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September 25, 2020

Electronic Filing

Aida Camacho-Welch
Office of the Secretary
NJ Board of Public Utilities
44 South Clinton Avenue, 3rd Fl, Ste 314
P.O. Box 350
Trenton, NJ 08625-0350

Re: In the Matter of the Petition of Elizabethtown Gas Company for Approval of New Energy Efficiency Programs and Associated Cost Recovery Pursuant to the Clean Energy Act and the Establishment of a Conservation Incentive Program
BPU Docket No._____

Dear Secretary Camacho-Welch:

Enclosed please find a Petition and supporting documents of Elizabethtown Gas Company which 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 submitted,

Deborah M. Franco

DMF:caj
Enclosures

cc: See attached Service List

IN THE MATTER OF THE PETITION OF ELIZABETHTOWN GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT AND THE ESTABLISHMENT OF A CONSERVATION INCENTIVE PROGRAM BPU DOCKET NO._____

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IN THE MATTER OF THE PETITION OF ELIZABETHTOWN GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT AND THE ESTABLISHMENT OF A CONSERVATION INCENTIVE PROGRAM BPU DOCKET NO._____

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IN THE MATTER OF THE PETITION OF ELIZABETHTOWN GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT AND THE ESTABLISHMENT OF A CONSERVATION INCENTIVE PROGRAM BPU DOCKET NO._____

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STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF ELIZABETHTOWN GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT AND THE ESTABLISHMENT OF A CONSERVATION INCENTIVE PROGRAM	:	**PETITION** **BPU DOCKET NO. _____**

CASE SUMMARY, PETITION, TESTIMONY AND SCHEDULES

September 25, 2020

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF ELIZABETHTOWN GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT AND THE ESTABLISHMENT OF A CONSERVATION INCENTIVE PROGRAM	:	**CASE SUMMARY** **BPU DOCKET NO. _____**

Elizabethtown Gas Company ("Elizabethtown" 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, and to implement a Conservation Incentive Program ("CIP"), pursuant to N.J.S.A. 48:3-87.8 et seq. and 48:3-98.1 et seq. The Board first authorized Elizabethtown to offer EEPs, and to implement the associated cost recovery mechanism, in August 2009. Since that time, Elizabethtown 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 EEP Rider rate.

Through this Petition and the accompanying Direct Testimony and Schedules, Elizabethtown seeks Board approval to implement new EEPs for a three-year period commencing July 1, 2021, with a total budget of approximately $100 million ("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. Elizabethtown 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 EEP Rider rate, set forth in Rider "E" of the Company's Tariff.

Elizabethtown also seeks Board approval to implement a CIP designed to recover lost revenues due to the EEPs and, thereby encourage Elizabethtown to invest in EE by removing its throughput incentive and enabling the Company to aggressively endorse and pursue EE while providing adequate customer protections. The proposed CIP will quantify sales loss from EE by comparing actual usage per customer to baseline usage on a monthly basis, accounting for weather-related variation. The CIP will include certain customer protections to ensure that the CIP Charge does not result in the Company over-earning, including a shareholder contribution to support conservation and education efforts.

Consistent with the 2019 New Jersey Energy Master Plan and the Clean Energy Act of 2018, these programs solidify Elizabethtown'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 2,145 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 $0.82, or 0.8%.

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF ELIZABETHTOWN GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT AND THE ESTABLISHMENT OF A CONSERVATION INCENTIVE PROGRAM	:	**PETITION** **BPU DOCKET NO. _____**

TO THE HONORABLE BOARD OF PUBLIC UTILITIES:

Petitioner, Elizabethtown Gas Company ("Elizabethtown" or "Company"), a public utility corporation of the State of New Jersey, with its principal office at 520 Green Lane, Union, New Jersey, hereby petitions the Board of Public Utilities ("Board") for approval of proposed Energy Efficiency Programs ("EEPs"), associated cost recovery through its existing EEP Rider, and a proposed Conservation Incentive Program ("CIP") 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. Elizabethtown 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: Hunterdon, Mercer, Middlesex, Morris, Sussex, Union and Warren. Within its service territory, Elizabethtown serves approximately 300,000 customers.

2. Elizabethtown 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, Elizabethtown seeks Board approval to implement new EEPs for a three-year period commencing July 1, 2021, with a total budget of approximately $100 million ("EEPs" or "Program"). Elizabethtown also seeks approval to recover costs associated with the EEPs described herein through the existing EEP Rider. Elizabethtown also seeks approval of the proposed CIP described herein. Consistent with the New Jersey 2019 Energy Master Plan ("EMP") and the Clean Energy Act of 2018 ("CEA"), with this filing, Elizabethtown 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 Elizabethtown's proposed EE investments and programs could generate approximately 2,145 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 Elizabethtown, 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"), Rockland Electric Company ("RECO"), and South Jersey Gas Company ("SJG") (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, Elizabethtown, 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) 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]

Elizabethtown EE Filing History

35. Based on the 2008 RGGI Legislation and the May 2008 Order, Elizabethtown has made multiple filings in BPU Docket Nos. EO09010056 and GO09010060, GR09030195,, GO11070399; GO12100946, GR16090826, GO18070682 and GR19040486 seeking approval to implement EEPs that complemented or supplemented existing programs offered through NJCEP and for approval of an associated cost recovery rider mechanism, its EEP rider rate.[37] In the August

[35] Id. at 42.
[36] Id.
[37] I/M/O Energy Efficiency Programs and Associated Cost Recovery Mechanisms and I/M/O the Petition of Pivotal Holdings. Inc. d/b/a Elizabethtown Gas Company for Approval of Energy Efficiency Program and a Regional Greenhouse Gas Initiative Cost Recovery Rider, BPU Docket Nos. EO09010056 and GO9010060, Decision and Order Approving Stipulation (Aug. 3, 2009) ("August 2009 Order"); I/M/O the Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas to Revise its Regional Greenhouse Gas Initiative Rider Rate and I/M/O the Petition of Pivotal Utility Holdings. Inc. d/b/a Elizabethtown Gas for Authority to Extend the Term of Energy Efficiency Programs with Certain Modifications and Approval of Associated Cost Recovery Mechanism and Deferral Accounting Treatment, BPU Docket Nos. GO10070466 and GO10100735, Decision and Order Adopting Stipulation (Jan. 19, 2011) ("January 2011 Order"); I/M/O Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas for Authority to Extend the Term of Energy Efficiency Programs with Certain Modifications and Approval of Associated Cost Recovery, BPU Docket No. GO11070399, Decision and Order Adopting Stipulation (Nov. 20, 2011) ("November 2011 Order"); I/M/O Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas for Authority to Extend the Term of Energy Efficiency Programs with Certain Modifications and Approval of Associated Cost Recovery, BPU Docket No. GO11070399, Decision and Order Adopting Stipulation (Apr. 11, 2012) ("April 2012 Order"); I/M/O the Petition of

2009 Order, January 2011 Order, November 2011 Order, April 2012 Order, August 2013 Order, December 2015 Order, April 2017 Order, February 2019 Order, and February 2020 Order, the BPU adopted the terms of Stipulations entered into among representatives from the BPU Staff, the New Jersey Division of Rate Counsel ("Rate Counsel") and Elizabethtown (the "Parties") approving the implementation of EEPs and the associated cost recovery mechanism. Cost recovery was through creation of the EEP rider rate, which consisted of two parts. The first part allowed the Company to earn a return on the investment and recover the investment over a four year amortization period for a regulatory asset ("RA") to be created on Elizabethtown's balance sheet. The second part allowed the Company to recover incremental operating and maintenance ("O&M") expenses associated with the EEPs.

36. In the instant proceeding, Elizabethtown 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 Frank J. Vetri included with the submission of this Petition.

Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas for Authority to Extend the Term of Energy Efficiency Programs with Certain Modifications and Approval of Associated Cost Recovery Mechanism, BPU Docket No. GO12100946, Order Adopting Stipulation (Aug. 21, 2013) ("August 2013 Order"); I/M/O the Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas for Authority to Extend the Term of Energy Efficiency Programs with Certain Modifications and Approval of Associated Cost Recovery Mechanism, BPU Docket Nos. GO12100946 and GO15050504, Order Adopting Stipulation (Dec. 16, 2015) ("December 2015 Order"); I/M/O the Petition of Pivotal Utility Holdings, Inc., d/b/a Elizabethtown Gas for Authority to Extend the Term of Energy Efficiency Programs with Certain Modifications and Approval of Associated Cost Recovery Mechanism, BPU Docket No. GR16070618 and GO15050504, Order Adopting Stipulation (Apr. 21, 2017) ("April 2017 Order"); I/M/O Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas for Authority to Extend the Term of Energy Efficiency Programs and Approval of Associated Cost Recovery Mechanism, BPU Docket No. GO18070682, Order (Feb. 27, 2019) ("February 2019 Order"); "); I/M/O Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas for Authority to Extend the Term of Energy Efficiency Programs and Approval of Associated Cost Recovery Mechanism, BPU Docket No. GO18070682, Order (Feb. 19, 2020) ("February 2020 Order"). ..

III. PROGRAM DESCRIPTION

37. In this filing, Elizabethtown is proposing a suite of new EEPs that have been developed in response to market demands, the June 2020 Order and the EMP, and customer needs. Elizabethtown 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. Elizabethtown 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 Frank J. Vetri and Schedule FJV-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 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 programs have a benefit-cost ratio of 1.0 or greater in five of the six tests, including a ratio of 1.9 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. Elizabethtown proposes a total program investment level of approximately $90.6 million over a three-year period and O&M expenses of approximately $9.3 million. The O&M expenses primarily consist of utility administration, inspections and quality control, and evaluation costs incurred to run the EEPs.

[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).

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

EEP Budget
($ Millions)

Program Investment	$90.6
Operations and Maintenance	$ 9.3
Total Investment and O&M	$99.9

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

V. COST RECOVERY

44. Elizabethtown requests approval to continue to recover costs associated with the EEPs through the existing EEP rider rate mechanism. As previously approved, the cost recovery will 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 over a ten (10) year period. The second part of the EEP will recover incremental O&M expenses associated with the EEPs.

45. Elizabethtown 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 7.131%, or 9.0645% on a pre-tax basis, effective November 15, 2019, which is the WACC utilized to set rates in the Company's most recent base rate case in Docket

No. GR19040486. The Company will also apply a revenue factor that reflects tax adjustments for BPU and Rate Counsel Assessments and bad debt allowance. The Company is using a revenue factor of 1.01122, which is the revenue factor utilized to set rates in the Company's most recent base rate case in Docket No. GR19040486 after removing the Federal and State corporate business tax.

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 (10) 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 Thomas Kaufmann.

48. Elizabethtown requests that the initial revenue requirement for the EEPs and an associated EEP rate commence during the month in which the EEPs and associated EEP rate 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, Elizabethtown proposes an initial EEP rate associated with the proposed EEPs of $0.0082 per therm, including taxes, and $0.0077 per therm, excluding taxes. This represents an increase of $0.0082 per therm to the current EEP rate of $0.0073 per therm, including taxes, for a total combined EEP rate of $0.0155 per therm, including taxes.

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 $0.82, or 0.8%, effective on Board approval.

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

VI. CONSERVATION INCENTIVE PROGRAM

52. Elizabethtown requests approval to implement a CIP consistent with the approved methodology currently in place for SJG and reflective of the modifications recommended by Board Staff and accepted by the Board in the June 2020 Order.

53. The CIP will be designed to recover lost revenues due to the EEPs and, thereby encourage Elizabethtown to invest in EE by removing the utilities' throughput incentive and enabling the utilities to aggressively endorse and pursue EE while providing adequate customer protections. The proposed CIP will quantify sales loss from EE by comparing actual usage per customer to baseline usage on a monthly basis, accounting for weather-related variation.

54. The Company proposes to implement the following consumer protection tests to limit the amount of margin deficiencies that the Company may recover annually through the CIP: (a) a BGSS savings test; (b) a variable margin test to serve as a "rate cap"; and (c) an earnings test to ensure the recovery of lost margins will not result in the Company over-earning.

55. Elizabethtown further proposes to provide a shareholder contribution of $180,000 per year to the CIP that will support conservation and education efforts.

56. Details regarding the calculation of the CIP is provided in the testimony and supporting schedules of Isaac Gabel-Frank. The tariff revisions and bill impacts related to the proposed CIP are discussed in the testimony and supporting schedules of Thomas Kaufmann and information regarding the BGSS savings test is provided in the testimony of Leonard J. Willey.

57. The Company will commit to filing a base rate case within five years of Board approval of the proposed CIP.

VII. PROCEDURAL MATTERS AND DIRECT TESTIMONY

58. 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.

59. 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.

60. Accordingly, Elizabethtown 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 .

61. Elizabethtown 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 Elizabethtown 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.

62. Elizabethtown 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.

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

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

Exhibit D: Direct Testimony of Frank J. Vetri, Manager, Energy Efficiency Programs for Elizabethtown;

Exhibit E: Direct Testimony of Thomas Kaufmann, Manager of Rates and Tariffs for Elizabethtown;

Exhibit F: Direct Testimony of Leonard J. Willey, Manager, Gas Supply for Elizabethtown; and

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

65. 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.

66. Similarly, Elizabethtown 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.

VIII. CONCLUSION AND REQUEST FOR APPROVAL

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

1. Finding that the EEPs are in the public interest and authorizing Elizabethtown 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 EEP Rider (Rider "E" of the Company's Tariff);

3. Approving Elizabethtown's request for an increase of $0.0082 per therm to its EEP rate until the Company submits its next annual EEP rate filing or the Board issues an Order changing such rates;

4. Approving implementation of a CIP for Elizabethtown as discussed herein;

5. Permitting Elizabethtown to make adjustments to budgets and incentives for EEPs as permitted by the June 2020 Order; and

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

Respectfully submitted,

ELIZABETHTOWN GAS COMPANY

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

Dated: September 25, 2020

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

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VERIFICATION

I, Christie McMullen, of full age, being duly sworn according to law, upon my oath, depose and say:

1. I am President of Elizabethtown 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.

Christie McMullen
President

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

Exhibit A

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

On September 25, 2020, Elizabethtown Gas Company ("Company" or "Elizabethtown") 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 Elizabethtown's residential and commercial customers to encourage energy efficiency. The proposed program budget is approximately $100 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 $0.0073 per therm. The proposed Year 1 EEP rate will be $0.0155 per therm. This represents an increase of $0.0082 per therm to the current EEP rate of $0.0073 per therm for a total combined EEP rate of $0.0155 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	New Program	Increase	100 Therm Bill Change
July 1, 2021	$0.0073	$0.0155	$0.0082	$0.82
July 1, 2022	$0.0073	$0.0237	$0.0164	$1.64
July 1, 2023	$0.0073	$0.0359	$0.0286	$2.86

If the new program is approved, the effect of the Year 1 rate change of $0.0082 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	$106.14	$106.96	$0.82	0.8%

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 Elizabethtown's website: www.elizabethtowngas.com/rates-and-tariff under Regulatory Information.

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: Month Day, Year

Hearing Times: 4:30 pm and 5:30 pm

Dial-In: 866-984-3163

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.

Elizabethtown Gas Company
Christie McMullen –President and Chief Operating Officer

Exhibit B

In the Matter of the Petition of Elizabethtown Gas Company
For Approval of New Energy Efficiency Programs and Associated Cost Recovery Mechanism
Pursuant to the Clean Energy Act and the Establishment of a Conservation Incentive Program

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.	TK-5 - Comparative Balance Sheet 2017 – 2019 TK-6 - Comparative Income Statement 2017 – 2019 TK-7 - Balance Sheet at June 2020 TK-8 - Statement of Revenue at December 2019 TK-9 – Payments and Accruals to Affiliated Companies TK-11 - Pro Forma Income Statement TK -12 - Pro Forma Balance Sheet TK-14 - Proposed Tariff Sheets Exhibit-A - Form of Public Notice
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.	TK-10- Energy Efficiency Chart of Accounts TK-11- Pro Forma Income Statement TK-12 - Pro Forma Balance Sheet

Exhibit B

In the Matter of the Petition of Elizabethtown Gas Company
For Approval of New Energy Efficiency Programs and Associated Cost Recovery Mechanism
Pursuant to the Clean Energy Act and the Establishment of a Conservation Incentive Program

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
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 Tom Kaufmann, §§ III-VI (p. 4-14) TK -1- Annual Revenue Requirements TK -2- Weighted Average Cost of Capital TK -3- Derivation of Revenue Factor Exhibit G - Direct Testimony of Isaac Gabel-Frank, §§ III-IV (p. 6-23) FJV-1 Energy Efficiency Program Plan IGF-3 – Cost-Benefit Analysis Workpapers (Confidential) *Electronic schedules supporting the cost benefit analysis will be provided upon execution of a Non-Disclosure Agreement agreeable to all parties.*

Exhibit B

In the Matter of the Petition of Elizabethtown Gas Company
For Approval of New Energy Efficiency Programs and Associated Cost Recovery Mechanism
Pursuant to the Clean Energy Act and the Establishment of a Conservation Incentive Program

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
d. The filing shall include testimony supporting the petition, including all proposed programs.	Exhibit D - Direct Testimony of Frank J. Vetri Exhibit E - Direct Testimony of Tom Kaufmann Exhibit F – Direct Testimony of Leonard J. Willey Exhibit G- 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 iv. Proposed incentives, including incentive payment processes and timeframes	Exhibit D – Direct Testimony of Frank J. Vetri, §§ III-VII (p. 2-17) FJV-1 Energy Efficiency Program Plan, § 3, 7, 8, 9 (p. 4-71, 78-82) FJV-1 Energy Efficiency Program Plan, Appendix A, B, C (p. 87-113) IGF-8 – Quantitative Performance Indicators IGF-3 – Cost-Benefit Analysis Workpapers (Confidential)

In the Matter of the Petition of Elizabethtown Gas Company
For Approval of New Energy Efficiency Programs and Associated Cost Recovery Mechanism
Pursuant to the Clean Energy Act and the Establishment of a Conservation Incentive Program

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
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 Elizabethtown Gas Company
For Approval of New Energy Efficiency Programs and Associated Cost Recovery Mechanism
Pursuant to the Clean Energy Act and the Establishment of a Conservation Incentive Program

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 Frank J. Vetri, §§ VI-VII (p. 6-17) Exhibit G – Direct Testimony Isaac Gabel-Frank, §§ III-IV (p. 6-23) IGF-2 – Cost-Benefit Results Summary IGF-3 – Cost-Benefit Analysis Workpapers (Confidential) FJV-1 – Energy Efficiency Program Plan, §§ 2, 5, 7, 8, 9, 10 (p. 2-3, 73-74, 78-83) Appendix A (p. 99)

Exhibit B

In the Matter of the Petition of Elizabethtown Gas Company
For Approval of New Energy Efficiency Programs and Associated Cost Recovery Mechanism
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MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
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 allocation of costs and energy savings among the utilities.	Exhibit D – Direct Testimony of Frank J. Vetri, § VII (p. 8-17) FJV-1 – Energy Efficiency Program Plan, § 6 (p. 75-77)
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. 14) IGF-3 – Cost-Benefit Analysis Workpapers (Confidential)

Exhibit B

In the Matter of the Petition of Elizabethtown Gas Company
For Approval of New Energy Efficiency Programs and Associated Cost Recovery Mechanism
Pursuant to the Clean Energy Act and the Establishment of a Conservation Incentive Program

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.	TK-11 - Pro Forma Income Statement TK-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 Tom Kaufmann, §§ III-V (p. 4-12) TK-10 – Energy Efficiency Chart of Accounts
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 Tom Kaufmann, §§ III-IV (p. 4-10)

Exhibit B

In the Matter of the Petition of Elizabethtown Gas Company
For Approval of New Energy Efficiency Programs and Associated Cost Recovery Mechanism
Pursuant to the Clean Energy Act and the Establishment of a Conservation Incentive Program

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
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 acertification of service demonstrating that the petition was served on the New Jersey Division of Rate Counsel simultaneous to its submission to the Board.	See Verified Petition
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.	TK-1 - Annual Revenue Requirements TK-13 - Annual Rate and Bill Impact Summary

Exhibit B

In the Matter of the Petition of Elizabethtown Gas Company
For Approval of New Energy Efficiency Programs and Associated Cost Recovery Mechanism
Pursuant to the Clean Energy Act and the Establishment of a Conservation Incentive Program

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
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.	FJV-1 Energy Efficiency Program Plan, § 3 (p. 4-71) FJV-1 Energy Efficiency Program Plan, Appendix A (p. 87-99) Exhibit D – Direct Testimony of Frank J. Vetri, § 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 effects upon rate base and pro forma income calculations.	TK-1 - Annual Revenue Requirements
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 Tom Kaufmann, § III (p. 4-7) TK-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 Tom Kaufmann, §§ III, IV (p. 4-10) TK-4 - Monthly Recovery and Interest Calculation

Exhibit B

In the Matter of the Petition of Elizabethtown Gas Company
For Approval of New Energy Efficiency Programs and Associated Cost Recovery Mechanism
Pursuant to the Clean Energy Act and the Establishment of a Conservation Incentive Program

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
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.	Elizabethtown is not seeking incentives in this 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. 18) FJV-1 Energy Efficiency Program Plan, § 10 (p. 83) Exhibit G - Direct Testimony of Isaac Gabel-Frank, § III, IV (p. 6-23) IGF-2 - Cost-Benefit Results 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. 18) FJV-1 Energy Efficiency Program Plan, § 2 (p. 2-3) Exhibit G - Direct Testimony of Isaac Gabel-Frank, § III, IV, V, XI (p. 6-23, 37) IGF-2 - Cost-Benefit Results Summary 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	Not Applicable

In the Matter of the Petition of Elizabethtown Gas Company
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MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
benefits resulting from such a proposed program as well as provide the projected costs.	
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 G - Direct Testimony of Isaac Gabel-Frank, § IV (p. 21) IGF-3 – Cost-Benefit Analysis Workpapers (Confidential)
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 G - Direct Testimony of Isaac Gabel-Frank, § IV (p. 22) 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.	FJV-1 Energy Efficiency Program Plan. § 5 (p. 73-74)

Exhibit B

In the Matter of the Petition of Elizabethtown Gas Company
For Approval of New Energy Efficiency Programs and Associated Cost Recovery Mechanism
Pursuant to the Clean Energy Act and the Establishment of a Conservation Incentive Program

MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
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 G - Direct Testimony of Isaac Gabel-Frank, § III (p. 10) IGF-8 – Quantitative Performance Indicators FJV-1 – Energy Efficiency Program Plan, § 9 (p. 82)
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 G - Direct Testimony of Isaac Gabel-Frank, § III (p. 10) IGF-8 – Quantitative Performance Indicators FJV-1 – Energy Efficiency Program Plan, § 9 (p. 82)

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In the Matter of the Petition of Elizabethtown Gas Company
For Approval of New Energy Efficiency Programs and Associated Cost Recovery Mechanism
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MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
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 Frank J. Vetri, § VI (p. 6-8) FJV-1 – Energy Efficiency Program Plan, § 7 (p. 79)
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 Frank J. Vetri, § VI (p. 6-8) FJV-1 – Energy Efficiency Program Plan, § 7 (p. 79)

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In the Matter of the Petition of Elizabethtown Gas Company
For Approval of New Energy Efficiency Programs and Associated Cost Recovery Mechanism
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MINIMUM FILING REQUIREMENTS FOR PETITIONS UNDER N.J.S.A. 48:3-98.1	LOCATION IN FILING
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.	Exhibit D – Direct Testimony of Frank J. Vetri, § VI (p. 6-8) FJV-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 ELIZABETHTOWN GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT AND THE ESTABLISHMENT OF A CONSERVATION INCENTIVE PROGRAM	**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 Elizabethtown Gas Company ("ETG" 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.

ELIZABETHTOWN 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

Exhibit C

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF ELIZABETHTOWN GAS COMPANY FOR APPROVAL OF NEW ENERGY EFFICIENCY PROGRAMS AND ASSOCIATED COST RECOVERY PURSUANT TO THE CLEAN ENERGY ACT AND THE ESTABLISHMENT OF A CONSERVATION INCENTIVE PROGRAM	**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 Elizabethtown 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

FRANK J. VETRI

Manager, Energy Efficiency Programs
Elizabethtown Gas

On Behalf of
Elizabethtown Gas Company

September 25, 2020

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Frank J. Vetri. My business address is 520 Green Lane, Union, New Jersey, 07083.

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

A. I am employed by Elizabethtown Gas Company ("ETG" or "Company") as Program Manager – Energy Efficiency Programs.

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

A. I manage all energy efficiency programs for Elizabethtown Gas.

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

A. I have a Bachelor of Arts degree in Economics from Rutgers University. I have 10 years of experience in the utility industry managing energy efficiency programs; including 9 years with Public Service Electric and Gas Company in New Jersey. I am the Senior Program Manager for the New Jersey Comfort Partners Program. I joined the Elizabethtown Gas team in August of 2019 as the Manager – Energy Efficiency Programs. In my current position, 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.

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") 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 FJV-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 FJV-1, which was prepared under my direction and supervision. This schedule contains information responsive to various MFRs, including the EEP Program Plan, and contains a breakdown of expenditures, participants, savings, and emissions data.

III. PROGRAM OVERVIEW

Q. Please describe the proposed EEP Program.

A. Through the EEP Program, the Company is proposing to invest up to $90.6 million and spend approximately $9.3 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 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 Program is set forth in Table 1 below. Detailed program descriptions for each of the proposed EEPs are attached hereto as Schedule FJV-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 ETG's EEP.

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

Table 2: EEP Participation Rates

Subprogram	PY 1	PY 2	PY 3	Total
Behavior	150,000	155,000	160,000	**465,000**
Efficient Products	16,375	21,627	31,650	**69,652**
Existing Homes HPwES	100	150	200	**450**
Existing Homes QHEC	850	1,200	1,650	**3,700**
Existing Homes Moderate Income Weatherization	150	250	450	**850**
Energy Saving Trees	900	1,800	2,700	**5,400**
Multi-Family	510	913	1,219	**2,642**
Energy Solutions for Business: Prescriptive / Custom	1,055	1,372	2,198	**4,625**
Energy Solutions for Business: Engineered Solutions	0	1	3	**4**
Energy Solutions for Business: Energy Management	0	1	3	**4**
Energy Solutions for Business: Direct Install	10	25	45	**80**
Total	**169,950**	**182,339**	**200,119**	**552,407**

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

A. ETG developed the proposed EEP 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 Elizabethtown Gas Energy Efficiency Program Plan, included in Schedule FJV-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 ETG service territory and ensure low-to-moderate income customers have equal opportunity to realize program benefits. The portfolio also puts ETG 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

Program Year	PY 1	PY 2	PY 3
Period	Jul 21 - Jun 22	Jul 22 - Jun 23	Jul 23 - Jun 24
Projected Consumption Baseline (therm)	507,701,794	490,932,159	487,471,731
Savings Target (%)		0.34%	0.51%
Savings Target (therm)		1,669,169	2,486,106
Projected Savings (therm)	1,812,912	1,853,384	2,539,658

V. PROGRAM BUDGET AND DURATION

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

A. As noted above, ETG is proposing an investment budget of approximately $90.6 million and an O&M budget of approximately $9.3 million, for a total overall program budget of approximately $100 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 FJV-1. In accordance with the authority set forth in the June 2020 Order, ETG 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 $185 million in participant bill savings and 0.5 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 Program commence July 1, 2021 and continue for a period of three years through June 30, 2024.

VI. DATA & REPORTING

Q. What data does ETG 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 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 FJV-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 ETG 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.

ETG 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 ETG 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 ETG'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. ETG 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. ETG may share customer information or aggregated customer data with outside third-party implementation contractors, vendors, or trade allies to implement and/or evaluate ETG'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 ETG 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 FJV-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 FJV-1 for market barriers by program and how ETG 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. ETG 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 ETG'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. ETG 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, ETG will develop and provide outreach materials in Spanish.

ETG 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, ETG 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. ETG 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, ETG 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, ETG 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, ETG may include focused outreach efforts to reach minority- and women-owned small businesses, as well as start-up companies. ETG 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. ETG 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, ETG 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. ETG 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. ETG will also employ strategies to ensure that landlords understand the long-term benefits of participating in EEPs. ETG 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. ETG 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, ETG 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, ETG 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 2,145 direct and/or indirect job-year equivalents.[1] Further detail on potential job creation for each EEP is reflected in Schedule FJV-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 FJV-1 for an overview of the SWC.

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

A. ETG 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 FJV-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. ETG 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 FJV-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, Frank Vetri, of full age, being duly sworn according to law, upon my oath, depose and say:

1. I am Manager – Energy Efficiency Programs for Elizabethtown 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.

Frank Vetri
Manager – Energy Efficiency Programs

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

Elizabethtown Gas Company

Energy Efficiency Program Plan
July 2021 – June 2024

Prepared by:
Elizabethtown Gas Company

Table of Contents

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1. INTRODUCTION

Elizabethtown Gas Company ("ETG") delivers safe, reliable, and affordable natural gas service to approximately 300,000 residential, commercial and industrial customers in parts of Union, Middlesex, Sussex, Warren, Hunterdon, Morris and Mercer counties.

ETG's current energy efficiency ("EE") portfolio offers resources to help customers save money while reducing their carbon footprint. Resources for residential customers include:

- Free home energy assessments - During the assessment, the contractor may install energy-efficient measures including programmable thermostats, low-flow shower heads, and faucet aerators.
- High-efficiency equipment rebates - ETG offers rebates on top of the New Jersey's Clean Energy Program rebates for the purchase and installation of high-efficiency natural gas equipment.
- Home weatherization for income-qualified customers - This program includes a home energy assessment, HVAC system testing, and installation of energy-saving measures including a programmable thermostat.
- 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.

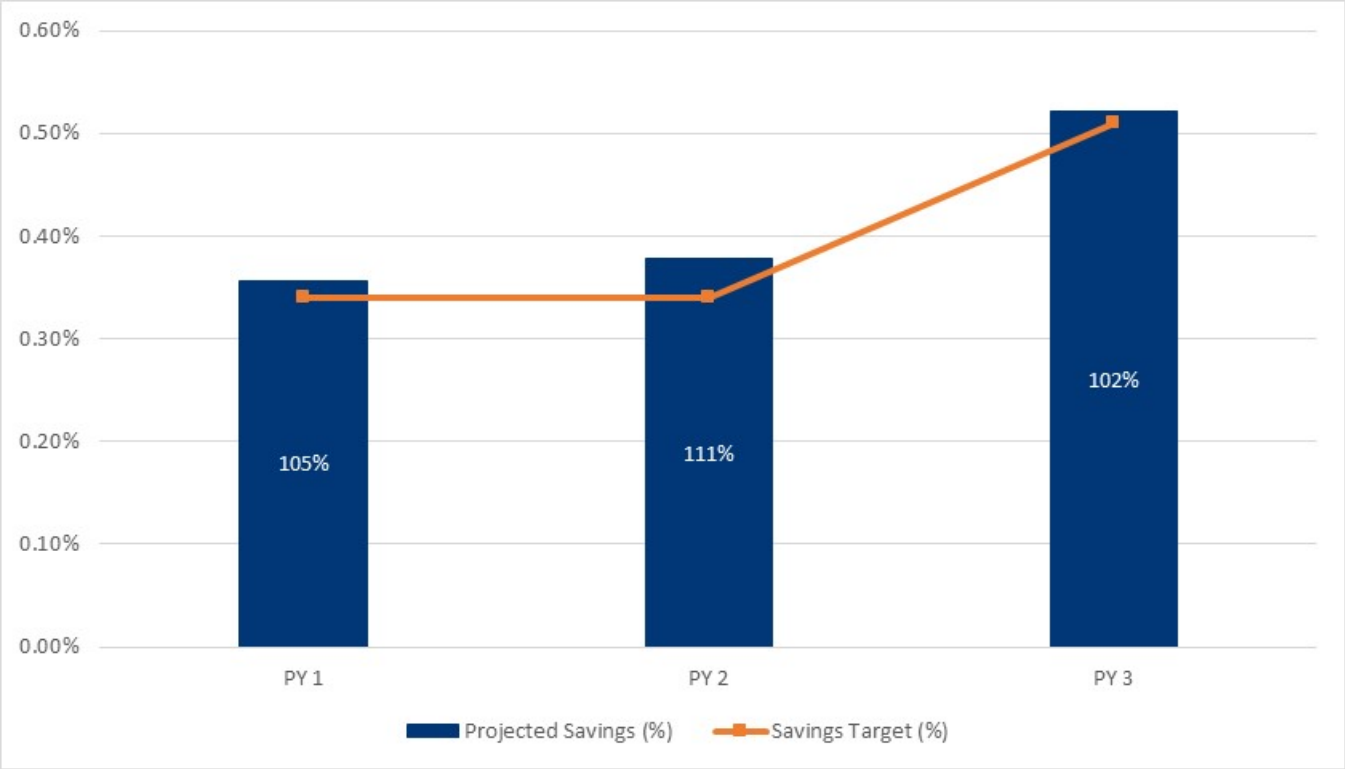
For commercial and industrial customers, ETG offers:

- Steam trap survey, repair, and maintenance program – This program is designed to help hospitals, schools, and municipalities maximize the value received from repairing and maintaining their natural gas steam boiler systems.

ETG 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 ("EMP"), the New Jersey Global Warming Response Act ("GWRA"), the Act Concerning the Reduction of Greenhouse Gas Emissions ("RGGI law"), and the Clean Energy Act ("CEA") of 2018.

2. PORTFOLIO OVERVIEW

The proposed EE Portfolio consists of Core, Utility-Led, and Pilot programs over three years between 2021 and 2024 which aim to increase energy efficiency throughout the ETG service territory. This Program Plan, provides customers with a mix of existing and new EE programs administered by ETG. 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: ETG 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

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 ETG 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 $185 million in participant bill savings and 0.5 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 1.9 and a Societal Cost Test score of 4.6. 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	2.1	4.3	0.7	3.2	0.8	0.5
C&I	3.0	5.8	1.6	3.7	1.9	1.2
LMI	0.8	1.2	0.3	1.7	0.3	0.2
Total Portfolio (Res+C&I)	1.9	4.6	1.0	3.4	1.1	0.7
Behavior	1.8	1.6	0.7	2.7	0.7	0.4
Efficient Products	2.1	4.9	0.7	3.1	0.9	0.5
Existing Homes HPwES	1.0	2.0	0.4	1.9	0.4	0.3
Existing Homes QHEC	4.4	7.1	1.8	8.2	1.4	0.7
Existing Homes Moderate Income Weatherization	0.8	1.2	0.3	1.7	0.3	0.2
Energy Saving Trees	6.1	10.1	1.6	8.0	1.6	0.6
Multi-Family	2.1	3.6	0.9	2.7	1.0	0.7
Energy Solutions for Business: Prescriptive and Custom	5.3	8.8	2.8	4.0	3.9	2.1
Energy Solutions for Business: Engineered Solutions	1.3	3.9	0.6	3.0	0.9	0.7
Energy Solutions for Business: Energy Management	2.8	5.8	1.5	3.6	1.5	1.3
Energy Solutions for Business: Direct Install	3.7	6.2	1.8	5.0	1.5	0.9
Pilots	0.0	1.4	0.0	1.0	0.0	0.0

3. PROGRAM DESCRIPTIONS

ETG will administer the following programs and subprograms to engage customers and encourage the pursuit of EE solutions from single transactions to comprehensive upgrades. ETG 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 the residential, commercial, industrial, and multifamily sectors. Next the ETG 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)

ETG 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 will be able to access historic usage data through the ETG 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[1]	16,375	21,627	31,650
Projected Net Annual Natural Gas Savings (therms)	653,816	848,528	1,241,482
Projected Net Lifetime Natural Gas Savings (therms)	6,187,009	7,791,358	11,416,347
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	-	-	-
Projected Net Annual Electric Savings (kWh)	1,251,648	1,737,150	2,600,820
Projected Net Lifetime Electric Savings (kWh)	9,415,119	13,069,338	19,580,168
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	-	-	-
Projected Net Annual Peak Demand Savings (kW)	0	0	0
Projected Net Lifetime Peak Demand Savings (kW)	1	1	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	-	-	-
Utility Administration	221,841	264,835	370,184
Marketing	104,296	128,791	186,231
Outside Services	631,420	751,329	1,046,631

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

Incentives-rebates and other	2,226,835	2,801,688	4,123,932
Incentives-financing	3,534,973	3,905,438	5,825,635
Inspections and Quality Control	33,946	35,115	41,239
Evaluation	299,734	318,133	429,254
Total	7,053,045	8,205,329	12,023,107

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, ETG will develop and provide outreach materials in Spanish. ETG 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)

ETG 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 will be able to access historic usage data through the ETG 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. Participants are number of households completing the HPwES subprogram. 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	100	150	200
Projected Net Annual Natural Gas Savings (therms)	32,991	49,486	65,981
Projected Net Lifetime Natural Gas Savings (therms)	560,839	841,259	1,121,678
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	-	-	-
Projected Net Annual Electric Savings (kWh)	95,750	143,625	191,500
Projected Net Lifetime Electric Savings (kWh)	1,627,754	2,441,631	3,255,508
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	-	-	-
Projected Net Annual Peak Demand Savings (kW)	3	5	6
Projected Net Lifetime Peak Demand Savings (kW)	55	83	110

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	-	-	-
Utility Administration	63,148	89,878	113,800
Marketing	29,689	43,708	57,250
Outside Services	179,737	254,982	321,750
Incentives-rebates and other	633,880	950,820	1,267,760

Incentives-financing	770,000	1,155,000	1,540,000
Inspections and Quality Control	9,663	11,917	12,678
Evaluation	73,031	99,883	121,135
Total	1,759,147	2,606,188	3,434,374

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. ETG 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, ETG 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, ETG may engage community partners, including chambers of commerce and other local organizations including those comprised of underrepresented and socially or economically disadvantaged individuals. ETG 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 ETG.

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.

ETG 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. ETG'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, ETG 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. ETG 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.

ETG 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 ETG. If used, the third-party implementation contractor will work closely with ETG 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 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)

ETG 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	10	25	45
Projected Net Annual Natural Gas Savings (therms)	13,809	34,522	62,140
Projected Net Lifetime Natural Gas Savings (therms)	207,133	517,832	932,098
Projected Net Lifetime Natural Gas Savings from Qualifying Small-Business Customers (therms)	207,133	517,832	932,098
Projected Net Annual Electric Savings (kWh)	458,584	1,146,461	2,063,629
Projected Net Lifetime Electric Savings (kWh)	6,878,764	17,196,910	30,954,439
Projected Net Lifetime Electric Savings from Qualifying Small-Business Customers (kWh)	6,878,764	17,196,910	30,954,439
Projected Net Annual Peak Demand Savings (kW)	12	31	56
Projected Net Lifetime Peak Demand Savings (kW)	187	467	840

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	-	-	-
Utility Administration	45,181	107,176	183,199
Marketing	21,242	52,121	92,163
Outside Services	128,598	304,057	517,963
Incentives-rebates and other	453,528	1,133,821	2,040,877
Incentives-financing	157,746	394,365	709,856
Inspections and Quality Control	6,914	14,211	20,409
Evaluation	31,799	72,485	118,675
Total	845,008	2,078,235	3,683,143

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 ETG 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 ETG'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 ETG, 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 ETG'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 includes 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 ETG 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, ETG 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, ETG 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, ETG 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

ETG will seek to manage barriers to subprogram success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. ETG'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. ETG 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)

ETG 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, ETG will use its strong customer and marketplace relationships to support multiple implementation strategies to achieve subprogram goals.

- **Trade Allies:** ETG 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:** ETG 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. ETG 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 ETG application forms.
- **Midstream:** ETG 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. ETG 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 ETG 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 ETG 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:** ETG 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 ETG 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

ETG 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)

ETG 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	1,055	1,372	2,198
Projected Net Annual Natural Gas Savings (therms)	132,900	172,635	280,413
Projected Net Lifetime Natural Gas Savings (therms)	807,262	1,047,425	1,738,830
Projected Net Lifetime Natural Gas Savings from Qualifying Small-Business Customers (therms)	-	-	-
Projected Net Annual Electric Savings (kWh)	848,713	1,227,199	2,282,045
Projected Net Lifetime Electric Savings (kWh)	18,823,731	26,328,927	46,904,196
Projected Net Lifetime Electric Savings from Qualifying Small-Business Customers (kWh)	-	-	-
Projected Net Annual Peak Demand Savings (kW)	45	61	103
Projected Net Lifetime Peak Demand Savings (kW)	1,086	1,448	2,407

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	-	-	-
Utility Administration	57,428	75,561	126,641
Marketing	26,999	36,746	63,710

Outside Services	163,457	214,365	358,056
Incentives-rebates and other	576,466	799,361	1,410,812
Incentives-financing	441,565	448,757	470,333
Inspections and Quality Control	8,788	10,019	14,108
Evaluation	52,959	59,201	81,158
Total	1,327,664	1,644,010	2,524,819

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[2].

- **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.

[2] 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[3]**	**Proposed Incentive**
Energy Assessment with installation of	N/A	• Energy Assessment with the equipment and installation costs for the standard energy

[3] 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)

ETG 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 will be able to access historic usage data through the ETG home energy report portal usage using the Green Button option. ETG 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 estimate represents number of apartments or buildings participating in the Multi-Family program. 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	510	913	1,219
Projected Net Annual Natural Gas Savings (therms)	20,222	38,483	62,055
Projected Net Lifetime Natural Gas Savings (therms)	304,278	593,107	1,005,701
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	-	-	-
Projected Net Annual Electric Savings (kWh)	258,441	858,275	1,783,295
Projected Net Lifetime Electric Savings (kWh)	3,452,626	13,767,464	31,135,197
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	-	-	-
Projected Net Annual Peak Demand Savings (kW)	3	12	28
Projected Net Lifetime Peak Demand Savings (kW)	44	207	501

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	-	-	-
Utility Administration	49,673	102,047	169,281
Marketing	23,353	49,626	85,161
Outside Services	141,382	289,505	478,611
Incentives-rebates and other	498,614	1,079,556	1,885,822
Incentives-financing	24,750	269,858	710,575
Inspections and Quality Control	7,601	13,531	18,858
Evaluation	27,226	64,006	112,016
Total	772,599	1,868,129	3,460,324

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 ETG 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 ETG territory. The actual number of participants will be established by ETG 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 ETG 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, ETG 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. ETG 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 ETG'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.

ETG will seek to manage all barriers to program success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. ETG 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, ETG 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. ETG 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, ETG 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 ETG 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)

ETG 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 will be able to access historic usage data through the ETG 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	155,000	160,000
Projected Net Annual Natural Gas Savings (therms)	907,885	583,168	560,152
Projected Net Lifetime Natural Gas Savings (therms)	1,944,452	1,248,994	1,199,699
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	-	-	-
Projected Net Annual Electric Savings (kWh)	-	-	-
Projected Net Lifetime Electric Savings (kWh)	-	-	-
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	-	-	-
Projected Net Annual Peak Demand Savings (kW)	-	-	-
Projected Net Lifetime Peak Demand Savings (kW)	-	-	-

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	-	-	-
Utility Administration	46,875	48,438	50,000
Marketing	-	-	-
Outside Services	-	-	-
Incentives-rebates and other	937,500	968,750	1,000,000
Incentives-financing	-	-	-
Inspections and Quality Control	-	-	-
Evaluation	48,770	45,950	43,143
Total	1,033,145	1,063,137	1,093,143

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. ETG 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.

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

The QHEC subprogram will be available to all single-family and single-family attached (1 to 4 unit properties)[4] 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 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)

ETG 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. ETG 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 ETG 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. ETG will focus on promoting the subprogram to underrepresented demographics. ETG will also provide outreach materials

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

in Spanish and can reach younger demographics through a robust digital marketing plan. ETG 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).

ETG will seek to manage all barriers to program success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. ETG'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 ETG'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, ETG 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, ETG 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)

ETG 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)

ETG 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 will be able to access historic usage data through the ETG 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	1,650
Projected Net Annual Natural Gas Savings (therms)	24,029	33,923	46,644
Projected Net Lifetime Natural Gas Savings (therms)	183,912	259,640	357,005
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	-	-	-
Projected Net Annual Electric Savings (kWh)	721,133	1,018,070	1,399,846

Projected Net Lifetime Electric Savings (kWh)	8,341,769	11,776,614	16,192,845
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	-	-	-
Projected Net Annual Peak Demand Savings (kW)	8	11	15
Projected Net Lifetime Peak Demand Savings (kW)	87	122	168

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	-	-	-
Utility Administration	40,963	54,873	71,649
Marketing	19,258	26,685	36,045
Outside Services	116,592	155,673	202,576
Incentives-rebates and other	411,188	580,500	798,188
Incentives-financing	-	-	-
Inspections and Quality Control	6,268	7,276	7,982
Evaluation	21,390	27,534	34,436
Total	615,660	852,541	1,150,875

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 ETG 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)

ETG 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. ETG 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 ETG to identify customers who are particularly susceptible to changes in weather and would be ideal candidates for an audit and comprehensive weatherization. ETG will also look at customers that did not qualify for the Comfort Partners program that might be eligible for this subprogram. Finally, ETG 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. ETG 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. ETG 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, ETG 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. ETG 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, ETG 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.

ETG will seek to manage all barriers to success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. ETG'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)

ETG 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. ETG 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. ETG 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. ETG 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. ETG 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)

ETG 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 will be able to access historic usage data through the ETG 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	150	250	450
Projected Net Annual Natural Gas Savings (therms)	24,658	41,097	73,975
Projected Net Lifetime Natural Gas Savings (therms)	452,738	754,563	1,358,214
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	452,738	754,563	1,358,214
Projected Net Annual Electric Savings (kWh)	134,044	223,406	402,131
Projected Net Lifetime Electric Savings (kWh)	1,787,910	2,979,851	5,363,731
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	1,787,910	2,979,851	5,363,731
Projected Net Annual Peak Demand Savings (kW)	3	6	10
Projected Net Lifetime Peak Demand Savings (kW)	63	105	189

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	-	-	-
Utility Administration	111,967	177,068	302,667
Marketing	52,640	86,109	152,264

Outside Services	318,689	502,338	855,736
Incentives-rebates and other	1,123,923	1,873,205	3,371,769
Incentives-financing	-	-	-
Inspections and Quality Control	17,133	23,478	33,718
Evaluation	58,467	88,850	145,468
Total	1,682,820	2,751,048	4,861,622

3.4.4. Energy Saving Trees

This program will promote planting of energy saving trees by residential customers in the ETG 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.[5]

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. ETG 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 ETG.

Marketing Plan (MFR II.a.xiv)

ETG 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. ETG 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.

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

- **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.

ETG will seek to manage all barriers to program success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. ETG 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, ETG 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)

ETG intends to deliver this program through a several keys steps. First, ETG will work with local nurseries to establish distribution partnerships for the trees. For this effort, ETG will pay the program incentive directly to the nurseries to distribute the trees. Second, ETG 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.

ETG 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)

ETG 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 will be able to access historic usage data through the ETG 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[6]	900	1,800	2,700
Projected Net Annual Natural Gas Savings (therms)	2,602	5,204	7,807
Projected Net Lifetime Natural Gas Savings (therms)	78,065	156,131	234,196
Projected Net Lifetime Natural Gas Savings from Qualifying Low-Income Customers (therms)	-	-	-
Projected Net Annual Electric Savings (kWh)	56,936	113,872	170,808
Projected Net Lifetime Electric Savings (kWh)	1,708,078	3,416,156	5,124,235
Projected Net Lifetime Electric Savings from Qualifying Low-Income Customers (kWh)	-	-	-
Projected Net Annual Peak Demand Savings (kW)	-	-	-
Projected Net Lifetime Peak Demand Savings (kW)	-	-	-

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	-	-	-
Utility Administration	4,483	8,507	12,118
Marketing	2,108	4,137	6,096
Outside Services	12,760	24,135	34,262
Incentives-rebates and other	45,000	90,000	135,000
Incentives-financing	-	-	-
Inspections and Quality Control	686	1,128	1,350

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

Evaluation	2,341	4,269	5,824
Total	67,377	132,177	194,651

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 ETG'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)

ETG 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 ETG'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. ETG 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 ETG 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.

ETG will seek to manage all barriers to program success through a commitment to applying best practices in program design, delivery, outreach, and marketing/advertising. ETG'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, ETG 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)

ETG 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:** ETG 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. ETG 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. ETG 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. ETG, 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. ETG will review the project with the Customer for customer agreement on the approved project and coordinate with the Partner Utility as necessary. ETG 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. ETG 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:** ETG 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 ETG and the trade ally engineering firm with updates to the Partner Utility as appropriate.

ETG will select qualified subprogram trade allies to undertake all auditing and engineering work associated with the subprogram. ETG 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 ETG 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 ETG), the program reduces barriers to entry related to knowledge of energy efficiency, confidence in assessments, and measure installation. ETG will perform customer satisfaction and other quality assurance and quality control activities to monitor, ensure program and verify quality standards are met.

ETG's service territory overlaps with Public Service Electric and Gas Company ("PSE&G"), and there will be coordination between the utilities for customer projects that span both service territories. For customers that are served by both ETG and PSE&G, ETG 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, ETG will take the lead, and if the measures are predominately electric, PSE&G 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, ETG 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.

ETG 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)

ETG 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)

ETG 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	3
Projected Net Annual Natural Gas Savings (therms)	-	43,918	131,754
Projected Net Lifetime Natural Gas Savings (therms)	-	878,361	2,635,082
Projected Net Lifetime Natural Gas Savings from Qualifying Small-Business Customers (therms)	-	-	-
Projected Net Annual Electric Savings (kWh)	-	591,913	1,775,738
Projected Net Lifetime Electric Savings (kWh)	-	11,838,256	35,514,767

Projected Net Lifetime Electric Savings from Qualifying Small-Business Customers (kWh)	-	-	-
Projected Net Annual Peak Demand Savings (kW)	-	16	49
Projected Net Lifetime Peak Demand Savings (kW)	-	323	970

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	-	-	-
Utility Administration	22,629	126,836	309,218
Marketing	10,639	61,681	155,560
Outside Services	64,410	359,832	874,258
Incentives-rebates and other	227,155	1,341,804	3,444,749
Incentives-financing	136,293	804,913	2,066,341
Inspections and Quality Control	3,463	16,817	34,447
Evaluation	18,907	101,823	237,765
Total	483,495	2,813,708	7,122,337

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 ETG. 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. ETG 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 ETG'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 ETG'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.

ETG 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. ETG 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. ETG 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. ETG 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.

ETG will seek to manage all barriers to subprogram success through a commitment to applying best practices in subprogram design, delivery, outreach, and marketing/advertising. ETG'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, ETG 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)

ETG 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. ETG staff and/or third-party implementation contractors will oversee all aspects of the subprogram. ETG 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. ETG 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.

ETG 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. ETG 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.

ETG 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)

ETG 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	-	1	3
Projected Net Annual Natural Gas Savings (therms)	-	2,418	7,255
Projected Net Lifetime Natural Gas Savings (therms)	-	48,366	145,098
Projected Net Lifetime Natural Gas Savings from Qualifying Small-Business Customers (therms)	-	-	-
Projected Net Annual Electric Savings (kWh)	-	61,184	183,552
Projected Net Lifetime Electric Savings (kWh)	-	1,223,682	3,671,047
Projected Net Lifetime Electric Savings from Qualifying Small-Business Customers (kWh)	-	-	-
Projected Net Annual Peak Demand Savings (kW)	-	1	4
Projected Net Lifetime Peak Demand Savings (kW)	-	29	88

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	-	-	-
Utility Administration	-	6,741	19,204
Marketing	-	3,278	9,661
Outside Services	-	19,124	54,296
Incentives-rebates and other	-	71,313	213,938
Incentives-financing	-	14,250	42,750
Inspections and Quality Control	-	894	2,139
Evaluation	-	4,058	11,074
Total	-	119,658	353,064

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 ETG 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 ETG 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	-	-	-
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	-	-	-
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 ETG 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 ETG 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. ETG 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 ETG tests different delivery and enrollment methods. ETG 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 ETG 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. ETG 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.

ETG 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 ETG 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, ETG 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)

ETG 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. ETG 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, ETG 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)

ETG 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 will be able to access historic usage data through the ETG 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 ETG 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 ETG 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)

ETG will recruit large C&I customers and CSPs and this pilot program would be ready for deployment in the first winter after ETG 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)

ETG 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 ETG's Residential and C&I customers with the goal of integrating these new methods as part of ETG's offerings. The demonstration of new technologies will allow ETG 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[7] ("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. ETG can provide an incentive for each student who completes the program.

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

- 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.

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

All Residential and C&I customer could potentially benefit from this pilot program. ETG 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)

ETG 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)

ETG 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 will be able to access historic usage data through the ETG home energy report portal usage using the Green Button option. ETG 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 ETG 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.

ETG 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 ETG 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. ETG 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. ETG may share customer information or aggregated customer data with outside third-party implementation contractors, vendors, or trade allies to implement and/or evaluate ETG'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.[8]

[8] 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)

ETG 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.

ETG 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 $100,000 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 ETG planned value, by program year, for each of the seven metrics.

Table 26 – ETG QPIs

QPI Metric	PY 1	PY 2	PY 3
Annual Energy Savings (therm)	1,812,912	1,853,384	2,539,658
Annual Demand Savings (Pk therm)	263	244	308
Lifetime Energy Savings (therm)	10,725,688	14,137,035	22,143,949
Lifetime of Persisting Demand Savings (Pk therm)	1,434	1,640	2,284
NPV of UCT Net Benefits ($)	1,302,501	1,611,793	2,370,175
Low-Income Lifetime Savings (therm)[9]	452,738	754,563	1,358,214
Small Business Lifetime Savings (therm)[10]	207,133	517,832	932,098

[9] Based upon the Moderate-Income Weatherization Program
[10] Based upon the Small Busines Direct Install Program

10. COST-EFFECTIVENESS

This section summarizes the approach and results of the cost-effectiveness analysis for the ETG proposed portfolio of programs. The cost-effectiveness analysis for the ETG 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.[11] 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	2.1	4.3	0.7	3.2	0.8	0.5
C&I	3.0	5.8	1.6	3.7	1.9	1.2
LMI	0.8	1.2	0.3	1.7	0.3	0.2
Total Portfolio (Res+C&I)	1.9	4.6	1.0	3.4	1.1	0.7
Behavior	1.8	1.6	0.7	2.7	0.7	0.4
Efficient Products	2.1	4.9	0.7	3.1	0.9	0.5
Existing Homes HPwES	1.0	2.0	0.4	1.9	0.4	0.3
Existing Homes QHEC	4.4	7.1	1.8	8.2	1.4	0.7
Existing Homes Moderate Income Weatherization	0.8	1.2	0.3	1.7	0.3	0.2
Energy Saving Trees	6.1	10.1	1.6	8.0	1.6	0.6
Multi-Family	2.1	3.6	0.9	2.7	1.0	0.7
Energy Solutions for Business: Prescriptive and Custom	5.3	8.8	2.8	4.0	3.9	2.1
Energy Solutions for Business: Engineered Solutions	1.3	3.9	0.6	3.0	0.9	0.7

[11] 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: Energy Management	2.8	5.8	1.5	3.6	1.5	1.3
Energy Solutions for Business: Direct Install	3.7	6.2	1.8	5.0	1.5	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, ETG 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 ETG's energy efficiency programs.

Table 28 – Estimated Job-Year Creation

Program	Direct Job Creation	Indirect + Induced Job Creation	Total Job Creation
Behavior	2	7	9
Efficient Products	323	419	742
Existing Homes HPwES	44	30	74
Existing Homes QHEC	13	61	74
Existing Homes Moderate Income Weatherization	48	8	56
Energy Saving Trees	4	26	30
Multi-Family	63	61	123
Energy Solutions for Business: Prescriptive and Custom	224	182	406
Energy Solutions for Business: Engineered Solutions	180	165	344
Energy Solutions for Business: Energy Management	11	8	18
Energy Solutions for Business: Direct Install	95	75	170
Pilots	56	22	78
Portfolio Costs	31	-12	19
Total	**1,094**	**1,051**	**2,145**

The following chart shows the expected economic value-added activity created by ETG's energy efficiency programs.

Table 29 – Estimated Economic Value Added

Subprogram	Value Added to GDP (NPV)	Value Added to GDP (Nominal)
Behavior	1,321,222	1,037,980
Efficient Products	58,382,894	70,133,163
Existing Homes HPwES	5,268,474	6,518,564
Existing Homes QHEC	5,458,345	8,088,590
Existing Homes Moderate Income Weatherization	4,830,709	5,827,039
Energy Saving Trees	1,244,228	3,115,763
Multi-Family	6,407,404	11,978,703
Energy Solutions for Business: Prescriptive and Custom	15,154,457	30,299,584
Energy Solutions for Business: Engineered Solutions	16,034,944	36,404,917
Energy Solutions for Business: Energy Management	757,008	1,418,447
Energy Solutions for Business: Direct Install	9,878,813	16,218,188
Pilots	8,950,998	8,392,757
Portfolio Costs	1,960,080	1,661,642
Total	**135,649,576**	**201,095,337**

10.3. Environmental Emissions Savings

The ETG 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 ETG's energy efficiency programs.

Table 30 – Estimated Environmental Emissions Savings

Subprogram	CO_2 Emissions Reduction (tons)	SO_2 Emissions Reduction (tons)	NOx Emissions Reduction (tons)
Behavior	25,332	0	20
Efficient Products	175,242	16	130
Existing Homes HPwES	19,109	3	14
Existing Homes QHEC	26,901	14	15
Existing Homes Moderate Income Weatherization	21,102	4	15
Energy Saving Trees	8,223	4	5
Multi-Family	38,920	18	24
Energy Solutions for Business: Prescriptive and Custom	73,591	35	45
Energy Solutions for Business: Engineered Solutions	46,891	18	31
Energy Solutions for Business: Energy Management	3,952	2	2

Energy Solutions for Business: Direct Install	42,692	21	25
Pilots	0	0	0
Portfolio Costs	0	0	0
Total	**481,957**	**135**	**326**

APPENDIX A – PROGRAM PARTICIPATION, SAVINGS, AND COST DETAILS

Participation and Savings Estimates

Table 31 – Estimated Participants

Participants

Subprogram	PY 1	PY 2	PY 3	Total
Behavior	150,000	155,000	160,000	**465,000**
Efficient Products	16,375	21,627	31,650	**69,652**
Existing Homes HPwES	100	150	200	**450**
Existing Homes QHEC	850	1,200	1,650	**3,700**
Existing Homes Moderate Income Weatherization	150	250	450	**850**
Energy Saving Trees	900	1,800	2,700	**5,400**
Multi-Family	510	913	1,219	**2,642**
Energy Solutions for Business: Prescriptive and Custom	1,055	1,372	2,198	**4,625**
Energy Solutions for Business: Engineered Solutions	0	1	3	**4**
Energy Solutions for Business: Energy Management	0	1	3	**4**
Energy Solutions for Business: Direct Install	10	25	45	**80**
Total	**169,950**	**182,339**	**200,119**	**552,407**

Table 32 – Annual Gas Savings

Gas Consumption Savings (therms) - Incremental Annual

Subprogram	PY 1	PY 2	PY 3	Total
Behavior	907,885	583,168	560,152	**2,051,205**
Efficient Products	653,816	848,528	1,241,482	**2,743,826**
Existing Homes HPwES	32,991	49,486	65,981	**148,457**
Existing Homes QHEC	24,029	33,923	46,644	**104,597**
Existing Homes Moderate Income Weatherization	24,658	41,097	73,975	**139,730**
Energy Saving Trees	2,602	5,204	7,807	**15,613**
Multi-Family	20,222	38,483	62,055	**120,761**
Energy Solutions for Business: Prescriptive and Custom	132,900	172,635	280,413	**585,947**
Energy Solutions for Business: Engineered Solutions	0	43,918	131,754	**175,672**
Energy Solutions for Business: Energy Management	0	2,418	7,255	**9,673**
Energy Solutions for Business: Direct Install	13,809	34,522	62,140	**110,471**
Total	**1,812,912**	**1,853,384**	**2,539,658**	**6,205,953**

Table 33 – Annual Gas Capacity Savings

Gas Demand Capacity Savings (therms) - Incremental Annual

Subprogram	PY 1	PY 2	PY 3	Total
Behavior	150	97	93	**340**
Efficient Products	106	138	203	**447**
Existing Homes HPwES	5	8	11	**25**
Existing Homes QHEC	0	0	0	**0**
Existing Homes Moderate Income Weatherization	0	0	0	**0**
Energy Saving Trees	0	1	1	**3**
Multi-Family	0	0	0	**0**
Energy Solutions for Business: Prescriptive and Custom	0	0	0	**0**
Energy Solutions for Business: Engineered Solutions	0	0	0	**0**
Energy Solutions for Business: Energy Management	0	0	0	**0**
Energy Solutions for Business: Direct Install	0	0	0	**0**
Total	**263**	**244**	**308**	**814**

Table 34 – Lifetime Gas Savings

Gas Consumption Savings (therms) - Lifetime

Subprogram	PY 1	PY 2	PY 3	Total
Behavior	1,944,452	1,248,994	1,199,699	**4,393,144**
Efficient Products	6,187,009	7,791,358	11,416,347	**25,394,714**
Existing Homes HPwES	560,839	841,259	1,121,678	**2,523,776**
Existing Homes QHEC	183,912	259,640	357,005	**800,557**
Existing Homes Moderate Income Weatherization	452,738	754,563	1,358,214	**2,565,515**
Energy Saving Trees	78,065	156,131	234,196	**468,392**
Multi-Family	304,278	593,107	1,005,701	**1,903,085**
Energy Solutions for Business: Prescriptive and Custom	807,262	1,047,425	1,738,830	**3,593,518**
Energy Solutions for Business: Engineered Solutions	0	878,361	2,635,082	**3,513,442**
Energy Solutions for Business: Energy Management	0	48,366	145,098	**193,465**
Energy Solutions for Business: Direct Install	207,133	517,832	932,098	**1,657,063**
Total	**10,725,688**	**14,137,035**	**22,143,949**	**47,006,672**

Table 35 – Lifetime Gas Capacity Savings

Gas Demand Capacity Savings (therms) - Lifetime

Subprogram	PY 1	PY 2	PY 3	Total
Behavior	322	207	199	**727**
Efficient Products	1,006	1,268	1,861	**4,135**
Existing Homes HPwES	93	139	186	**418**
Existing Homes QHEC	0	0	0	**0**
Existing Homes Moderate Income Weatherization	0	0	0	**0**
Energy Saving Trees	13	26	39	**78**
Multi-Family	0	0	0	**0**
Energy Solutions for Business: Prescriptive and Custom	0	0	0	**0**
Energy Solutions for Business: Engineered Solutions	0	0	0	**0**
Energy Solutions for Business: Energy Management	0	0	0	**0**
Energy Solutions for Business: Direct Install	0	0	0	**0**
Total	**1,434**	**1,640**	**2,284**	**5,358**

Table 36 – Annual Electric Savings

Electric Consumption Savings (kWh) - Incremental Annual

Subprogram	PY 1	PY 2	PY 3	Total
Behavior	0	0	0	**0**
Efficient Products	1,251,648	1,737,150	2,600,820	**5,589,618**
Existing Homes HPwES	95,750	143,625	191,500	**430,876**
Existing Homes QHEC	721,133	1,018,070	1,399,846	**3,139,048**
Existing Homes Moderate Income Weatherization	134,044	223,406	402,131	**759,581**
Energy Saving Trees	56,936	113,872	170,808	**341,616**
Multi-Family	258,441	858,275	1,783,295	**2,900,011**
Energy Solutions for Business: Prescriptive and Custom	848,713	1,227,199	2,282,045	**4,357,957**
Energy Solutions for Business: Engineered Solutions	0	591,913	1,775,738	**2,367,651**
Energy Solutions for Business: Energy Management	0	61,184	183,552	**244,736**
Energy Solutions for Business: Direct Install	458,584	1,146,461	2,063,629	**3,668,674**
Total	**3,825,249**	**7,121,154**	**12,853,365**	**23,799,768**

Table 37 – Annual Electric Demand Savings

Electric Demand Savings (kW) - Incremental Annual

Subprogram	PY 1	PY 2	PY 3	Total
Behavior	0	0	0	**0**
Efficient Products	0	0	0	**0**
Existing Homes HPwES	3	5	6	**15**
Existing Homes QHEC	8	11	15	**34**
Existing Homes Moderate Income Weatherization	3	6	10	**20**
Energy Saving Trees	0	0	0	**0**
Multi-Family	3	12	28	**43**
Energy Solutions for Business: Prescriptive and Custom	45	61	103	**208**
Energy Solutions for Business: Engineered Solutions	0	16	49	**65**
Energy Solutions for Business: Energy Management	0	1	4	**6**
Energy Solutions for Business: Direct Install	12	31	56	**100**
Total	**75**	**143**	**272**	**490**

Table 38 – Lifetime Electric Savings

Electric Consumption Savings (kWh) - Lifetime

Subprogram	PY 1	PY 2	PY 3	Total
Behavior	0	0	0	**0**
Efficient Products	9,415,119	13,069,338	19,580,168	**42,064,625**
Existing Homes HPwES	1,627,754	2,441,631	3,255,508	**7,324,893**
Existing Homes QHEC	8,341,769	11,776,614	16,192,845	**36,311,228**
Existing Homes Moderate Income Weatherization	1,787,910	2,979,851	5,363,731	**10,131,492**
Energy Saving Trees	1,708,078	3,416,156	5,124,235	**10,248,469**
Multi-Family	3,452,626	13,767,464	31,135,197	**48,355,288**
Energy Solutions for Business: Prescriptive and Custom	18,823,731	26,328,927	46,904,196	**92,056,854**
Energy Solutions for Business: Engineered Solutions	0	11,838,256	35,514,767	**47,353,022**
Energy Solutions for Business: Energy Management	0	1,223,682	3,671,047	**4,894,730**
Energy Solutions for Business: Direct Install	6,878,764	17,196,910	30,954,439	**55,030,113**
Total	**52,035,752**	**104,038,830**	**197,696,132**	**353,770,713**

Table 39 – Lifetime Electric Demand Savings

Electric Demand Savings (kW) - Lifetime

Subprogram	PY 1	PY 2	PY 3	Total
Behavior	0	0	0	**0**
Efficient Products	1	1	2	**4**
Existing Homes HPwES	55	83	110	**249**
Existing Homes QHEC	87	122	168	**377**
Existing Homes Moderate Income Weatherization	63	105	189	**357**
Energy Saving Trees	0	0	0	**0**
Multi-Family	44	207	501	**752**
Energy Solutions for Business: Prescriptive and Custom	1,086	1,448	2,407	**4,941**
Energy Solutions for Business: Engineered Solutions	0	323	970	**1,294**
Energy Solutions for Business: Energy Management	0	29	88	**117**
Energy Solutions for Business: Direct Install	187	467	840	**1,493**
Total	**1,522**	**2,785**	**5,276**	**9,584**

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	**$609,648**
Utility Administration ($)	$145,313	$856,860	$266,826	$167,485	$591,701	$25,109	$321,000	$259,631	$458,684	$25,945	$335,557	$425,870	$90,000	**$3,969,980**
Marketing ($)	$0	$419,318	$130,647	$81,989	$291,014	$12,341	$158,140	$127,456	$227,881	$12,939	$165,525	$206,946	$750,000	**$2,584,197**
Outside Service ($)	$0	$2,429,380	$756,469	$474,841	$1,676,763	$71,157	$909,498	$735,878	$1,298,500	$73,420	$950,618	$1,208,273	$1,735,471	**$12,320,268**
Rebates, Grants, Loans, and Other Direct Incentives ($)	$2,906,250	$22,418,501	$6,317,460	$1,789,875	$6,368,897	$270,000	$4,469,176	$4,147,295	$8,021,254	$342,251	$4,890,193	$4,500,000	$0	**$66,441,152**
Inspections and Quality Control ($)	$0	$110,300	$34,258	$21,526	$74,329	$3,164	$39,990	$32,915	$54,728	$3,033	$41,533	$56,666	$300,000	**$772,440**
Evaluation ($)	$137,862	$1,047,121	$294,050	$83,361	$292,786	$12,434	$203,248	$193,318	$358,495	$15,133	$222,959	$213,894	$750,000	**$3,824,660**
ETG Lead Budget Subtotal	**$3,189,425**	**$27,281,481**	**$7,799,710**	**$2,619,076**	**$9,295,489**	**$394,205**	**$6,101,052**	**$5,496,492**	**$10,419,540**	**$472,722**	**$6,606,386**	**$6,611,648**	**$4,235,119**	**$90,522,345**
Funds Allocated to Partner Electric Utility	$0	-$1,199,305	-$569,258	$1,087,319	-$756,293	$115,203	$2,075,386	-$1,934,347	-$2,526,782	-$158,570	$2,597,721	$0	$0	**$13,020,184**
Funds Received from Partner Electric Utility													$22,389,606	**$22,389,606**
Total Net ETG Budget	**$3,189,425**	**$26,082,176**	**$7,230,451**	**$1,531,757**	**$8,539,196**	**$279,003**	**$4,025,666**	**$3,562,145**	**$7,892,758**	**$314,152**	**$4,008,665**	**$6,611,648**	**$26,624,725**	**$99,891,766**

Table 41 – Annual Budget Summary ($ millions)

Subprogram	PY 1	PY 2	PY 3	Total
Behavior	$1.0	$1.1	$1.1	**$3.2**
Efficient Products	$7.1	$8.2	$12.0	**$27.3**
Existing Homes HPwES	$1.8	$2.6	$3.4	**$7.8**
Existing Homes QHEC	$0.6	$0.9	$1.2	**$2.6**
Existing Homes Moderate Income Weatherization	$1.7	$2.8	$4.9	**$9.3**
Energy Saving Trees	$0.1	$0.1	$0.2	**$0.4**
Multi-Family	$0.8	$1.9	$3.5	**$6.1**
Energy Solutions for Business: Prescriptive and Custom	$1.3	$1.6	$2.5	**$5.5**
Energy Solutions for Business: Engineered Solutions	$0.5	$2.8	$7.1	**$10.4**
Energy Solutions for Business: Energy Management	$0.0	$0.1	$0.4	**$0.5**
Energy Solutions for Business: Direct Install	$0.8	$2.1	$3.7	**$6.6**
Pilots	$2.2	$2.2	$2.2	**$6.6**
Portfolio Costs	$2.2	$1.0	$1.0	**$4.2**
ETG Lead Budget Subtotal	**$20.1**	**$27.4**	**$43.1**	**$90.5**
Funds Allocated to Partner Electric Utility	-$2.0	-$3.9	-$7.1	**-$13.0**
Funds Received from Partner Electric Utility	$3.4	$6.7	$12.2	**$22.4**
Total Net ETG Budget	**$21.5**	**$30.2**	**$48.2**	**$99.9**

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 ETG Territory [5, 6]**
Efficient Products	Clothes Dryer - Tier 2	$300.00	Per dryer	$300
	EnergyStar Clothes Washer - Tier 1	$50.00	Per unit	$50
	Energy Star Clothes Washer - Tier 2	$100.00	Per unit	$100
	Energy Star Dryer	$100.00	Per dryer	$100
	Smart Thermostat	$125.00	Per thermostat [3]	New
	Boiler Outdoor Reset Controls	$200.00	Per boiler	$200
	Gas Boiler 90% - 95% ($200 supplemental incentive for LMI customers)	$1,000.00	Per boiler	$600
	Gas Boiler ≥95% ($200 supplemental incentive for LMI customers)	$1,200.00	Per boiler	$600
	Gas Furnace - Tier 1 (≥ 95%) ($200 supplemental incentive for LMI customers)	$1,000.00	Per furnace	$500
	Gas Furnace - Tier 2 (≥ 97%) ($200 supplemental incentive for LMI customers)	$1,500.00	Per furnace	$750
	Gas Combi Heat ≥ 95 AFUE ($200 supplemental incentive for LMI customers)	$1,300.00	Per unit	$1,050
	Gas Combi Heat ≥ 97 AFUE ($200 supplemental incentive for LMI customers)	$1,750.00	Per unit	$1,300
	Qualifying Gas Heat with Qualifying Gas Water Heat ($200 supplemental incentive for LMI customers)	$1,300.00	Per unit	$1,100

	HVAC Quality Install	$450.00	Per unit	New
	Gas Storage Tank Water Heater - Power Vented < 55 gallons ≥ .64UEF	$500.00	Per unit	$400
	Gas Storage Tank Water Heater - Power Vented WH, ≥ 55 gallons, UEF ≥ .85	$750.00	Per water heater	$400
	Gas Storage Tank Water Heater - Power Vented Instant WH, UEF ≥ .87	$750.00	Per water heater	$400
	Indirect-fired Storage Tank Water Heater	$250.00	Per water heater	$500 *
	Properly Maintained Boiler (Tune-up Boiler)	$250.00	Per boiler	New
	Properly Maintained Furnace (Tune-up Furnace)	$250.00	Per furnace	New
	Marketplace Products Other Than Thermostat	50% Discount	Per customer	New
	Kits	$60.00	Per customer	New

Comprehensive Residential Programs

Program	Subprogram	Description	Total Current Incentives in ETG 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.	No up front cost to customer for walk through audit with no cost or low cost measures installed at time of audit.

	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, weatherization and health & safety measures up $1,000 on health and safety expenses
Hybrid Heat	N/A	Up to $2,500 in rebate.	New

Note

1 - ETG reserves 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 ETG's territory through New Jersey's Clean Energy Program and ETG's EEP.

6 - ETG did not offer incentives on some items previously but plans to align with the other utilities on rebate values.

* - When paired with a qualifying boiler.

Commercial Prescriptive

Table 43: Commerical Prescriptive Table

Commercial Sector Incentives (not including financing)				
Program	**Prescriptive Measure [1]**	**Rebate Up To Value ($) GDC Consensus Rebate Strategy [2]**	**Unit Basis**	**Total (NJCEP & ETG) [4.5]**
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	New
	Gas Furnace ≥ 97% AFUE	$1,500	Per unit	New
	Boiler Economizer Controls	$2,700	Per unit	New
	Boiler Economizer Controls, < 800,000 Btu	$1,200	Per unit	New
	Boiler Economizer Controls, > 4 MMBtu	$2,700	Per unit	New
	Boiler Economizer Controls, 0.8 to 1.6 MMBtu	$1,500	Per unit	New
	Boiler Economizer Controls, 1.6 to 3 MMBtu	$1,800	Per unit	New
	Boiler Economizer Controls, 3 to 3.5 MMBtu	$2,100	Per unit	New
	Boiler Economizer Controls, 3.5 to 4 MMBtu	$2,400	Per unit	New
	Boiler HW Non-condensing, < 300 MBh	$2	Per MBh	New
	Boiler HW Non-condensing, 300 to 2,500 MBh	$2	Per MBh	New
	Boiler HW Non-condensing, > 2,500 MBh	$2	Per MBh	New
	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	New
	Boiler, HW Condensing - Tier 1, 300 to 2,500 MBh	$3.50	Per MBh	New
	Boiler, HW Condensing - Tier 1, > 2,500 MBh	$3.50	Per MBh	New
	Boiler, HW Condensing - Tier 2, < 300 MBh	$1,200	Per Boiler	New
	Boiler, HW Condensing - Tier 2, 300 to 2,500 MBh	$4	Per MBh	New
	Boiler, HW Condensing - Tier 2, > 2,500 MBh	$4	Per MBh	New

	Boiler, Steam < 300 MBH Input	$2	Per MBh	New
	Boiler, Steam All Except Natural Draft, 300 to 2,500 MBh	$2	Per MBh	New
	Boiler, Steam All Except Natural Draft, > 2,500 MBh	$2	Per MBh	New
	Boiler, Steam Natural Draft, ≤ 300 to 2,500 MBh	$1	Per MBh	New
	Boiler, Steam Natural Draft, > 2,500 MBh	$1	Per MBh	New
	Commercial Combination Oven/Steamer	$2,000	Per oven/steamer	New
	Commercial Conveyor Oven	$1,500	Per oven deck	New
	Commercial Dishwashers, Door Type High Temp	$750	Per unit	New
	Commercial Dishwashers, Door Type Low Temp	$700	Per unit	New
	Commercial Dishwashers, Under Counter High Temp	$400	Per unit	New
	Commercial Dishwashers, Under Counter Low Temp	$400	Per unit	New
	Commercial Dishwashers, Multiple Tank Conveyor, High Temp	$1,500	Per unit	New
	Commercial Dishwashers, Multiple Tank Conveyor, Low Temp	$1,500	Per unit	New
	Commercial Dishwashers, Single Tank Conveyor, High Temp	$1,500	Per unit	New
	Commercial Dishwashers, Single Tank Conveyor, Low Temp	$1,000	Per unit	New
	Commercial Fryer	$750	Per vat	New
	Commercial Griddle	$500	Per griddle	New
	Commercial Rack Oven	$1,000	Per oven	New
	Commercial Steam Cooker	$2,000	Per compartment	New
	Condensing Integrated Boiler and Water Heater	$2,500	Per unit	New
	Condensing Unit Heater, 90% AFUE	$750	Per unit	New
	DHW Pipe Wrap Insulation, < 0.5" dia	$1	Per linear foot pipe	New
	DHW Pipe Wrap Insulation, > 0.5" dia	$2	Per linear foot pipe	New
	DHW Storage, Gas-Fired, < 75,000 Btuh, (75 MBH) > 0.67 EF or 0.64 UEF	$350	Per unit	New
	DHW Storage, Gas-Fired, < 75,000 Btuh, (75 MBH) > 0.87 EF or 0.81 UEF	$500	Per unit	New

	DHW Storage, Gas-Fired, > 105,000 Btuh (105 MBH), > 82% Et	$500	Per unit	New
	DHW Storage, Gas-Fired, > 105,000 Btuh (105 MBH), > 92% Et	$750	Per unit	New
	DHW Storage, Gas-Fired, 75,000 to 105,000 Btuh, > 82% Et or .64 UEF	$750	Per unit	New
	DHW Storage, Gas-Fired, 75,000 to 105,000 Btuh, > 90% Et or .85 UEF	$500	Per unit	New
	DHW, Instant, Gas-Fired, < 200,000 Btuh, > 90% Et or .82 EF or > 0.81 UEF	$750	Per unit	New
	DHW, Instant, Gas-Fired, > 200,000 Btuh, ≥ 90% Et or .85 UEF	$1,000	Per unit	New
	Clothes Dryer - High Efficiency	$200	Per dryer	New
	HE Commercial Cloths Washer	$150	Per washer	New
	ENERGY STAR Gas Convection Oven	$500	Per cavity	New
	Gas Absorption Chillers, < 100 tons	$450	Per ton	New
	Gas Absorption Chillers, 100 to 400 tons	$230	Per ton	New
	Gas Absorption Chillers, > 400 tons	$185	Per ton	New
	Gas Engine Driven Chillers	$350	Per ton	New
	Gas-Fired Low-Intensity Infrared Heating Unit < 100MBH	$750	Per unit	New
	Gas-Fired Low-Intensity Infrared Heating Unit > 100MBH	$500	Per unit	New
	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	New
	Smart Thermostat	$125	Per thermostat [3]	New
Energy Solutions for Businesses	**Custom Measure [1]**	**Rebate Up To Value (%) GDC Consensus Rebate Strategy [2]**	**Unit Basis**	**Total (NJCEP & ETG) [5,6]**
	Custom Measure	50%	Per Measure	New

Note

1 - ETG reserves 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 ETG's territory through New Jersey's Clean Energy Program and ETG's EEP.

5- ETG does not have prior experience providing incentives on these items in the Commercial space. Our proposed up-to rebate values listed above are consistent with those of the other NJ utilities.

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, ETG 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 ETG's territory through New Jersey's Clean Energy Program and ETG's EEP.

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 ETG's territory through New Jersey's Clean Energy Program and ETG's EEP.

APPENDIX C – Financing Terms by Program

ETG 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, ETG 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 ETG'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 residential programs.

Table 46: Summary of Financing Terms

ETG 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 ETG credit screening will have the opportunity to apply for a loan through a network of local lenders and ETG 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 ETG credit screening will have the opportunity to apply for a loan through a network of local lenders and ETG 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

THOMAS KAUFMANN

Manager of Rates and Tariffs
Elizabethtown Gas

On Behalf of
Elizabethtown Gas Company

September 25, 2020

EXHIBIT E

SCHEDULE INDEX

Schedules TK- 1 through TK-14 relate to Energy Efficiency Programs:

I. INTRODUCTION

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

A. My name is Thomas Kaufmann and I am the Manager of Rates and Tariffs for Elizabethtown Gas Company ("Elizabethtown" or "Company"). My business address is Elizabethtown Gas, 520 Green Lane, Union, NJ 07083.

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

A. In June 1977, I graduated from Rutgers University, Newark, N.J. with a Bachelor of Arts degree in Business Administration, majoring in accounting and economics. In July 1979, I graduated from Fairleigh Dickinson University, Madison, N.J. with a Master of Business Administration, majoring in finance.

My professional responsibilities have encompassed financial analysis, accounting, planning, and pricing in manufacturing and energy services companies in both regulated and unregulated industries. In 1977, I was employed by Allied Chemical Corp. as a staff accountant. In 1980, I was employed by Celanese Corp. as a financial analyst. In 1981, I was employed by Suburban Propane as a Strategic Planning Analyst, promoted to Manager of Rates and Pricing in 1986 and to Director of Acquisitions and Business Analysis in 1990. In 1993, I was employed by Concurrent Computer as a Manager, Pricing Administration. In 1996, I joined NUI Utilities Inc., now part of South Jersey Industries, Inc. ("SJI"), as a Rate Analyst, was promoted to Manager of Regulatory Support in August 1997, Manager of Regulatory Affairs in February 1998, and named Manager of Rates and

Tariffs in July 1998. During my time with the Company, I managed rates and Tariff activities for utilities in New Jersey, New York, Pennsylvania, Maryland, North Carolina and Florida. I am a member of 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 O&M budgets are described in detail in the Direct Testimony of Frank J. Vetri, Program Manager, Energy Efficiency.

I am also addressing the customer bill impacts associated with the Company's proposed Conservation Incentive Program ("CIP"), along with proposed tariff changes related to the CIP. The Company's CIP proposal is

described in greater detail by Company witness Isaac Gabel-Frank of Gabel Associates, Inc.

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 TK-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 Loan Program Investment category is comprised of the loan incentives that will be provided by the Company through the NJCEP Residential Loans/Rebates Program, the NJCEP Commercial Loans Program, and the C&I Engineered Solutions Program. The Direct Program Investments category is comprised of grants and energy audits, as well as other capitalizable expenditures required to implement the proposed programs.

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 operating and maintenance ("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 Elizabethtown'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 7.131%, or 9.0645% on a pre-tax basis, effective November 15, 2019. This is the pre-tax WACC utilized to set rates in the Company's most recent base rate case in Docket No. GR19040486. 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 TK-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, Elizabethtown is seeking to recover O&M expenses, which primarily consist of utility administration, inspections and quality control, and evaluation costs incurred to run the EEP.

Q. Please explain the basis for the revenue factor used to calculate the revenue requirements.

A. The revenue factor reflects tax adjustments for BPU and Rate Counsel Assessments and bad debt allowance. The Company is using a revenue factor of 1.01122, which is the revenue factor utilized to set rates in the Company's most recent base rate case in Docket No. GR19040486 after removing the Federal and State corporate business tax. The calculation of this revenue factor is attached hereto as Schedule TK-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 Program rate ("EEP"), which is set forth in Rider "E" to the Company's Tariff. Total EEP revenue requirements for an annual period are calculated and recovered though a volumetric charge applicable to all customers except those customers under special contracts as filed and approved by the BPU and those customers exempted pursuant to the Long-Term Capacity Agreement Pilot Program ("LCAPP"), P.L. 2011 c.9, codified as N.J.S.A. 48:3-60.1. Rider "E" 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 EEP rate. For expenditures proposed in this filing, the forecasted recovery of the EEP year one revenue requirement is attached hereto as Schedule TK-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 EEP 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 commencing in July of each year. The forecasted volumes for the initial recovery period are 481,156,512 therms. These volumes reflect consumption for all customers that are charged the EEP. The methodology used is the same as that used in the demand forecast which supports Elizabethtown's Basic Gas Supply Service ("BGSS") rates.

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 would 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 expense is attached hereto as Schedule TK-4.

Q. Please provide the initial EEP rate associated with the Company's proposed EEPs, as well as the associated customer bill impacts.

A. The EEP rate and annual customer bill impacts associated with the initial six (6) years of the EEP program are included in Schedule TK-1. The proposed Year 1 EEP rate will be $0.0082 per therm, including taxes, and $0.0077 per therm, excluding taxes. This represents an increase of $0.0082 per therm to the current

EEP rate of $0.0073 per therm (including taxes), for a total combined EEP rate of $0.0155 per therm, 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 $0.82, or 0.8%. The cumulative annual bill impacts for all approved and proposed programs, for all rate classes, are provided in Schedule TK-13.

V. ADDITIONAL MINIMUM FILING REQUIREMENTS

Q. Please provide a comparative balance sheet for the most recent three-year period.

A. Please see the attached Schedule TK-5 which reflects the Company's balance sheets as of December 31st for 2017, 2018 and 2019, 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 TK-6, which reflects the Company's income statement for the year ending December 31st for 2017, 2018 and 2019.

Q. Please provide a balance sheet with the most recent date available.

A. Please see the attached Schedule TK-8 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 TK-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 TK-9 listing payments and accruals made to affiliated companies for the year ending December 31st for 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 TK-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 TK-11 and TK-12. The pro forma income statement and balance sheet 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 TK-13 for the annual rate impact and bill impact by year for all approved and proposed EEPs.

Q. Please provide proposed tariff sheets associated with the proposed EEPs.

A. Please see the attached Schedule TK-14 for the proposed tariff sheets and Rider "E", in redlined form.

VI. CIP

Q. Please identify the CIP-related items that you will be addressing.

A. In this filing, the Company is proposing a CIP, which as I noted earlier in my testimony, is addressed by Company witness Gabel-Frank. I am supporting the customer bill impacts associated with the proposed CIP and a proposed CIP Rider to be included in the Company's Tariff.

Q. Please explain how the forecasted CIP bill impacts were calculated.

A. CIP Schedule TK-1 presents the calculation of bill impacts for the Residential Delivery Service ("RDS"), Small General Service ("SGS") and General Delivery Service ("GDS") rate classes to which the CIP applies. For each class, a monthly projection was made of customer therm reductions from a base use per customer to which pre-tax margins for per therm Distribution Charge rates plus the pre-tax

Infrastructure Investment Program rates per therm were applied to derive lost margins per class. These monthly amounts are summed to a 12-month period ending June 30 of each year and divided by projected therms for the upcoming recovery period beginning October 1st of each year. The initial bill impact comparison is compared to a current bill at September 1, 2020 and thereafter for the CIP periods presented.

Q. What will be the basis for the therms used to calculate the rate?

A. The methodology used is the same as that used in the demand forecast which supports Elizabethtown's Basic Gas Supply Service ("BGSS") rates.

Q. How will the Company account for any over/under recoveries?

A. The Company would defer any over/under-recovery of an allowed recoverable or refundable amount to a future period.

Q. Will the Company's Weather Normalization Clause be part of the CIP?

A. Yes, the value of the weather-related changes in customer usage shall be calculated in accordance with the WNC Rider B of the Company's tariff and be made part of the CIP rate as noted in the proposed CIP tariff. For periods prior to the approval of the CIP, the WNC rate will remain in effect until near zero with any residual balance subsumed into the CIP.

Q. Please provide proposed tariff sheets associated with the proposed EEPs.

A. Please see the attached CIP Schedule TK-2 for the proposed new tariff sheets and Rider "G". The tariff sheet presents the terms and applicable to the CIP.

Q. Does this conclude your testimony?

A. Yes, it does.

VERIFICATION

I, Thomas Kaufmann, of full age, being duly sworn according to law, upon my oath, depose and say:

1. I am Manager of Rates and Tariffs for Elizabethtown 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.

Thomas Kaufmann
Manager of Rates & Tariffs

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

ELIZABETHTOWN GAS COMPANY
ENERGY EFFICIENCY PROGRAM ("EEP")
Annual Revenue Requirement (Program Year)

	July 21 - Jun 22 Year 1	July 22 - Jun 23 Year 2	July 23- Jun 24 Year 3	July 24- Jun 25 Year 4
DIRECT PROGRAM INVESTMENTS				
Annual Investment	$ 13,479,482	$ 18,695,878	$ 28,347,299	$ 3,387,619
Cumulative Investment	$ 13,479,482	$ 32,175,361	$ 60,522,660	$ 63,910,279
Less Accumulated Amortization	$ (631,828)	$ (2,843,644)	$ (7,360,376)	$ (13,608,730)
Less Accumulated Deferred Tax	$ (3,611,476)	$ (8,245,146)	$ (14,943,918)	$ (14,139,765)
Net Investment	$ 9,236,179	$ 21,086,571	$ 38,218,366	$ 36,161,783
Rate of Return (Pre Tax)	9.06%	9.06%	9.06%	9.06%
Required Net Operating Income	$ 469,503	$ 1,433,259	$ 2,767,268	$ 3,391,711
Incremental O&M Pre Tax	$ 1,832,276	$ 2,331,201	$ 3,168,749	$ -
Pre Tax Amortization	$ 631,828	$ 2,211,816	$ 4,516,732	$ 6,248,353
Operating Income	$ 2,933,607	$ 5,976,277	$ 10,452,749	$ 9,640,064
Revenue Factor	1.01122	1.01122	1.01122	1.01122
Revenue Requirement Excluding SUT	$ 2,966,529	$ 6,043,346	$ 10,570,057	$ 9,748,251
LOAN PROGRAM INVESTMENTS				
Annual Investment	$ 5,277,984	$ 6,556,759	$ 9,867,532	$ 1,885,773
Less Loan Repayments	$ (78,431)	$ (1,422,775)	$ (2,981,019)	$ (3,934,343)
Net Investment	$ 5,199,553	$ 5,133,984	$ 6,886,513	$ (2,048,569)
Cumulative Investment	$ 5,199,553	$ 10,333,537	$ 17,220,050	$ 15,171,480
Rate of Return (Pre Tax)	9.06%	9.06%	9.06%	9.06%
Required Net Operating Income	$ 280,464	$ 1,335,000	$ 1,335,000	$ 1,471,647
Incremental O&M Pre Tax	$ 441,327	$ 613,074	$ 930,454	$ -
Operating Income	$ 721,791	$ 1,381,882	$ 2,265,454	$ 1,471,647
Revenue Factor	1.01122	1.01122	1.01122	1.01122
Revenue Requirement Excluding SUT	$ 729,891	$ 1,397,391	$ 2,290,878	$ 1,488,163
RATE CALCULATION				
Revenue Requirement For Direct Investments Excluding SUT	$ 2,966,529	$ 6,043,346	$ 10,570,057	$ 9,748,251
Revenue Requirement For Loans Programs Excluding SUT	$ 729,891	$ 1,397,391	$ 2,290,878	$ 1,488,163
Prior Year (Over)/Under Recovered Deferred Balance Including Carrying Costs	$ -	$ (8,229)	$ 25,510	$ (2,754)
Total Revenue Requirements	$ 3,696,420	$ 7,432,508	$ 12,886,445	$ 11,233,660
Therms	481,156,512	481,156,512	481,156,512	481,156,512
Rate Per Therm, Excluding SUT	$ 0.0077	$ 0.0154	$ 0.0268	$ 0.0233
Rate Per Therm, Including SUT	$ 0.0082	$ 0.0164	$ 0.0286	$ 0.0248
Annual Bill Impact				
Residential Delivery Service (844 Therms)	$ 6.92	$ 6.92	$ 10.30	$ (3.21)
Small General Service (1,244 Therms)	$ 10.20	$ 10.20	$ 15.18	$ (4.73)
General Delivery Service (18,000 Therms)	$ 147.60	$ 147.60	$ 219.60	$ (68.40)
Large Volume Demand (830,000 Therms)	$ 6,806.00	$ 6,806.00	$ 10,126.00	$ (3,154.00)

Schedule TK-1

ELIZABETHTOWN GAS COMPANY
ENERGY EFFICIENCY PROGRAM ("EEP")
Annual Revenue Requirement (Program Year)

	July 25- Jun 26 Year 5	July 26- Jun 27 Year 6
DIRECT PROGRAM INVESTMENTS		
Annual Investment	$ 1,550,905	$ 144,672
Cumulative Investment	$ 65,461,183	$ 65,605,856
Less Accumulated Amortization	$ (20,086,024)	$ (26,645,546)
Less Accumulated Deferred Tax	$ (12,754,957)	$ (10,951,743)
Net Investment	$ 32,620,202	$ 28,008,566
Rate of Return (Pre Tax)	9.06%	9.06%
Required Net Operating Income	$ 3,114,806	$ 2,734,909
Incremental O&M Pre Tax	$ -	$ -
Pre Tax Amortization	$ 6,477,294	$ 6,559,523
Operating Income	$ 9,592,100	$ 9,294,432
Revenue Factor	1.01122	1.01122
Revenue Requirement Excluding SUT	$ 9,699,749	$ 9,398,740
LOAN PROGRAM INVESTMENTS		
Annual Investment	$ 1,270,400	$ 89,760
Less Loan Repayments	$ (3,814,546)	$ (3,450,431)
Net Investment	$ (2,544,146)	$ (3,360,671)
Cumulative Investment	$ 12,627,334	$ 9,266,664
Rate of Return (Pre Tax)	9.06%	9.06%
Required Net Operating Income	$ 1,271,429	$ 983,314
Incremental O&M Pre Tax	$ -	$ -
Operating Income	$ 1,271,429	$ 983,314
Revenue Factor	1.01122	1.0112
Revenue Requirement Excluding SUT	$ 1,285,698	$ 994,350
RATE CALCULATION		
Revenue Requirement For Direct Investments Excluding SUT	$ 9,699,749	$ 9,398,740
Revenue Requirement For Loans Programs Excluding SUT	$ 1,285,698	$ 994,350
Prior Year (Over)/Under Recovered Deferred Balance Including Carrying Costs	$ 32,743	$ 10,037
Total Revenue Requirements	$ 11,018,190	$ 10,403,127
Therms	481,156,512	481,156,512
Rate Per Therm, Excluding SUT	$ 0.0229	$ 0.0216
Rate Per Therm, Including SUT	$ 0.0244	$ 0.0230
Annual Bill Impact		
Residential Delivery Service (844 Therms)	$ (0.33)	$ (1.19)
Small General Service (1,244 Therms)	$ (0.49)	$ (1.75)
General Delivery Service (18,000 Therms)	$ (7.20)	$ (25.20)
Large Volume Demand (830,000 Therms)	$ (332.00)	$ (1,162.00)

Schedule TK-2

ELIZABETHTOWN GAS COMPANY
ENERGY EFFICIENCY PROGRAM ("EEP")
WEIGHTED AVERAGE COST OF CAPITAL

Per 2019 Rate Case				After-Tax	Revenue Conversion	Pre-Tax
Type of Capital	Ratios	Cost Rate	Weighted Cost Rate	Weighted Cost Rate	Factor	Weighted Cost Rate
Long-Term Debt	48.5000%	4.5100%	2.1870%	1.5722%		2.1870%
Common Equity	51.5000%	9.6000%	4.9440%	4.9440%	139.1014%	6.8772%
Calculation adj to settlement				0.0003%		0.0003%
	100.0000%		7.1310%	6.5165%		9.0645%

As of 7/31/2020				After-Tax	Revenue Conversion	Pre-Tax
Type of Capital	Ratios	Cost Rate	Weighted Cost Rate	Weighted Cost Rate	Factor	Weighted Cost Rate
Long-Term Debt	32.7200%	4.110%	1.3448%	0.9668%		1.3448%
Short Term Debt	6.2600%	1.930%	0.1208%	0.0869%		0.1208%
Common Equity	61.0200%	9.600%	5.8579%	5.8579%	139.1014%	8.1484%
	100.0000%		7.3235%	6.9115%		9.6141%

**Tax Reflects FIT Rate of 21%, effective January 1, 2018*

Schedule TK-3

ELIZABETHTOWN GAS COMPANY
ENERGY EFFICIENCY PROGRAM ("EEP")
DERIVATION OF REVENUE FACTOR

Line No.		
1		
2	Components:	
3		
4	BPU and Rate Counsel Assessments	0.2650%
5		
6	Bad Debt Provision (Bad Debt)	0.8550%
7		
8	Operating Revenue	1.0000
9		
10	Revenue Factor Calculation:	
11	1.00265*1.00855 =	1.01122

Schedule TK-4

ENERGY EFFICIENCY PROGRAM ("EEP")
Annual Revenue Requirement (Program Year)
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		15,337,437	15,626,070	14,730,536	20,425,652	36,805,711	60,942,716	75,959,858	84,098,597	66,885,046	47,517,108	26,257,042	16,570,739	481,156,512
2															
3	Recovery Rate		$ 0.007700	$ 0.007700	$ 0.007700	$ 0.007700	$ 0.007700	$ 0.007700	$ 0.007700	$ 0.007700	$ 0.007700	$ 0.007700	$ 0.007700	$ 0.007700	
4															
5	Recoveries		$ 118,098	$ 120,321	$ 113,425	$ 157,278	$ 283,404	$ 469,259	$ 584,891	$ 647,559	$ 515,015	$ 365,882	$ 202,179	$ 127,595	3,704,905
6															
7	Revenue Requirements Excluding SUT		$ 210,648	$ 232,226	$ 242,419	$ 264,233	$ 278,757	$ 296,034	$ 321,682	$ 337,021	$ 349,495	$ 372,678	$ 387,063	$ 404,164	3,696,420
8															
9	Less Recoveries		$ 118,098	$ 120,321	$ 113,425	$ 157,278	$ 283,404	$ 469,259	$ 584,891	$ 647,559	$ 515,015	$ 365,882	$ 202,179	$ 127,595	3,704,905
10															
11	Monthly (Over)/Under Recovered Balance		$ 92,550	$ 111,906	$ 128,994	$ 106,955	$ (4,647)	$ (173,225)	$ (263,209)	$ (310,538)	$ (165,520)	$ 6,796	$ 184,884	$ 276,570	$ (8,485)
12															
13	Beginning (Over)/Under Recovered Balance		$ -	$ 92,550	$ 204,456	$ 333,450	$ 440,405	$ 435,758	$ 262,533	$ (676)	$ (311,215)	$ (476,734)	$ (469,938)	$ (285,054)	$ -
14															
15	Ending (Over)/Under Recovered Balance		$ 92,550	$ 204,456	$ 333,450	$ 440,405	$ 435,758	$ 262,533	$ (676)	$ (311,215)	$ (476,734)	$ (469,938)	$ (285,054)	$ (8,485)	$ (8,485)
16															
17	Average (Over)/Under Recovered Balance (Net of Taxes	71.89%	$ 33,267	$ 106,759	$ 193,350	$ 278,162	$ 314,937	$ 251,001	$ 94,124	$ (112,109)	$ (283,228)	$ (340,281)	$ (271,382)	$ (105,513)	
18															
19	Interest (To Customers) / To Company		$ 54	$ 172	$ 311	$ 447	$ 507	$ 404	$ 151	$ (180)	$ (456)	$ (547)	$ (436)	$ (170)	$ 256
20															
21	Cumulative Interest		$ 54	$ 225	$ 536	$ 984	$ 1,490	$ 1,894	$ 2,045	$ 1,865	$ 1,409	$ 862	$ 426	$ 256	
22															
23	Annual Interest Rate (Elizabethtown Gas Avg Borrowing)		1.9300%	1.9300%	1.9300%	1.9300%	1.9300%	1.9300%	1.9300%	1.9300%	1.9300%	1.9300%	1.9300%	1.9300%	

Schedule TK-5
2017

Elizabethtown Gas Company
Balance Sheet

		Period Ending 12/31/2017
Assets and Other Debits		
Utility Plant		
101-106, 114	Utility Plant	1,399,999,950
107.00	Construction Work in Progress	38,358,267
108,111,115.00	(Less) Accum. Prov. for Depr. Amort. Depl.	-324,996,699
	Net Utility Plant	1,113,361,518
176.00	Long-Term Portion of Derivative Assets-Hedges	0
	Total Other Property and Investments	0
Current and Accrued Assets		
142.00	Customer Accounts Receivable	63,241,892
143	Other Accounts Receivable	7,718,678
144.00	(Less) Accum. Prov. for Uncollectible Acct.-Credit	-4,905,352
154.00	Plant Materials and Operating Supplies	251,328
164.10	Gas Stored Underground - Current	19,586,247
164.2-164.3	Liquefied Natural Gas Stored and Held for Processi	1,382,174
165.00	Prepayments	34,819,907
176.00	Derivative Instrument Assets-Hedges	0
176	(less) Long-Term Portion of Derivative Assets-Hedg	0
	Total Current and Accrued Assets	122,094,874
Deferred Debits		
181	Unamortized Debt Expense	680,666
182.30	Other Regulatory Assets	135,777,311
186.00	Miscellaneous Deferred Debits	40,000
189	Unamortized Loss on Reacquired Debt	3,870,043
190.00	Accumulated Deferred Income Taxes	12,762,695
191.00	Unrecovered Purchased Gas Costs	0
	Total Deferred Debits	153,130,715
Total Assets and Other Debits		1,388,587,107
Liabilities and Other Credits		
Proprietary Capital		
208-211	Other Paid-In Capital	166,377,323
215,215.1,216	Retained Earnings	268,372,715
219.00	Accumulated Other Comprehensive Income	0
	Total Proprietary Capital	434,750,038
Long-Term Debt		
223.00	Advances from Associated Companies	268,405,834
224.00	Other Long-Term Debt	180,100,000
226.00	(Less) Unamortized Discount on Long-Term Debt-D	-112,780
	Total Long-Term Debt	448,393,054
Other Noncurrent Liabilities		
228.2	Accumulated Provision for Injuries and Damages	0
228.30	Accumulated Provision for Pensions and Benefits	19,216,443
228.40	Accumulated Miscellaneous Operating Provisions	277,777
245.00	Long-Term Portion of Derivative Instrument Lia.-He	0
	Total Other Noncurrent Liabilities	19,494,220
Current and Accrued Liabilities		
232.00	Accounts Payable	16,562,426
234.00	Accounts Payable to Associated Companies	81,902,559
235	Customer Deposits	7,299,263
236.00	Taxes Accrued	8,685,921
237.00	Interest Accrued	7
241.00	Tax Collections Payable	4,196,482
242	Miscellaneous Current and Accrued Liabilities	934,535
243.00	Obligations Under Capital Leases-Current	0
245	Derivative Instrument Liabilities-Hedges	2,005,920
245.00	(less) Long-Term Portion of Derivative Instrument L	0
	Total Current and Accrued Liabilities	121,587,113
Deferred Credits		
252.00	Customer Advances for Construction	1,061,378
253.00	Other Deferred Credits	85,136,624
254	Other Regulatory Liabilities	130,927,857
255.00	Accumulated Deferred Investment Tax Credits	62,463
281 - 282	Accumulated Deferred Federal Income Taxes	144,843,030
283	Accumulated Deferred Other Income Taxes	2,331,330
	Total Deferred Credits	364,362,682
Total Liabilities and Other Credits		1,388,587,107

Schedule TK-5
2018 & 2019

Elizabethtown Gas Company
Balance Sheet

Ledger Account	Period Ending 12/31/2018	Period Ending 12/31/2019
Assets		
Property, Plant and Equipment		
Utility Plant, at original cost	1,415,214,785.99	1,750,613,137.32
Accumulated Depreciation and Amortization	(258,817,039.94)	(285,363,428.07)
Nonutility Property and Equipment, at cost	0.00	0.00
Accumulated Depreciation	0.00	0.00
Total Property, Plant and Equipment	**1,156,397,746.05**	**1,465,249,709.25**
Investments		
Investments in Subsidiaries	0.00	0.00
Available-for-Sale-Securities	0.00	0.00
Restricted	371,145.00	8,523,293.00
Investment in Affiliates	0.00	0.00
Total Investments	**371,145.00**	**8,523,293.00**
Current Assets		
Cash and Cash Equivalents	88,119.15	92,660.77
Accounts Receivable - Affiliate		0.00
Accounts Receivable	45,207,774.74	61,994,277.93
Unbilled Revenues	24,543,433.00	33,544,025.00
Provision for Uncollectibles	(4,902,917.14)	(5,618,293.79)
Accounts Receivable - Associated Companies	0.00	0.00
Natural Gas in Storage, Average Cost	19,077,525.00	13,983,380.00
Materials and Supplies, Average Cost	349,129.18	456,498.06
Assets of Discontinued Businesses Held for Disposal	0.00	0.00
Derivatives - Energy Related Assets	911,871.09	9,109.79
Prepaid Taxes	0.00	1,382,451.00
Other Prepayments and Current Assets	1,308,003.99	2,049,781.23
Elimination- Intercompany	0.00	0.00
Total Current Assets	**86,582,939.01**	**107,893,889.99**
Regulatory and Other Noncurrent Assets		
Goodwill	730,972,377.00	700,226,528.93
Identifiable Intangible Assets	0.00	0.00
Environmental Remediation Costs	115,468,932.62	97,615,321.04
Derivatives - Energy Related Assets	161,272.64	15,302.84
Deferred Gas Fuel Costs	0.00	5,301,452.14
Pension & Post-Retirement - Regulatory Asset	43,218,771.45	39,202,964.45
Other Regulatory Assets	11,232,682.43	27,112,052.27
Other	1,666,098.86	7,706,613.81
Long Term Assets	0.00	0.00
Deferred Income Taxes – Asset, Net	0.00	0.00
Total Regulatory and Other Non-Current Assets	**902,720,135.00**	**877,180,235.48**
Total Assets	**2,146,071,965.06**	**2,458,847,127.72**

Schedule TK-5
2018 & 2019

Elizabethtown Gas Company
Balance Sheet

Capitalization and Liabilities		
Common Equity		
Treasury Stock	0.00	0.00
Common Stock	0.00	0.00
Premium on Common Stock	1,199,397,342.46	1,183,797,342.94
Accumulated Other Comprehensive Income	0.00	0.00
Retained Earnings	(5,040,638.80)	29,202,523.10
Total Equity	**1,194,356,703.66**	**1,212,999,866.04**
Long Term Debt	523,996,042.27	668,463,778.88
Total Long-Term Debt	**523,996,042.27**	**668,463,778.88**
Current Liabilities		
Notes Payable- Banks	86,000,000.00	103,700,000.00
Accounts Payable	45,431,888.58	31,897,842.42
Accounts Payable to Associated Companies	25,953,966.13	18,561,918.39
Current Maturities of Long-Term Debt	0.00	0.00
Customer Deposits	3,895,776.64	11,604,687.07
Taxes Accrued	3,187,556.03	(0.45)
Environmental Remediation Costs	14,274,820.00	14,135,000.00
Interest Accrued	688,151.24	1,287,057.92
Derivatives - Energy Related Liabilities	121,863.69	5,467,219.85
Other Current Liabilities	1,909,748.61	2,421,023.27
Pension Benefit Obligation - Current	0.00	0.00
Total Current Liabilities	**181,463,770.92**	**189,074,748.47**
Deferred Credits and Other Noncurrent Liabilities		
Pension and Other Postretirement Benefits	5,019,238.00	2,826,936.62
Accumulated Deferred Income Taxes - Net	(22,788,484.00)	(29,097,483.00)
Environmental Remediation Costs	90,302,568.00	86,931,000.00
Derivatives - Energy Related Liabilities	120,204.26	667,411.66
Asset Retirement Obligations	0.00	167,154,909.00
Regulatory Liabilities	172,296,437.30	157,810,579.55
Other	1,305,484.65	2,015,380.50
Total Deferred Credits and Other Noncurrent Liat	**246,255,448.21**	**388,308,734.33**
Affiliate Liabilities	0.00	0.00
Total Affiliate Liabilities	**0.00**	**0.00**
Total Liabilities	**951,715,261.40**	**1,245,847,261.68**
Total Liabilities and Equity	**2,146,071,965.06**	**2,458,847,127.72**

Schedule TK-6
2017

Elizabethtown Gas Company
Income Statement

		12 Months December 31, 2017
Utility Operating Income		
400	Gas Operating Revenues	307,632,025
Utility Operating Expenses		
401	**Operation Expenses**	194,266,732
402	Maintenance Expenses	8,247,782
403	Depreciation Expense	28,666,777
404-405	Amort. & Depl. of Utility Plant	6,516
408	Taxes Other Than Income Taxes	5,473,999
409	**Income Taxes - Federal**	(10,826,424)
409	Income Taxes - Other	(1,021,580)
410	Provision for Deferred Income Taxes	32,939,066
411	**Investment Tax Credit Adj. - Net**	(86,075)
	Total Utility Operating Expenses	257,666,793
Net Operating Income (Loss)		49,965,232
Other Income (Deductions)		
415-421.1	**Other Income, Net**	(375,850)
426.1-426.5	**Miscellaneous Income Deductions**	(121,490)
409	**Total Taxes on Other Inc. and Ded.**	(418,787)
	Net Other Income (Deductions)	(916,127)
Interest Charges		
427	**Interest on Long-Term Debt**	2,665,547
428	**Amort. of Debt Disc. and Expense**	67,997
428	**Amortization of Loss on Reacquired Del**	442,080
430	Interest on Debt to Assoc. Companies	13,363,176
431	Other Interest Expense	(219,349)
432	(Less) Allow. for Borrowed Funds Used D	(359,820)
	Net Interest Charges	15,959,631
Net Income (Loss)		33,089,474

Schedule TK-6
6 Mos 2018

Elizabethtown Gas Company
Income Statement

	6 Months June 30, 2018
Distribution Revenues	**179,364,988**
Shipping Revenues	**-**
Firm Sales	**-**
Other Sales	**-**
NonUtility Energy Sales	**-**
Miscellaneous Energy Revenue	**4,328,580**
Rider Revenue	**-**
Storage Revenues	**-**
Service Fees Other Revenue	**623,976**
Operating Revenues	**184,317,545**
Cost of Sales	**87,471,865**
Cost of Sales - Interruptible	**-**
Cost of Sales - Shipping	**-**
Cost of Sales - Firm	**-**
Cost of Sales - Utility-Bill Expense	**-**
Cost of Sales - Other	**-**
Cost of Sales	**87,471,865**
Operating Margin	**96,845,679**
Payroll Expenses	**13,979,983**
Fleet Services	**711,702**
Facilities	**465,437**
LNG Storage	**12,588**
Storage	**-**
Distribution Expenses	**5,641**
Customer Account Expenses	**2,414,251**
Customer Service Expenses	**-**
Marketing Admin & Support	**87,872**
Regulatory	**135,163**
Legal	**447,156**
Benefits	**3,497,553**
Office Administration & Supply	**646,134**
Development & Training	**13,087**
Outside Services	**3,663,998**
Dues and Subscriptions	**114,385**
Travel and Entertainment	**131,203**
Equipment Leases	**-**
Franchise and Riders	**-**
Miscellaneous Operation Exp	**730,811**
Operation Expenses	**27,056,964**
R&M Shipping	**-**

Schedule TK-6
6 Mos 2018

Elizabethtown Gas Company
Income Statement

	6 Months June 30, 2018
LNG Storage Maintenance	-
Distribution Expense Maint	605,187
Other Maintenance Expense	138,537
Maintenance Expenses	743,724
Operations & Maintenance Exp.	27,800,689
Capitalized Expenses	(2,850,664)
Intercompany Billings	1,785
Allocated Costs	10,445,661
Depreciation & Amortization	13,826,073
Taxes Other Than Income	1,712,495
Foreign Currency Revaluation	-
Total Operating Expenses	50,936,038
Gain/(Loss) on Disposal of Long Lived Assets	-
Operating Income	45,909,641
Equity Investment Income	-
Subsidiaries Income	-
Interest Income	191
Other Income - Net	347,718
Other Income	347,909
Earnings Before Interest & Taxes	46,257,550
Interest on Long-Term Debt	2,216,933
Intercompany Interest	8,193,175
Other Interest Expense	(25,358)
Allowance for Funds-Debt	(219,336)
Dividends Common Stock	-
Interest and Stock	10,165,414
Earnings Before Income Taxes	36,092,136
Income Tax Expense	10,744,409
Net Income from Continuing Operations	25,347,727

Schedule TK-6
6 Mos 2018 & 2019

Elizabethtown Gas Company
Income Statement

	6 Months December 31, 2018	12 Months December 31, 2019
Utility:	125,604,462	325,132,512
NonUtility:	0	0
Total Operating Revenues	**125,604,462**	**325,132,512**
Operating Expenses:		
Cost of Sales - Utility:		141,269,350
Operations:	52,069,785	75,751,085
Maintenance:	3,288,463	6,237,842
Depreciation:	12,976,876	28,449,579
Energy and Other Taxes:	1,614,204	4,109,304
Total Operating Expenses:	**123,440,789**	**255,817,160**
Total Operating Income:	**2,163,674**	**69,315,352**
	0	
Other Income and Expenses:		
Equity in Affiliated Companies:		
Equity in Undistributed Earnings of Subs:		
Other:	188,608	40,471
Total other Income and Expenses:	**188,608**	**40,471**
Interest Charges:		
Interest Charges:	**10,478,474**	**27,351,623**
Income Taxes:		
Current Federal & State Income Taxes:	(0)	0
Deferred Federal and State Income Taxes:	(3,085,553)	7,761,039
Total Income Taxes:	**(3,085,553)**	**7,761,039**
Income From Continuing Operations:	**(5,040,639)**	**34,243,161**

Elizabethtown Gas Company
Balance Sheet

	Period Ending 6/30/2020
Assets	
Property, Plant and Equipment	
Utility Plant, at original cost	1,801,171,370
Accumulated Depreciation and Amortization	(294,356,305)
Nonutility Property and Equipment, at cost	0
Accumulated Depreciation	0
Total Property, Plant and Equipment	**1,506,815,064**
Investments	
Investments in Subsidiaries	0
Available-for-Sale-Securities	0
Restricted	5,028,318
Investment in Affiliates	0
Total Investments	**5,028,318**
Current Assets	
Cash and Cash Equivalents	436,769
Accounts Receivable - Affiliate	0
Accounts Receivable	52,594,068
Unbilled Revenues	8,842,077
Provision for Uncollectibles	(15,499,928)
Accounts Receivable - Associated Companies	0
Natural Gas in Storage, Average Cost	7,486,329
Materials and Supplies, Average Cost	495,668
Assets of Discontinued Businesses Held for Disposal	0
Derivatives - Energy Related Assets	797,079
Prepaid Taxes	10,345,233
Other Prepayments and Current Assets	2,680,147
Elimination- Intercompany	0
Total Current Assets	**68,177,441**
Regulatory and Other Noncurrent Assets	
Goodwill	700,226,529
Identifiable Intangible Assets	0
Environmental Remediation Costs	87,199,337
Derivatives - Energy Related Assets	785,032
Deferred Gas Fuel Costs	0
Pension & Post-Retirement - Regulatory Asset	37,576,977
Other Regulatory Assets	38,402,040
Other	7,711,199
Long Term Assets	0
Deferred Income Taxes – Asset, Net	0
Total Regulatory and Other Non-Current Assets	**871,901,115**
Total Assets	**2,451,921,939**
Capitalization and Liabilities	
Common Equity	

Schedule TK-7

Elizabethtown Gas Company
Balance Sheet

	Period Ending 6/30/2020
Treasury Stock	0
Common Stock	0
Premium on Common Stock	1,183,797,343
Accumulated Other Comprehensive Income	0
Retained Earnings	65,135,806
Total Equity	**1,248,933,148**
Long Term Debt	668,085,777
Total Long-Term Debt	**668,085,777**
Current Liabilities	
Notes Payable- Banks	123,900,000
Accounts Payable	30,743,738
Accounts Payable to Associated Companies	1,167,182
Current Maturities of Long-Term Debt	0
Customer Deposits	9,105,173
Taxes Accrued	(1,011,565)
Environmental Remediation Costs	19,607,000
Interest Accrued	1,237,251
Derivatives - Energy Related Liabilities	3,847,607
Other Current Liabilities	1,208,386
Pension Benefit Obligation - Current	0
Total Current Liabilities	**189,804,772**
Deferred Credits and Other Noncurrent Liabilities	
Pension and Other Postretirement Benefits	1,244,128
Accumulated Deferred Income Taxes - Net	(14,141,747)
Environmental Remediation Costs	70,979,000
Derivatives - Energy Related Liabilities	156,315
Asset Retirement Obligations	114,257,672
Regulatory Liabilities	170,419,533
Other	2,183,339
Total Deferred Credits and Other Noncurrent Liabilities	**345,098,241**
Affiliate Liabilities	0
Total Affiliate Liabilities	**0**
Total Liabilities	**1,202,988,790**
Total Liabilities and Equity	**2,451,921,939**

Elizabethtown Gas Company
Statement of Gas Operating Revenues

December 31, 2019

Operating Revenues:		
Firm Residential	$	215,563,272
Firm Commercial		65,990,824
Firm Industrial		2,753,090
Firm Cogen & Electric Gen		10,241,545
Firm Transportation - Residential		1,631,868
Firm Transportation - Commerical		22,691,396
Firm Transportation - Industrial		12,154,996
Firm Transportation - Cogen		0
Total Firm Operating Revenues		331,026,992
Deferred BGSS		
Weather Normalization Revenue Deferred		(5,894,480)
All Other Deferred Accts		
Total Deferred		(5,894,480)
TOTAL	$	325,132,512

Schedule TK-9

Elizabethtown Gas Company
Payments and Accruals to Affiliated Companies

		12 Months December 31, 2019
1	**South Jersey Industries, Inc. (corporate support)**	54,462,721
2	**South Jersey Gas (corporate support)**	6,413,880
3	**South Jersey Resources Group, LLC (commodity purchases)**	135,899,713

South Jersey Industries, Inc. includes the following major pass-through items:

Common Dividends	-
Federal Income Taxes	-
Pension Plan Contributions	433,575
Benefits	6,227,214
Subtotal of Major Pass-Through Items	6,660,789

Schedule TK-10

ELIZABETHTOWN GAS COMPANY
ENERGY EFFICIENCY PROGRAM ("EEP")
Energy Efficiency Chart of Accounts

GL Acct.	Prg. Code	ETG Program Title
16140	762	Residential base Program - RGGI
16140	756	Small Commercial and Industrial Enhanced - RGGI
16140	757	Large Commercial and Industrial Enhanced - RGGI
16140	758	Residential Outreach and Education - RGGI
16140	759	Commercial and Industrial Outreach and Education - RGGI
16140	760	Residential Dashboard - RGGI
16140	TBD	Loan Program
16170	761	Regulatory Asset - RGGI

Schedule TK-11
Income Statement

ELIZABETHTOWN GAS COMPANY
ENERGY EFFICIENCY PROGRAM ("EEP")
Pro Forma Income Statement (Program Year)

	Year 1	Year 2	Year 3
Operating Revenues	$ 3,696,420	$ 7,440,737	$ 12,860,935
Incremental O&M Expense	$ (2,273,602)	$ (2,944,275)	$ (4,099,202)
Margin	$ 1,422,818	$ 4,496,462	$ 8,761,733
Amortization of Program Investment	$ (631,828)	$ (2,211,816)	$ (4,516,732)
Operating Income	$ 790,990	$ 2,284,645	$ 4,245,000
Interest Expense	$ (182,987)	$ (571,186)	$ (1,097,518)
Income Before Income Taxes	$ 608,003	$ 1,713,459	$ 3,147,482
Income Tax Expense (28.11%)	$ (170,910)	$ (481,653)	$ (884,757)
Net Income	$ 437,093	$ 1,231,806	$ 2,262,725

Schedule TK-12
Balance Sheet

ELIZABETHTOWN GAS COMPANY
ENERGY EFFICIENCY PROGRAM ("EEP")
Pro Forma Balance Sheet (Program Year)

	Year 1	Year 2	Year 3
Assets			
Cumulative Investment	$ 18,757,467	$ 44,010,103	$ 82,224,935
Less Accumulated Amortization	$ (631,828)	$ (2,843,644)	$ (7,360,376)
Net Investment	$ 18,125,639	$ 41,166,459	$ 74,864,558
Deferred Tax	$ (3,611,476)	$ (8,245,146)	$ (14,943,918)
Total Asset	$ 14,514,163	$ 32,921,314	$ 59,920,640
Liabilities & Capitalization			
Deferred Income Tax	$ (3,611,476)	$ (8,245,146)	$ (14,943,918)
Total Capitalization	$ 18,125,639	$ 41,166,459	$ 74,864,558
Total Liabilities & Capitalization	$ 14,514,163	$ 32,921,314	$ 59,920,640

ELIZABETHTOWN GAS COMPANY
ENERGY EFFICIENCY PROGRAM ("EEP")
Annual Bill Summary

		Proposed Residential Delivery Service (844 Therms)				Proposed Small General Service (1,244 Therms)			
Program Year	Rate	Annual Bill	Change ($)	Change (%)	Cumulative Change (%)	Annual Bill	Change ($)	Change (%)	Cumulative Change (%)
Current Bill	$0.0000	$931.42				$1,448.57			
Year 1	$0.0082	$938.34	$6.92	0.7%	0.7%	$1,458.77	$10.20	0.7%	0.7%
Year 2	$0.0164	$945.26	$6.92	0.7%	1.5%	$1,468.97	$10.20	0.7%	1.4%
Year 3	$0.0286	$955.56	$10.30	1.1%	2.6%	$1,484.15	$15.18	1.0%	2.5%
Year 4	$0.0248	$952.35	($3.21)	-0.3%	2.2%	$1,479.42	($4.73)	-0.3%	2.1%
Year 5	$0.0244	$952.02	($0.33)	0.0%	2.2%	$1,478.93	($0.49)	0.0%	2.1%
Year 6	$0.0230	$950.83	($1.19)	-0.1%	2.1%	$1,477.18	($1.75)	-0.1%	2.0%

		Proposed General Deliver Service (18,000 Therms)				Proposed Large Volume Demand (830,000 Therms)			
Effective Date	Rate	Annual Bill	Change ($)	Change (%)	Cumulative Change (%)	Annual Bill	Change ($)	Change (%)	Cumulative Change (%)
Current Bill	$0.0000	$16,957.80				$616,616.00			
Year 1	$0.0082	$17,105.40	$147.60	0.9%	0.9%	$623,422.00	$6,806.00	1.1%	1.1%
Year 2	$0.0164	$17,253.00	$147.60	0.9%	1.7%	$630,228.00	$6,806.00	1.1%	2.2%
Year 3	$0.0286	$17,472.60	$219.60	1.3%	3.0%	$640,354.00	$10,126.00	1.6%	3.8%
Year 4	$0.0248	$17,404.20	($68.40)	-0.4%	2.6%	$637,200.00	($3,154.00)	-0.5%	3.3%
Year 5	$0.0244	$17,397.00	($7.20)	0.0%	2.6%	$636,868.00	($332.00)	-0.1%	3.3%
Year 6	$0.0230	$17,371.80	($25.20)	-0.1%	2.4%	$635,706.00	($1,162.00)	-0.2%	3.1%

		Proposed Electric Generation Firm (30,000 Therms)			
Effective Date	Rate	Annual Bill	Change ($)	Change (%)	Cumulative Change (%)
Current Bill	$0.0000	$20,469.00			
Year 1	$0.0082	$20,715.00	$246.00	1.2%	1.2%
Year 2	$0.0164	$20,961.00	$246.00	1.2%	2.4%
Year 3	$0.0286	$21,327.00	$366.00	1.7%	4.2%
Year 4	$0.0248	$21,213.00	($114.00)	-0.5%	3.6%
Year 5	$0.0244	$21,201.00	($12.00)	-0.1%	3.6%
Year 6	$0.0230	$21,159.00	($42.00)	-0.2%	3.4%

REDLINE

TABLE OF CONTENTS
(continued)

RIDER "E"

ENERGY EFFICIENCY PROGRAM ("EEP")

Applicable to all Customers except those Customers under special contracts as filed and approved by the BPU and those customers exempted pursuant to the Long-Term Capacity Agreement Pilot Program ("LCAPP"), P.L. 2011 c.9, codified as N.J.S.A. 48:3-60.1. See the LCAPP Exemption Procedures at the end of the SBC, Rider "D."

The EEP shall be collected on a per therm basis and shall remain in effect until changed by order of the BPU. The applicable EEP rate is as follows:

Docket No. GR19070872, per a four-year amortization	$0.0073 per therm
Docket No. TBD, per a ten-year amortization	$0.0082 per therm
TOTAL	$0.0155 per therm

The rate applicable under this Rider includes provision for the New Jersey Sales and Use Tax, and when billed to customers exempt from this tax shall be reduced by the amount of such tax included therein.

In the "Global Warming Act," *N.J.S.A.*26-2C-45. or "RGGI Legislation" the State Legislature determined that global warming is a pervasive and dangerous threat that should be addressed through the establishment of a statewide greenhouse gas emissions reduction program. On May 8, 2008, the Board issued an Order (the "RGGI Order") pursuant to *N.J.S.A.* 48:3-98.1(c). The RGGI Order allowed electric and gas public utilities to offer energy efficiency and conservation programs on a regulated basis. The Company's energy efficiency programs were first authorized pursuant to Board orders issued in Docket Nos. EO09010056 and GO09010060. They were subsequently extended pursuant to Board orders issued in GO10070446, GO11070399, GO12100946, GO15050504, GR16070618 and GO18070682. The Company's current energy efficiency programs are effective through December 31, 2021 and described below. On May 23, 2018, the Clean Energy Act of 2018 ("CEA" or the "Act") was signed into law. The BPU directed utilities to file changes pursuant to Board orders issued in Docket Nos. QO1901040, QO19060748 and QO17091004 Dated June 10, 2020, ("the 2020 Orders").

The EEP enables the Company to recover all costs associated with ~~the following~~ energy efficiency programs approved by the Board. ~~order dated February 19, 2020 in BPU Docket No. GO18070682:~~

~~1. Residential gas HVAC and hot water heater incentive programs;~~

~~2. Residential home energy assessment program;~~

~~3. Residential home weatherization for income qualified customers program;~~

~~4. Commercial steam trap survey and repair program; and~~

~~5. Enhanced customer education and outreach initiatives designed to encourage customers to conserve energy and lower their gas bills.~~

520 Green Lane
Union, New Jersey 07083

Filed Pursuant to Order of the Board of Public Utilities
Dated ~~March 9, 2020~~xxx3 in Docket No. ~~GR19070872~~xxx4

RIDER "E"

ENERGY EFFICIENCY PROGRAM ("EEP")
(continued)

Determination of the EEP

On or about July 31 of each year, the Company shall file with the Board an EEP rate filing based on the Board's August 21, 2013 Order in Docket No.GO12100946 and one based on the 2020 Orders for the costs and recoveries incurred during the previous EEP year ending June 30th as well as estimates, if applicable, through the upcoming calendar year to develop the total EEP rate to be effective October 1st as follows:

The EEP monthly recoverable expenditure amounts shall be derived from taking the average of the cumulative beginning and end of month expenditures associated with the EEP investments less accumulated amortization and accumulated deferred income tax credits times the after tax weighted average cost of capital grossed up for the Company's revenue factor, as directed in the Board's August 21, 2013 Order in Docket No. GO12100946, plus monthly amortization using a four year amortization period. Costs recoveries incurred under this and previous Dockets will continue until near zero and then be subsumed in the filings made under the 2020 Orders. The 2020 Orders monthly amortization will be a ten (10) year amortization period. The 2020 Orders also include a customer loan component that will earn a monthly rate of return recovery derived from taking the average of the cumulative beginning and end of month balances associated with the loan investments times the pre-tax rate of return grossed up using a revenue factor after removing the Federal and State corporate business tax.. Any changes in the above authorized by the Board in a subsequent base rate case will be reflected in the subsequent monthly calculations.

Under the current and 2020 Orders t~~T~~he EEP rate shall be calculated by summing the (i) prior year's EEP over or under recovery balance, plus (ii) current year monthly recoverable expenditure amounts, less (iii) current year recoveries, plus (iv) current year carrying costs based on the monthly average over or under recovered balances, at a rate equal to the rate obtained on the Company's weighted average of its commercial paper and bank credit lines, if both sources have been utilized, not to exceed the weighted average cost of capital after tax as described above, plus (v) an estimated amount to recover the upcoming year's recoverable expenditures amount and dividing the resulting sum by the annual forecasted per therm quantities for the applicable Customers set forth above. The resulting rate shall be adjusted for all applicable taxes. The EEP rate shall be self-implementing on a refundable basis as directed by the BPU.

ELIZABETHTOWN GAS COMPANY
Conservation Incentive Program ("CIP")
Customer Bill Impacts

Rate Month		10/1/2021	10/1/2022	10/1/2023	10/1/2024
Amounts Through		6/30/2021	6/30/2022	6/30/2023	6/30/2024
Therm Reductions, to date					
Residential Delivery Service		0	(1,216,204)	(2,381,092)	(3,805,535)
Small General Service		0	(42,080)	(134,400)	(279,784)
General Delivery Service		0	(25,248)	(80,564)	(168,044)
Margin Rate Pre Tax: Distribution Charge and IIP					
Residential Delivery Service			$0.4307	$0.4700	$0.4701
Small General Service			$0.3787	$0.4205	$0.4223
General Delivery Service			$0.2288	$0.2536	$0.2547
Margin $$$ Pre Tax- (Losses- Recoverable from Customers)					
Residential Delivery Service		$0	($523,820)	($1,119,024)	($1,788,981)
Small General Service		$0	($15,936)	($56,518)	($118,152)
General Delivery Service		$0	($5,777)	($20,435)	($42,802)
			($545,533)	($1,195,977)	($1,949,935)
Annual Therms					
Residential Delivery Service		231,614,900	232,831,104	235,212,196	239,017,731
Small General Service		21,220,600	21,262,680	21,397,080	21,676,864
General Delivery Service		125,569,124	125,594,372	125,674,936	125,842,980
Billing Rate with Tax: Charge / (Credit)					
Residential Delivery Service	1.06625		$0.0024	$0.0051	$0.0080
Small General Service	1.06625		$0.0008	$0.0028	$0.0058
General Delivery Service	1.06625		$0.0000	$0.0002	$0.0004
Annual Bill Amount	Ann Thms	9/1/2020			
Residential Delivery Service	844	$931.42	$933.45	$937.75	$944.50
Small General Service	1,244	$1,448.57	$1,449.57	$1,453.05	$1,460.27
General Delivery Service	18,000	$14,821.20	$14,821.20	$14,824.80	$14,832.00
Change in Annual Bill Amount					
Residential Delivery Service			$2.03	$4.30	$6.75
Small General Service			$1.00	$3.48	$7.22
General Delivery Service			$0.00	$3.60	$7.20
Percent Change in Annual Bill Amount					
Residential Delivery Service			0.2%	0.5%	0.7%
Small General Service			0.1%	0.2%	0.5%
General Delivery Service			0.0%	0.0%	0.0%
Cumulative Percent Change in Annual Bill Amount					
Residential Delivery Service			0.2%	0.7%	1.4%
Small General Service			0.1%	0.3%	0.8%
General Delivery Service			0.0%	0.0%	0.1%

REDLINE

ELIZABETHTOWN GAS COMPANY
B. P. U. NO. 17 – GAS ORIGINAL SHEET NO. 125.2

RIDER "G"

CONSERVATION INCENTIVE PROGRAM ("CIP")

Applicable to all Customers served under RDS, SGS and GDS rate classes.

The CIP shall be collected on a per therm basis and shall remain in effect until changed by order of the BPU. The applicable CIP rates are as follows:

RDS	SGS	GDS
$0.0000 per therm	$0.0000 per therm	$0.0000 per therm

The rates applicable under this Rider include provision for the New Jersey Sales and Use Tax, and when billed to customers exempt from this tax shall be reduced by the amount of such tax included therein.

The annual filing for the adjustment to the CIP rate shall be concurrent with the annual filing for BGSS. The CIP factor shall be credited/collected on a per therm basis for the service classifications stated above. The level of BGSS savings referenced in (d) in this Rider shall be identified in the annual CIP filing, and serve as an offset to the non-weather related portion of the CIP charge provided in (f) in this Rider. The Periodic and Monthly BGSS rates identified in Rider "A" to this tariff shall include the BGSS savings, as applicable.

(a) This Rider shall be utilized to adjust the Company's revenues in cases wherein the Actual Usage per Customer experienced during Monthly Periods varies from the Baseline Usage per Customer ("BUC"). This adjustment will be effectuated through a credit or surcharge applied to customers' bills during the Adjustment Period. The credit or surcharge will also be adjusted to reflect prior year under recoveries or over recoveries pursuant to this CIP.

ELIZABETHTOWN GAS COMPANY

B. P. U. NO. 17 – GAS ORIGINAL SHEET NO. 125.3

RIDER "G"

CONSERVATION INCENTIVE PROGRAM ("CIP")
(continued)

(b) The BUC in therms for each Customer Class Group by month is as follows:

Month	RDS	SGS	GDS
July	14.1	17.5	526.5
August	14.1	18.0	531.2
September	15.1	23.3	602.0
October	39.0	54.5	1,143.8
November	85.4	117.0	1,801.4
December	140.2	217.5	2,670.3
January	174.8	277.7	3,201.7
February	149.6	231.4	2,700.7
March	118.5	164.0	2,198.0
April	57.9	71.3	1,292.9
May	22.5	31.8	781.5
June	12.8	19.7	514.5
Total Annual	844.0	1,243.7	17,964.5

The BUC shall be reset each time new base rates are placed into effect as the result of a base rate case proceeding.

(c) At the end of the Annual Period, a calculation shall be made that determines for each Customer Class Group the deficiency ("Deficiency") or excess ("Excess") to be surcharged or credited to customers pursuant to the CIP mechanism. The Deficiency or Excess shall be calculated each month by multiplying the result obtained from subtracting the Baseline Usage per Customer from the Actual Usage per Customer by the actual number of customers, and then multiplying the resulting therms by the Margin Revenue Factor.

ELIZABETHTOWN GAS COMPANY
B. P. U. NO. 17 – GAS ORIGINAL SHEET NO. 125.4

RIDER "G"

CONSERVATION INCENTIVE PROGRAM ("CIP")
(continued)

(d) Recovery of any Deficiency in accordance with Paragraph (c), above, associated with non-weather-related changes in customer usage will be limited to the level of BGSS savings achieved pursuant to Board orders issued in Docket Nos. QO1901040, QO19060748 and QO17091004 Dated June 10, 2020.The value of the weather-related changes in customer usage shall be calculated in accordance with WNC Rider of this tariff without a dead band which result shall be allocated to applicable classes by the Company.

(e) Except as limited by Paragraph (d), above, the amount to be surcharged or credited to the Customer Class Group shall equal the aggregate Deficiency or Excess for all months during the Annual Period determined in accordance with the provisions herein, divided by the Forecast Annual Usage ("FAU") for the Customer Class Group.

(f) The CIP shall not operate to cause the Company to earn in excess of its allowed rate of return on common equity of 9.6% for any twelve-month period ending June 30; any revenue which is not recovered will not be deferred. For purposes of this paragraph the Company's rate of return on common equity shall be calculated by dividing the Company's net income for such annual period by the Company's average 13 month common equity balance for such annual period, all data as reflected in the Company's monthly reports to the Board of Public Utilities. The Company's regulated jurisdictional net income shall be calculated by subtracting from total net income (1) margins retained by the Company from non-firm sales and transportation services, net of associated taxes, (2) margins retained in the provision of sales in accordance with the Board Order pertaining to Docket No. GR90121391J and GM90090949, net of associated taxes and (3) net income derived from unregulated activities conducted by Elizabethtown and (4) the Energy Efficiency Program and (5) the Infrastructure Investment Program.

ELIZABETHTOWN GAS COMPANY
B. P. U. NO. 17 – GAS ORIGINAL SHEET NO. 125.5

RIDER "G"

CONSERVATION INCENTIVE PROGRAM ("CIP")
(continued)

(g) As used in this Rider, the following terms shall have the meanings ascribed to them herein:

(i) **Actual Number of Customers** ("ANC") – shall be determined on a monthly basis for each of the Customer Class Groups to which the CIP Clause applies, plus any Incremental Large Customer Count Adjustment for the Customer Class Group.

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

(iii) **Adjustment Period** – shall be the calendar year beginning immediately following the conclusion of the Annual Period.

(iv) **Annual Period** – shall be the twelve consecutive months from July 1 of one calendar year through June 30 of the following calendar year.

(v) **Baseline Usage per Customer** ("BUC") – shall be the average normalized consumption per customer by month derived from the Company's most recent base rate case and stated in therms on a monthly basis for each Customer Class Group to which the CIP applies. The BUC shall be rounded to the nearest one tenth of one therm.

(vi) **Customer Class Group** – For purposes of determining and applying the CIP, customers shall be aggregated into three separate recovery class groups, RDS, SGS and GDS.

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

ELIZABETHTOWN GAS COMPANY
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RIDER "G"

CONSERVATION INCENTIVE PROGRAM ("CIP")
(continued)

(viii) **Incremental Large Customer Count Adjustment** – the Company shall maintain a list of incremental commercial and industrial customers added to its system on or after May 31, 2020 whose connected load is greater than that typical for the Company's average commercial and industrial customer in the GDS rate schedule. For purposes of the CIP, large incremental customers shall be those GDS customers whose connected load exceeds 5,400 cubic feet per hour ("CFH"). A new customer at an existing location previously connected to the Company's facilities shall not be considered an incremental customer. The Actual Number of Customers for the Customer Class Group shall be adjusted to reflect the impact of all such incremental commercial or industrial customers. Specifically, the Incremental Large Customer Count Adjustment for the GDS customer class for the applicable month shall equal the aggregate connected load for all new active customers that exceed the 5,400 CFH threshold divided by 2,700 CFH. rounded to the nearest whole number.

(ix) **Margin Revenue Factor** – the Margin Revenue Factor ("MRF") for the CIP shall be each class's Distribution Charge and applicable IIP rate on a pre-tax basis.

Exhibit F

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

DIRECT TESTIMONY

OF

LEONARD J. WILLEY

Manager, Gas Supply
Elizabethtown Gas

On Behalf of
Elizabethtown Gas Company

September 25, 2020

Q. Please state your name and business address.

A. My name is Leonard J. Willey. My business address is 520 Green Lane, Union, New Jersey 07083.

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

A. I am employed as Manager, Gas Supply by Elizabethtown Gas Company ("Elizabethtown" or "Company").

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

A. I received a Bachelor of Arts degree in Computer Science from Rutgers, The State University of New Jersey with a minor in Economics in 1991. I have been employed by Elizabethtown since September 1983 and have held a number of positions in the planning and gas supply procurement area. During my tenure with Elizabethtown, I have attended the American Gas Association's ("AGA") "Demand Modeling and Forecasting" seminar, the Institute of Gas Technology's "Energy Modeling" seminar, the Institute for Professional Education ("IPE") courses "Applied Time Series: Analysis and Forecasting" and "Forecasting: Methods and Applications". In addition, I have attended various conferences and seminars on topics and issues related to my job function. I am formerly a member of the AGA's Statistics and Load Forecasting Methods Committee. I have previously testified in many New Jersey Board of Public Utilities ("Board") proceedings on behalf of Elizabethtown concerning the Company's Basic Gas Supply Service ("BGSS") rate, as well as other proceedings.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide support for the BGSS savings test information related to Elizabethtown's proposed Conservation Incentive Program ("CIP") contained in

the testimony of Company witness Isaac Gabel-Frank of Gabel, Associates, Inc. I also address associated impacts arising out of Elizabethtown's asset management agreement with South Jersey Resources Group, LLC ("SJRG").

Q. Please describe the BGSS Savings Test under the proposed CIP.

A. The BGSS Savings Test is a measure of the value or cost savings on an on-going basis to customers resulting from the effectiveness of the Company's energy efficiency programs. Savings are derived from permanent and/or long-term reductions to annual fixed costs to the Company's portfolio of firm transportation and storage contracts related to reduced firm design peak day demand requirements that coincide with energy efficiency initiatives. The annual fixed cost savings are on-going and include additional savings that occurred during the CIP review period July 1 through June 30.

Q. Please describe the BGSS savings that Elizabethtown anticipates from reductions in capacity as a result of energy efficiency programs?

A. Elizabethtown anticipates BGSS savings related to 1) permanent BGSS capacity savings; 2) long-term BGSS capacity savings inclusive of foregone incremental design day capacity purchases; and 3) avoided capacity savings.

Q. Please describe and quantify the permanent BGSS capacity savings.

A. Permanent BGSS capacity savings represent the Company's permanent savings realized from permanent capacity releases or contract terminations on an ongoing basis. Currently, the permanent capacity releases and contract terminations for Elizabethtown's permanent savings realized from permanent capacity release or contract terminations are $2,188,818 calculated using current, FERC-approved, interstate pipeline tariff rates and associated billing determinants or in the case of abandoned tariff services, the last billed rates and

billing determinants. The computed annual BGSS savings are associated with contracts terminated during the term of previous energy efficiency programs.

Q. Please describe and quantify the long-term BGSS capacity savings.

A. These savings result from reductions of capacity on a long-term basis, *i.e.* for periods of at least one-year. This category of savings includes, but is not limited to: 1) additional contract terminations not included in permanent BGSS capacity savings; 2) release of capacity to an affiliate or non-affiliate; 3) contract restructuring; 4) reductions in the commodity cost of gas supply effectuated through purchasing strategies; and 5) foregone incremental design day capacity purchases. The additional long-term BGSS capacity savings for Elizabethtown's portfolio are currently estimated to be $22,036,033 and are associated with existing contracts that would be released and/or terminated as part of the CIP and an estimate of the savings derived from foregoing incremental design day capacity purchases. The estimated BGSS savings from released or terminated contracts represent annual savings calculated using current, FERC-approved, interstate pipeline tariff rates and associated billing determinants. The annual savings derived from foregone incremental design day capacity were calculated using the average negotiated rate of recent, incremental capacity expansions serving the NJ/NY market area multiplied by the difference between the projected firm, design peak day demand requirement and the Company's current capacity portfolio.

Q. Please describe the avoided capacity savings.

A. Avoided capacity costs represent the cost to meet residential customer growth on a prospective basis. These savings will be calculated as set forth in the Board of Public Utilities May 21, 2014 Order in Docket No. GR13030185. Under that order, avoided

capacity costs shall be calculated on a monthly basis and equal the net change in residential customers multiplied by the corresponding "Benchmark Use per Customer" and by the average fixed capacity costs reflected in the Company's concurrent BGSS filing.

Q. Are the capacity assets you describe above subject to an asset management agreement?

A. Yes, in connection with the South Jersey Industries, Inc. acquisition of Elizabethtown's assets through a transaction that was authorized by the Board by Order dated June 22, 2018 in BPU Docket No. GM17121309, the asset management agreement then in place with Sequent Energy Management, L.P. ("Sequent") ("SEM AMA") was assigned to SJRG for the remaining term and extended through a new asset management agreement for the term April 1, 2019 through March 31, 2022 ("SJRG AMA"). Thus, pursuant to the SJRG AMA, SJRG, serves as the upstream capacity manager and principal supplier of natural gas on terms and conditions substantially the same as those reflected in the SEM AMA. The SJRG AMA involves two contracts: an Asset Management and Agency Agreement and a Gas Purchase and Sale Agreement. Under the terms of the agreements, which are confidential, Elizabethtown has for all interstate pipeline and storage capacity designated SJRG as its agent and where appropriate, has released assets -- upstream pipeline transportation and storage contracts -- to SJRG. SJRG has the right to utilize all of Elizabethtown's upstream contracts as long as it meets its supply obligations to Elizabethtown.

Q. Will the capacity releases associated with the BGSS savings test you describe above impact the SJRG AMA?

A. The removal of any existing capacity contracts from the SJRG AMA to satisfy the BGSS savings test is not prohibited but may require an amendment to the AMA. Amendments to

the AMA are subject to BPU approval. To the extent an amendment is necessary, Elizabethtown will file for approval to amend the AMA

Q. Does this conclude your testimony?

A. Yes, it does.

VERIFICATION

I, Leonard J. Willey, of full age, being duly sworn according to law, upon my oath, depose and say:

1. I am Manager, Gas Supply for Elizabethtown 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.

Leonard J. Willey
Manager, Gas Supply

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

Exhibit G

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

DIRECT TESTIMONY

OF

ISAAC GABEL-FRANK

Vice President
Gabel Associates, Inc.

On Behalf of
Elizabethtown Gas Company

September 25, 2020

Exhibit G

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"), Elizabethtown Gas Company ("ETG" or "the Company"), 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 SJG, NJNG, Atlantic City Electric Company ("ACE"), and Jersey Central Power and Light Company ("JCP&L") to support the energy efficiency filings being made in accordance with the New Jersey Board of Public Utilities' ("BPU" or "Board") Order dated June 10, 2020 in Docket Nos. QO19010040, QO19060748, and QO17091004 ("June 2020 Order").[1].

During the energy efficiency transition process at the Board in 2019 and 2020, I was an active participant that testified and submitted written comments on all major topics. During this process, I served as an 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.

[1] Order Directing the Utilities to Establish Energy Efficiency and Peak Demand Reduction Programs. Docket No. QO19010040, QO19060748, & QO17091004.

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, ratemaking, rate impacts, and lost revenue.

II. PURPOSE OF THIS TESTIMONY

Q. Please describe the purpose of this testimony.

A. This testimony serves two main functions:

1) to present the cost-effectiveness analysis conducted on the ETG proposed three-year energy efficiency portfolio.
2) to support ETG's petition for approval of a CIP Charge.

The purpose of the cost-effectiveness testimony is to describe the factors associated with cost-benefit analysis, lay out the assumptions used to calculate the cost-benefit analysis, and characterize the results and findings of the cost-benefit analysis for the ETG portfolio.

The purpose of the CIP testimony is to present the rationale for the CIP, and to set forth the methodology for and quantification of the initial CIP Charges to provide for collection of the non-weather-related margin deficiency experienced by the Company during the review period. The methodology set forth in the attached Schedules is also

proposed to be utilized in future years to establish CIP Charges to recover future non-weather-related margin deficiencies (or return to customers any excess in future non-weather-related margins). The methodology used is consistent with the Board's directives.

Q. Are you submitting any Schedules to support your testimony or the Company's CIP filing?

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 2020 Order. The schedules attached to my testimony include:

Schedule IGF-1	Resume of Isaac Gabel Frank
Schedule IGF-2	Cost-Benefit Results Summary
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
Schedule IGF-10	CIP Schedules

Schedule IGF-10 above contains a number of schedules describing and supporting the proposed ETG CIP mechanism. These schedules set forth the methodology and calculations used to derive CIP Charges to recover the non-weather-related deficiency in margins experienced by the Company during a review period. The methodology and calculations are intended to be consistent with CIP programs previously approved by Board for other New Jersey Gas Distribution Companies ("GDC"), as well as Staff

recommendations and related Board findings and directives in the June 2020 Order. A list of each schedule contained in IGF-10 is provided below:

Schedule IGF-10.1	Determination of Total Margin Variance
Schedule IGF-10.2	Determination of Weather-Related Component of CIP
Schedule IGF-10.3	CIP Recovery Tests
Schedule IGF-10.4	Earnings Test
Schedule IGF-10.5	Derivation of CIP Charges
Schedule IGF-10.6	Calculation of Average Baseline Use per Customer
Schedule IGF-10.7	Calculation of Average Actual Usage per Customer
Schedule IGF-10.8	Components of BGSS Savings Test
Schedule IGF-10.9	Derivation of Variable Margin

Q. Did you prepare the Schedules that set forth the cost-benefit analysis of ETG's energy efficiency portfolio and the methodology and quantifications for ETG's proposed CIP charge?

A. Yes. Schedules IGF-1 through IGF-10 attached hereto were prepared by me or under my direct supervision.

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 Order. The programs will provide energy savings opportunities to all ETG customers, stimulate economic development in New Jersey, and reduce environmental pollution, including carbon dioxide emissions.

III. COST-BENEFIT ANALYSIS OF ETG ENERGY EFFICIENCY PORTFOLIO

Q. Did you conduct an analysis of the program portfolio in the ETG Plan to determine its cost-effectiveness?

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 Rest ("PCT"), the Program Administrator Cost ("PAC") Rest, 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.[2,3] 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.

Q. Did you evaluate ETG'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.

[2] New Jersey Board of Public Utilities. *Order Adopting the First New Jersey Cost Test.* Docket Nos. QO19010040 and QO20060389. August 24, 2020.

[3] 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. Please summarize your conclusions.

A. The CBA shows the ETG 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 $67 million and a cost-benefit ratio of 1.9. This implies that for every dollar ETG spends on energy efficiency programs, customer will receive $1.90 in benefits.

The portfolio also produced significant environmental benefits. I estimate that the energy savings produced by the ETG Plan will reduce carbon dioxide ("CO_2") emissions by 0.5 million tons, sulfur dioxide ("SO_2") emissions by 135 tons, and nitrogen oxide ("NO_X") emissions by 326 tons.[4] The displacement of these emissions will avoid human health and environmental harms, providing additional benefits to ETG's customers. The portfolio also will provide significant economic development benefits. I estimate the portfolio will add $201 million to the New Jersey gross domestic product and create 2,145 job-year equivalents.[5]

Q. Did you review the ETG 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 ETG cost to achieve is well below the Board's guidelines for the Residential sector. The commercial & industrial, multi-family, and low-income cost to achieve values exceeded the Board's guidelines. The ETG programs were designed to build from those currently offered by the Division of Clean Energy with modifications geared to 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 $1.90 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

[4] The results of the emissions avoided analysis are shown in Schedule IGF-4.
[5] The results of the economic development benefits analysis are shown in Schedule IGF-5.

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 ETG 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 2 below summarizes the energy savings targets applicable to ETG in the first three-year program cycle:

Table 2: ETG Energy Savings Target

	Overall Target	State-Administered Target	ETG 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 ETG 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.[6,7] 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 1 shows a list of specific costs and benefits and the tests they apply to:

Table 1: 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		
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

[6] August 2020 Order.

[7] 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	x
Utility Lost Revenues						x

Q. Please describe the Program Benefits shown in Table 1.

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.[8] The prices were then forecasted using a blend of energy market forward trading price 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.[9] 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 PSE&G system and sales and use tax.

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.[10] The prices were then forecasted using the electric energy forecast described above.

[8] See August 2020 Order, Appendix A at 12.
[9] 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.
[10] 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

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 PSEG 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 PSE&G 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 "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.[11]

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.

[11] August 2020 Order, Appendix A at 15-16.

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 NY delivery point. The underlying Henry Hub supply forecast was combined with the Transco Z6 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.[12]

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.

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

[12] Id. at 13.

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.[13]

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 PSEG transmission zone was used.[14] 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.[15]

[13] 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.

[14] PJM Annual Transmission Revenue Requirements and Rates. pjm.com/-/media/markets-ops/settlements/network-integration-trans-service-june-2020.ashx?la=en

[15] See August 2020 Order, Appendix A at 13.

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 PSE&G'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 ETG's Tariff for Gas Service. This method results 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.[16] The avoided damages for CO_2 were estimated using the "Social Cost of Carbon for Regulatory Impact Analysis - Under Executive Order 12866" produced by the Interagency Working Group on Social Cost of Greenhouse Gases, United States Government.[17] 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).[18] I then de-escalated these rates over time based upon emissions rates from the most recent EIA Annual Energy

[16] See id. at 17.
[17] 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
[18] 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

Outlook (currently 2020) for the PJM/East region.[19] The de-escalation is intended to reflect the likely shift towards 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.[20] This source was used and approved by the Board[21] in the Evaluation of New Jersey Solicitation for ORECs for Offshore Wind Capacity Framework for Evaluation of Impacts.[22]

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 of customer bills savings. Energy efficiency programs create significant bill savings, which increase disposable income for residents and businesses. The spending of this increased

[19] 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.

[20] 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.

[21] 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

[22] 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

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.[23]

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 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.[24]

[23] N.J.A.C. 14: § 14:8-6.5 Application Requirements. nj.gov/bpu/pdf/boardorders/2018/20180917/9-17-18-8G.pdf
[24] August 2020 Order, Appendix A at 18.

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

The program administration cost category captures the cost of administering the energy efficiency programs by ETG. These include costs for marketing, outside services, utility administration, inspections and quality control, and evaluation. These costs were developed based on ETG'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 developed 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 customers 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").[25] 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,[26] Massachusetts Technical Reference Manual,[27] and the New York Technical Reference Manual.[28]

[25] 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

[26] 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

[27] 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

[28] New York State Department of Public Service. Technical Reference Manual. dps.ny.gov/W/PSCWeb.nsf/All/72C23DECFF52920A85257F1100671BDD

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 ETG 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,[29] 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 ETG service territory to produce natural gas savings in dual fuel projects and measures, and ETG 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 to FJV-1 to Company witness Vetri's testimony, with the total budget included in the revenue requirements shown on Schedule TK-1 attached to Company witness Kaufmann's testimony.

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.[30] The TRC, PCT, PAC, and RIM tests relied on the ETG weighted average cost of capital of 6.52% 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.[31]

Q. Please describe how the ETG energy savings target was developed.

A. The ETG 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

[29] See the testimony of Frank J. Vetri for additional information on utility overlap and the role of the statewide coordinator

[30] August 2020 Order at 7.

[31] June 2020 Order.

years relative to the program year for which the target is applicable."[32] 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 cogen and 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. CBA FINDINGS

Q. Please summarize your testimony and recommendations to the Board on the findings of your cost-effectiveness analysis.

A. The ETG 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 ETG service territory and ensure low-to-moderate income customers have equal opportunity to realize program benefits. The portfolio also puts ETG on a trajectory to meet the program year five energy savings target mandated in the Clean Energy Act.

The CBA shows that the ETG program portfolio is cost-effective under the New Jersey Cost Test with a cost-benefit ratio of 1.9 and net benefits of $67 million. These results indicate that the programs will provide significant benefits to all ETG customers, while improving environmental quality and stimulating economic development. I recommend the Board approve the ETG program portfolio as proposed.

[32] *See* June 2020 Order at page 19.

VI. CIP BACKGROUND

Q. Please provide some background regarding the CIP in New Jersey.

A. The Board established a Conservation Incentive Program on a pilot basis beginning in 2006 for NJNG and SJG. The stated rationale for the CIP was to separate the link between customer usage and a company's gross margin when a utility encourages energy conservation. In other words, the CIP is intended to remove the financial disincentive for a utility to encourage energy efficiency and reductions in energy consumption by its customers. The CIPs implemented for NJNG and SJG have undergone modifications since their inception in 2006, most recently as reflected in a Stipulation of Settlement between NJNG, SJG, Board Staff, and the Division of Rate Counsel, which was approved by the Board in 2014 in BPU Docket No. GR13030185.

The overall purpose of the CIP is to promote cost-effective energy efficiency and energy conservation measures, while aligning the interests of the utility and its customers. This is accomplished via the CIP by providing a mechanism to assure that reductions in energy usage due to the impacts of conservation and other changes in customer use do not adversely impact the financial performance of the utility, subject to certain "tests" intended to protect customers, including a cap on the amount of lost margins that can be recovered to assure that such cost recovery does not result in "overearnings" by the utility.

Q. Have there been more recent, relevant developments regarding the promotion of energy efficiency and energy conservation in general, and the CIP in particular?

A. Yes. On May 23, 2018, the New Jersey Clean Energy Act of 2018 ("CEA") was signed into law by Governor Murphy. The CEA, which emphasizes the important role that energy efficiency will play in helping to reduce greenhouse gas emissions and mitigate climate impacts, requires each New Jersey electric and natural gas utility to reduce the use of electricity and natural gas in their respective service territories. The CEA requires each natural gas utility to achieve annual reductions in the use of natural gas of at least 0.75%; however, the CEA also authorizes the Board to mandate additional reductions beyond this requirement. To meet these requirements, the CEA calls upon the State's Electric

Distribution Companies ("EDCs") and GDCs to take on an increased role in delivering energy efficiency programs to their customers.

In December 2018, Governor Murphy signed an Executive Order launching a process to develop an updated New Jersey Energy Master Plan ("EMP"). A draft EMP entitled "2019 New Jersey Energy Master Plan: Pathway to 2050" was released in June 2019 and, after a stakeholder review and comment process, the final EMP was released in January 2020. The EMP sets a goal and provides a blueprint for the conversion of the State's energy production profile to 100% clean energy sources by 2050. The EMP further identifies energy efficiency and load management as the most cost-effective energy resources for meeting customer demands and as being critical to meeting the State's goal of 100% reliance on clean energy sources by 2050. Moreover, the EMP identifies utilities as "critical allies" in achieving the State's clean energy goals through energy efficiency and helping deliver efficiency programs.

In response to Docket Nos. QO19010040, QO19060748, and QO17091004, on June 10, 2020, the Board issued the June 2020 Order which reflected a lengthy stakeholder and comment process and addressed the transition to the next generation of energy efficiency programs in the State consistent with the directives, goals, and vision in the CEA and EMP, entitled "Energy Efficiency Transition Straw Proposal". The June 2020 Order addresses many issues, including Staff recommendations that utilities offer a suite of core energy efficiency programs in the residential, commercial & industrial, and multi-family segments, and that utilities be allowed to propose additional initiatives and program enhancements. In addition, the Staff Proposal recommends that the overall annual energy use target reductions for gas utilities be increased beyond the CEA-mandated 0.75% during the last two years of a 5-year transition period, with total annual reductions in Year 4 of 0.95% (0.65% from utility programs and 0.3% from State-administered programs) and in Year 5 of 1.1% (0.75% from utility programs and 0.35% from State-administered programs).

Importantly, the June 2020 Order also addresses the issue of energy efficiency program cost recovery. Among other things, the Order notes that the CEA provides that all utility investment in energy efficiency and conservation programs may be eligible for rate treatment approved by the Board, including a return on equity, or other incentives or rate mechanisms to decouple utility revenue from sales of electricity and natural gas. The Order also notes that the Staff Proposal has been guided by three "crucial regulatory tools" that are needed to align the utility business model with the "aggressive" energy savings targets set forth in the CEA, one of which is the inclusion of a mechanism for the recovery of lost revenues due to efficiency programs. The Staff Proposal, which was adopted by the Board, recommends that utilities continue to utilize or propose a CIP.

Q. What are the key elements of the Board's June 2020 Order relative to the design of the CIP?

A. As proposed by Board Staff and accepted by the Board, the CIP approach currently in place for NJNG and SJG would remain in place with the following adjustments: 1) removal of the BGSS savings test and incorporation of an alternative BGSS savings test recognizing that current gas utilities without a CIP (including the Company) do not manage their natural gas capacity portfolios; 2) a requirement that the utility calculate the difference between its baseline revenue per applicable customer (determined by the utility's most recent base rate case) and the actual revenue per applicable customer on a monthly basis; and 3) a requirement that the utility file a base rate case no later than five years after the commencement of an approved energy efficiency program in order to reset the baseline revenue per customer. However, the following protections would remain part of the modified CIP under the Staff Proposal: a) an earnings test; b) a rate cap on surcharges; 3) some form of reasonable shareholder contribution; and 4) incorporation of an alternative to the BGSS savings Test. The June 2020 Order directs the utilities and Board Staff to work with Rate Counsel to develop a CIP.

VII. PROPOSED CIP METHODLOGY

Q. What is the purpose of the Company's proposed CIP Charge?

A. The purpose of the proposed CIP Charge is to provide a mechanism to de-link the Company's financial performance from the amount of natural gas consumed by each customer, and thereby remove any financial disincentive relative to the proliferation of energy efficiency in the Company's territory, consistent with the directives and goals set forth in the CEA, the EMP, and the June 2020 Order, as described above. As a result, the Company's financial interests will be aligned with the State's energy policies and goals. The existing Weather Normalization Clause ("WNC"), which has been in place for many years, de-links the Company's financial performance from the effects of weather on customer usage; the CIP would de-link the Company's financial performance from non-weather-related changes in natural gas consumption. The CIP will incorporate the current WNC and also "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."[33]

Q. What is the general methodology proposed to calculate the Company's CIP Charge to recover sales losses?

A. The proposed methodology is consistent with the approved methodology currently in place for NJNG and SJG and is reflective of the modifications recommended by Board Staff and accepted by the Board. As described below and in the attached Schedules, the methodology quantifies sales loss (i.e. margin deficiency) by comparing actual usage per customer to baseline usage per customer on a monthly basis, backs out weather-related sales variation to identify only the non-weather-related margin deficiency, and then applies a series of customer protection "tests" that put limits on the amount of margin deficiencies that can be recovered in any year, including:

1) a BGSS savings test;

[33] *See* June 2020 Order at 40.

2) a variable margin test which serves as the ‘rate cap’ envisioned by Board Staff; and,

3) an earnings test to assure that recovery of lost margins will not result in the Company ‘over-earning’.

The details of each step in the process are described below and set forth in the attached Schedules. In addition, ETG will also provide a shareholder contribution to support conservation and education efforts and will commit to file a base rate case within five years.

Q. Describe the first step in the quantification.

A. The first step in the process, as set forth in Schedule IGF-10.1, is to quantify the difference between actual natural gas use per customer and the baseline use per customer during the annual review period. Consistent with the Staff Proposal as set forth in the June 2020 Order and the practice of SJG and NJNG in their CIP mechanisms, this calculation is performed on a monthly basis. The monthly baseline use per customer is derived from the final test year proof of revenues from the Company’s most recent base rate case for service classifications Residential Delivery Service (“RDS”), Small General Service (“SGS”), and General Delivery Service (“GDS”), and these calculations are shown in Schedule IGF-10.6. The actual use per customers is derived from actual monthly throughput and actual monthly customer counts for the RDS, SGS and GDS service classifications, and these calculations are shown in Schedule IGF-10.7. The variance between actual use per customer and baseline use per customer is then applied to the actual customer count and the margin factor to derive the total variance in margins collected by the Company. The margin factor is calculated on a dollar-per-therm basis based upon the Company’s most recent base rate case and the Company’s Infrastructure Investment Program.

In this way, negative variances, i.e. those that result from actual usage per customer that is less than baseline use per customer, will result in a charge to customers (subject to customer protections). Conversely, positive variances, i.e. those that result from actual

usage per customer that is greater than baseline use per customer, will result in a credit to customers.

Q. What is the next step in the calculation?

A. The next step is to compute the weather-related variance in margins for the annual period. This calculation is shown in Schedule IGF-10.2. As shown, this calculation is consistent with the methodology used to calculate the annual WNC (except, consistent with existing Board policy, excluding the impact of a dead band). This starts with a comparison of the actual monthly degree days during the heating season months (October-May) to normal monthly degree days for the period, and then applying that differential to the combined consumption factor for RDS, SGS, and GDS customers (a 'weather-sensitivity' factor expressed as therms per degree day), and then applying that resulting figure to the applicable margin factor to derive the weather-related margin variance.

Q. Please describe the computation of the non-weather-related margin excess/deficiency and the application of the tests that place limitations on the recovery of any margin deficiencies.

A. Step 1 on Schedule IGF-10.3 sets forth the computation of the non-weather-related margin excess/deficiency for the annual period examined. As shown, the weather-related margin excess/deficiency derived on Schedule IGF-10.2 is subtracted from the total margin excess/deficiency for the period derived on Schedule IGF-10.1 to derive the non-weather-related margin excess/deficiency. This step is taken because recovery of the weather-related margin excess/deficiency is not subject to the same recovery tests as non-weather-related margin.

Consistent with existing CIP mechanisms, recovery of non-weather-related margin deficiencies through the CIP Charge is subject to the dual recovery test, which is comprised of a BGSS Savings Test and a Variable Margin Revenue Test. Accordingly, once the total deficiency of non-weather-related margins has been quantified (Step 1 on page 1 of 2 of Schedule IGF-10.3), the BGSS Test (Step 2) and Variable Margin Revenue Test (Step 3) are applied in order to determine the amount of margin deficiency that may be recovered

over the ensuing 12-month period via the CIP Charge. To be eligible for recovery during the ensuing annual period covered by the filing, non-weather-related margin deficiencies must pass both recovery tests. The two recovery tests work in conjunction, such that the total non-weather recoverable amount is limited in any year to the lesser of the two recoverable amounts allowed under the separately applied tests. Amounts that do not pass one or both tests may be recoverable in a future year, subject to the application of the recovery tests, as well as the earnings test, in that future year.

Step 2 on Schedule IGF-10.3 (page 1 of 2) sets forth the application of the BGSS Savings Test to the non-weather-related margin deficiency. Based upon the 2014 Board Order memorializing the stipulation between SJG, NJNG, Board Staff, and the Division of Rate Counsel, the non-weather margin impact shall be multiplied by a factor of 75% prior to application of the BGSS Savings Test;[34] therefore, only 75% of the non-weather-margin deficiency is applicable to the BGSS Savings Test. The BGSS Savings Test consists of three components: 1) permanent BGSS capacity savings; 2) additional long-term BGSS capacity savings inclusive of foregone incremental design day capacity purchases; and 3) avoided capacity savings.

Permanent BGSS capacity savings represent the Company's permanent savings realized from their respective permanent capacity releases or contract terminations on an ongoing basis. Currently, the permanent capacity releases and contract terminations for ETG's permanent savings realized from permanent capacity release or contract terminations are $2,188,818 and are provided in Schedule IGF-10.8 (page 1 of 3).

Additional long-term BGSS capacity savings represent cost savings from reductions of capacity on a long-term basis, i.e. for periods of at least one-year. This category of savings includes, but is not limited to: 1) additional contract terminations not included in permanent BGSS capacity savings; 2) release of capacity to an affiliate or non-affiliate; 3) contract restructuring; 4) reductions in the commodity cost of gas supply

[34] In the Matter of the Petition of New Jersey Natural Gas Company and South Jersey Gas Company for Authority to Continue the Conservation Incentive Program. Docket No. GR13030185. Page 4.

effectuated through purchasing strategies; and 5) foregone incremental design day capacity purchases. Currently, the additional long-term BGSS capacity savings for ETG's portfolio are estimated to be $22,036,033 and are provided in Schedule IGF-10.8 (page 2 of 3).

Avoided capacity costs represent the cost to meet residential customer growth on a prospective basis. Currently, the avoided capacity costs for ETG are estimated to be $0 and are provided in Schedule IGF-10.8 (page 3 of 3).

BGSS capacity savings amounts are supported in the direct testimony of Leonard J Willey.

Q. What is the next step in the application of the tests that place limitations on the recovery of any margin deficiencies?

A. Step 3 on Schedule IGF-10.3 (page 2 of 2) sets forth the application of the Variable Margin Revenue Test to the non-weather-related margin deficiency. Under the Variable Margin Revenue Test, recoverable non-weather-related margin deficiencies in any year cannot exceed 6.5% of the aggregate variable margins. The annual variable margins are calculated based upon the product of 1) actual monthly number of customers; 2) baseline monthly use per customer; and 3) monthly margin per therm. Monthly totals are summed for an annual period. The calculation of total variable margins is provided in Schedule IGF-10.9. As shown in Step 3 of Schedule IGF-10.3 (page 2 of 2), total annual variable margin revenues are $134,757,037. Accounting for the application of the 6.5% factor to the total variable margin revenues results in a recovery cap of $8,759,207 for current year non-weather-related margin deficiencies and prior-year carry-forward balances.

Step 4 on Schedule IGF-10.3 (page 2 of 2) provides a summary of the amounts of current-year and prior-year non-weather-related margins that pass the modified BGSS Savings Test and the Variable Margin Revenue Test.

The recoverable amount of non-weather-related margin deficiency determined in Schedule IGF-10.3 is subject to an Earnings Test. Schedule IGF-10.4 shows the application

of the Earning Test, which assures that the CIP Charge recoveries do not result in an exceedance of the Company's allowed return on equity.

Q. How are the CIP Charges calculated?

A. Schedule IGF-10.5 shows the derivation of the proposed CIP Charges applicable to the RDS, SGS, and GDS service classifications. First, the total non-weather recoverable CIP amount is allocated to each service classification based upon each classification's share of (contribution to) the total non-weather recoverable amount. Next, the weather-related margin is added back to the non-weather recovery amount to determine the total recoverable CIP margins. The total recoverable CIP margins by service classification are divided by projected throughput (therms) by applicable class to derive class-specific "pre-tax" CIP Charges. A sales and use tax factor is applied to these pre-tax CIP Charges to derive the proposed after-tax CIP Charge for each service classification.

Q. In addition to all the customer protection tests described above, does ETG intend to provide additional value to customers?

A. Yes. In addition to the tests designed to limit CIP costs and protect customers, ETG will fund information and conservation programs designed to aid customers in reducing their natural gas costs and to reduce ETG's peak winter and design day system demand. These funds will be contributed by shareholders, and ETG will not seek recovery from customers for those contributed funds.

Q. How much will the Company contribute to supporting information and conservation programs on an annual basis?

A. ETG will contribute a fund of $180,000 per year to support information and conservation programs designed to aid customers in reducing their natural gas costs and to reduce ETG's peak winter and design day system demand. To the extent the Company does not expend the entire annual amount in a year, the difference between the annual amount and the actual amount spent will be added to the amount to be spent in the following year by ETG. In addition, should CIP costs for the programs exceed the funding levels in any given year, ETG will still provide funding for 100% of such program costs in future years.

VIII. ILLUSTRATIVE CIP EXAMPLE

Q. Have you provided any Schedules to support the ETG's CIP Filing?

A. Yes. As discussed previously, I prepared Schedules to support the CIP mechanism that clearly show a step-by-step outline of how the CIP would be calculated in future years. In addition, to provide the Board with an understanding of how the CIP mechanism will function, I included example values within the CIP Schedules. While these values are for illustrative purposes only, they are based upon estimated savings associated with ETG's proposed energy efficiency programs.

Q. What assumptions did you include in your illustrative Schedules?

A. First, I assumed that there would be no customer growth. In reality, an increase in customers will impact how the CIP is calculated. Next, I assumed a reduction in actual therm usage of approximately 1.3 million therms, which was sourced from ETG's proposed energy efficiency programs. Finally, I assumed no weather-related variation.

Q. Based upon these high-level example illustrative assumptions, what values did the CIP model produce?

A. As shown in Schedule IGF-10.1, under this illustrative scenario the Company would experience a margin variance of ($502,810) from RDS customers, ($15,199) from SGS customers, and ($5,871) from GDS customers. This equates to a total margin deficiency for the Company of $523,880.

Because my example illustrative analysis did not include any weather-related margin, all margins were deemed to be related to non-weather margin impacts. Schedule IGF-10.3 (page 1 of 2) shows that in this example the non-weather impact subject to the BGSS test, which is 75% of the identified margin deficiency, is $392,910. This is less than the BGSS savings test limit of $24.2 million; therefore, the non-weather impacts pass the BGSS savings tests. Schedule IGF-10.3 (page 2 of 2) compares the non-weather-related margin of $523,880 to the variable margin fixed recovery cap of nearly $8.8 million; and therefore, the non-weather impacts pass the variable margin test. As shown, the full amount

of $523,880 in accrued deficiency passes both tests. Since this example represents the proposed first year of operation of the CIP Charge, there are no carry-forward amounts from prior years; resulting in a total non-weather margin recoverable CIP amount of $523,880.

Schedule IGF-10.4 compares the regulated jurisdictional net income to the allowed return and finds that because the jurisdictional net income is less than the allowed return, the earnings test is satisfied.

Finally, the recoverable non-weather margins and the weather-related margins (in this case zero) are combined together to determine the total recoverable margins. Because the non-weather margin recoverable CIP amount did not exceed any of the customer protection tests, the full amount of $523,880 is eligible for recovery. When divided by the projected throughput by rate classification and grossed up for sales tax the proposed after-tax CIP charge is estimated at $0.0023 per therm for RDS customers, $0.0007 per therm for SGS customers, and $0.0000 per them for GDS customers. GDS customers are not assessed a CIP charge in my illustrative example because all charges are rounded to four decimal places. Because the variance in use per customer in the GDS classification only resulted in a deficiency of $5,871, when divided by projected throughput and rounded to four decimal places, the charge was determined to be zero.

Q. Should the Board assume the estimates from your illustrative example will be the actual values requested in future CIP filings?

A. No. There are numerous factors that impact the calculation of the CIP rate which are not accounted for in my illustrative example, the largest of which being weather-related impacts. The values provided in my testimony and Schedules are provided to allow the Board to understand the mechanism and calculations underpinning the CIP; but not to provide an actual value for future periods. Actual adjustments would be presented and reviewed in the context of annual petitions to be filed concurrent with the Company's BGSS filings.

IX. TIMING AND SCHEDULE OF CIP RATES

Q. When will the CIP mechanism take effect?

A. The CIP is intended to coincide with the energy savings programs that contemplate both increased energy savings and allowance for the implementation of a CIP to sever the connection between throughput and revenues. Therefore, the CIP is expected to recover margin deviations that occur during the first program year of the proposed energy efficiency programs, which are scheduled to begin on July 1, 2021 and run through June 30, 2022.

Q. When will the Company start to reflect the CIP in its rates?

A. The CIP is being submitted as a component of ETG's energy efficiency filing, highlighting the opportunity for aggressive and substantial energy savings by the Company's customers. As such, the Company is requesting to implement the CIP on the same timeline as the implementation of the proposed energy efficiency programs. The following schedule describes when subsequent CIP filings will occur and for what period they will recover margin deviations.

June 1, 2021	File CIP petition simultaneous with ETG's 2021 BGSS filing. The CIP rate, to take effect on October 1, 2021, will be $0.0000 per therm for all customer classes.
June 1, 2022	File CIP petition simultaneous with ETG's 2022 BGSS filing. The CIP rate, to take effect on October 1, 2022, will be based upon the actual variation in usage per customer for the period July 1, 2021 through June 30, 2022.
June 1, 2023+	Annual CIP petitions will be made each June simultaneous with ETG's BGSS filings. CIP rates will be based upon the variation in usage per customer during the previous energy

efficiency program year, as well as any prior-year carry-forward margins that were not recovered in previous years.

Q. What will happen to ETG's Weather Normalization Charge if the CIP is implemented?

A. Because the CIP contains both weather-related and non-weather-related components, upon implementation of the CIP, ETG will begin to wind-down the existing WNC. Because the CIP will not take effect until July 1, 2021, the Company's June 1, 2021 BGSS filing will include a WNC component to adjust for weather-related deviations that occurred in the previous period. Subsequent weather-related deviations will be incorporated in the CIP. The WNC will be eliminated once all costs are fully reconciled.

X. CIP FINDINGS

Q. What is your recommendation to the Board regarding ETG's proposed CIP?

A. I recommend that the Board authorize the implementation of a CIP mechanism, as set forth in this testimony and schedules, for ETG in order to encourage, not hinder, active utility participation in energy efficiency investments by removing ETG's throughput incentive and enabling it to aggressively pursue energy efficiency, while providing adequate customer protections.

Because the CIP mechanism is symmetrical, it not only eliminates the Company's disincentive to reducing throughput, but it also provides customers with protections against overcollection of revenues. Effectively, the CIP provides a hedge to customers because increases in usage per customer are refunded.

It is important to note that authorization of the implementation of the proposed CIP will allow ETG to begin submitting annual petitions simultaneous with the Company's BGSS filings; and the Board will retain oversight and discretion over any CIP related charges during each annual filing.

XI. CONCLUSIONS

Q. Based on your review of ETG's energy efficiency programs, what do you conclude?

A. A thorough review and an in-depth analysis of ETG's energy efficiency programs has helped me form the opinion that the portfolio is comprehensive, cost-effective, and will result in millions of dollars of benefits for New Jersey and its residents.

Q. Based on your review of the CIP mechanism, what do you conclude?

A. A thorough review and an in-depth analysis of ETG's CIP schedules has helped me form the opinion that implementation of a CIP will align ETG's focus on energy savings and benefits, as highlighted in the comprehensive set of proposed energy efficiency programs, with the Company's ability to recover authorized rate base revenues. The CIP will assure that the Company does not earn above the approved use per customer margin, and also includes additional tests that further protect customers.

Q. What is your recommendation for the Board?

A. I recommend the Board approve the ETG energy efficiency program portfolio as proposed. I also recommend that the Board authorize the implementation of a CIP mechanism.

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 Elizabethtown 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

Elizabethtown 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

Elizabethtown Gas Company
Energy Efficiency Program Filing
Cost Benefit Results Summary

Schedule IGF-2

Total Resource Cost Test (TRC)		Res	C&I	LMI	Total Portfolio (Res+C&I)	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
BENEFITS																		
1 Lifetime Avoided Wholesale Electric Energy and Ancillary Costs		$ 3,294,862	$ 5,626,362	$ 315,779	$ 8,921,224	$ -	$ 1,576,716	$ 236,344	$ 1,209,132	$ 315,779	$ 272,670	$ 1,357,710	$ 2,563,239	$ 1,229,279	$ 138,388	$ 1,695,456	$ -	$ -
2 Lifetime Avoided Wholesale Electric Capacity Costs		$ 158,491	$ 1,983,438	$ 94,785	$ 2,141,929	$ -	$ 964	$ 48,587	$ 108,941	$ 94,785	$ -	$ 193,310	$ 1,203,913	$ 315,670	$ 31,215	$ 432,640	$ -	$ -
3 Lifetime Avoided Wholesale Natural Gas Costs		$ 12,414,741	$ 3,085,251	$ 762,569	$ 15,499,992	$ 1,874,695	$ 9,266,441	$ 838,802	$ 308,853	$ 762,569	$ 125,950	$ 588,233	$ 1,532,839	$ 959,664	$ 57,060	$ 535,689	$ -	$ -
4 Lifetime DRIPE Benefits (E&G)		$ 1,515,686	$ 9,613,747	$ 488,078	$ 11,129,432	$ 15	$ 390,791	$ 267,428	$ 804,896	$ 488,078	$ 52,556	$ 1,114,303	$ 5,565,851	$ 1,517,449	$ 164,694	$ 2,365,752	$ -	$ -
5 Lifetime Avoided RPS REC Purchase Costs		$ 1,146,987	$ 1,806,377	$ 112,558	$ 2,953,364	$ -	$ 569,323	$ 76,422	$ 433,007	$ 112,558	$ 68,236	$ 433,340	$ 799,910	$ 355,054	$ 44,318	$ 607,094	$ -	$ -
6 Lifetime Avoided Wholesale Volatility Costs (E&G)		$ 1,586,809	$ 1,069,505	$ 117,313	$ 2,656,314	$ 187,470	$ 1,084,412	$ 112,373	$ 162,693	$ 117,313	$ 39,862	$ 213,925	$ 529,999	$ 250,461	$ 22,666	$ 266,378	$ -	$ -
7 Lifetime Avoided T&D Costs (E&G)		$ 560,216	$ 5,755,446	$ 276,343	$ 6,315,662	$ 3,555	$ 22,211	$ 195,654	$ 338,556	$ 276,343	$ 241	$ 553,636	$ 3,526,359	$ 892,841	$ 88,492	$ 1,247,754	$ -	$ -
Total Benefits	***1+2+3+4+5+6+7***	**$ 20,677,792**	**$ 28,940,126**	**$ 2,167,424**	**$ 49,617,918**	**$ 2,065,735**	**$ 12,910,857**	**$ 1,775,609**	**$ 3,366,077**	**$ 2,167,424**	**$ 559,515**	**$ 4,454,458**	**$ 15,722,112**	**$ 5,520,417**	**$ 546,833**	**$ 7,150,764**	**$ -**	**$ -**
COSTS																		
8 Lifetime Incremental Costs		$ 20,866,629	$ 13,742,664	$ 5,519,619	$ 34,609,293	$ 2,699,750	$ 13,431,541	$ 3,400,752	$ 1,095,982	$ 5,519,619	$ 238,603	$ 3,521,411	$ 4,400,577	$ 6,564,835	$ 245,151	$ 2,532,101	$ 4,062,018	$ -
9 Lifetime Administration Costs		$ 6,782,690	$ 4,907,519	$ 2,592,397	$ 15,583,351	$ 256,092	$ 4,351,128	$ 1,324,281	$ 741,049	$ 2,592,397	$ 110,140	$ 1,440,030	$ 1,200,563	$ 2,083,047	$ 112,457	$ 1,511,452	$ 1,913,365	$ 3,893,142
Total Costs	***8+9***	**$ 27,649,319**	**$ 18,650,183**	**$ 8,112,017**	**$ 50,192,644**	**$ 2,955,842**	**$ 17,782,669**	**$ 4,725,033**	**$ 1,837,031**	**$ 8,112,017**	**$ 348,743**	**$ 4,961,441**	**$ 5,601,140**	**$ 8,647,883**	**$ 357,608**	**$ 4,043,553**	**$ 5,975,383**	**$ 3,893,142**
Benefit Cost Ratio	**(1+2+3+4+5+6+7)/(8+9)**	**0.7**	**1.6**	**0.3**	**1.0**	**0.7**	**0.7**	**0.4**	**1.8**	**0.3**	**1.6**	**0.9**	**2.8**	**0.6**	**1.5**	**1.8**	**0.0**	**0.0**

Participant Cost Test (PCT)		Res	C&I	LMI	Total Portfolio (Res+C&I)	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
BENEFITS																		
10 Lifetime Avoided Retail Electric Costs		$ 17,645,513	$ 34,249,179	$ 1,761,876	$ 51,894,692	$ -	$ 8,442,325	$ 1,228,028	$ 6,612,055	$ 1,761,876	$ 1,363,105	$ 5,106,254	$ 11,638,798	$ 13,977,267	$ 515,828	$ 8,117,287	$ -	$ -
11 Lifetime Avoided Retail Natural Gas Costs		$ 30,099,851	$ 6,388,289	$ 1,937,386	$ 36,488,140	$ 4,482,972	$ 22,533,598	$ 2,027,863	$ 752,731	$ 1,937,386	$ 302,687	$ 1,241,301	$ 3,396,432	$ 1,646,711	$ 104,953	$ 1,240,194	$ -	$ -
12 Lifetime Program Incentive Costs		$ 15,225,074	$ 9,838,403	$ 5,621,662	$ 25,063,478	$ 2,699,750	$ 8,154,243	$ 2,538,787	$ 1,593,692	$ 5,621,662	$ 238,603	$ 2,957,030	$ 2,468,216	$ 3,939,849	$ 245,367	$ 3,184,972	$ 4,062,018	$ -
13 Lifetime Time-Value of Loan Repayments		$ 2,878,483	$ 808,137	$ -	$ 3,686,620	$ -	$ 2,245,687	$ 632,796	$ -	$ -	$ -	$ 203,587	$ 314,679	$ 331,263	$ 6,875	$ 155,320	$ -	$ -
Total Benefits	***10+11+12+13***	**$ 65,848,921**	**$ 51,284,008**	**$ 9,320,925**	**$ 117,132,930**	**$ 7,182,722**	**$ 41,375,852**	**$ 6,427,474**	**$ 8,958,477**	**$ 9,320,925**	**$ 1,904,395**	**$ 9,508,172**	**$ 17,818,125**	**$ 19,895,089**	**$ 873,023**	**$ 12,697,772**	**$ 4,062,018**	**$ -**
COSTS																		
14 Lifetime Participant Costs		$ 20,866,629	$ 13,742,664	$ 5,519,619	$ 34,609,293	$ 2,699,750	$ 13,431,541	$ 3,400,752	$ 1,095,982	$ 5,519,619	$ 238,603	$ 3,521,411	$ 4,400,577	$ 6,564,835	$ 245,151	$ 2,532,101	$ 4,062,018	$ -
Total Costs	***14***	**$ 20,866,629**	**$ 13,742,664**	**$ 5,519,619**	**$ 34,609,293**	**$ 2,699,750**	**$ 13,431,541**	**$ 3,400,752**	**$ 1,095,982**	**$ 5,519,619**	**$ 238,603**	**$ 3,521,411**	**$ 4,400,577**	**$ 6,564,835**	**$ 245,151**	**$ 2,532,101**	**$ 4,062,018**	**$ -**
Benefit Cost Ratio	**(10+11+12+13)/14**	**3.2**	**3.7**	**1.7**	**3.4**	**2.7**	**3.1**	**1.9**	**8.2**	**1.7**	**8.0**	**2.7**	**4.0**	**3.0**	**3.6**	**5.0**	**1.0**	**n/a**

Program Administrator Cost Test (PAC)		Res	C&I	LMI	Total Portfolio (Res+C&I)	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
BENEFITS																		
15 Lifetime Avoided Wholesale Electric Energy and Ancillary Costs		$ 3,294,862	$ 5,626,362	$ 315,779	$ 8,921,224	$ -	$ 1,576,716	$ 236,344	$ 1,209,132	$ 315,779	$ 272,670	$ 1,357,710	$ 2,563,239	$ 1,229,279	$ 138,388	$ 1,695,456	$ -	$ -
16 Lifetime Avoided Wholesale Electric Capacity Costs		$ 158,491	$ 1,983,438	$ 94,785	$ 2,141,929	$ -	$ 964	$ 48,587	$ 108,941	$ 94,785	$ -	$ 193,310	$ 1,203,913	$ 315,670	$ 31,215	$ 432,640	$ -	$ -
17 Lifetime Avoided Wholesale Natural Gas Costs		$ 12,414,741	$ 3,085,251	$ 762,569	$ 15,499,992	$ 1,874,695	$ 9,266,441	$ 838,802	$ 308,853	$ 762,569	$ 125,950	$ 588,233	$ 1,532,839	$ 959,664	$ 57,060	$ 535,689	$ -	$ -
18 Lifetime DRIPE Benefits (E&G)		$ 1,515,686	$ 9,613,747	$ 488,078	$ 11,129,432	$ 15	$ 390,791	$ 267,428	$ 804,896	$ 488,078	$ 52,556	$ 1,114,303	$ 5,565,851	$ 1,517,449	$ 164,694	$ 2,365,752	$ -	$ -
19 Lifetime Avoided RPS REC Purchase Costs		$ 1,146,987	$ 1,806,377	$ 112,558	$ 2,953,364	$ -	$ 569,323	$ 76,422	$ 433,007	$ 112,558	$ 68,236	$ 433,340	$ 799,910	$ 355,054	$ 44,318	$ 607,094	$ -	$ -
20 Lifetime Avoided Wholesale Volatility Costs		$ 1,586,809	$ 1,069,505	$ 117,313	$ 2,656,314	$ 187,470	$ 1,084,412	$ 112,373	$ 162,693	$ 117,313	$ 39,862	$ 213,925	$ 529,999	$ 250,461	$ 22,666	$ 266,378	$ -	$ -
21 Lifetime Avoided T&D Costs		$ 560,216	$ 5,755,446	$ 276,343	$ 6,315,662	$ 3,555	$ 22,211	$ 195,654	$ 338,556	$ 276,343	$ 241	$ 553,636	$ 3,526,359	$ 892,841	$ 88,492	$ 1,247,754	$ -	$ -
Total Benefits	***15+16+17+18+19+20+21***	**$ 20,677,792**	**$ 28,940,126**	**$ 2,167,424**	**$ 49,617,918**	**$ 2,065,735**	**$ 12,910,857**	**$ 1,775,609**	**$ 3,366,077**	**$ 2,167,424**	**$ 559,515**	**$ 4,454,458**	**$ 15,722,112**	**$ 5,520,417**	**$ 546,833**	**$ 7,150,764**	**$ -**	**$ -**
COSTS																		
22 Lifetime Administration Costs		$ 6,782,690	$ 4,907,519	$ 2,592,397	$ 15,583,351	$ 256,092	$ 4,351,128	$ 1,324,281	$ 741,049	$ 2,592,397	$ 110,140	$ 1,440,030	$ 1,200,563	$ 2,083,047	$ 112,457	$ 1,511,452	$ 1,913,365	$ 3,893,142
23 Lifetime Program Investment Costs		$ 15,225,074	$ 9,838,403	$ 5,621,662	$ 25,063,478	$ 2,699,750	$ 8,154,243	$ 2,538,787	$ 1,593,692	$ 5,621,662	$ 238,603	$ 2,957,030	$ 2,468,216	$ 3,939,849	$ 245,367	$ 3,184,972	$ 4,062,018	$ -
24 Lifetime Time-Value of Loan Repayments		$ 2,878,483	$ 808,137	$ -	$ 3,686,620	$ -	$ 2,245,687	$ 632,796	$ -	$ -	$ -	$ 203,587	$ 314,679	$ 331,263	$ 6,875	$ 155,320	$ -	$ -
Total Costs	***22+23+24***	**$ 24,886,247**	**$ 15,554,059**	**$ 8,214,060**	**$ 44,333,449**	**$ 2,955,842**	**$ 14,751,058**	**$ 4,495,864**	**$ 2,334,740**	**$ 8,214,060**	**$ 348,743**	**$ 4,600,647**	**$ 3,983,458**	**$ 6,354,159**	**$ 364,699**	**$ 4,851,744**	**$ 5,975,383**	**$ 3,893,142**
Benefit Cost Ratio	**(15+16+17+18+19+20+21)/(22+23+24)**	**0.8**	**1.9**	**0.3**	**1.1**	**0.7**	**0.9**	**0.4**	**1.4**	**0.3**	**1.6**	**1.0**	**3.9**	**0.9**	**1.5**	**1.5**	**0.0**	**0.0**

Ratepayer Impact Measure Test (RIM)		Res	C&I	LMI	Total Portfolio (Res+C&I)	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
BENEFITS																		
25 Lifetime Avoided Wholesale Electric Energy and Ancillary Costs		$ 3,294,862	$ 5,626,362	$ 315,779	$ 8,921,224	$ -	$ 1,576,716	$ 236,344	$ 1,209,132	$ 315,779	$ 272,670	$ 1,357,710	$ 2,563,239	$ 1,229,279	$ 138,388	$ 1,695,456	$ -	$ -
26 Lifetime Avoided Wholesale Electric Capacity Costs		$ 158,491	$ 1,983,438	$ 94,785	$ 2,141,929	$ -	$ 964	$ 48,587	$ 108,941	$ 94,785	$ -	$ 193,310	$ 1,203,913	$ 315,670	$ 31,215	$ 432,640	$ -	$ -
27 Lifetime Avoided Wholesale Natural Gas Costs		$ 12,414,741	$ 3,085,251	$ 762,569	$ 15,499,992	$ 1,874,695	$ 9,266,441	$ 838,802	$ 308,853	$ 762,569	$ 125,950	$ 588,233	$ 1,532,839	$ 959,664	$ 57,060	$ 535,689	$ -	$ -
28 Lifetime DRIPE Benefits (E&G)		$ 1,515,686	$ 9,613,747	$ 488,078	$ 11,129,432	$ 15	$ 390,791	$ 267,428	$ 804,896	$ 488,078	$ 52,556	$ 1,114,303	$ 5,565,851	$ 1,517,449	$ 164,694	$ 2,365,752	$ -	$ -
29 Lifetime Avoided RPS REC Purchase Costs		$ 1,146,987	$ 1,806,377	$ 112,558	$ 2,953,364	$ -	$ 569,323	$ 76,422	$ 433,007	$ 112,558	$ 68,236	$ 433,340	$ 799,910	$ 355,054	$ 44,318	$ 607,094	$ -	$ -
30 Lifetime Avoided Wholesale Volatility Costs		$ 1,586,809	$ 1,069,505	$ 117,313	$ 2,656,314	$ 187,470	$ 1,084,412	$ 112,373	$ 162,693	$ 117,313	$ 39,862	$ 213,925	$ 529,999	$ 250,461	$ 22,666	$ 266,378	$ -	$ -
31 Lifetime Avoided T&D Costs		$ 560,216	$ 5,755,446	$ 276,343	$ 6,315,662	$ 3,555	$ 22,211	$ 195,654	$ 338,556	$ 276,343	$ 241	$ 553,636	$ 3,526,359	$ 892,841	$ 88,492	$ 1,247,754	$ -	$ -
Total Benefits	***25+26+27+28+29+30+31***	**$ 20,677,792**	**$ 28,940,126**	**$ 2,167,424**	**$ 49,617,918**	**$ 2,065,735**	**$ 12,910,857**	**$ 1,775,609**	**$ 3,366,077**	**$ 2,167,424**	**$ 559,515**	**$ 4,454,458**	**$ 15,722,112**	**$ 5,520,417**	**$ 546,833**	**$ 7,150,764**	**$ -**	**$ -**
COSTS																		
32 Lifetime Administration Costs		$ 6,782,690	$ 4,907,519	$ 2,592,397	$ 15,583,351	$ 256,092	$ 4,351,128	$ 1,324,281	$ 741,049	$ 2,592,397	$ 110,140	$ 1,440,030	$ 1,200,563	$ 2,083,047	$ 112,457	$ 1,511,452	$ 1,913,365	$ 3,893,142
33 Lifetime Program Investment Costs		$ 15,225,074	$ 9,838,403	$ 5,621,662	$ 25,063,478	$ 2,699,750	$ 8,154,243	$ 2,538,787	$ 1,593,692	$ 5,621,662	$ 238,603	$ 2,957,030	$ 2,468,216	$ 3,939,849	$ 245,367	$ 3,184,972	$ 4,062,018	$ -
34 Lifetime Re-allocated Distribution Costs		$ 18,581,055	$ 7,927,512	$ 1,383,450	$ 26,508,567	$ 1,962,120	$ 12,243,097	$ 1,238,227	$ 2,561,541	$ 1,383,450	$ 573,270	$ 2,081,883	$ 3,625,851	$ 1,036,145	$ 71,536	$ 3,193,979	$ -	$ -
35 Lifetime Time-Value of Loan Repayments		$ 2,878,483	$ 808,137	$ -	$ 3,686,620	$ -	$ 2,245,687	$ 632,796	$ -	$ -	$ -	$ 203,587	$ 314,679	$ 331,263	$ 6,875	$ 155,320	$ -	$ -
Total Costs	***32+33+34+35***	**$ 43,467,303**	**$ 23,481,571**	**$ 9,597,509**	**$ 70,842,015**	**$ 4,917,963**	**$ 26,994,154**	**$ 5,734,091**	**$ 4,899,082**	**$ 9,597,509**	**$ 922,013**	**$ 6,682,530**	**$ 7,609,309**	**$ 7,390,304**	**$ 436,235**	**$ 8,045,722**	**$ 5,975,383**	**$ 3,893,142**
Benefit Cost Ratio	**(25+26+27+28+29+30+31)/(32+33+34+35)**	**0.5**	**1.2**	**0.2**	**0.7**	**0.4**	**0.5**	**0.3**	**0.7**	**0.2**	**0.6**	**0.7**	**2.1**	**0.7**	**1.3**	**0.9**	**0.0**	**0.0**

Societal Cost Test (SC)		Res	C&I	LMI	Total Portfolio (Res+C&I)	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
BENEFITS																		
36 Lifetime Avoided Wholesale Electric Energy and Ancillary Costs		$ 4,253,360	$ 8,357,400	$ 425,531	$ 12,610,760	$ -	$ 1,894,862	$ 328,814	$ 1,569,400	$ 425,531	$ 460,283	$ 2,026,198	$ 3,867,298	$ 1,980,790	$ 205,189	$ 2,304,124	$ -	$ -
37 Lifetime Avoided Wholesale Electric Capacity Costs		$ 221,430	$ 3,125,700	$ 143,659	$ 3,347,130	$ -	$ 1,317	$ 71,323	$ 148,791	$ 143,659	$ -	$ 304,031	$ 1,937,250	$ 522,111	$ 47,979	$ 618,359	$ -	$ -
38 Lifetime Avoided Wholesale Natural Gas Costs		$ 15,518,130	$ 3,963,418	$ 1,121,291	$ 19,481,548	$ 2,016,818	$ 11,749,154	$ 1,169,631	$ 371,253	$ 1,121,291	$ 211,274	$ 836,661	$ 1,608,131	$ 1,539,891	$ 84,705	$ 730,691	$ -	$ -
39 Lifetime DRIPE Benefits (E&G)		$ 1,995,245	$ 14,435,053	$ 703,494	$ 16,430,298	$ 16	$ 468,503	$ 379,803	$ 1,064,326	$ 703,494	$ 82,598	$ 1,669,261	$ 8,484,976	$ 2,413,149	$ 243,307	$ 3,293,622	$ -	$ -
40 Lifetime Avoided RPS REC Purchase Costs		$ 1,443,243	$ 2,526,411	$ 148,104	$ 3,969,653	$ -	$ 683,977	$ 103,686	$ 555,892	$ 148,104	$ 99,687	$ 610,704	$ 1,117,914	$ 533,556	$ 62,491	$ 812,449	$ -	$ -
41 Lifetime Avoided Wholesale Volatility Costs		$ 1,999,292	$ 1,544,652	$ 169,048	$ 3,543,944	$ 201,682	$ 1,364,533	$ 156,977	$ 208,944	$ 169,048	$ 67,156	$ 316,689	$ 741,268	$ 404,279	$ 33,787	$ 365,317	$ -	$ -
42 Lifetime Avoided T&D Costs		$ 741,767	$ 8,666,675	$ 399,221	$ 9,408,442	$ 3,779	$ 27,880	$ 272,274	$ 437,452	$ 399,221	$ 381	$ 835,946	$ 5,411,986	$ 1,425,377	$ 130,766	$ 1,698,547	$ -	$ -
43 Lifetime Avoided Emissions Damages		$ 19,947,873	$ 17,394,951	$ 1,779,018	$ 37,342,824	$ 1,620,482	$ 13,044,774	$ 1,549,173	$ 2,824,944	$ 1,779,018	$ 908,599	$ 4,142,667	$ 7,684,395	$ 4,802,026	$ 420,808	$ 4,487,723	$ -	$ -
44 Job and Savings Multiplier Benefits		$ 79,638,671	$ 59,142,016	$ 5,215,115	$ 140,608,737	$ 1,201,725	$ 64,029,824	$ 5,816,719	$ 6,654,370	$ 5,215,115	$ 1,936,034	$ 8,675,412	$ 21,358,009	$ 24,102,387	$ 1,027,707	$ 12,653,913	$ 8,741,806	$ 1,828,049
Total Benefits	***36+37+38+39+40+41+42+43+44***	**$ 125,759,011**	**$ 119,156,276**	**$ 10,104,482**	**$ 246,743,336**	**$ 5,044,502**	**$ 93,264,824**	**$ 9,848,400**	**$ 13,835,273**	**$ 10,104,482**	**$ 3,766,011**	**$ 19,417,570**	**$ 52,211,226**	**$ 37,723,566**	**$ 2,256,739**	**$ 26,964,745**	**$ 8,741,806**	**$ 1,828,049**
COSTS																		
45 Lifetime Incremental Costs		$ 22,118,895	$ 15,124,528	$ 5,896,358	$ 37,243,423	$ 2,806,730	$ 14,275,272	$ 3,616,805	$ 1,165,355	$ 5,896,358	$ 254,733	$ 3,875,978	$ 4,687,011	$ 7,458,994	$ 265,556	$ 2,712,967	$ 4,287,725	$ -
46 Lifetime Administration Costs		$ 7,193,882	$ 5,259,920	$ 2,764,111	$ 16,523,676	$ 270,054	$ 4,614,489	$ 1,405,563	$ 786,405	$ 2,764,111	$ 117,370	$ 1,538,573	$ 1,276,972	$ 2,244,666	$ 121,685	$ 1,616,597	$ 2,015,620	$ 4,069,874
Total Costs	***45+46***	**$ 29,312,777**	**$ 20,384,448**	**$ 8,660,469**	**$ 53,767,099**	**$ 3,076,785**	**$ 18,889,761**	**$ 5,022,369**	**$ 1,951,760**	**$ 8,660,469**	**$ 372,103**	**$ 5,414,551**	**$ 5,963,983**	**$ 9,703,659**	**$ 387,241**	**$ 4,329,564**	**$ 6,303,346**	**$ 4,069,874**
Benefit Cost Ratio	**(36+37+38+39+40+41+42+43+44)/(45+46)**	**4.3**	**5.8**	**1.2**	**4.6**	**1.6**	**4.9**	**2.0**	**7.1**	**1.2**	**10.1**	**3.6**	**8.8**	**3.9**	**5.8**	**6.2**	**1.4**	**0.4**

New Jersey Cost Test (NJCT)		Res	C&I	LMI	Total Portfolio	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
BENEFITS																		
47 Lifetime Avoided Wholesale Electric Energy and Ancillary Costs		$ 4,253,360	$ 8,357,400	$ 425,531	$ 15,062,489	$ -	$ 1,894,862	$ 328,814	$ 1,569,400	$ 425,531	$ 460,283	$ 2,026,198	$ 3,867,298	$ 1,980,790	$ 205,189	$ 2,304,124	$ -	$ -
48 Lifetime Avoided Wholesale Electric Capacity Costs		$ 221,430	$ 3,125,700	$ 143,659	$ 3,794,820	$ -	$ 1,317	$ 71,323	$ 148,791	$ 143,659	$ -	$ 304,031	$ 1,937,250	$ 522,111	$ 47,979	$ 618,359	$ -	$ -
49 Lifetime Avoided Wholesale Natural Gas Costs		$ 15,518,130	$ 3,963,418	$ 1,121,291	$ 21,439,499	$ 2,016,818	$ 11,749,154	$ 1,169,631	$ 371,253	$ 1,121,291	$ 211,274	$ 836,661	$ 1,608,131	$ 1,539,891	$ 84,705	$ 730,691	$ -	$ -
50 Lifetime DRIPE Benefits (E&G)		$ 1,995,068	$ 14,434,904	$ 703,468	$ 18,802,670	$ -	$ 468,395	$ 379,788	$ 1,064,324	$ 703,468	$ 82,561	$ 1,669,230	$ 8,484,961	$ 2,413,033	$ 243,303	$ 3,293,607	$ -	$ -
51 Lifetime Avoided Electric Transmission Costs		$ 710,874	$ 8,666,675	$ 399,221	$ 10,612,737	$ 3,550	$ 269,891	$ 437,452	$ 399,221	$ -	$ 345,946	$ 5,411,986	$ 1,425,377	$ 130,766	$ 1,698,547	$ -	$ -	
52 Lifetime Avoided Distribution Costs		$ 23,311,421	$ 11,029,048	$ 1,941,646	$ 39,330,329	$ 2,114,568	$ 15,252,058	$ 1,712,770	$ 3,288,396	$ 1,941,646	$ 943,629	$ 3,048,215	$ 4,948,238	$ 1,651,024	$ 105,110	$ 4,324,676	$ -	$ -
53 Lifetime Avoided Emissions Damages		$ 13,684,312	$ 9,275,683	$ 1,182,201	$ 26,329,801	$ 1,279,940	$ 9,414,584	$ 1,061,921	$ 1,446,414	$ 1,182,201	$ 481,453	$ 2,187,605	$ 4,002,227	$ 2,709,051	$ 222,806	$ 2,341,599	$ -	$ -
54 Non-Energy Benefit Adder		$ 2,300,515	$ 2,478,857	$ 236,741	$ 5,452,127	$ 206,569	$ 1,468,467	$ 196,611	$ 343,981	$ 236,741	$ 84,887	$ 436,014	$ 1,312,893	$ 476,611	$ 40,853	$ 648,500	$ -	$ -
55 Low-Income Adder		$ -	$ -	$ 473,482	$ 473,482	$ -	$ -	$ -	$ -	$ 473,482	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Benefits	***47+48+49+50+51+52+53+54+55***	**$ 61,995,129**	**$ 61,331,686**	**$ 6,627,239**	**$ 141,297,955**	**$ 5,617,894**	**$ 40,252,387**	**$ 5,190,750**	**$ 8,670,011**	**$ 6,627,239**	**$ 2,264,088**	**$ 11,343,900**	**$ 31,572,983**	**$ 12,717,887**	**$ 1,080,711**	**$ 15,960,105**	**$ -**	**$ -**
COSTS																		
56 Lifetime Incremental Costs		$ 22,118,895	$ 15,124,528	$ 5,896,358	$ 51,303,484	$ 2,806,730	$ 14,275,272	$ 3,616,805	$ 1,165,355	$ 5,896,358	$ 254,733	$ 3,875,978	$ 4,687,011	$ 7,458,994	$ 265,556	$ 2,712,967	$ 4,287,725	$ -
57 Lifetime Administration Costs		$ 7,193,882	$ 5,259,920	$ 2,764,111	$ 22,841,980	$ 270,054	$ 4,614,489	$ 1,405,563	$ 786,405	$ 2,764,111	$ 117,370	$ 1,538,573	$ 1,276,972	$ 2,244,666	$ 121,685	$ 1,616,597	$ 2,015,620	$ 4,069,874
Total Costs	***56+57***	**$ 29,312,777**	**$ 20,384,448**	**$ 8,660,469**	**$ 74,145,464**	**$ 3,076,785**	**$ 18,889,761**	**$ 5,022,369**	**$ 1,951,760**	**$ 8,660,469**	**$ 372,103**	**$ 5,414,551**	**$ 5,963,983**	**$ 9,703,659**	**$ 387,241**	**$ 4,329,564**	**$ 6,303,346**	**$ 4,069,874**
Benefit Cost Ratio	**(47+48+49+50+51+52+53+54+55)/(56+57)**	**2.1**	**3.0**	**0.8**	**1.9**	**1.8**	**2.1**	**1.0**	**4.4**	**0.8**	**6.1**	**2.1**	**5.3**	**1.3**	**2.8**	**3.7**	**0.0**	**0.0**

Elizabethtown Gas Company
Energy Efficiency Program Filing
CBA Workpapers

Schedule IGF-3

*Confidential - will be provided upon execution of NDA

Elizabethtown Gas Company
Energy Efficiency Program Filing
Emissions Avoided Results Summary

Schedule IGF-4

Subprogram	CO_2 Emissions Reduction (tons)	SO_2 Emissions Reduction (tons)	NOx Emissions Reduction (tons)
Behavior	25,332	0	20
Efficient Products	175,242	16	130
Existing Homes HPwES	19,109	3	14
Existing Homes QHEC	26,901	14	15
Existing Homes Moderate Income Weatherization	21,102	4	15
Energy Saving Trees	8,223	4	5
Multi-Family	38,920	18	24
Energy Solutions for Business: Prescriptive and Custom	73,591	35	45
Energy Solutions for Business: Engineered Solutions	46,891	18	31
Energy Solutions for Business: Energy Management	3,952	2	2
Energy Solutions for Business: Direct Install	42,692	21	25
Pilots	0	0	0
Portfolio Costs	0	0	0
Total	**481,957**	**135**	**326**

Elizabethtown Gas Company
Energy Efficiency Program Filing
Economic Development and Job Creation Results Summary

Schedule IGF-5

Table IGF-2.1 Economic Impacts

Subprogram	Value Added to GDP (NPV)	Value Added to GDP (Nominal)
Behavior	1,321,222	1,037,980
Efficient Products	58,382,894	70,133,163
Existing Homes HPwES	5,268,474	6,518,564
Existing Homes QHEC	5,458,345	8,088,590
Existing Homes Moderate Income Weatherization	4,830,709	5,827,039
Energy Saving Trees	1,244,228	3,115,763
Multi-Family	6,407,404	11,978,703
Energy Solutions for Business: Prescriptive and Custom	15,154,457	30,299,584
Energy Solutions for Business: Engineered Solutions	16,034,944	36,404,917
Energy Solutions for Business: Energy Management	757,008	1,418,447
Energy Solutions for Business: Direct Install	9,878,813	16,218,188
Pilots	8,950,998	8,392,757
Portfolio Costs	1,960,080	1,661,642
Total	**135,649,576**	**201,095,337**

Table IGF-2.2 Anticipated Job Creation Impacts

Subprogram	Direct Job Creation	Indirect + Induced Job Creation	Total Job Creation
Behavior	2	7	9
Efficient Products	323	419	742
Existing Homes HPwES	44	30	74
Existing Homes QHEC	13	61	74
Existing Homes Moderate Income Weatherization	48	8	56
Energy Saving Trees	4	26	30
Multi-Family	63	61	123
Energy Solutions for Business: Prescriptive and Custom	224	182	406
Energy Solutions for Business: Engineered Solutions	180	165	344
Energy Solutions for Business: Energy Management	11	8	18
Energy Solutions for Business: Direct Install	95	75	170
Pilots	56	22	78
Portfolio Costs	31	-12	19
Total	**1,094**	**1,051**	**2,145**

Elizabethtown Gas Company
Energy Efficiency Program Filing
EE Target Development

Schedule IGF-6

Year	Gross Total (therms)	Cogen sales (therms)	Electric Gen sales (therms)	Adjusted Total (therms)	Program Year	Baseline (therms)	Target (%)	Target (therms)
2018	544,013,978	1,776	43,715	543,968,487				
2019	511,518,798	1,069	63,680	511,454,049				
2020	473,427,026	1,828	5,742,352	467,682,846				
2021	506,296,934	72	12,637,280	493,659,582	PY1	507,701,794	0.30%	1,523,105
2022	514,807,933	72	13,735,097	501,072,764	PY2	490,932,159	0.34%	1,669,169
					PY3	487,471,731	0.51%	2,486,106

Elizabethtown Gas Company
Energy Efficiency Program Filing
Cost to Achieve Results

Schedule IGF-7

Sector	$/therm
Res Projected Cost to Achieve ($/therm)	4.46
C&I Projected Cost to Achieve ($/therm)	14.03
MF Projected Cost to Achieve ($/therm)	28.88
LMI Projected Cost to Achieve ($/therm)	61.11

Elizabethtown Gas Company
Energy Efficiency Program Filing
Quantitative Performance Indicators

Schedule IGF-8

QPI Metric	PY 1	PY 2	PY 3
Annual Energy Savings (therm)	1,812,912	1,853,384	2,539,658
Annual Demand Savings (Pk therm)	263	244	308
Lifetime Energy Savings (therm)	10,725,688	14,137,035	22,143,949
Lifetime of Persisting Demand Savings (Pk therm)	1,434	1,640	2,284
NPV of UCT Net Benefits ($)	1,302,501	1,611,793	2,370,175
Low-Income Lifetime Savings (therm)	452,738	754,563	1,358,214
Small Business Lifetime Savings (therm)	207,133	517,832	932,098

Elizabethtown Gas Company
Energy Efficiency Program Filing
Energy Use Reduction Targets

Schedule IGF-9

Program Year	PY 1	PY 2	PY 3
Period	Jul 21 - Jun 22	Jul 22 - Jun 23	Jul 23 - Jun 24
Projected Consumption Baseline (therm)	507,701,794	490,932,159	487,471,731
Savings Target (%)		0.34%	0.51%
Savings Target (therm)		1,669,169	2,486,106
Projected Savings (therm)	1,812,912	1,853,384	2,539,658
Achieved Goal		Yes	Yes

Elizabethtown Gas Company
Conservation Incentive Program Filing
Determination of Total Margin Variance

Residential Delivery Service (RDS)

Month	Year	Actual/ Estimate	Total Usage Therms[1]	Number of Customers[1]	Avg. Use / Cust.	Baseline Use / Cust[2]	Difference	Aggregate Therm Impact	Rate Case Margin Factor[3]	IIP Margin Factor[4]	Total Margin Factor	Margin Variance
(a)	(b)	(c)	(d)	(e)	(f) = (d) / (e)	(g)	(h) = (f) - (g)	(i) = (h) * (e)	(j)	(k)	(l) = (j) + (k)	(m) = (i) * (l)
July	2021	e	3,823,273	271,494	14.1	14.1	-	-	$0.4110	$0.0197	$0.4307	$0
August	2021	e	3,815,699	271,494	14.1	14.1	-	-	$0.4110	$0.0197	$0.4307	$0
September	2021	e	4,103,707	271,494	15.1	15.1	-	-	$0.4110	$0.0197	$0.4307	$0
October	2021	e	10,567,668	271,494	38.9	39.0	(0.1)	(27,149)	$0.4110	$0.0197	$0.4307	($11,693)
November	2021	e	23,093,236	271,494	85.1	85.4	(0.3)	(81,448)	$0.4110	$0.0197	$0.4307	($35,080)
December	2021	e	37,865,673	271,494	139.5	140.2	(0.7)	(190,046)	$0.4110	$0.0197	$0.4307	($81,853)
January	2022	e	47,147,524	271,494	173.7	174.8	(1.1)	(298,643)	$0.4110	$0.0197	$0.4307	($128,626)
February	2022	e	40,374,218	271,494	148.7	149.6	(0.9)	(244,345)	$0.4110	$0.0197	$0.4307	($105,239)
March	2022	e	31,972,966	271,494	117.8	118.5	(0.7)	(190,046)	$0.4110	$0.0197	$0.4307	($81,853)
April	2022	e	15,606,540	271,494	57.5	57.9	(0.4)	(108,598)	$0.4110	$0.0197	$0.4307	($46,773)
May	2022	e	6,092,572	271,494	22.4	22.5	(0.1)	(27,149)	$0.4110	$0.0197	$0.4307	($11,693)
June	2022	e	3,472,623	271,494	12.8	12.8	-	-	$0.4110	$0.0197	$0.4307	$0
			227,935,699		839.7	844.0		(1,167,424)				
Total Excess / (Deficiency)												**($502,810)**

Small General Service (SGS)

Month	Year	Actual/ Estimate	Total Usage Therms[1]	Number of Customers[1]	Avg. Use / Cust.	Baseline Use / Cust[2]	Difference	Aggregate Therm Impact	Rate Case Margin Factor[3]	IIP Margin Factor[4]	Total Margin Factor	Margin Variance
(a)	(b)	(c)	(d)	(e)	(f) = (d) / (e)	(g)	(h) = (f) - (g)	(i) = (h) * (e)	(j)	(k)	(l) = (j) + (k)	(m) = (i) * (l)
July	2021	e	281,422	16,054	17.5	17.5	-	-	$0.3570	$0.0217	$0.3787	$0
August	2021	e	288,981	16,054	18.0	18.0	-	-	$0.3570	$0.0217	$0.3787	$0
September	2021	e	373,743	16,054	23.3	23.3	-	-	$0.3570	$0.0217	$0.3787	$0
October	2021	e	873,157	16,054	54.4	54.5	(0.1)	(1,605)	$0.3570	$0.0217	$0.3787	($608)
November	2021	e	1,876,095	16,054	116.9	117.0	(0.1)	(1,605)	$0.3570	$0.0217	$0.3787	($608)
December	2021	e	3,484,775	16,054	217.1	217.5	(0.4)	(6,422)	$0.3570	$0.0217	$0.3787	($2,432)
January	2022	e	4,447,837	16,054	277.1	277.7	(0.6)	(9,632)	$0.3570	$0.0217	$0.3787	($3,648)
February	2022	e	3,707,449	16,054	230.9	231.4	(0.5)	(8,027)	$0.3570	$0.0217	$0.3787	($3,040)
March	2022	e	2,627,172	16,054	163.6	164.0	(0.4)	(6,422)	$0.3570	$0.0217	$0.3787	($2,432)
April	2022	e	1,141,356	16,054	71.1	71.3	(0.2)	(3,211)	$0.3570	$0.0217	$0.3787	($1,216)
May	2022	e	509,030	16,054	31.7	31.8	(0.1)	(1,605)	$0.3570	$0.0217	$0.3787	($608)
June	2022	e	314,674	16,054	19.6	19.7	(0.1)	(1,605)	$0.3570	$0.0217	$0.3787	($608)
			19,925,691		1,241.2	1,243.7		(40,135)				
Total Excess / (Deficiency)												**($15,199)**

General Delivery Service (GDS)

Month	Year	Actual/ Estimate	Total Usage Therms[1]	Number of Customers[1]	Avg. Use / Cust.	Baseline Use / Cust[2]	Difference	Aggregate Therm Impact	Rate Case Margin Factor[3]	IIP Margin Factor[4]	Total Margin Factor	Margin Variance
(a)	(b)	(c)	(d)	(e)	(f) = (d) / (e)	(g)	(h) = (f) - (g)	(i) = (h) * (e)	(j)	(k)	(l) = (j) + (k)	(m) = (i) * (l)
July	2021	e	3,651,476	6,935	526.5	526.5	-	-	$0.2158	$0.0130	$0.2288	$0
August	2021	e	3,683,412	6,935	531.1	531.2	(0.1)	(694)	$0.2158	$0.0130	$0.2288	($159)
September	2021	e	4,174,688	6,935	602.0	602.0	-	-	$0.2158	$0.0130	$0.2288	$0
October	2021	e	7,931,258	6,935	1,143.7	1,143.8	(0.1)	(693)	$0.2158	$0.0130	$0.2288	($159)
November	2021	e	12,491,567	6,935	1,801.2	1,801.4	(0.2)	(1,387)	$0.2158	$0.0130	$0.2288	($317)
December	2021	e	18,514,416	6,935	2,669.7	2,670.3	(0.6)	(4,161)	$0.2158	$0.0130	$0.2288	($952)
January	2022	e	22,197,433	6,935	3,200.8	3,201.7	(0.9)	(6,241)	$0.2158	$0.0130	$0.2288	($1,428)
February	2022	e	18,724,337	6,935	2,700.0	2,700.7	(0.7)	(4,854)	$0.2158	$0.0130	$0.2288	($1,111)
March	2022	e	15,239,294	6,935	2,197.4	2,198.0	(0.6)	(4,161)	$0.2158	$0.0130	$0.2288	($952)
April	2022	e	8,964,546	6,935	1,292.7	1,292.9	(0.2)	(1,387)	$0.2158	$0.0130	$0.2288	($317)
May	2022	e	5,418,688	6,935	781.4	781.5	(0.1)	(694)	$0.2158	$0.0130	$0.2288	($159)
June	2022	e	3,566,886	6,935	514.3	514.5	(0.2)	(1,387)	$0.2158	$0.0130	$0.2288	($317)
			124,558,002		17,960.8	17,964.5		(25,659)				
Total Excess / (Deficiency)												**($5,871)**

Notes:
1 Schedule IGF-10.7
2 Schedule IGF-10.6
3 2019 Rate Case
4 IIP Filing

Elizabethtown Gas Company
Conservation Incentive Program Filing
Determination of Weather-Related Component of CIP

Residential Delivery Service (RDS)/Small General Service (SGS)/General Delivery Service (GDS)

Month	Year	Actual/ Estimate	Actual Degree Day	Normal Degree Day[1]	Variance Degree Day	Therms per HDD[2]	Weather Variance in Therms	Margin Factor[3]	Weather-Related Margin Variance
(a)	(b)	(c)	(d)	(e)	(f) = (d) - (e)	(g)	(h) = (f) x (g)	(i)	(j) = (h) x (i)
October	2021	e	244	244	-	52,581	0	$0.346	$0
November	2021	e	516	516	-	63,514	0	$0.346	$0
December	2021	e	828	828	-	70,081	0	$0.346	$0
January	2022	e	998	998	-	69,083	0	$0.346	$0
February	2022	e	829	829	-	68,805	0	$0.346	$0
March	2022	e	689	689	-	64,630	0	$0.346	$0
April	2022	e	355	355	-	53,261	0	$0.346	$0
May	2022	e	120	120	-	55,078	0	$0.346	$0
			4,579	4,579	-		-		

Total Excess / (Deficiency) **$0**

Notes:

1 Per Original Tariff Sheet No. 110
2 Per Original Tariff Sheet No. 111
3 Per Original Tariff Sheet No. 111

Elizabethtown Gas Company
Conservation Incentive Program Filing
CIP Recovery Tests

Step 1: Determine Non-Weather Related Margin Excess/(Deficiency)

Line No.	Note		Total Margin Excess/(Deficiency)	Weather-Related Allocation Percentage[1]	Weather-Related Margin Excess/(Deficiency)	Non-Weather Margin Excess/(Deficiency)
1		Residential Delivery Service (RDS)	(502,810)	74%	-	(502,810)
2		Small General Service (SGS)	(15,199)	6%	-	(15,199)
3		General Delivery Service (GDS)	(5,871)	20%	-	(5,871)
4	L1 + L2 + L3	Total	(523,880)	100%	-	(523,880)
5						
6		**Step 2: Apply BGSS Savings Test**				
7						
8		A. Non-Weather Related Impact Subject to Modified BGSS Savings Test				
9	-L4	Non-Weather Deficiency				$523,880
10		75% Factor				75%
11	L8 * L9	Subtotal				$392,910
12						
13		Prior Year Carry-Forward (Modified BGSS Savings Test)				$0
14		75% Factor				75%
15	L12 * L13	Subtotal				$0
16						
17	L10 + L14	Non-Weather Impact Subject to Test				**$392,910**
18						
19		B. BGSS Savings[2]				
20		Permanent Capacity Savings				$2,188,818
21		Additional Capacity BGSS Savings				$22,036,033
22		Avoided Cost BGSS Savings				$0
23	Sum (L19:L21)	Total BGSS Savings				$24,224,851
24						
25		C. Results				
26		Non-Weather Impacts Passing Test (current accrual)				$523,880
27		Non-Weather Impacts Passing Test (prior year carry-forward)				$0
28		Non-Weather Impacts Exceeding Test				$0

Notes:
1 WNC Weighting of Margin Revenue by Class from 2019 Rate Case
2 Schedule IGF-10.8

Elizabethtown Gas Company
Conservation Incentive Program Filing
CIP Recovery Tests

Line No.	Note		
		Step 3: Apply Variable Margin Revenue Test	
		A. Non-Weather Related Impact Subject to Variable Margin Revenue T	
1		Non-Weather Deficiency	$523,880
2			
3		Prior Year Carry-Forward (Variable Margin Revenue Test)	$0
4			
5	L1 + L3	Non-Weather Impact Subject to Test	$523,880
6			
7		B. Variable Margin Revenues	
8		Variable Margin Revenues[1]	$134,757,037
9		6.5% Factor	6.5%
10	L8 * L9	Total Fixed Recovery Cap	**$8,759,207**
11			
12		C. Results	
13		Non-Weather Impacts Passing Test (current accrual)	$523,880
14		Non-Weather Impacts Passing Test (prior year carry-forward)	$0
15		Non-Weather Impacts Exceeding Test	$0
16			
17			
18		**Step 4: Determine Recoverable Non-Weather CIP Impacts**	
19			
20		A. Current Year Accrual Recoverable Non-Weather Impacts	
21		Amount Passing Modified BGSS Savings Test	$523,880
22			
23		Amount Passing Variable Margin Revenue Test	$523,880
24			
25		Recoverable Amount	$523,880
26			
27		B. Previous Carry-Forward Recoverable Amounts	
28		Total Unrecoverable Amount from Prior Year	$0
29			
30		Prior Year Subject to Modified BGSS Savings Test	$0
31		Prior Year Passing Modified BGSS Savings Test	$0
32		Remaining Unrecoverable Amount	$0
33			
34		Prior Year Subject to Variable Margin Revenue Test	$0
35		Prior Year Passing Variable Margin Revenue Test	$0
36		Remaining Unrecoverable Amount	$0
37			
38		Non-Recoverable Prior Year Carry-Forward	$0
39			
40		Recoverable Amount from Prior Year	$0
41			
42		Over/Under from Prior Year	$0
43			
44		**Total Non-Weather Recoverable CIP Amount**	**$523,880**

Notes:
1 Schedule IGF-10.9

Elizabethtown Gas Company
Conservation Incentive Program Filing
Earning Test

Line No.	Note		
1		Regulated Jurisdictional Net Income [1]	$39,170,289
2			
3		Average 13-Month Common Equity[1]	$563,498,863
4			
5		Rate of Return on Equity (2019 Base Rate Case)	9.60%
6			
7	L3 x L5	Allowed Return	$54,095,891
8			
9	L7 - L1	Amount Allowed Return Exceeds Actual Return	$14,925,602
10			
11		Earnings Test Pass/Fail	**PASS**

Notes:
1 WNC TK-5-Earnings

Elizabethtown Gas Company
Conservation Incentive Program Filing
Derivation of Recoverable/(Refundable) CIP Charges

Line No.	Note					
1		Total Non-Weather Recoverable CIP Impact[1]		$523,880		
2						
3		Allocation of RDS/SGS/GDS Total Margins[2]				
4			RDS	95.98%		
5			SGS	2.90%		
6			GDS	1.12%		
7						
8		Recoverable/(Refundable) CIP Impact		Non-Weather CIP Impacts	Weather-Related Impacts[3]	Total Recoverable Impact
9			RDS	$502,810	$0	$502,810
10			SGS	$15,199	$0	$15,199
11			GDS	$5,871	$0	$5,871
12						
13		Projected Throughput (Therms) for Recovery Period[4]				
14			RDS			231,985,400
15			SGS			21,267,300
16			GDS			125,262,024
17						
18		Pre-Tax CIP Charge / (Credit)				
19	L9 / L14		RDS			$0.0022
20	L10 / L15		SGS			$0.0007
21	L11 / L16		GDS			$0.0000
22						
23		Sales and Use Tax Factor				6.625%
24						
25		**Proposed After Tax CIP Charge /(Credit) per Therm**				
26	L19 x L23		**RDS**			**$0.0023**
27	L20 x L23		**SGS**			**$0.0007**
28	L21 x L23		**GDS**			**$0.0000**
29						
30		Current After-Tax CIP Charge/(Credit) per Therm				
31			RDS			$0.0000
32			SGS			$0.0000
33			GDS			$0.0000
34						
35		Increase/(Decrease) in After-Tax CIP Charge per Therm				
36	L27 - L32		RDS			$0.0023
37	L27 - L32		SGS			$0.0007
38	L27 - L32		GDS			$0.0000
39						

Notes

1 Schedule IGF-10.3 Page 2 of 2 Line 42
2 Schedule IGF-10.3
3 Schedule IGF-10.2
4 CIP Schedule TK-1

Elizabethtown Gas Company
Conservation Incentive Program Filing
Calculation of Average Baseline Use/Customer

		July	August	September	October	November	December	January	February	March	April	May	June	Annual
Baseline Customer Count[1]														
RDS	Residential Delivery Service	271,494	271,494	271,494	271,494	271,494	271,494	271,494	271,494	271,494	271,494	271,494	271,494	3,257,928
SGS	Small General Service	16,054	16,054	16,054	16,054	16,054	16,054	16,054	16,054	16,054	16,054	16,054	16,054	192,648
GDS	General Delivery Service	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	83,220
	Total	294,483	294,483	294,483	294,483	294,483	294,483	294,483	294,483	294,483	294,483	294,483	294,483	3,533,796
Baseline Therm Usage[1]														
RDS	Residential Delivery Service	3,824,124	3,816,637	4,104,739	10,601,064	23,179,178	38,075,328	47,452,504	40,612,280	32,179,063	15,713,029	6,119,200	3,474,758	229,151,904
SGS	Small General Service	281,555	289,200	374,127	874,278	1,878,556	3,491,235	4,458,348	3,715,246	2,633,556	1,144,517	511,000	316,154	19,967,772
GDS	General Delivery Service	3,651,556	3,683,543	4,174,918	7,931,931	12,493,044	18,518,292	22,203,740	18,729,016	15,243,125	8,966,443	5,419,870	3,567,774	124,583,252
	Total	7,757,235	7,789,380	8,653,784	19,407,273	37,550,778	60,084,855	74,114,592	63,056,542	50,055,744	25,823,989	12,050,070	7,358,686	373,702,928
Baseline Therm Usage per Cust														
RDS	Residential Delivery Service	14.1	14.1	15.1	39.0	85.4	140.2	174.8	149.6	118.5	57.9	22.5	12.8	844.0
SGS	Small General Service	17.5	18.0	23.3	54.5	117.0	217.5	277.7	231.4	164.0	71.3	31.8	19.7	1,243.7
GDS	General Delivery Service	526.5	531.2	602.0	1,143.8	1,801.4	2,670.3	3,201.7	2,700.7	2,198.0	1,292.9	781.5	514.5	17,964.5

Notes
1 2019 Rate Case Workpapers

Elizabethtown Gas Company
Conservation Incentive Program Filing
Calculation of Average Actual Use/Customer

		July 2021	August 2021	September 2021	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022	April 2022	May 2022	June 2022	Annual
Actual Customer Count[1]														
RDS	Residential Delivery Service	271,494	271,494	271,494	271,494	271,494	271,494	271,494	271,494	271,494	271,494	271,494	271,494	3,257,928
SGS	Small General Service	16,054	16,054	16,054	16,054	16,054	16,054	16,054	16,054	16,054	16,054	16,054	16,054	192,648
GDS	General Delivery Service	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	6,935	83,220
	Total	294,483	294,483	294,483	294,483	294,483	294,483	294,483	294,483	294,483	294,483	294,483	294,483	3,533,796
Actual Therm Usage[1]														
RDS	Residential Delivery Service	3,823,273	3,815,699	4,103,707	10,567,668	23,093,236	37,865,673	47,147,524	40,374,218	31,972,966	15,606,540	6,092,572	3,472,623	227,935,699
SGS	Small General Service	281,422	288,981	373,743	873,157	1,876,095	3,484,775	4,447,837	3,707,449	2,627,172	1,141,356	509,030	314,674	19,925,691
GDS	General Delivery Service	3,651,476	3,683,412	4,174,688	7,931,258	12,491,567	18,514,416	22,197,433	18,724,337	15,239,294	8,964,546	5,418,688	3,566,886	124,558,002
	Total	7,756,171	7,788,092	8,652,138	19,372,084	37,460,898	59,864,864	73,792,794	62,806,004	49,839,432	25,712,442	12,020,291	7,354,183	372,419,392
Actual Therm Usage per Cust														
RDS	Residential Delivery Service	14.1	14.1	15.1	38.9	85.1	139.5	173.7	148.7	117.8	57.5	22.4	12.8	839.7
SGS	Small General Service	17.5	18.0	23.3	54.4	116.9	217.1	277.1	230.9	163.6	71.1	31.7	19.6	1,241.2
GDS	General Delivery Service	526.5	531.1	602.0	1,143.7	1,801.2	2,669.7	3,200.8	2,700.0	2,197.4	1,292.7	781.4	514.3	17,960.8

Notes
1 Illustrative Example

Elizabethtown Gas Company
Conservation Incentive Program Filing
Components of BGSS Savings

Component 1: Permanent BGSS Savings

Line No.	Note	Pipeline	Tariff Service	Contract No.	Current Status	Maximum Daily Quantity Dth		Annual Demand $
1								
2								
3		TEXAS GAS	Firm Transportation	7474	Terminated	17,927	$	1,859,621
4		TRANSCO	Storage	1044824	Terminated	6,973	$	218,334
5		TRANSCO	Firm Transportation	1003960	Terminated	2,940	$	110,862
6								
7								
8		**Total Permanent Reductions**					**$**	**2,188,818**

Elizabethtown Gas Company
Conservation Incentive Program Filing
Components of BGSS Savings

Component 2: Additional BGSS Savings

Component 2(a) - Annual Capacity Savings

Line No.	Note	Pipeline	Tariff Service	Contract No.	Current Status	Maximum Daily Quantity Dth		Annual Demand $
5		GULF SOUTH	Storage	49786	Active	10,000	$	315,600
6		TRANSCO	Storage	9213322	Active	35,923	$	817,783
7		TRANSCO	Storage	9213323	Active	29,822	$	868,233
8		GULF SOUTH	Firm Transportation	49785	Active	15,000	$	1,040,250
9		NATIONAL FUEL GAS	Firm Transportation	E12398	Active	11,090	$	618,223
10		NATIONAL FUEL GAS	Firm Transportation	F12397	Active	15,805	$	853,830
11		TEXAS EASTERN	Firm Transportation	911520	Active	1,348	$	281,981
12		TRANSCO	Firm Transportation	9213324	Active	1,442	$	273,888
15		**Total Annual Capacity Savings**					**$**	**5,069,788**

Component 2(b) - Foregone Incremental Design-Day Capacity Savings

21	20/21 Peak Day Capacity Requirement	Dth		498,602
23	20/21 ETG Capacity Portfolio	Dth		431,299
25	Excess (Shortfall) Capacity	Dth		(67,303)
27	Foregone Capacity Rate	$/Dth	$	0.79
29	Short-Term Capacity Purchase Rate	$/Dth	$	0.10
31	Short-Term vs New Build Capacity Cost (Savings)	$/Dth	$	(0.69)
33	Total Savings (Cost) to Customers	$	$	16,966,245
36	**Total Annual Incremental Peak-Day Capacity Savings**			**$ 16,966,245**
41	**Total Additional Reductions**			**$ 22,036,033**

Elizabethtown Gas Company
Conservation Incentive Program Filing
Components of BGSS Savings

Component 3: Avoided Cost BGSS Savings

Line No.	Note	Month (a)	Base Year Customer Count (e)	Current Year Customer Count (c)	Net Increase/ (Decrease) Customer Count (d) = (c) - (b)	Baseline Use / Cust. (e)	Avoided Capacity (f) = (d) x (e)
6		July	271,494	271,494	0	14.10	0
7		August	271,494	271,494	0	14.10	0
8		September	271,494	271,494	0	15.10	0
9		October	271,494	271,494	0	39.00	0
10		November	271,494	271,494	0	85.40	0
11		December	271,494	271,494	0	140.20	0
12		January	271,494	271,494	0	174.80	0
13		February	271,494	271,494	0	149.60	0
14		March	271,494	271,494	0	118.50	0
15		April	271,494	271,494	0	57.90	0
16		May	271,494	271,494	0	22.50	0
17		June	271,494	271,494	0	12.80	0
20		Subtotal				844.00	0
22					Average Fixed BGSS Capacity Costs (per therm)[1]	$	0.1852
25		**CIP Year 2018-2019**				**$**	**-**

Notes:
1 ETG BGSS Filing dated June 1, 2020, Schedule LJW-8, page 2.

Elizabethtown Gas Company
Conservation Incentive Program Filing
Variable Margin

Residential Delivery Service (RDS)

Month	Year	Actual/ Estimate	Number of Customers[1]	Baseline Use / Cust[2]	Total Usage	Rate Case Margin Factor[3]	IIP Margin Factor	Total Margin Factor	Variable Margin
(a)	(b)	(c)	(d)	(e)	(f) = (d) x (e)	(g)	(h)	(i) = (g) + (h)	(j) = (f) x (i)
July	2021	e	271,494	14.1	3,828,065	$0.4110	$0.0197	$0.4307	$1,648,748
August	2021	e	271,494	14.1	3,828,065	$0.4110	$0.0197	$0.4307	$1,648,748
September	2021	e	271,494	15.1	4,099,559	$0.4110	$0.0197	$0.4307	$1,765,680
October	2021	e	271,494	39.0	10,588,266	$0.4110	$0.0197	$0.4307	$4,560,366
November	2021	e	271,494	85.4	23,185,588	$0.4110	$0.0197	$0.4307	$9,986,033
December	2021	e	271,494	140.2	38,063,459	$0.4110	$0.0197	$0.4307	$16,393,932
January	2022	e	271,494	174.8	47,457,151	$0.4110	$0.0197	$0.4307	$20,439,795
February	2022	e	271,494	149.6	40,615,502	$0.4110	$0.0197	$0.4307	$17,493,097
March	2022	e	271,494	118.5	32,172,039	$0.4110	$0.0197	$0.4307	$13,856,497
April	2022	e	271,494	57.9	15,719,503	$0.4110	$0.0197	$0.4307	$6,770,390
May	2022	e	271,494	22.5	6,108,615	$0.4110	$0.0197	$0.4307	$2,630,980
June	2022	e	271,494	12.8	3,475,123	$0.4110	$0.0197	$0.4307	$1,496,736
				844.0	229,140,936.0				
Total Excess / (Deficiency)									**$98,691,001**

Small General Service (SGS)

Month	Year	Actual/ Estimate	Number of Customers[1]	Baseline Use / Cust[2]	Total Usage	Rate Case Margin Factor[3]	IIP Margin Factor	Total Margin Factor	Variable Margin
(a)	(b)	(c)	(d)	(e)	(f) = (d) x (e)	(g)	(h)	(i) = (g) + (h)	(j) = (f) x (i)
July	2021	e	16,054	17.5	280,945	$0.3570	$0.0217	$0.3787	$106,394
August	2021	e	16,054	18.0	288,972	$0.3570	$0.0217	$0.3787	$109,434
September	2021	e	16,054	23.3	374,058	$0.3570	$0.0217	$0.3787	$141,656
October	2021	e	16,054	54.5	874,943	$0.3570	$0.0217	$0.3787	$331,341
November	2021	e	16,054	117.0	1,878,318	$0.3570	$0.0217	$0.3787	$711,319
December	2021	e	16,054	217.5	3,491,745	$0.3570	$0.0217	$0.3787	$1,322,324
January	2022	e	16,054	277.7	4,458,196	$0.3570	$0.0217	$0.3787	$1,688,319
February	2022	e	16,054	231.4	3,714,896	$0.3570	$0.0217	$0.3787	$1,406,831
March	2022	e	16,054	164.0	2,632,856	$0.3570	$0.0217	$0.3787	$997,063
April	2022	e	16,054	71.3	1,144,650	$0.3570	$0.0217	$0.3787	$433,479
May	2022	e	16,054	31.8	510,517	$0.3570	$0.0217	$0.3787	$193,333
June	2022	e	16,054	19.7	316,264	$0.3570	$0.0217	$0.3787	$119,769
				1243.7	19,966,359.8				
Total Excess / (Deficiency)									**$7,561,260**

General Delivery Service (GDS)

Month	Year	Actual/ Estimate	Number of Customers[1]	Baseline Use / Cust[2]	Total Usage	Rate Case Margin Factor[3]	IIP Margin Factor	Total Margin Factor	Variable Margin
(a)	(b)	(c)	(d)	(e)	(f) = (d) x (e)	(g)	(h)	(i) = (g) + (h)	(j) = (f) x (i)
July	2021	e	6,935	526.5	3,651,278	$0.2158	$0.0130	$0.2288	$835,412
August	2021	e	6,935	531.2	3,683,872	$0.2158	$0.0130	$0.2288	$842,870
September	2021	e	6,935	602.0	4,174,870	$0.2158	$0.0130	$0.2288	$955,210
October	2021	e	6,935	1143.8	7,932,253	$0.2158	$0.0130	$0.2288	$1,814,899
November	2021	e	6,935	1801.4	12,492,709	$0.2158	$0.0130	$0.2288	$2,858,332
December	2021	e	6,935	2670.3	18,518,531	$0.2158	$0.0130	$0.2288	$4,237,040
January	2022	e	6,935	3201.7	22,203,790	$0.2158	$0.0130	$0.2288	$5,080,227
February	2022	e	6,935	2700.7	18,729,355	$0.2158	$0.0130	$0.2288	$4,285,276
March	2022	e	6,935	2198.0	15,243,130	$0.2158	$0.0130	$0.2288	$3,487,628
April	2022	e	6,935	1292.9	8,966,262	$0.2158	$0.0130	$0.2288	$2,051,481
May	2022	e	6,935	781.5	5,419,703	$0.2158	$0.0130	$0.2288	$1,240,028
June	2022	e	6,935	514.5	3,568,058	$0.2158	$0.0130	$0.2288	$816,372
				17964.5	124,583,807.5				
Total Excess / (Deficiency)									**$28,504,775**

Total Variable Margin **$134,757,037**

Notes:
1 Schedule IGF-10.7
2 Schedule IGF-10.6
3 2019 Rate Case
4 IIP Filing