000
Price to Compare	1.336189	0.888419	0.447769

NonHeat Residential Rate Schedule:

	RSG FSS	*RSG-FTS*	*Difference*
BGSS	0.447769	0.000000	0.447769
CIP	(0.118718)	(0.118718)	0.000000
Base Rate	0.722972	0.722972	0.000000
CLEP	0.019265	0.019265	0.000000
RAC	0.048815	0.048815	0.000000
USF	0.012100	0.012100	0.000000
TIC	0.001321	0.001321	0.000000
EET	0.029493	0.029493	0.000000
2017 Tax Act	(0.020239)	(0.020239)	0.000000
BSC "J" BS-1	0.087115	0.087115	0.000000
Price to Compare	1.229893	0.782123	0.447769

GSG
(Under 5,000 therms annually)

	GSG FSS	*GSG-FTS*	*Difference*
BGSS	0.447769	0.000000	0.447769
CIP	(0.021023)	(0.021023)	0.000000
Base Rates	0.603830	0.603830	0.000000
CLEP	0.019265	0.019265	0.000000
RAC	0.048815	0.048815	0.000000
USF	0.012100	0.012100	0.000000
TIC	0.001321	0.001321	0.000000
EET	0.029493	0.029493	0.000000
2017 Tax Act	(0.020239)	(0.020239)	0.000000
BSC "J" BS-1	0.087115	0.087115	0.000000
Price to Compare	1.208446	0.760676	0.447769

GSG
(5,000 therms annually or greater)

	GSG FSS	*GSG-FTS*	*Difference*
BGSS	0.376821	0.000000	0.376821
CIP	(0.021023)	(0.021023)	0.000000
Base Rates	0.603830	0.603830	0.000000
CLEP	0.019265	0.019265	0.000000
RAC	0.048815	0.048815	0.000000
USF	0.012100	0.012100	0.000000
TIC	0.001321	0.001321	0.000000
EET	0.029493	0.029493	0.000000
2017 Tax Act	(0.020239)	(0.020239)	0.000000
BSC "J" BS-1	0.087115	0.087115	0.000000
Price to Compare	1.137497	0.760676	0.376821

GSG-LV

Prior to 7/15/97

	GSG-LV FSS	*GSG-LV-FTS*	*Difference*
BGSS	0.376821	0.000000	0.376821
CIP	0.013689	0.013689	0.000000
Base Rates	0.302316	0.302316	0.000000
CLEP	0.019265	0.019265	0.000000
RAC	0.048815	0.048815	0.000000
USF	0.012100	0.012100	0.000000
TIC	0.001321	0.001321	0.000000
EET	0.029493	0.029493	0.000000
2017 Tax Act	(0.020239)	(0.020239)	0.000000
BSC "J" BS-1	0.087115	0.087115	0.000000
Price to Compare	0.870695	0.493874	0.376821

EXHIBIT F

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

DIRECT TESTIMONY

OF

ISAAC GABEL-FRANK

Vice President
Gabel Associates, Inc.

On Behalf of
South Jersey Gas Company

September 25, 2020

TABLE OF CONTENTS

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Isaac Gabel-Frank and my business address is 417 Denison Street, Highland Park, New Jersey, 08904. I am presently employed as a Vice President at Gabel Associates, Inc., an energy, environmental, and public utility consulting firm.

Q. Please summarize your professional experience and educational background.

A. As a Vice President at Gabel Associates, Inc., I perform specialized economic, financial, tariff, regulatory, and marketplace analysis for various public and private clients in the energy industry. My experience spans energy efficiency, renewable energy, cogeneration, traditional generation sources, gas transactions, and infrastructure analysis. I have undertaken comprehensive development, evaluation, and ratemaking related to energy efficiency programs, including expert analysis for all of New Jersey's natural gas utilities and three of New Jersey's electric utilities. This includes detailed program design, cost-benefit, and lost revenue analysis.

I also provide insights and analysis with respect to electricity, natural gas, and renewable markets. Since beginning work at Gabel Associates, Inc. in 2009, I have evaluated and assisted in the analysis, development, and implementation of all types of technologies and contractual arrangements. This includes the development of proprietary models that evaluate the viability and customer rate impacts of projects and scenarios.

I use my knowledge of wholesale electricity and natural gas markets, paired with my experience working with retail tariffs, to deliver in-depth market and rate forecasts which are used to assess and guide project investment decisions and support regulatory filings. I also have assisted in the development and approval of contract rates for large natural gas purchasers, which included the development of rates based upon historic and projected usage and associated revenue loss and ratepayer impacts analysis. I have also conducted analysis and filed expert testimony supporting natural gas infrastructure investment programs.

I received a BA in Economics, Political Science, and English Writing from the University of Pittsburgh. Further work experience is detailed in my resume provided in the attached Schedule IGF-1.

Q. What experience do you have in conducting analyses related to utility energy efficiency and conservation programs, undertaking analysis for natural gas companies, or conversing on lost revenue related topics?

A. Within the past five years, I have developed and submitted testimony on multiple energy efficiency programs for Public Service Electric & Gas Company ("PSE&G"), South Jersey Gas Company ("SJG" or the "Company"), Elizabethtown Gas Company ("ETG"), and New Jersey Natural Gas Company ("NJNG"). This testimony and consulting work has covered topics such as cost-benefit analysis, lost revenue analysis, ratemaking, job creation, and program design, all of which provide me with unique insight into energy efficiency programs and how they impact customers. I am also currently preparing cost-benefit analyses for other utilities in New Jersey, including ETG, NJNG, Atlantic City Electric Company ("ACE"), and Jersey Central Power and Light Company ("JCPL") to support their upcoming energy efficiency filings.

During the energy efficiency transition process at the New Jersey Board of Public Utilities ("BPU" or "Board") in 2019 and 2020, I was an active participant that testified and submitted written comments on all major topics. During this process, I acted as a trusted expert for the State's electric and natural gas utilities on topics pertaining to cost-effectiveness, cost recovery, lost revenues, goal setting, incentives, and other best practices in energy efficiency. This included comments during live stakeholder meetings, the provision of formal written comments, and discussions during utility working group sessions to assist in settling important matters related to the transition process in general and cost recovery and lost revenues in particular.

Additionally, I have submitted expert testimony in support of NJNG's infrastructure investment program, which included a review of specific proposed

infrastructure projects and the development of a unique cost-benefit analysis designed specifically for infrastructure investments.

The projects I have analyzed range in type and size and represent an array of different technologies and configurations. Having performed this analysis for projects with varying degrees of complexity, I am extremely familiar with the processes and methodologies to formulate an objective and balanced analysis on cost-effectiveness issues.

II. PURPOSE OF TESTIMONY

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

A. The purpose of my testimony is to present the cost-effectiveness analysis conducted on the SJG proposed three-year energy efficiency portfolio.

Q. Are you sponsoring any schedules in connection with your direct testimony?

A. Yes. I am presenting the following schedules, which have been prepared by me or under my direction and supervision and are accurate and complete to the best of my knowledge and belief. These schedules contain information responsive to the Minimum Filing Requirements ("MFRs") as referenced in the MFR Index attached to the Petition as Exhibit B and as approved by the Board in its June 10, 2020 Order in Docket Nos. QO19010040, QO19060748, and QO10791004 ("June 2020 Order'). The schedules attached to my testimony include:

Schedule IGF-1	Resume of Isaac Gabel Frank
Schedule IGF-2	Cost-Effectiveness Results
Schedule IGF-3	Cost-Benefit Analysis Workpapers (Confidential)
Schedule IGF-4	Emissions Avoided Results
Schedule IGF-5	Economic Development and Job Creation Analysis Results
Schedule IGF-6	Energy Savings Target Development Schedule

Schedule IGF-7	Cost to Achieve Estimates
Schedule IGF-8	Quantitative Performance Indicators
Schedule IGF-9	Energy Use Reduction Targets

Q. Does the filing meet the Board's stated goals?

A. Yes. The filing presents a cost-effective energy efficiency plan to meet the goals outlined in the June 2020 Order. The programs will provide energy savings opportunities to all SJG customers, stimulate economic development in New Jersey, and reduce environmental pollution, including carbon dioxide emissions.

III. COST-BENEFIT ANALYSIS OF SJG ENERGY EFFICIENCY PORTFOLIO

Q. Did you conduct a cost-effectiveness analysis of the program portfolio in the SJG Plan?

A. Yes. the cost-benefit analysis ("CBA"), which calculates and details the results of the six tests prescribed in the MFRs as required by the Board, was prepared by me or under my direct supervision. This entailed developing a model which analyzed measure-specific details and computed the estimated costs and savings of each program for use in the New Jersey Cost Test ("NJCT"), the Total Resource Cost ("TRC") Test, the Participant Cost Test ("PCT"), the Program Administrator Cost ("PAC") Test, the Ratepayer Impact Measure ("RIM") Test, and the Societal Cost Test ("SCT"). This testimony presents the methodology and results of the six CBA tests required by the Board's MFRs for the Company's energy efficiency program results for the plan period of July 1, 2021 through June 30, 2024. These results allow the BPU to evaluate the projected performance of the program offerings proposed for this time period.

Q. Please describe the CBA tests required by the Board's MFRs.

A. In the June 2020 Order, the Board updated the energy efficiency MFRs. Section V.a. in the updated MFRs states:

> *The utility shall conduct a benefit-cost analysis of the programs and portfolio using the New Jersey Cost Test, Participant Cost Test, Program Administrator Cost Test, Ratepayer Impact Measure Test, Total Resource Cost Test, and Societal Cost Test that assesses all program costs and benefits from a societal perspective i.e., that includes the combined financial costs and benefits realized by the utility and the customer. The utility may also provide any additional benefit-cost analysis that it believes appropriate with supporting rationales and documentation.*

Each test listed above is designed to provide a different perspective on the cost-effectiveness of the proposed programs. The six cost-benefit tests prescribed by the Board provide the following perspectives for decision makers:

- New Jersey Cost Test – The New Jersey Cost Test is the primary cost-effectiveness test for energy efficiency programs in New Jersey. The test measures net costs of the program as a resource option based on total costs, similar to the total resource cost test, but also includes additional benefits to address specific state policy considerations in New Jersey, like the social cost of avoiding carbon dioxide emissions.
- Societal Cost Test – The Societal Cost Test measures the net costs of a program as a resource option based on the total costs of the program, including both the participants' and the utility's costs. The Societal Cost Test differs from the Total Resource Cost Test in that it includes the effects of societal impacts such as environmental impacts to the economy, excludes tax credit benefits, and uses a different (societal) discount rate.
- Total Resource Cost Test – The Total Resource Cost Test measures the net costs of a program as a resource option based on the total costs, including both the participant and the utility costs of the program.
- Participant Cost Test – The Participant Cost Test is the measure of the quantifiable benefits and costs from the perspective of program participants. Since many customers do not base their decision to participate in a program entirely on

quantifiable variables, this test is not a complete measure of the benefits and costs of a program to a customer.

- Program Administrator Cost Test – The Program Administrator Cost Test measures the net costs of a program as a resource option based on the costs incurred by the program administrator or utility (including incentive costs) and excluding any net costs incurred by the participant. The benefits are similar to the TRC benefits. Costs include the total program costs. This test measures the net economic impact of investing in energy efficiency programs from the perspective of the utility.
- Ratepayer Impact Measure Test – The Ratepayer Impact Measure test measures what happens to customer rates due to changes in utility revenues and operating costs caused by the program.

In aggregate, these tests provide the Board with multiple viewpoints of the benefits and costs associated with the programs.

Q. Please describe your approach to assessing cost-effectiveness using the six tests described above.

A. I completed all six tests using guidance from the Board's August 24, 2020 Order Adopting the First New Jersey Cost Test ("August 2020 Order") and the California Standard Practice Manual.[1,2] The August 2020 Order provided specific guidance on how to estimate costs and benefits of programs, including assumptions on line losses and discount rate, for the New Jersey Cost Test. I applied the Board's guidance on the development of specific benefits and costs. For the Societal Cost Test, I included additional benefits that were not included in the August 2020 Order. For those benefits, I relied on industry best practice methods.

[1] New Jersey Board of Public Utilities. *Order Adopting the First New Jersey Cost Test.* Docket Nos. QO19010040 and QO20060389. August 24, 2020.

[2] California Public Utilities Commission. 2001. *California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects.* cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/CPUC_STANDARD_PRACTICE_MANUAL.pdf

Q. Did you evaluate SJG's portfolio of programs being proposed using the six CBA tests required in the MFRs?

A. Yes, I evaluated program cost-effectiveness for all six tests. The results of this analysis are presented in Schedule IGF-2. The supporting workpapers for the cost-benefit analysis are attached as Schedule IGF-3. Schedule IGF-3 is confidential and will be provided to the parties upon execution of a non-disclosure agreement.

Q. Please summarize your conclusions.

A. The CBA shows the SJG portfolio is cost-effective under the New Jersey Cost Test. Under the New Jersey Cost Test, the three-year portfolio resulted in net-benefits of $48 million and a cost-benefit ratio of 1.5. This implies that for every dollar SJG spends on energy efficiency programs, customer will receive $1.50 in benefits.

The portfolio also produced significant environmental benefits. I estimate that the energy savings produced by the SJG Plan will reduce carbon dioxide ("CO_2") emissions by 0.6 million tons, sulfur dioxide ("SO_2") emissions by 133 tons, and nitrogen oxide ("NO_X") emissions by 401 tons.[3] The displacement of these emissions will avoid human health and environmental harms, providing additional benefits to SJG's customers. The portfolio also will provide significant economic development benefits. I estimate the portfolio will add $265 million to the New Jersey gross domestic product and create 2,826 job-year equivalents.[4]

Q. Did you also review the SJG cost to achieve values in relation to the Board's proposed guidelines from the June 2020 Order?

A. Yes. The sector level cost to achieve values are shown in Schedule IGF-7. As the Schedule shows, the SJG cost to achieve is well below the Board's guidelines for the Residential sector. The SJG commercial and industrial, multi-family, and low-income cost to achieve values exceeded the Board's guidelines. The SJG programs were designed to build from those currently offered by the Division of Clean Energy with modifications geared to

[3] The results of the emissions avoided analysis are shown in Schedule IGF-4.
[4] The results of the economic development benefits analysis are shown in Schedule IGF-5.

achieve deeper, longer lasting savings. The first-year cost to achieve metrics do not capture the long-term focus of these programs. Further, the programs are designed to be, and are, cost-effective based upon the New Jersey Cost Test, and therefore will delivery substantial benefits to New Jersey. As stated above, these programs are good investments for the State because for every dollar spent, they will generate $1.50 dollars of benefits. Finally, the derivation of the Board's cost to achieve guidelines was not made available for review and was stated to be based upon program portfolios from Massachusetts and Rhode Island, which are very mature states in the energy efficiency space and not like comparisons for New Jersey at the current time. While both states have a similar energy savings target as New Jersey, they are fundamentally different because of the maturity of the energy efficiency programs.

Q. Did you assess how the programs comprising the portfolio are designed to achieve the targets established pursuant to the utility's Quantitative Performance Indicators ("QPI")?

A. Yes. An overview of all seven metrics requested by the Board for QPI review is provided in Schedule IGF-8.

Q. Does the SJG portfolio meet the savings targets set forth in the June 2020 Order?

A. Yes. The June 2020 Order set forth energy savings targets for natural gas utilities for the first three-year cycle. Table 1 below summarizes the energy savings targets applicable to SJG in the first three-year program cycle:

Table 1: SJG Energy Savings Target

	Overall Target	State-Administered Target	SJG Target
PY 1	n/a	n/a	n/a
PY 2	0.50%	0.16%	0.34%
PY 3	0.75%	0.24%	0.51%

There was no target set for the first program year. In program years two and three, the SJG energy efficiency portfolio meets or exceeds the Energy Savings Targets set forth

in the June 2020 Order. A comparison of projected energy savings and the energy use reduction targets is shown in Schedule IGF-9.

IV. COST-BENEFIT ANALYSIS ASSUMPTIONS

Q. What types of cost-benefit analyses did you prepare?

A. I prepared an analysis for each of the six CBA tests required by the Board's MFRs.

Q. What methodology did you use to undertake these calculations?

A. I relied on methodology outlined in the Board's August 2020 Order and the California Standard Practice Manual.[5,6] Within the CBA tests, there are a wide range of costs and benefits used to characterize program integrity, some of which are applicable in conducting certain tests but not others. Table 2 shows a list of specific costs and benefits and the tests they apply to:

Table 2: Costs and Benefits Utilized in CBA Tests

	NJCT	SCT	TRC	PCT	PAC	RIM
Program Benefits						
Avoided Wholesale Electric Energy	x	x	x		x	x
Avoided Electric Ancillary Services	x	x	x		x	x
Avoided Wholesale Electric Capacity	x	x	x		x	x
Avoided Wholesale Natural Gas	x	x	x		x	x
Demand Reduction Induced Price Effect	x	x	x		x	x
Avoided RPS REC Purchases		x			x	x
Avoided Wholesale Volatility		x			x	x
Avoided T&D	x	x	x		x	x
Avoided Retail Electric and Gas Costs				x		

[5] New Jersey Board of Public Utilities. *Order Adopting the First New Jersey Cost Test.* Docket Nos. QO19010040 and QO20060389. August 24, 2020.

[6] California Public Utilities Commission. 2001. *California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects.* cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/CPUC_STANDARD_PRACTICE_MANUAL.pdf

Customer Rebates and Incentives				x		
Utility Lost Revenues						x
Non-Energy Benefits 5% Adder	x					
Low-Income Benefit 10% Adder	x					
Avoided Emissions Impacts (CO_2)	x	x				
Avoided Emissions Impacts (SO_2 & NO_X)		x				
Economic Development Benefits		x				
Program Costs						
Incremental Costs	x	x	x			
Participant Costs				x		
Administration Costs	x	x	x		x	x
Customer Rebates and Incentives					x	x
Utility Lost Revenues						x

Q. Please describe the Program Benefits shown in Table 2.

A. The following sections describe the benefits and calculation approach.

1. Avoided Wholesale Electric Energy Costs

The avoided wholesale electric energy costs benefit represents the wholesale electric market purchases that would be avoided as a result of reductions in energy usage associated with the programs. Consistent with the New Jersey Cost Test guidance document, this value was estimated using the three-year average of historic PJM energy prices.[7] The prices were then forecasted using a blend of energy market forward trading prices for PJM-Western Hub, the most liquidly traded zone in PJM, and forecasted prices from the Energy Information Administration ("EIA") in its newest (currently 2020) Annual Energy Outlook generation reference case for the PJM/East region.[8] Values were calculated for on- and off-peak prices on a monthly basis. All values were adjusted to account for marginal line losses on the ACE system and sales and use tax.

[7] August 2020 Order, Appendix A at 12

[8] United States Energy Information Administration. Annual Energy Outlook 2020. Table 54. Electric Power Projections by Electricity Market Module Region (Reference Case, PJM/East Region). eia.gov/outlooks/aeo/data/browser/#/?id=62-AEO2020&region=5-10&cases=ref2020&start=2018&end=2050&f=A&linechart=ref2020-d112119a.130-62-AEO2020.5-10&map=&ctype=linechart&sourcekey=0.

2. Avoided Electric Ancillary Services Costs

The avoided electric ancillary services costs benefit represents the wholesale electric ancillary service market purchases that would be avoided as a result of reductions in energy usage associated with the programs. Consistent with the New Jersey Cost Test guidance document, this value was estimated using the three-year average of historic PJM ancillary service prices based upon data from PJM's Independent Market Monitor.[9] The prices were then forecasted using the electric energy forecast described above.

3. Avoided Wholesale Electric Capacity Costs

The avoided wholesale electric capacity costs category captures the wholesale reduction in PJM capacity as a result of the reductions in electric demand associated with the programs. I used actual cleared PJM Eastern Mid-Atlantic Area Council ("EMAAC") Locational Deliverability Area ("LDA") prices where available. Clearing prices were forecasted based upon a baseline of the average of the previous three delivery year clearing prices. Prices were escalated based upon a regression forecast of how capacity prices have increased over time. All values were adjusted to account for marginal line losses on the ACE and PJM systems, PJM's Forecast Pool Requirement ("FPR") to account for avoided reserve requirements, and sales and use tax.

4. Demand Reduction Induced Price Effect Benefits

The demand reduction induced price effects ("DRIPE") price suppression (also known as merit order benefits) is a benefit that captures the reduction in wholesale electric and natural gas market prices to all customers, not just participants, as a result of energy efficiency. Wholesale electric and natural gas markets are fundamentally supply and demand based – therefore, downward movement in the electric or natural gas demand curve as a result of reduced consumption should result in less expensive generation resources being dispatched for electricity, and less expensive natural gas delivered. If either market

[9] Monitoring Analytics, LLC. *2019 State of the Market Report for PJM*. Section 10 Ancillary Services. Table 10-4. History of ancillary service costs per MWh of load: 1999 through 2019. monitoringanalytics.com/reports/PJM_State_of_the_Market/2019/2019-som-pjm-sec10.pdf

"clears" at a lower price, the associated reductions in market prices flow through to all customers.

Both electric energy and capacity DRIPE benefits were estimated using a univariate regression model. This approach is consistent with the NJCT guidance document.[10]

5. Avoided Wholesale Natural Gas Costs

The avoided wholesale natural gas costs category captures wholesale natural gas market purchases that would be avoided as a result of reduction in energy usage associated with the programs.

The value of avoided natural gas costs is estimated using New York Mercantile Exchange ("NYMEX") forward trading prices for Henry Hub adjusted for transportation to Transcontinental Pipeline ("Transco") Z6 Non-NY delivery point. The underlying Henry Hub supply forecast was combined with the Transco Z6 Non-NY basis to determine the avoided cost projection. All values were adjusted to account for average losses and sales and use tax. This approach is consistent with the prescribed method in the New Jersey Cost Test guidance document.[11]

6. Avoided RPS REC Purchase Costs

The avoided RPS REC purchase cost estimates the reduced volume of RECs that must be purchased by New Jersey's electric retail suppliers as a result of energy efficiency related electricity reductions. The New Jersey Renewable Portfolio Standard ("RPS") sets the total volume requirement of Renewable Energy Certificates ("RECs") that must be purchased as a percentage of retail load. A reduction in retail load due to energy efficiency will reduce the total number of RECs required to be purchased.

[10] August 2020 Order, Appendix A at 15-16.
[11] Id. at 13.

Forecast market prices for New Jersey Class I RECs, Class II RECs, and SRECs (legacy, transition, successor) were used based upon an internal supply-demand analysis and compliance costs for the three New Jersey REC markets.

7. Avoided Wholesale Volatility Costs

The avoided wholesale volatility cost category estimates the value of avoiding risk of wholesale purchases. Wholesale electric and natural gas prices are inherently risky as they are market-based and not fixed in price or volume. Large fluctuations in prices expose customers and retail suppliers to risks that ultimately are priced into retail rates. Energy efficient measures and practices amount to a purchase of energy service which does not contain the price volatility implicit in the price of electricity and natural gas. By reducing the overall energy purchases of customers, customers are exposed to less fuel volatility. In this regard, energy efficiency can be viewed as an energy resource that does not contain the price volatility embedded in purchases from the electric and gas supply systems.

The risk avoidance benefit of energy efficiency was applied as a price adder to the cost of electricity and natural gas (only in the SCT). The price adder was determined based upon a review of studies and regulatory decisions. While there is some variation among the studies, a conservative premium based on these precedents equal to 10% of electric and natural gas costs was assumed.[12]

[12] For studies reviewed, please see Baatz et al. Estimating the Value of Energy Efficiency to Reduce Wholesale Energy Price Volatility. American Council for an Energy-Efficient Economy; aceee.org/research-report/u1803. Stanton et al. Net Metering in Mississippi. Synapse Energy Economics. Appendix A. synapse-energy.com/sites/default/files/Net%20Metering%20in%20Mississippi.pdf; Hornby et al. Avoided Energy Supply Costs in New England: 2013 Report. Synapse Energy Economics. pp 5-22. publicservice.vermont.gov/sites/dps/files/documents/Energy_Efficiency/AESC%20Report%20-%20With%20Appendices%20Attached.pdf; 2013 Integrated Resource Plan. Rocky Mountain Power. pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Integrated_Resource_Plan/2013IRP/PacifiCorp-2013IRP_Vol1-Main_4-30-13.pdf and pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Integrated_Resource_Plan/2013IRP/PacifiCorp-2013IRP_Vol2-Appendices_4-30-13.pdf; Bolinger et al. Quantifying the Value that Energy Efficiency and Renewable Energy Provide As a Hedge Against Volatile Natural Gas Prices. Lawrence Berkley National Labs. aceee.org/files/proceedings/2002/data/papers/SS02_Panel5_Paper02.pdf; Is Fixed Price Energy a Good Deal? Walden Labs. waldenlabs.com/is-fixed-price-energy-a-good-deal; EEU Avoided Costs for the 2016-2017 Time Period. P. 17 – number 6. puc.vermont.gov/sites/psbnew/files/doc_library/order-re-eeu-avoided-cost-2016-2017.pdf.

8. Avoided T&D Costs

The value of avoided transmission and distribution costs was estimated using the methods prescribed in the NJCT guidance document. For electric transmission, the most recent Network Integrated Transmission Service ("NITS") rate for the ACE service territory was used.[13] For distribution, the value was estimated in the manner prescribed by the Board in the NJCT guidance document. This required estimating the total distribution charges that would have been paid by program participants in the absence of the program and then subtracting the total distribution charges the customer paid after the implementation of the energy efficiency measures.[14]

9. Avoided Retail Electric and Natural Gas Costs

The avoided retail electric and natural gas cost categories captures the actual bill savings to participants of the programs. A key benefit of energy efficiency is reduced consumption by participants which results in reduced utility costs.

Avoided retail electric costs were calculated based upon the electric charges and applicable rate classes in ACE's Tariff for Electric Service. This method results in a "price to compare" analysis, as only portions of the tariff which would be offset as a result of the programs are included in the analysis. By way of example, customers will not offset any of the monthly fixed service charge, so that avoiding that charge was not included in the retail electric savings analysis. Each charge was escalated, by component, to account for separate escalation rates for distribution and supply charges. Charges related to electric delivery and transmission were escalated at 2.0% per year and electric energy and capacity supply charges were escalated in a manner consistent with the wholesale market escalations explained above.

Avoided retail natural gas costs were calculated based on the natural gas charges and applicable rate classes available in SJG's Tariff for Gas Service. This method results

[13] PJM Annual Transmission Revenue Requirements and Rates. pjm.com/-/media/markets-ops/settlements/network-integration-trans-service-june-2020.ashx?la=en

[14] August 2020 Order, Appendix A at 13.

in a "price to compare" type analysis, as only portions of the tariff which would be offset as a result of the programs are included in the analysis. By way of example, customers will not offset any of the monthly fixed service charge, so that avoiding that charge was not included in the retail natural gas savings analysis. Each charge was escalated, by component, to account for separate escalation rates for distribution and supply charges. Charges related to natural gas delivery were escalated at 2.0% per year while natural gas supply charges were escalated in a manner consistent with the wholesale market escalations explained above.

10. Customer Rebates and Incentives

The customer rebate and incentive cost category capture the direct rebate incentives provided to participants of the programs. Depending on perspective, customer rebates and incentive costs can either be a benefit to a program (to participants) or a cost to programs (to the utility and ultimately, customers). This benefit is only realized in the participant cost test, as that test singles out the experience of a participant in the programs. The time-value of money associated with the provision of loans to participations is also a benefit to customers (and costs to the utility and ultimately, customers), and is captured as a benefit in the PCT, and as a cost in the PAC and RIM tests.

11. Avoided Emissions Damages

The avoided emissions damages category captures the economic value (also known as the avoided social cost) of reductions in CO_2, NO_x, and SO_2. Energy efficiency programs displace power plant emissions, which reduce human health and environmental harms, also known as damages. I did not include any other criteria air pollutants or greenhouse gases.

To estimate the displaced CO_2, I relied on the electric emissions factor of 1,374 pounds per MWh and natural gas emission factor of 11.7 pounds per therm, per the NJCT guidance document.[15] The avoided damages for CO_2 were estimated using the "Social Cost of Carbon for Regulatory Impact Analysis - Under Executive Order 12866" produced by

[15] Id. at 17.

the Interagency Working Group on Social Cost of Greenhouse Gases, United States Government.[16] This benefit was included in the NJCT and SCT.

I also estimate the economic value of the avoided SO_2 and NO_X emissions from the programs. While not included in the NJCT, the economic value of avoiding these emissions is substantial and reflected in the SCT. To estimated displaced SO_2 and NO_X emissions, I relied on the non-baseload tons per MWh estimate from the most recent eGrid data release (currently eGRID2018 released in March 2020).[17] I then de-escalated these rates over time based upon emissions rates from the most recent EIA Annual Energy Outlook (currently 2020) for the PJM/East region.[18] The de-escalation is intended to reflect the likely shift to renewable generation sources. To estimate the avoided damages from SO_2 and NO_X, I relied on the February 2018 Technical Support Document Estimating the Benefit per Ton of Reducing $PM_{2.5}$ Precursors from 17 Sectors by the U.S. Environmental Protection Agency Office of Air and Radiation Office of Air Quality Planning and Standards.[19] This source was used and approved by the Board[20] in the Evaluation of New Jersey Solicitation for ORECs for Offshore Wind Capacity Framework for Evaluation of Impacts.[21]

[16] Interagency Working Group on Social Cost of Greenhouse Gases, United States Government. 2016 Technical Support Document: -Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis -Under Executive Order 12866. August 2016. epa.gov/sites/production/files/2016-12/documents/sc_co2_tsd_august_2016.pdf

[17] United States Environmental Protection Agency. Emissions and Generation Resource Integrated Database (eGRID). Released 1/28/2020, Revised 3/9/2020. epa.gov/energy/emissions-generation-resource-integrated-database-egrid

[18] United States Energy Information Administration. Annual Energy Outlook 2020. Table 54. Electric Power Projections by Electricity Market Module Region (Reference Case, PJM/East Region). eia.gov/outlooks/aeo/data/browser/#/?id=62-AEO2020&region=5-10&cases=ref2020&start=2018&end=2050&f=A&linechart=ref2020-d112119a.108-62-AEO2020.5-10~ref2020-d112119a.156-62-AEO2020.5-10~ref2020-d112119a.157-62-AEO2020.5-10~ref2020-d112119a.158-62-AEO2020.5-10~&map=&ctype=linechart&sourcekey=0.

[19] United States Environmental Protection Agency. 2018. Technical Support Document: Estimating the Benefit per Ton of Reducing PM2.5 Precursors from 17 Sectors. epa.gov/sites/production/files/2018-02/documents/sourceapportionmentbpttsd_2018.pdf.

[20] In the Matter of the Board of Public Utilities Offshore Wind Solicitation for 1,100 MW – Evaluation of the Offshore Wind Applications. Docket No. QO18121289. bpu.state.nj.us/bpu/pdf/boardorders/2019/20190621/6-21-19-8D.pdf

[21] Levitan & Associates, Inc. *Evaluation of New Jersey Solicitation for ORECs for Offshore Wind Capacity Framework for Evaluation of Impacts*. bpu.state.nj.us/bpu/pdf/boardorders/2019/20190621/6-21-19-8D%20-%20Public%20Version%20-%20Levitan%20NJ%20OREC%20Final%20Report.pdf

12. Economic Development Benefits

Energy efficiency programs can be a powerful tool for local economic development and job creation. While cost-effective energy efficiency programs provide many other benefits including reduced utility system costs, improved health outcomes, and lower bills for program participants, the job creation and local economic growth benefits are critical as states begin to recover from the COVID-19 pandemic.

Economic benefits are created by energy efficiency programs in two significant ways. First, economic benefits are created through the direct implementation of the programs. Second, benefits are also created through the ripple effects on the economy from customer bills savings. Energy efficiency programs create significant bill savings, which increase disposable income for residents and businesses. The spending of this increased disposable income stimulates the economy, providing ripple effects in many sectors of the economy.

I estimated the economic development benefits using IMPLAN, a widely used industry standard input/output model. IMPLAN and similar input output models have been presented to the Board numerous times, including instances by its own consultants and by consultants to Rate Counsel. IMPLAN is also one of the input/output models suggested by the Board for evaluation of offshore wind investments. Finally, input/output modeling is required under the Offshore Wind Economic Development Act ("OWEDA") for offshore wind projects submitting for ORECs.[22]

I estimated the economic impacts by inputting the projected program spending and bill savings into IMPLAN. For program spending, I used a program by program approach to break out materials and labor, mapping spending into specific industries within IMPLAN. For bill savings, I mapped the increased disposable income to households by income level and to relevant commercial industries. Finally, to capture the negative economic impacts of higher rates and bills from the cost recovery associated with the

[22] N.J.A.C. 14: § 14:8-6.5 Application Requirements. nj.gov/bpu/pdf/boardorders/2018/20180917/9-17-18-8G.pdf

programs, I offset the increased disposable income by the projected increase in bills driven by program costs. Collectively, these three steps provide a comprehensive estimate of economic impacts and job creation.

13. Non-Energy and Low-Income Adders

I applied a 5% adder to avoided energy benefits to address non-energy benefits. I also applied a 10% adder to avoided energy benefits to address low-income non energy benefits. The low-income adder was in addition to the 5% non-energy benefit adder. Both adders are consistent with the prescribed method in the New Jersey Cost Test guidance document.[23]

Q. Please describe the Program Costs listed in Table 2 above.

A. The program costs include:

1. Incremental Costs

The incremental cost category captures the incremental cost of participating in the programs. This cost is calculated based upon the difference between the efficient measure costs assumed to install energy efficiency technologies and processes and the base measure cost assumed that a participant would otherwise pay without access to the proposed program.

2. Participant Costs

The participant cost category captures the incremental cost of participating in the programs paid by participants. This category includes both incremental costs paid by participants for the non-subsidized portion of energy efficiency costs, as well as loan repayments for programs offering financing.

3. Program Administration Costs

[23] August 2020 Order, Appendix A at 18.

The program administration cost category captures the cost of administering the energy efficiency programs by SJG. These include costs for marketing, outside services, utility administration, inspections and quality control, and evaluation. These costs were developed based on SJG's previous experience delivering similar programs and guidance from the Board in the June 2020 and August 2020 orders.

4. Customer Rebate and Incentives Cost

The customer rebate and incentive cost category capture the direct rebate incentives provided to participants of the programs. These costs were developing through a coordinated approach with other New Jersey utilities, but also based on existing programs in New Jersey and other jurisdictions for similar measures.

5. Utility Lost Revenues

An associated cost is the reallocated distribution costs category which captures the value of any distribution costs being avoided by participants that must be collected from the balance of customers. These are not direct program costs and represent the transfer between existing customer subsectors. This cost is also known as lost utility costs or lost revenues.

Utility lost revenues were calculated based upon the individual rate charges which currently contribute to supporting distribution costs. In addition, the utility lost revenues also include tariff surcharges and riders which do not contribute to distribution costs but would likely be reallocated to customers at large. Utility lost revenues do not include any supply related costs, as New Jersey's electric and natural gas utilities are deregulated, and avoided supply costs resulting from energy efficiency are not borne by customers.

Q. What assumptions did you use for measure-level energy savings?

A. My primary source to estimate measure level savings is the New Jersey Board of Public Utilities Protocols to Measure Resource Savings FY2020 ("Protocols").[24] I used the Protocols for the majority of measures, but when estimating savings for measures not covered in the Protocols, I relied on other regional technical reference manuals to estimate savings. These references included, but are not limited to, the Mid-Atlantic Technical Reference Manual,[25] Massachusetts Technical Reference Manual,[26] and the New York Technical Reference Manual.[27]

Q. What assumption did you make on electric savings and costs within the CBA?

A. For cost-benefit purposes, I analyzed all program costs and benefits associated with projects where SJG is expected to be the lead utility. Under this approach, I included all gas savings and costs and all electric savings and costs estimated for these projects. While costs and savings will ultimately be allocated to a partner utility,[28] the CBA should be predicated on the full set of circumstances for a project, not a portion. Separate from the CBA, I expect the electric companies overlapping the SJG service territory to produce natural gas savings in dual fuel projects and measures, and SJG will require budget to cover expenditures related to these savings. Information on the total budget pursuant to transfers between lead and partner utilities (separate from the CBA) can be found in the Company's Program Plan attached as PD-1 to Company witness Druckemiller's testimony, with the total budget included in the revenue requirements shown on Schedule SMG-1 attached to Company witness Graham's testimony.

[24] New Jersey Board of Public Utilities. New Jersey's Clean Energy Program Protocols to Measure Resource Savings FY2020. Approved July 10, 2019. njcleanenergy.com/files/file/NJCEP%20Protocols%20to%20Measure%20Resource%20Savings%20FY20_FINAL.pdf

[25] Mid-Atlantic Technical Reference Manual. Version 9. October 2019. neep.org/sites/default/files/resources/Mid_Atlantic_TRM_V9_Final_clean_wUpdateSummary%20-%20CT%20FORMAT.pdf

[26] Massachusetts Technical Reference Manual. 2016-2018 Plan Version. ma-eeac.org/wordpress/wp-content/uploads/Exhibit-1-Gas-and-Electric-PAs-Plan-2016-2018-with-App-except-App-U.pdf

[27] New York State Department of Public Service. Technical Reference Manual. dps.ny.gov/W/PSCWeb.nsf/All/72C23DECFF52920A85257F1100671BDD

[28] See the testimony of Peter Druckenmiller for additional information on utility overlap and the role of the statewide coordinator

Q. Were the costs and benefits evaluated on a nominal or present value basis?

A. For the purposes of each of the CBA tests, all costs and benefits were evaluated on a present value basis. The NJCT and SCT both relied on a 3% societal discount rate as prescribed by the Board in the August 2020 Order.[29] The TRC, PCT, PAC, and RIM tests relied on the SJG weighted average cost of capital of 6.30% to discount costs and benefits.

Q. What net to gross assumption did you make in conducting the cost-benefit analysis?

A. Consistent with Board guidance, I used a 1.0 net-to-gross factor for all programs and measures to account for free ridership, spillover, and other interactive effects.[30]

Q. Please describe how the SJG energy savings target was developed.

A. The SJG energy savings target is based on guidance from the Board in the June 2020 Order. In the Order, Staff recommends that "the average usage for the purposes of compliance be calculated based on the average of retail sales for the most recent three-year years relative to the program year for which the target is applicable."[31] Accordingly, the savings target for each program year is based on an average of the three prior years. For program year one, which runs from July 1, 2021 through June 30, 2022, the savings target is based on the average of the actual sales in 2018-2019 and forecasted sales for 2020. For program year two, the savings target is developed based on the average of actual sales in 2019, and forecasted sales in 2020-2021. I removed electric generation sales. The program year three target was based upon forecasted sales for 2021-2023. The baseline developed through this approach was then multiplied by the energy savings target percentages in the June 2020 Order to determine the therm goals. The target development is detailed in Schedule IGF-6.

V. CONCLUSIONS

Q. Please summarize your testimony and recommendations to the Board.

[29] August 2020 Order at 7.
[30] New Jersey Board of Public Utilities. *Order Directing the Utilities to Establish Energy Efficiency and Peak Demand Reduction Programs.* Docket Nos. QO19010040, QO19060748, and QO10791004. June 10, 2020.
[31] *See* June 2020 Order at 19.

A. The SJG 2021-2023 Energy Efficiency Program Plan is a cost-effective portfolio of energy efficiency programs that achieve the state policy goals of the Board. The programs provide energy savings opportunities to all customers in the SJG service territory and ensure low-to-moderate income customers have equal opportunity to realize program benefits. The portfolio also puts SJG on a trajectory to meet the program year five energy savings target mandated in the Clean Energy Act.

The CBA shows that the SJG program portfolio is cost-effective under the New Jersey Cost Test with a cost-benefit ratio of 1.5 and net benefits of $48 million. These results indicate that the programs will provide significant benefits to all SJG customers, while improving environmental quality and stimulating economic development.

I recommend the Board approve the SJG program portfolio as proposed.

Q. Does this conclude your testimony?

A. Yes. However, I reserve the right to update this testimony to account for additional information I may receive. Thank you.

VERIFICATION

I, Isaac Gabel-Frank, of full age, being duly sworn according to law, upon my oath, depose and say:

1. I am Vice President at Gabel Associates, Inc., consultant to the Petitioner South Jersey Gas Company ("Company") and I am authorized to make this verification on behalf of the Company.

2. I have reviewed the within petition and the information contained therein is true according to the best of my knowledge, information and belief.

Isaac Gabel-Frank
Vice President at Gabel Associates, Inc.

Sworn to and subscribed
before me this 25th day
of September 2020

CAROLYN A. JACOBS

NOTARY PUBLIC OF NEW JERSEY

My Commission Expires October 28, 2023

South Jersey Gas Company
Energy Efficiency Program Filing
Isaac Gabel-Frank Resume

Schedule IGF-1

Attached

Isaac Gabel-Frank
Vice President

Overview of Experience

Isaac Gabel-Frank, Vice President at Gabel Associates, has over 10 years of experience supporting complex energy issues related to cost-benefit analysis, energy efficiency and renewables, energy project development, economic and tariff analysis, electric vehicles, regional transmission organizations (RTOs), and energy procurement.

Mr. Gabel-Frank is an expert on cost-benefit analytics and has supported a multitude of clients in quantifying cost and benefit dynamics related to the economic impact of energy projects. This includes past and present work for Federal agencies, state and local governments, school districts, and private sector clients on energy efficiency, renewable energy, cogeneration, and traditional generation projects. Mr. Gabel-Frank also performs sensitivity analysis to help identify risk boundaries and market deviations. This analysis is critical to investment decisions as it allows clients to understand the full value proposition associated with energy initiatives.

Mr. Gabel-Frank has submitted expert testimony to the New Jersey Board of Public Utilities (NJBPU) in matters regarding the cost effectiveness of energy efficiency. He is also currently supporting analytical and filing preparation activities for energy efficiency, renewable, energy storage, and electric vehicle matters for a range of clients.

Mr. Gabel-Frank has also performed in-depth project valuation and levelized cost of energy studies to support a proposed asset transaction.

Mr. Gabel-Frank assists in the development of numerous renewable and energy efficiency projects including in-depth economic, technical, and utility tariff analysis, which incorporates long-term utility and energy forecasts. He has developed various tariff models from the ground up, which are customized to reflect the specific parameters of each project. He is also skilled at calculating energy savings associated with various project structures. As a result of his strong analytical skill set, Mr. Gabel-Frank has served an integral role on various progressive projects throughout the region.

He supports solar projects through the request for proposal (RFP) process as well as reviews utility tariffs and performs cost/benefit analysis. He is also knowledgeable on the solar renewable energy certificate (SREC) market and has provided transactional support.

He has specialized knowledge on the demand response market and can effectively support clients in evaluating this revenue opportunity. Mr. Gabel-Frank also developed a model that calculates energy savings and potential rebates associated with energy efficiency projects.

In addition, he is extremely knowledgeable on RTO issues and actively monitors activities related to energy and capacity markets, energy efficiency, demand response, ancillary services, interconnection, and general grid issues. Mr. Gabel-Frank helps clients formulate and strategize positions on current PJM rules as well as provides analysis on potential market changes. This includes development of offer and bid strategies for energy efficiency, demand response, renewable, and traditional generation resources into the PJM market.

He was a key contributor in the development of the Analytical Likelihood of Availability and Non-Performance Risk (ALAN) model, a proprietary stochastic modeling tool that computes the exposure of capacity resources within the PJM and ISO-NE footprints. ALAN uses resource outage data as well expected performance assessment event information to determine the probabilistic coincidence of outages and performance assessment events.

Professional Qualifications

BA., Economics, Political Science, English Writing
University of Pittsburgh, 2009

gabel associates

Total Resource Cost Test (TRC)		Res	C&I	LMI	Total Portfolio (Res+C&I)	Behavior	Efficient Products	Existing Homes HPwES	Existing Homes QHEC
BENEFITS									
1 Avoided Wholesale Electric Energy and Electric Ancillary Costs		$ 2,479,906	$ 3,940,848	$ 186,245	$ 6,420,755	$ -	$ 777,163	$ 342,562	$ 919,534
2 Avoided Wholesale Electric Capacity Costs		$ 376,691	$ 1,635,596	$ -	$ 2,012,287	$ -	$ 1,530	$ 94,063	$ 108,852
3 Avoided Wholesale Natural Gas Costs		$ 17,334,621	$ 2,264,985	$ 98,105	$ 19,599,606	$ 1,256,966	$ 13,216,130	$ 1,391,055	$ 266,045
4 Avoided RPS REC Purchase Costs		$ 1,154,921	$ 1,559,695	$ 60,694	$ 2,714,616	$ -	$ 378,912	$ 144,872	$ 430,888
5 Avoided Wholesale Volatility Costs		$ 2,019,122	$ 784,143	$ 28,435	$ 2,803,265	$ 125,697	$ 1,399,482	$ 182,768	$ 129,443
6 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE)		$ 984,397	$ 2,694,365	$ 32,446	$ 3,678,762	$ -	$ 179,853	$ 178,988	$ 328,524
7 Avoided Transmission and Distribution Costs		$ 36,325,092	$ 6,510,930	$ 561,177	$ 42,836,023	$ 2,414,995	$ 24,583,710	$ 3,224,124	$ 2,804,349
Total Benefits	***1+2+3+4+5+6+7***	**$ 60,674,751**	**$ 19,390,562**	**$ 967,102**	**$ 80,065,313**	**$ 3,797,657**	**$ 40,536,780**	**$ 5,558,431**	**$ 4,987,636**
COSTS									
8 Incremental Costs		$ 42,762,651	$ 17,610,483	$ 203,752	$ 60,373,135	$ 2,622,112	$ 23,333,963	$ 6,230,214	$ 1,057,514
9 Administration Costs		$ 15,375,223	$ 6,876,107	$ 95,963	$ 22,251,330	$ 249,181	$ 8,138,605	$ 1,769,331	$ 716,344
Total Costs	***8+9***	**$ 58,137,874**	**$ 24,486,591**	**$ 299,716**	**$ 82,624,465**	**$ 2,871,294**	**$ 31,472,568**	**$ 7,999,545**	**$ 1,773,858**
Benefit Cost Ratio	**(1+2+3+4+5+6+7)/(8+9)**	**1.0**	**0.8**	**3.2**	**1.0**	**1.3**	**1.3**	**0.7**	**2.8**

Participant Cost Test (PCT)		Res	C&I	LMI	Total Portfolio (Res+C&I)	Behavior	Efficient Products	Existing Homes HPwES	Existing Homes QHEC
BENEFITS									
10 Avoided Retail Electric Costs		$ 16,055,816	$ 18,498,032	$ 1,117,497	$ 34,553,848	$ -	$ 5,057,913	$ 2,135,656	$ 5,997,980
11 Avoided Retail Natural Gas Costs		$ 58,398,757	$ 4,566,753	$ 319,359	$ 62,965,511	$ 4,443,897	$ 44,306,719	$ 4,607,380	$ 902,569
12 Program Incentive Costs		$ 31,140,636	$ 13,692,122	$ 203,752	$ 44,832,758	$ 2,622,112	$ 14,054,663	$ 3,231,281	$ 1,537,754
13 Time-Value of Loan Repayments		$ 7,193,163	$ 834,412	$ -	$ 8,027,575	$ -	$ 6,065,354	$ 1,127,809	$ -
Total Benefits	***10+11+12+13***	**$ 112,788,373**	**$ 37,591,319**	**$ 1,640,608**	**$ 150,379,692**	**$ 7,066,010**	**$ 69,484,648**	**$ 11,102,125**	**$ 8,438,303**
COSTS									
14 Lifetime Participant Costs		$ 42,762,651	$ 17,610,483	$ 203,752	$ 60,373,135	$ 2,622,112	$ 23,333,963	$ 6,230,214	$ 1,057,514
Total Costs	***14***	**$ 42,762,651**	**$ 17,610,483**	**$ 203,752**	**$ 60,373,135**	**$ 2,622,112**	**$ 23,333,963**	**$ 6,230,214**	**$ 1,057,514**
Benefit Cost Ratio	**(10+11+12+13)/14**	**2.6**	**2.1**	**8.1**	**2.5**	**2.7**	**3.0**	**1.8**	**8.0**

Program Administrator Cost Test (PAC)		Res	C&I	LMI	Total Portfolio (Res+C&I)	Behavior	Efficient Products	Existing Homes HPwES	Existing Homes QHEC
BENEFITS									
15 Avoided Wholesale Electric Energy and Electric Ancillary Costs		$ 2,479,906	$ 3,940,848	$ 186,245	$ 6,420,755	$ -	$ 777,163	$ 342,562	$ 919,534
16 Avoided Wholesale Electric Capacity Costs		$ 376,691	$ 1,635,596	$ -	$ 2,012,287	$ -	$ 1,530	$ 94,063	$ 108,852
17 Avoided Wholesale Natural Gas Costs		$ 17,334,621	$ 2,264,985	$ 98,105	$ 19,599,606	$ 1,256,966	$ 13,216,130	$ 1,391,055	$ 266,045
18 Avoided RPS REC Purchase Costs		$ 1,154,921	$ 1,559,695	$ 60,694	$ 2,714,616	$ -	$ 378,912	$ 144,872	$ 430,888
19 Avoided Wholesale Volatility Costs		$ 2,019,122	$ 784,143	$ 28,435	$ 2,803,265	$ 125,697	$ 1,399,482	$ 182,768	$ 129,443
20 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE)		$ 984,397	$ 2,694,365	$ 32,446	$ 3,678,762	$ -	$ 179,853	$ 178,988	$ 328,524
21 Avoided Transmission and Distribution Costs		$ 36,325,092	$ 6,510,930	$ 561,177	$ 42,836,023	$ 2,414,995	$ 24,583,710	$ 3,224,124	$ 2,804,349
Total Benefits	***15+16+17+20+21***	**$ 60,674,751**	**$ 19,390,562**	**$ 967,102**	**$ 80,065,313**	**$ 3,797,657**	**$ 40,536,780**	**$ 5,558,431**	**$ 4,987,636**
COSTS									
22 Administration Costs		$ 15,375,223	$ 6,876,107	$ 95,963	$ 22,251,330	$ 249,181	$ 8,138,605	$ 1,769,331	$ 716,344
23 Program Rebate Costs		$ 31,140,636	$ 13,692,122	$ 203,752	$ 44,832,758	$ 2,622,112	$ 14,054,663	$ 3,231,281	$ 1,537,754
24 Time-Value of Loan Repayments		$ 7,193,163	$ 834,412	$ -	$ 8,027,575	$ -	$ 6,065,354	$ 1,127,809	$ -
Total Costs	***22+23+24***	**$ 53,709,022**	**$ 21,402,641**	**$ 299,716**	**$ 75,111,663**	**$ 2,871,294**	**$ 28,258,622**	**$ 6,128,421**	**$ 2,254,099**
Benefit Cost Ratio	**(15+16+17+20+21)/(22+23+24)**	**1.1**	**0.9**	**3.2**	**1.1**	**1.3**	**1.4**	**0.9**	**2.2**

Ratepayer Impact Measure Test (RIM)		Res	C&I	LMI	Total Portfolio (Res+C&I)	Behavior	Efficient Products	Existing Homes HPwES	Existing Homes QHEC
BENEFITS									
25 Avoided Wholesale Electric Energy and Electric Ancillary Costs		$ 2,479,906	$ 3,940,848	$ 186,245	$ 6,420,755	$ -	$ 777,163	$ 342,562	$ 919,534
26 Avoided Wholesale Electric Capacity Costs		$ 376,691	$ 1,635,596	$ -	$ 2,012,287	$ -	$ 1,530	$ 94,063	$ 108,852
27 Avoided Wholesale Natural Gas Costs		$ 17,334,621	$ 2,264,985	$ 98,105	$ 19,599,606	$ 1,256,966	$ 13,216,130	$ 1,391,055	$ 266,045
28 Avoided RPS REC Purchase Costs		$ 1,154,921	$ 1,559,695	$ 60,694	$ 2,714,616	$ -	$ 378,912	$ 144,872	$ 430,888
29 Avoided Wholesale Volatility Costs		$ 2,019,122	$ 784,143	$ 28,435	$ 2,803,265	$ 125,697	$ 1,399,482	$ 182,768	$ 129,443
30 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE)		$ 984,397	$ 2,694,365	$ 32,446	$ 3,678,762	$ -	$ 179,853	$ 178,988	$ 328,524
31 Avoided Transmission and Distribution Costs		$ 36,325,092	$ 6,510,930	$ 561,177	$ 42,836,023	$ 2,414,995	$ 24,583,710	$ 3,224,124	$ 2,804,349
Total Benefits	***25+26+27+28+29+30+31***	**$ 60,674,751**	**$ 19,390,562**	**$ 967,102**	**$ 80,065,313**	**$ 3,797,657**	**$ 40,536,780**	**$ 5,558,431**	**$ 4,987,636**
COSTS									
32 Administration Costs		$ 15,375,223	$ 6,876,107	$ 95,963	$ 22,251,330	$ 249,181	$ 8,138,605	$ 1,769,331	$ 716,344
33 Program Rebate Costs		$ 31,140,636	$ 13,692,122	$ 203,752	$ 44,832,758	$ 2,622,112	$ 14,054,663	$ 3,231,281	$ 1,537,754
34 Re-allocated Distribution Costs		$ 35,968,283	$ 5,135,827	$ 561,177	$ 41,104,111	$ 2,414,995	$ 24,582,397	$ 3,114,942	$ 2,704,386
35 Time-Value of Loan Repayments		$ 7,193,163	$ 834,412	$ -	$ 8,027,575	$ -	$ 6,065,354	$ 1,127,809	$ -
Total Costs	***32+33+34+35***	**$ 89,677,305**	**$ 26,538,468**	**$ 860,893**	**$ 116,215,773**	**$ 5,286,289**	**$ 52,841,019**	**$ 9,243,363**	**$ 4,958,484**
Benefit Cost Ratio	**(25+26+27+28+29+30+31)/(32+33+34+35)**	**0.7**	**0.7**	**1.1**	**0.7**	**0.7**	**0.8**	**0.6**	**1.0**

Societal Cost Test (SC)		Res	C&I	LMI	Total Portfolio (Res+C&I)	Behavior	Efficient Products	Existing Homes HPwES	Existing Homes QHEC
BENEFITS									
36 Avoided Wholesale Electric Energy and Electric Ancillary Costs		$ 3,157,442	$ 5,819,953	$ 304,338	$ 8,977,395	$ -	$ 924,344	$ 469,429	$ 1,179,271
37 Avoided Wholesale Electric Capacity Costs		$ 540,498	$ 2,539,301	$ -	$ 3,079,799	$ -	$ 2,051	$ 135,647	$ 146,407
38 Avoided Wholesale Natural Gas Costs		$ 22,373,306	$ 3,062,239	$ 158,971	$ 25,435,545	$ 1,351,809	$ 17,069,797	$ 1,904,547	$ 316,519
39 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE)		$ 1,313,332	$ 4,086,297	$ 49,249	$ 5,399,628	$ -	$ 212,977	$ 251,038	$ 425,030
40 Natural Gas Demand Reduction Induced Price Effects (DRIPE)		$ 124	$ 155	$ 43	$ 279	$ 10	$ 129	$ 16	$ 1
41 Avoided RPS REC Purchase Costs		$ 1,445,987	$ 2,161,162	$ 86,177	$ 3,607,149	$ -	$ 449,668	$ 193,003	$ 544,749
42 Avoided Wholesale Volatility Costs		$ 2,607,124	$ 1,142,149	$ 46,331	$ 3,749,274	$ 135,181	$ 1,799,619	$ 250,962	$ 164,220
43 Avoided Transmission and Distribution Costs		$ 46,321,305	$ 9,033,640	$ 890,241	$ 55,354,945	$ 2,596,891	$ 31,258,637	$ 4,374,618	$ 3,530,224
44 Avoided CO_2 Emissions Damages		$ 20,552,897	$ 8,023,317	$ 407,912	$ 28,576,215	$ 1,035,611	$ 14,135,137	$ 1,943,659	$ 1,411,566
45 Avoided SO_2 + NOx Emissions Damages		$ 8,056,989	$ 7,079,261	$ 363,159	$ 15,136,251	$ 275,442	$ 4,505,212	$ 897,768	$ 1,348,339
46 Job and Energy Savings Economic Value-Added Multiplier Benefits		$ 173,719,968	$ 41,679,277	$ 1,600,983	$ 215,399,245	$ 859,033	$ 147,853,755	$ 10,162,792	$ 6,051,830
Total Benefits	***36+37+38+39+40+41+42+43+44+45+46***	**$ 280,088,971**	**$ 84,626,753**	**$ 3,907,403**	**$ 364,715,724**	**$ 6,253,978**	**$ 218,211,327**	**$ 20,583,480**	**$ 15,118,155**
COSTS									
47 Incremental Costs		$ 45,162,109	$ 19,227,601	$ 214,386	$ 64,389,710	$ 2,717,918	$ 24,636,960	$ 6,595,981	$ 1,119,203
48 Administration Costs		$ 16,225,167	$ 7,283,963	$ 100,781	$ 23,509,130	$ 261,765	$ 8,573,521	$ 1,869,488	$ 756,734
Total Costs	***47+48***	**$ 61,387,276**	**$ 26,511,565**	**$ 315,167**	**$ 87,898,841**	**$ 2,979,683**	**$ 33,210,481**	**$ 8,465,469**	**$ 1,875,937**
Benefit Cost Ratio	**(36+37+38+39+40+41+42+43+44+45+46)/(47+48)**	**4.6**	**3.2**	**12.4**	**4.1**	**2.1**	**6.6**	**2.4**	**8.1**

New Jersey Cost Test (NJCT)		Res	C&I	LMI	Total Portfolio	Behavior	Efficient Products	Existing Homes HPwES	Existing Homes QHEC
BENEFITS									
49 Avoided Wholesale Electric Energy and Electric Ancillary Costs		$ 3,157,442	$ 5,819,953	$ 304,338	$ 11,680,201	$ -	$ 924,344	$ 469,429	$ 1,179,271
50 Avoided Wholesale Electric Capacity Costs		$ 540,498	$ 2,539,301	$ -	$ 3,544,410	$ -	$ 2,051	$ 135,647	$ 146,407
51 Avoided Wholesale Natural Gas Costs		$ 22,373,306	$ 3,062,239	$ 158,971	$ 26,104,999	$ 1,351,809	$ 17,069,797	$ 1,904,547	$ 316,519
52 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE)		$ 1,313,332	$ 4,086,297	$ 49,249	$ 6,452,808	$ -	$ 212,977	$ 251,038	$ 425,030
53 Avoided Transmission and Distribution Costs		$ 46,321,305	$ 9,033,640	$ 890,241	$ 63,018,459	$ 2,596,891	$ 31,258,637	$ 4,374,618	$ 3,530,224
54 Avoided CO_2 Emissions Damages		$ 20,552,897	$ 8,023,317	$ 407,912	$ 31,730,449	$ 1,035,611	$ 14,135,137	$ 1,943,659	$ 1,411,566
55 Non-Energy Benefits (5%)		$ 3,685,294	$ 1,227,072	$ 70,140	$ 5,540,044	$ 197,435	$ 2,473,390	$ 356,764	$ 279,873
56 Low-Income Benefits (10%)		$ -	$ -	$ 140,280	$ 140,280	$ -	$ -	$ -	$ -
Total Benefits	***49+50+51+52+53+54+55+56***	**$ 97,944,073**	**$ 33,791,819**	**$ 2,021,131**	**$ 148,211,649**	**$ 5,181,747**	**$ 66,076,334**	**$ 9,435,702**	**$ 7,288,888**
COSTS									
57 Incremental Costs		$ 45,162,109	$ 19,227,601	$ 214,386	$ 68,802,556	$ 2,717,918	$ 24,636,960	$ 6,595,981	$ 1,119,203
58 Administration Costs		$ 16,225,167	$ 7,283,963	$ 100,781	$ 31,398,027	$ 261,765	$ 8,573,521	$ 1,869,488	$ 756,734
Total Costs	***57+58***	**$ 61,387,276**	**$ 26,511,565**	**$ 315,167**	**$ 100,200,582**	**$ 2,979,683**	**$ 33,210,481**	**$ 8,465,469**	**$ 1,875,937**
Benefit Cost Ratio	**(49+50+51+52+53+54+55+56)/(57+58)**	**1.6**	**1.3**	**6.4**	**1.5**	**1.7**	**2.0**	**1.1**	**3.9**

Total Resource Cost Test (TRC)		Existing Homes Moderate Income Weatherization	Energy Saving Trees	Multi-Family	Energy Solutions for Business: Prescriptive and Custom	Energy Solutions for Business: Engineered Solutions	Energy Solutions for Business: Energy Management	Energy Solutions for Business: Direct Install	Pilots	Portfolio Costs
BENEFITS										
1 Avoided Wholesale Electric Energy and Electric Ancillary Costs		$ 440,647	$ 186,245	$ 1,653,112	$ 1,152,800	$ 1,597,027	$ 190,377	$ 1,000,644	$ -	$ -
2 Avoided Wholesale Electric Capacity Costs		$ 172,246	$ -	$ 304,231	$ 759,419	$ 518,751	$ 33,409	$ 324,017	$ -	$ -
3 Avoided Wholesale Natural Gas Costs		$ 1,204,427	$ 98,105	$ 362,184	$ 399,536	$ 1,409,850	$ 96,459	$ 359,139	$ -	$ -
4 Avoided RPS REC Purchase Costs		$ 200,249	$ 60,694	$ 670,778	$ 444,638	$ 577,272	$ 80,608	$ 457,177	$ -	$ -
5 Avoided Wholesale Volatility Costs		$ 181,732	$ 28,435	$ 231,953	$ 231,176	$ 352,563	$ 32,025	$ 168,380	$ -	$ -
6 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE)		$ 297,031	$ 32,446	$ 683,963	$ 1,119,793	$ 902,723	$ 78,630	$ 593,218	$ -	$ -
7 Avoided Transmission and Distribution Costs		$ 3,297,914	$ 561,177	$ 4,746,543	$ 2,445,805	$ 1,720,052	$ 148,251	$ 2,196,823	$ -	$ -
Total Benefits	***1+2+3+4+5+6+7***	**$ 5,794,247**	**$ 967,102**	**$ 8,652,764**	**$ 6,553,166**	**$ 7,078,239**	**$ 659,758**	**$ 5,099,398**	**$ -**	**$ -**
COSTS										
8 Incremental Costs		$ 9,518,848	$ 203,752	$ 3,819,253	$ 1,727,902	$ 9,501,588	$ 432,013	$ 1,873,938	$ 4,075,042	$ -
9 Administration Costs		$ 4,501,761	$ 95,963	$ 1,415,413	$ 571,761	$ 3,049,016	$ 198,602	$ 1,137,459	$ 1,919,270	$ 6,016,755
Total Costs	***8+9***	**$ 14,020,609**	**$ 299,716**	**$ 5,234,666**	**$ 2,299,663**	**$ 12,550,604**	**$ 630,615**	**$ 3,011,397**	**$ 5,994,312**	**$ 6,016,755**
Benefit Cost Ratio	**(1+2+3+4+5+6+7)/(8+9)**	**0.4**	**3.2**	**1.7**	**2.8**	**0.6**	**1.0**	**1.7**	**0.0**	**0.0**

Participant Cost Test (PCT)		Existing Homes Moderate Income Weatherization	Energy Saving Trees	Multi-Family	Energy Solutions for Business: Prescriptive and Custom	Energy Solutions for Business: Engineered Solutions	Energy Solutions for Business: Energy Management	Energy Solutions for Business: Direct Install	Pilots	Portfolio Costs
BENEFITS										
10 Avoided Retail Electric Costs		$ 2,864,268	$ 1,117,497	$ 10,523,502	$ 6,419,030	$ 7,604,101	$ 683,239	$ 3,791,663	$ -	$ -
11 Avoided Retail Natural Gas Costs		$ 4,138,193	$ 319,359	$ 1,244,359	$ 952,211	$ 2,334,529	$ 183,311	$ 1,096,702	$ -	$ -
12 Program Incentive Costs		$ 9,694,826	$ 203,752	$ 2,795,938	$ 1,125,171	$ 5,702,405	$ 432,394	$ 2,357,110	$ 4,075,042	$ -
13 Time-Value of Loan Repayments		$ -	$ -	$ 298,487	$ 245,269	$ 465,730	$ 11,768	$ 111,645	$ -	$ -
Total Benefits	***10+11+12+13***	**$ 16,697,287**	**$ 1,640,608**	**$ 14,862,286**	**$ 8,741,680**	**$ 16,106,765**	**$ 1,310,712**	**$ 7,357,120**	**$ 4,075,042**	**$ -**
COSTS										
14 Lifetime Participant Costs		$ 9,518,848	$ 203,752	$ 3,819,253	$ 1,727,902	$ 9,501,588	$ 432,013	$ 1,873,938	$ 4,075,042	$ -
Total Costs	***14***	**$ 9,518,848**	**$ 203,752**	**$ 3,819,253**	**$ 1,727,902**	**$ 9,501,588**	**$ 432,013**	**$ 1,873,938**	**$ 4,075,042**	**$ -**
Benefit Cost Ratio	**(10+11+12+13)/14**	**1.8**	**8.1**	**3.9**	**5.1**	**1.7**	**3.0**	**3.9**	**1.0**	**n/a**

Program Administrator Cost Test (PAC)		Existing Homes Moderate Income Weatherization	Energy Saving Trees	Multi-Family	Energy Solutions for Business: Prescriptive and Custom	Energy Solutions for Business: Engineered Solutions	Energy Solutions for Business: Energy Management	Energy Solutions for Business: Direct Install	Pilots	Portfolio Costs
BENEFITS										
15 Avoided Wholesale Electric Energy and Electric Ancillary Costs		$ 440,647	$ 186,245	$ 1,653,112	$ 1,152,800	$ 1,597,027	$ 190,377	$ 1,000,644	$ -	$ -
16 Avoided Wholesale Electric Capacity Costs		$ 172,246	$ -	$ 304,231	$ 759,419	$ 518,751	$ 33,409	$ 324,017	$ -	$ -
17 Avoided Wholesale Natural Gas Costs		$ 1,204,427	$ 98,105	$ 362,184	$ 399,536	$ 1,409,850	$ 96,459	$ 359,139	$ -	$ -
18 Avoided RPS REC Purchase Costs		$ 200,249	$ 60,694	$ 670,778	$ 444,638	$ 577,272	$ 80,608	$ 457,177	$ -	$ -
19 Avoided Wholesale Volatility Costs		$ 181,732	$ 28,435	$ 231,953	$ 231,176	$ 352,563	$ 32,025	$ 168,380	$ -	$ -
20 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE)		$ 297,031	$ 32,446	$ 683,963	$ 1,119,793	$ 902,723	$ 78,630	$ 593,218	$ -	$ -
21 Avoided Transmission and Distribution Costs		$ 3,297,914	$ 561,177	$ 4,746,543	$ 2,445,805	$ 1,720,052	$ 148,251	$ 2,196,823	$ -	$ -
Total Benefits	***15+16+17+20+21***	**$ 5,794,247**	**$ 967,102**	**$ 8,652,764**	**$ 6,553,166**	**$ 7,078,239**	**$ 659,758**	**$ 5,099,398**	**$ -**	**$ -**
COSTS										
22 Administration Costs		$ 4,501,761	$ 95,963	$ 1,415,413	$ 571,761	$ 3,049,016	$ 198,602	$ 1,137,459	$ 1,919,270	$ 6,016,755
23 Program Rebate Costs		$ 9,694,826	$ 203,752	$ 2,795,938	$ 1,125,171	$ 5,702,405	$ 432,394	$ 2,357,110	$ 4,075,042	$ -
24 Time-Value of Loan Repayments		$ -	$ -	$ 298,487	$ 245,269	$ 465,730	$ 11,768	$ 111,645	$ -	$ -
Total Costs	***22+23+24***	**$ 14,196,586**	**$ 299,716**	**$ 4,509,838**	**$ 1,942,201**	**$ 9,217,151**	**$ 642,764**	**$ 3,606,214**	**$ 5,994,312**	**$ 6,016,755**
Benefit Cost Ratio	**(15+16+17+20+21)/(22+23+24)**	**0.4**	**3.2**	**1.9**	**3.4**	**0.8**	**1.0**	**1.4**	**0.0**	**0.0**

Ratepayer Impact Measure Test (RIM)		Existing Homes Moderate Income Weatherization	Energy Saving Trees	Multi-Family	Energy Solutions for Business: Prescriptive and Custom	Energy Solutions for Business: Engineered Solutions	Energy Solutions for Business: Energy Management	Energy Solutions for Business: Direct Install	Pilots	Portfolio Costs
BENEFITS										
25 Avoided Wholesale Electric Energy and Electric Ancillary Costs		$ 440,647	$ 186,245	$ 1,653,112	$ 1,152,800	$ 1,597,027	$ 190,377	$ 1,000,644	$ -	$ -
26 Avoided Wholesale Electric Capacity Costs		$ 172,246	$ -	$ 304,231	$ 759,419	$ 518,751	$ 33,409	$ 324,017	$ -	$ -
27 Avoided Wholesale Natural Gas Costs		$ 1,204,427	$ 98,105	$ 362,184	$ 399,536	$ 1,409,850	$ 96,459	$ 359,139	$ -	$ -
28 Avoided RPS REC Purchase Costs		$ 200,249	$ 60,694	$ 670,778	$ 444,638	$ 577,272	$ 80,608	$ 457,177	$ -	$ -
29 Avoided Wholesale Volatility Costs		$ 181,732	$ 28,435	$ 231,953	$ 231,176	$ 352,563	$ 32,025	$ 168,380	$ -	$ -
30 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE)		$ 297,031	$ 32,446	$ 683,963	$ 1,119,793	$ 902,723	$ 78,630	$ 593,218	$ -	$ -
31 Avoided Transmission and Distribution Costs		$ 3,297,914	$ 561,177	$ 4,746,543	$ 2,445,805	$ 1,720,052	$ 148,251	$ 2,196,823	$ -	$ -
Total Benefits	***25+26+27+28+29+30+31***	**$ 5,794,247**	**$ 967,102**	**$ 8,652,764**	**$ 6,553,166**	**$ 7,078,239**	**$ 659,758**	**$ 5,099,398**	**$ -**	**$ -**
COSTS										
32 Administration Costs		$ 4,501,761	$ 95,963	$ 1,415,413	$ 571,761	$ 3,049,016	$ 198,602	$ 1,137,459	$ 1,919,270	$ 6,016,755
33 Program Rebate Costs		$ 9,694,826	$ 203,752	$ 2,795,938	$ 1,125,171	$ 5,702,405	$ 432,394	$ 2,357,110	$ 4,075,042	$ -
34 Re-allocated Distribution Costs		$ 3,151,564	$ 561,177	$ 4,497,463	$ 1,801,834	$ 1,284,968	$ 131,051	$ 1,917,974	$ -	$ -
35 Time-Value of Loan Repayments		$ -	$ -	$ 298,487	$ 245,269	$ 465,730	$ 11,768	$ 111,645	$ -	$ -
Total Costs	***32+33+34+35***	**$ 17,348,150**	**$ 860,893**	**$ 9,007,300**	**$ 3,744,035**	**$ 10,502,119**	**$ 773,814**	**$ 5,524,187**	**$ 5,994,312**	**$ 6,016,755**
Benefit Cost Ratio	**(25+26+27+28+29+30+31)/(32+33+34+35)**	**0.3**	**1.1**	**1.0**	**1.8**	**0.7**	**0.9**	**0.9**	**0.0**	**0.0**

Societal Cost Test (SC)		Existing Homes Moderate Income Weatherization	Energy Saving Trees	Multi-Family	Energy Solutions for Business: Prescriptive and Custom	Energy Solutions for Business: Engineered Solutions	Energy Solutions for Business: Energy Management	Energy Solutions for Business: Direct Install	Pilots	Portfolio Costs
BENEFITS										
36 Avoided Wholesale Electric Energy and Electric Ancillary Costs		$ 584,397	$ 304,338	$ 2,398,468	$ 1,721,025	$ 2,491,465	$ 276,939	$ 1,330,524	$ -	$ -
37 Avoided Wholesale Electric Capacity Costs		$ 256,392	$ -	$ 464,611	$ 1,203,390	$ 831,778	$ 50,409	$ 453,724	$ -	$ -
38 Avoided Wholesale Natural Gas Costs		$ 1,730,635	$ 158,971	$ 510,483	$ 260,135	$ 2,184,441	$ 139,890	$ 477,774	$ -	$ -
39 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE)		$ 424,287	$ 49,249	$ 1,003,931	$ 1,740,348	$ 1,420,723	$ 114,679	$ 810,547	$ -	$ -
40 Natural Gas Demand Reduction Induced Price Effects (DRIPE)		$ (32)	$ 43	$ 30	$ 93	$ 49	$ 2	$ 11	$ -	$ -
41 Avoided RPS REC Purchase Costs		$ 258,566	$ 86,177	$ 919,919	$ 611,273	$ 841,639	$ 111,065	$ 597,185	$ -	$ -
42 Avoided Wholesale Volatility Costs		$ 257,142	$ 46,331	$ 337,356	$ 318,455	$ 550,768	$ 46,724	$ 226,202	$ -	$ -
43 Avoided Transmission and Distribution Costs		$ 4,560,934	$ 890,241	$ 6,773,273	$ 3,233,096	$ 2,651,446	$ 213,271	$ 2,935,827	$ -	$ -
44 Avoided CO_2 Emissions Damages		$ 2,026,924	$ 407,912	$ 2,746,322	$ 1,773,254	$ 4,149,338	$ 394,474	$ 1,706,251	$ -	$ -
45 Avoided SO_2 + NOx Emissions Damages		$ 1,030,228	$ 363,159	$ 2,761,134	$ 1,931,145	$ 3,233,581	$ 351,146	$ 1,563,390	$ -	$ -
46 Job and Energy Savings Economic Value-Added Multiplier Benefits		$ 8,792,557	$ 1,600,983	$ 12,392,365	$ 10,184,832	$ 15,486,171	$ 1,373,814	$ 5,828,963	$ 8,805,497	$ 1,267,690
Total Benefits	***36+37+38+39+40+41+42+43+44+45+46***	**$ 19,922,031**	**$ 3,907,403**	**$ 30,307,891**	**$ 22,977,045**	**$ 33,841,400**	**$ 3,072,412**	**$ 15,930,397**	**$ 8,805,497**	**$ 1,267,690**
COSTS										
47 Incremental Costs		$ 10,092,047	$ 214,386	$ 4,198,459	$ 1,824,963	$ 10,667,205	$ 465,216	$ 1,982,492	$ 4,287,725	$ -
48 Administration Costs		$ 4,763,659	$ 100,781	$ 1,501,375	$ 603,129	$ 3,250,541	$ 213,641	$ 1,201,031	$ 2,015,620	$ 6,286,741
Total Costs	***47+48***	**$ 14,855,706**	**$ 315,167**	**$ 5,699,833**	**$ 2,428,092**	**$ 13,917,746**	**$ 678,857**	**$ 3,183,524**	**$ 6,303,346**	**$ 6,286,741**
Benefit Cost Ratio	**(36+37+38+39+40+41+42+43+44+45+46)/(47+48)**	**1.3**	**12.4**	**5.3**	**9.5**	**2.4**	**4.5**	**5.0**	**1.4**	**0.2**

New Jersey Cost Test (NJCT)		Existing Homes Moderate Income Weatherization	Energy Saving Trees	Multi-Family	Energy Solutions for Business: Prescriptive and Custom	Energy Solutions for Business: Engineered Solutions	Energy Solutions for Business: Energy Management	Energy Solutions for Business: Direct Install	Pilots	Portfolio Costs
BENEFITS										
49 Avoided Wholesale Electric Energy and Electric Ancillary Costs		$ 584,397	$ 304,338	$ 2,398,468	$ 1,721,025	$ 2,491,465	$ 276,939	$ 1,330,524	$ -	$ -
50 Avoided Wholesale Electric Capacity Costs		$ 256,392	$ -	$ 464,611	$ 1,203,390	$ 831,778	$ 50,409	$ 453,724	$ -	$ -
51 Avoided Wholesale Natural Gas Costs		$ 1,730,635	$ 158,971	$ 510,483	$ 260,135	$ 2,184,441	$ 139,890	$ 477,774	$ -	$ -
52 Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE)		$ 424,287	$ 49,249	$ 1,003,931	$ 1,740,348	$ 1,420,723	$ 114,679	$ 810,547	$ -	$ -
53 Avoided Transmission and Distribution Costs		$ 4,560,934	$ 890,241	$ 6,773,273	$ 3,233,096	$ 2,651,446	$ 213,271	$ 2,935,827	$ -	$ -
54 Avoided CO_2 Emissions Damages		$ 2,026,924	$ 407,912	$ 2,746,322	$ 1,773,254	$ 4,149,338	$ 394,474	$ 1,706,251	$ -	$ -
55 Non-Energy Benefits (5%)		$ 377,832	$ 70,140	$ 557,538	$ 407,900	$ 478,993	$ 39,759	$ 300,420	$ -	$ -
56 Low-Income Benefits (10%)		$ -	$ 140,280	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Benefits	***49+50+51+52+53+54+55+56***	**$ 9,961,402**	**$ 2,021,131**	**$ 14,454,626**	**$ 10,339,148**	**$ 14,208,184**	**$ 1,229,421**	**$ 8,015,066**	**$ -**	**$ -**
COSTS										
57 Incremental Costs		$ 10,092,047	$ 214,386	$ 4,198,459	$ 1,824,963	$ 10,667,205	$ 465,216	$ 1,982,492	$ 4,287,725	$ -
58 Administration Costs		$ 4,763,659	$ 100,781	$ 1,501,375	$ 603,129	$ 3,250,541	$ 213,641	$ 1,201,031	$ 2,015,620	$ 6,286,741
Total Costs	***57+58***	**$ 14,855,706**	**$ 315,167**	**$ 5,699,833**	**$ 2,428,092**	**$ 13,917,746**	**$ 678,857**	**$ 3,183,524**	**$ 6,303,346**	**$ 6,286,741**
Benefit Cost Ratio	**(49+50+51+52+53+54+55+56)/(57+58)**	**0.7**	**6.4**	**2.5**	**4.3**	**1.0**	**1.8**	**2.5**	**0.0**	**0.0**

Schedule IGF-3

South Jersey Gas Company
Energy Efficiency Program 2021 Extension (EET V)
Cost Benefit Analysis Workpapers

The workpapers are confidential and will be provided upon execution of non-disclosure agreement.

South Jersey Gas Company
Energy Efficiency Program 2021 Extension (EET V)
Emissions Avoided Results Summary

Program	CO_2 Emissions Reduction (tons)	SO_2 Emissions Reduction (tons)	NOx Emissions Reduction (tons)
Behavior	20,474	0	16
Efficient Products	259,754	11	199
Existing Homes HPwES	34,988	5	25
Existing Homes QHEC	26,262	14	15
Existing Homes Moderate Income Weatherization	36,230	7	26
Energy Saving Trees	6,989	3	4
Multi-Family	48,926	27	28
Energy Solutions for Business: Prescriptive and Custom	32,905	19	19
Energy Solutions for Business: Engineered Solutions	71,926	28	47
Energy Solutions for Business: Energy Management	7,013	3	4
Energy Solutions for Business: Direct Install	31,205	15	18
Pilots	0	0	0
Portfolio Costs	0	0	0
Total	**576,670**	**133**	**401**

South Jersey Gas Company
Energy Efficiency Program 2021 Extension (EET V)
Economic Development and Job Creation Results Summary

Table IGF-2.1 Economic Impacts

Program	Value Added to GDP (NPV)	Value Added to GDP (Nominal)
Behavior	985,409	684,088
Efficient Products	136,975,065	160,620,834
Existing Homes HPwES	8,994,070	11,752,813
Existing Homes QHEC	5,030,830	7,342,366
Existing Homes Moderate Income Weatherization	8,120,598	9,957,629
Energy Saving Trees	1,058,647	2,566,453
Multi-Family	9,336,144	16,938,012
Energy Solutions for Business: Prescriptive and Custom	7,338,233	14,563,407
Energy Solutions for Business: Engineered Solutions	11,190,557	22,519,755
Energy Solutions for Business: Energy Management	1,049,385	1,870,456
Energy Solutions for Business: Direct Install	4,717,446	7,372,233
Pilots	8,990,715	8,476,685
Portfolio Costs	1,687,632	748,905
Total	**205,474,731**	**265,413,637**

Table IGF-2.2 Anticipated Job Creation Impacts

Program	Direct Job Creation	Indirect + Induced Job Creation	Total Job Creation
Behavior	1	5	**6**
Efficient Products	844	891	**1,736**
Existing Homes HPwES	69	65	**134**
Existing Homes QHEC	13	55	**68**
Existing Homes Moderate Income Weatherization	83	14	**96**
Energy Saving Trees	3	21	**25**
Multi-Family	33	125	**158**
Energy Solutions for Business: Prescriptive and Custom	99	79	**178**
Energy Solutions for Business: Engineered Solutions	130	102	**232**
Energy Solutions for Business: Energy Management	15	11	**26**
Energy Solutions for Business: Direct Install	42	33	**75**
Pilots	59	23	**82**
Portfolio Costs	28	-16	**12**
Total	**1,419**	**1,407**	**2,826**

South Jersey Gas Company
Energy Efficiency Program 2021 Extension (EET V)
EE Target Development

Year	Total	Electric Generation Service	Adjusted Total	Program Year	Baseline (therms)	Target (%)	Target (therms)
2018	564,456,611	45,304,243	519,152,367				
2019	554,388,175	52,102,043	502,286,133				
2020	481,436,045	38,920,451	442,515,594				
2021	502,629,396	43,067,731	459,561,665	PY1	487,984,698	0.30%	1,463,954
2022	502,629,396	43,067,731	459,561,665	PY2	468,121,131	0.34%	1,591,612
				PY3	453,879,642	0.51%	2,314,786

South Jersey Gas Company
Energy Efficiency Program 2021 Extension (EET V)
Cost to Achieve Results

Sector	$/therm
Res Projected Cost to Achieve ($/therm)	5.84
C&I Projected Cost to Achieve ($/therm)	4.13
MF Projected Cost to Achieve ($/therm)	18.69
LMI Projected Cost to Achieve ($/therm)	28.37

South Jersey Gas Company
Energy Efficiency Program 2021 Extension (EET V)
Quantitative Performance Indicators

QPI Metric	PY 1	PY 2	PY 3
Annual Energy Savings (therm)	2,007,669	2,081,342	2,738,402
Annual Demand Savings (Pk therm)	297	301	391
Lifetime Energy Savings (therm)	17,356,632	18,812,531	27,655,786
Lifetime of Persisting Demand Savings (Pk therm)	2,517	2,661	3,883
NPV of UCT Net Benefits ($)	1,444,346	1,472,719	2,036,585
Low-Income Lifetime Savings (therm)	1,056,388	1,207,301	2,112,777
Small Business Lifetime Savings (therm)	310,699	372,839	517,832

South Jersey Gas Company

Energy Efficiency Program 2021 Extension (EET V)

Energy Use Reduction Targets

	PY 1	PY 2	PY 3
Period	Jul 21 - Jun 22	Jul 22 - Jun 23	Jul 23 - Jun 24
Projected Consumption Baseline (therm)	487,984,698	468,121,131	453,879,642
Utility Savings Target (%)		0.34%	0.51%
Utility Savings Target (therm)		1,591,612	2,314,786
Projected SJG Savings (therm)	2,007,669	2,081,342	2,738,402
Achieved Goal	Yes	Yes	Yes