STATE OF NEW JERSEY BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE)
IMPLEMENTATION OF)
P.L. 2018, c. 17 REGARDING THE) DOCKET NO. QO19010040
ESTABLISHMENT OF ENERGY)
EFFICIENCY AND PEAK DEMAND)
REDUCTION PROGRAMS)
)
IN THE MATTER OF THE)
PETITION OF ROCKLAND) DOCKET NO.
ELECTRIC COMPANY FOR)
APPROVAL OF ITS ENERGY)
EFFICIENCY AND PEAK DEMAND)
REDUCTION PROGRAMS	

INDUID MADDED OF DIE

Rockland Electric Company ("RECO," the "Company," or "Petitioner") a corporation of the State of New Jersey, which is subject to the jurisdiction of the Board of Public Utilities ("Board") and which has its principal offices at One Lethbridge Plaza, Suite 32 – Second Floor, Route 17 North, Mahwah, New Jersey 07430, respectfully petitions the Board as follows:

1. Petitioner is engaged in the retail distribution of electric energy and the provision of electric Basic Generation Service for residential, commercial and industrial purposes within the State of New Jersey. The Board has jurisdiction over Petitioner's electric distribution rates pursuant to and accordance with N.J.S.A 48:2-2-1 et. seq. Petitioner provides electric distribution service to approximately 73,000 customers in an area which extends from eastern Bergen County at the Hudson River to western Passaic County and small communities in Sussex County, New Jersey.

- 2. The rates and charges for electric service furnished by Petitioner and the conditions upon which the same are furnished are set forth in Petitioner's tariff designated B.P.U. No. 3 Electricity.
- 3. The Company is filing this Petition as required by the Order of the New Jersey Board of Public Utilities ("the Board" or "BPU") of June 10, 2020 in Docket Nos. BPU Docket Nos. QO19010040, QO19060748, and QO17091004 ("June 10 Order").
- 4. The June 10 Order implemented the Energy Efficiency ("EE") section of the New Jersey Clean Energy Act² ("CEA"), which requires each utility to implement energy efficiency measures to reduce electricity usage by 2% and natural gas usage by 0.75%.³
- 5. In the June 10 Order, the Board required that the New Jersey utilities file petitions on or before September 25, 2020 proposing EE and Peak Demand Response ("PDR") programs that achieve energy savings, and required that the filings meet Minimum Filing Requirements ("MFR"). The within filing is the Company's filing in compliance with the June 10 Order.
- 6. Pursuant to the CEA, the Company requests a determination of the Company's Petition within 180 days of today's filing. The CEA provides that each utility file annual petitions for cost recovery of the programs pursuant to section 13 of P.L.2007, c. 340." ("RGGI Statute") Additionally, the CEA states that the utility

¹ In re the Implementation of P.L. 2018, c. 17 Regarding the Establishment of Energy Efficiency and Peak Demand Reduction Programs, BPU Docket Nos. QO19010040, QO19060748, QO17091004, Order dated June 10, 2020 ("June 2020 Order").

² P.L. 2018, c. 17, § 3(a) and (e)(1). Codified at N.J.S.A. 48:3-87.9.

³ Codified at N.J.S.A. 48:3-98.1.

⁴ N.J.S.A. 48:3-87.9e(1).

petition "shall be determined" by the Board "pursuant to" section 13 of the RGGI Statute ⁵

7. The RGGI Statute requires that the Board issue a decision within 180 days of the utility filing, and states:

Unless the board issues a written order within 180 days after the filing of the petition approving, modifying or denying the requested recovery, the recovery requested by the utility shall be granted effective on the 181st day after the filing without further order by the board.⁶

- 8. The Company submits this Energy Efficiency Plan to provide a program plan for the period 2021-2023 that is consistent with the initiatives described in the June 10 Order The programs and initiatives described in this document contain RECO's EE and demand reduction initiatives, as well as additional initiatives and EE opportunities advanced through beneficial electrification and enhanced offering for low and moderate income customers. RECO is proposing five core programs and two pilot programs to support New Jersey's ambitious energy efficiency goals and to support the 2019 New Jersey Energy Master Plan. The core programs proposed are: Residential Efficient Products, Home Performance with Energy Star, Multi-Family, C&I Direct Install, and C&I Rebate Programs. The two pilot programs are the Peak Demand Reduction Program and the Clean Heat Beneficial Electrification Program.
- 9. These programs are proposed to begin implementation in July 2021 and are designed to achieve annual energy savings of 8,922 MWh in 2021, 11,522 MWh in 2022 and 15,103 MWh in 2023, and represent 0.57%, 0.74%, and 0.97% of the three-year average of RECO sales for 2017, 2018, and 2019. The Peak Demand Reduction Program

⁶ N.J.S.A. 48:3-87.9(b).

⁵ *Id*.

is designed to achieve 4.9 MW in 2021, 5.7 MW in 2022, and 6.4 MW in 2023. The Clean Heat Beneficial Electrification Program is designed to achieve annual energy savings of 2,169 MMBtu in 2021, 3,484 MMBtu in 2022, and 4,362 MMBTU in 2023. The anticipated cost of the portfolio of programs is \$5,000,252 in 2021, \$5,859,176 in 2022, and \$7,159,787 in 2023. For the core programs the NJ Cost Test benefit cost ratio is 1.6, for the Peak Demand Reduction Pilot Program the NJ Cost Test benefit cost ratio, is 2.1 and for the Clean Heat Beneficial Electrification the NJ Cost Test benefit cost ratio is 1.2.

10. The following is a brief description of the core and pilot programs.

Residential Efficient Products

The Residential Efficient Products 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 access to financing 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 provide a means to encourage customers to take the first steps toward energy-efficiency. A behavioral component will provide customers a home energy report ("HER"). This HER benchmarks customers' energy usage against their historical usage and similar homes in the area. This report also compares monthly energy usage and prompts consumers to reduce usage in order to improve against their previous month's usage and benchmark relative to their neighbors.

Home Performance with ENERGY STAR Program

The Home Performance with ENERGY STAR ("HPwES") Program will provide a holistic approach for customers to explore and invest in the efficiency and comfort of their homes and includes a Quick Home Energy Checkup ("QHEC"). All participants in this program must have an initial energy audit performed directly by a qualified HPwES contractor or auditor where QHEC measures may be installed. 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 access to financing.

Multi-Family Program

The Multi-Family Program addresses multi-family structures with five or more units. As such, there can be significant variation in the types of structures served under this Program ranging from residential dwellings with five 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 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 emergency equipment replacement. In addition, the Multi-Family Program will provide access to low to no-interest interest financing and enhanced incentives for low income/affordable housing properties.

Commercial & Industrial Direct Install Program

The Commercial and Industrial ("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 a turnkey streamlined customer experience and 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 timeconsuming 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.

C&I Rebate Program

The C&I Rebate Program will promote the installation of high-efficiency electric and/or natural gas equipment by RECO C&I customers, via the installation of prescriptive or custom measures or projects. The program provides prescriptive and custom based incentives to commercial and industrial customers to purchase and install energy efficient products. The program will continue to support and/or provide downstream approaches to ensure the market is properly supported. The program may also provide midstream or upstream incentives or buydowns and

support to manufacturers, distributors, contractors, and retailers that sell select energy efficient products. The rebates 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 vary 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.

Clean Heat Beneficial Electrification Program

The Clean Heat Beneficial Electrification Program is designed to promote the installation of clean heat pump technology by residential, multi-family, and C&I customers by offering a range of incentives to advance the adoption of this clean and highly efficient air-source and ground-source heat pump technology for space and water heating. O&R, RECO's parent company, is implementing a similar program in its New York territory and RECO will benefit from the synergy of implementing the same program across its contiguous service territories.

Peak Demand Reduction Program

RECO will offer a Peak Demand Reduction ("PDR") pilot, emulating the existing programs that operate in the Company's New York service territory. The pilot will include a Bring Your Own Thermostat ("BYOT") program for residential and

small commercial customers that are eligible to participate in the Company's C&I Direct Install Program, a behavioral PDR component for residential customers, and a Commercial System Relief Program ("CSRP") option for commercial customers. The BYOT program will remotely control central heat pump and central air conditioning ("AC") equipment in residential customers' homes and small businesses during peak shaving or critical contingency events. The behavioral PDR program will educate and engage residential customers, utilizing data analytics to provide personalized usage and demand history to establish an additional peak shaving resource. CSRP will serve as a peak shaving program that can be called on a day-ahead basis when the day-ahead forecast load approaches the Company's forecasted summer electric system peak.

- Donald E. Kennedy, who will provide more detailed information about the Company's proposed EE and PDR programs; the Direct Testimony of the Rate and Forecasting Panel, which will address the calculation of the Company's proposal to recover the costs of the programs by establishing the Clean Energy Act component of the Company's existing System Benefits Charge ("SBC"), and the Company's proposal to recover lost revenues resulting from its programs through a modified Conservation Incentive Program ("CIP"); the Direct Testimony of the Accounting Panel, which will address the calculation of the Company's revenue requirements for its EE and PDR programs: and, the Direct Testimony of Andrew W. Cottrell of Applied Energy Group ("AEG") who performed the benefit-cost analysis ("BCA") of the Company's EE and PDR programs.
 - 12. The Company's proposed, revised tariff leaves are annexed as Exhibit A.

13. Pursuant to the June 10 Order, the Company's Minimum Filing

Requirements are annexed to this Petition.

14. The following is a list of Attachments to this Petition:

Minimum Filing Requirements
Appendix A – Tariff Pages
Appendix B – Draft Public Notice
Direct Testimony of Donald E Kennedy
Direct Testimony of Rate and Forecasting Panel
Direct Testimony of Accounting Panel
Direct Testimony of Andrew W. Cottrell
Exhibit DEK-1
Exhibits RFP 1 – 2
Exhibits AP 1-5
Working Papers Rate and Forecasting Panel
Working Papers Accounting Panel
Working Papers Donald E. Kennedy

15. Communications and correspondence related to this Petition should be

sent as follows:

Margaret Comes
Associate Counsel
Rockland Electric Company
4 Irving Place 18th Floor
New York, New York 10025
(212) 460-3013
comesm@coned.com

and

John L. Carley, Esq.
Associate General Counsel
Consolidated Edison Company of New York, Inc.
Law Department, Room 1815S
4 Irving Place
New York, NY 10003
carleyj@coned.com

WHEREFORE, Petitioner respectfully requests that the Board consider this

matter and issue a decision and order:

1. Deciding the Company's Petition within 180 days of today's filing:

2. Approving the proposed rates and charges for electric service set forth in

this Petition and supporting testimony and tariffs as just and reasonable;

3. Approving the proposed revised tariff leaves for inclusion in RECO's

Tariff B.P.U. No. 3 – Electricity on and after the effective date of the new rates addressed

above;

4. Providing such other relief as is just and proper.

Respectfully submitted,

ROCKLAND ELECTRIC COMPANY

By <u>Margaret Comes</u> Margaret Comes

Attorney for Rockland Electric

Company

Dated: September 25, 2020

11

VERIFICATION

STATE OF NEW YORK)
	: ss
COUNTY OF ROCKLAND)

Christina C. Ho, of full age, being duly sworn according to law, on his oath deposes and says

- 1. I am the Vice President Customer Service of Rockland Electric Company, the petitioner in the foregoing Petition.
- 2. I have read the annexed petition, and the matters and things contained therein are true to the best of my knowledge and belief.

L 1. A

Sworn to and subscribed to before me this 25 day

of September, 2020.

DAVID H. BRAUNFOTEL

NOTARY PUBLIC-STATE OF NEW YORK

No. 01BR5019642

Qualified in Rockland County
My Commission Expires October 25, 20

List of Attachments

Minimum Filing Requirements

Appendix A – Tariff Pages

Appendix B – Draft Public Notice

Direct Testimony of Donald E Kennedy

Direct Testimony of Rate and Forecasting Panel

Direct Testimony of Accounting Panel

Direct Testimony of Andrew W. Cottrell

Exhibit DEK-1

Exhibits RFP 1-2

Exhibits AP 1-5

Working Papers Rate and Forecasting Panel

Working Papers Accounting Panel

Working Papers Donald E. Kennedy

Rockland Electric Company Minimum Filing Requirements

MINIMUM FILING REQUIREMENTS					
I. General Filir	ng Requirements				
MIMIMUM FILING REQUIREMENTS BOARD ORDER JUNE 10, 2020 Location in Filing Page Number or Specific Location					
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.	DEK-1	P. 1-42			
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.	See Accounting Panel testimony and exhibits				
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.	DEK-1	P. 58 - 60			
d. The filing shall include testimony supporting the petition, including all proposed programs.	Direct Testimony of Donald E. Kennedy	Direct Testimony of Donald E. Kennedy			
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.	N/A				
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.	See Draft 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:	DEK-1	P. 1 - 69			
i. Program description/design	DEK-1	P. 1- 35			
ii. Target market segment/efficiency – including eligible customers, properties, and measures/services – and eligibility requirements and processes	DEK-1	P. 3, 7, 12, 16, 21, 27, 32			

iii. Existing incentives	DEK-1	P. 43 - 53
iv. Proposed incentives, including incentive payment processes and timeframes	DEK-1	P. 43 - 53
v. Program delivery method	DEK-1	P. 5, 9, 14, 18, 22, 28, 34
vi. Customer financing options	DEK-1	P. 54
vii. Customer access to current and historic energy usage data	DEK-1	P. 62
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.	DEK-1	P. 5, 9, 14, 18, 22, 28, 34
x. Estimated program participants, by year	DEK-1	P. 55 - 57
. Projected energy savings and associated calculations for each program year	DEK-1	P. 55 - 57
Projected energy savings and associated calculations for each program	DEK-1	P. 55 – 57, 58 - 60
Net annual peak demand savings	DEK-1	P. 55 - 57
Net lifetime energy savings	DEK-1	P. 55 - 57
Net lifetime demand savings	DEK-1	P. 55 - 57
Net lifetime demand savings	DEK-1	P. 55 - 57
Net lifetime energy savings derived from qualifying small commercial customers	DEK-1	P. 55 - 57
i. Program budget, by year	DEK-1	P. 58 - 60
kii. Projected program costs, by year, broken down into the following categories, as applicable: capital cost; utility administration; marketing; outside services; ncentives (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.	DEK-1	P. 58 - 60
xiii. Implementation plan for all proposed programs	DEK-1	P. 5, 9, 14, 18, 22, 28, 34
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 DEK-1e 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.	DEK-1	P. 3, 8, 13, 16, 21, 27, 32

b. The utility shall provide the following information about the proposed portfolio:	DEK-1		
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).	DEK-1	P. 65 - 67	
ii. Workforce development and job training partnerships and pipelines for energy efficiency jobs, including for local, underrepresented, and disadvantaged workers	DEK-1	P. 39 - 40	
iii. Total budget summary, including an annual budget summary	DEK-1	P. 58 - 60	
iv. Benefit-cost analysis (as defined in Section V)	DEK-1	P. 68 - 69	
v. EM&V strategies/plan (as defined in Section VI)	DEK-1	P. 37 - 38	
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)	DEK-1	P. 55 - 57	
vii. Reporting plan (as defined in Section VIII)	DEK-1	P. 36	
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.	DEK-1	P. 63 - 64	
III. Additiona	al 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).	N/A		
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.	N/A		
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.	See Accounting Panel testimony and exhibits		
b. The utility shall provide detailed spreadsheets of the accounting treatment of	See Accounting Panel testimony and		

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.	exhibits	
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.	See Rate and Forecasting Panel testimony and exhibits	
d. The utility's petition for approval, including proposed tariff sheets and other required information, shall be verified as to its accuracy and shall be accompanied by a certification of service demonstrating that the petition was served on the New Jersey Division of Rate Counsel simultaneous to its submission to the 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.	See Rate and Forecasting Panel testimony and exhibits	
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.	See Accounting Panel testimony and exhibits, DEK-1	P. 58 - 60
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.	See Accounting Panel testimony and exhibits	
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.	See Accounting Panel testimony and exhibits	
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.	See Accounting Panel testimony and exhibits	
j. A utility seeking incentives shall provide all supporting justifications and	Direct Testimony of Donald E. Kennedy	Direct Testimony of Donald E. Kennedy

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.		
V. Bene	fit-Cost 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.	DEK-1	P. 68 - 69
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.	Direct Testimony of Andrew W. Cottrell	P. 4
c. Renewable energy programs shall not be subject to a benefit-cost test, but the utility must quantify all direct and indirect benefits resulting from such a proposed program as well as provide the projected costs.	N/A	
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.	Direct Testimony of Andrew W. Cottrell	P. 6
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.	Direct Testimony of Andrew W. Cottrell	Direct Testimony of Andrew W. Cottrell
VI. Evaluation, Mea	surement, 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.	DEK-1	P. 37 - 38
VII. Quantitative Perf	ormance 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.	DEK-1	P. 55 - 57
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:	DEK-1	P. 57

i. Net annual energy savings	DEK-1	P. 55 - 57
ii. Net annual peak demand savings	DEK-1	P. 55 - 57
ii. Net annual peak demand savings	DEK-1	P. 55 - 57
iv. Net lifetime demand savings	DEK-1	P. 55 - 57
v. Net present value of net benefits as determined by the Utility Cost Test	DEK-1	P. 55 - 57
vi. Net lifetime energy savings derived from qualifying low-income customers	DEK-1	P. 55 - 57
vii. Net lifetime energy savings derived from qualifying small commercial customers	DEK-1	P. 55 - 57
VIII. Reporting Plan: The utility shall provide a pla	n to comply with the following reporting requ	uirements:
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:	DEK-1	P. 36
i. Energy savings: gross and net savings	DEK-1	P. 55 - 57
ii. Number of program participants: total, low-income, moderate-income, and small commercial		P. 55 - 57
iii. Program expenditures	DEK-1	
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.	DEK-1	P. 36
c. Triennial reports:	DEK-1	P. 36
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.	DEK-1	P. 36
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.	DEK-1	P. 36

Revised Leaf No. 56 Superseding Revised Leaf No. 56

GENERAL INFORMATION

No. 33 SOCIETAL BENEFITS CHARGE ("SBC")

The SBC shall be applied to the kWh usage on the bills of all customers served under this Schedule. The SBC shall include costs, including current costs and any refund or recovery of prior period over- or under-collection balances, related to:

- (1) demand-side management ("DSM"), including the costs associated with DSM programs and DSM bidding programs;
- (2) Clean Energy Program, ("CEP");
- (3) Universal Service Fund and Lifeline; and
- (4) Clean Energy Act Energy Efficiency ("EE") and Peak Demand Reduction ("PDR") programs.

The SBC to be effective on and after the date indicated below shall be set at 0.5979 cents per kWh, including sales and use tax ("SUT"). The SBC includes the following rate components:

	SBC Rate Components (¢ per kWh)	
	Excluding SUT Including SUT	
DSM & CEP	0.3359	0.3582
Universal Service Fund	0.1249	0.1332
Lifeline	0.0708	0.0755
Clean Energy Act	0.0290	0.0310
Total SBC	0.5606	0.5979

The difference between actual costs incurred by the Company for the SBC components described above and SBC recoveries will be deferred, with interest, for future recovery in accordance with the Company's Plan for Resolution of Proceedings approved by the Board in its Summary Order dated July 28, 1999 and Final Order dated July 22, 2002 in Docket Nos. EO97070464, EO97070465 and EO97070466.

- 4	\sim		
•	1 'A	うもいつ	ued)
			U 1
١			~~~

ISSUED: EFFECTIVE:

ISSUED BY: Robert Sanchez, President Mahwah, New Jersey 07430

Revised Leaf No. 57 Superseding Revised Leaf No. 57

GENERAL INFORMATION

No. 33 SOCIETAL BENEFITS CHARGE ("SBC") (Continued)

On April 1 of each year, the Company shall file with the Board the SBC rate components listed in (a) and (b) above for inclusion in the SBC effective for the twelve-month period commencing the following August 1. Such rate components shall be set to amortize any over- or under-recovered balances, including interest, calculated as determined by the Board in its Order dated October 21, 2008 in Docket Number ER08060455, and to provide current program cost recovery over the twelve-month period commencing the following August 1.

On July 1 of each year, the Company shall file with the Board the Universal Service Fund and Lifeline rate components for inclusion in the SBC effective for the twelve-month period commencing the following October 1. Such rate components shall be set to recover any under recovered balances, including interest, calculated as determined by the Board in its Order dated October 21, 2008 in Docket Number ER08060455, and to provide current program cost recovery over the twelve-month period commencing the following October 1, consistent with the Board's Universal Service Fund and Lifeline directives.

The Clean Energy Act component of the SBC will be subject to deferred accounting, with interest, and reconciled annually by comparing the actual amounts subject to recovery to the actual amounts collected. Any difference will be included in the Clean Energy Act component of the following year's SBC. The difference between the actual monthly revenue requirement associated with the Clean Energy Act EE and PDR programs and actual recoveries through the Clean Energy Act component of the SBC will be deferred, with interest, for future recovery in the case of an under-collection or for future credits in the case of an over-collection. Beginning XXXX, and on August 1 of each year thereafter, the Company shall file with the Board the Clean Energy Act component of the SBC to be effective for the twelve-month period commencing the following October 1. The Clean Energy Act component of the SBC shall be set to recover any prior period over- or under-recovered balances, including interest, and to provide current recovery of the forecasted Clean Energy Act EE and PDR programs revenue requirement over the twelve-month period commencing the following October 1.

ISSUED: EFFECTIVE:

ISSUED BY: Robert Sanchez, President

Saddle River, New Jersey 07458

Revised Leaf No. 65A Superseding Revised Leaf No. 65A

GENERAL INFORMATION

No. 40 CONSERVATION INCENTIVE PROGRAM ("CIP") ADJUSTMENT

Subject to an earnings test, the non-bypassable CIP Adjustment shall be applied to the kWh delivered under Service Classification ("SC") Nos. 1, 2, 3, and 5. For CIP Adjustment purposes, the following customer groups have been established:

Group A – SC Nos. 1, 3, and 5 Group B – SC No. 2 – Secondary Group C – SC No. 2 – Primary

The earnings test will compare the Company's actual return on equity ("ROE") to its allowed ROE from the most recently approved base rate filing. Should the actual ROE exceed the approved base rate filing ROE by 50 basis points or more, the CIP Adjustment surcharge or sur-credit shall not be allowed for the applicable program year.

The CIP Adjustment shall be based on the difference between actual revenue and allowed revenue based upon group specific Revenue Per Customer ("RPC") targets for the twelve-month period ended May 31 of each year.

Actual Revenue shall be equal to the sum of billed distribution charge revenue (i.e., customer charge revenue, distribution usage revenue, and distribution demand revenue). Actual Revenue will not include revenues derived from the CIP Adjustment.

ISSUED: **EFFECTIVE**:

ISSUED BY: Robert Sanchez, President

GENERAL INFORMATION

No. 40 CONSERVATION INCENTIVE PROGRAM ("CIP") ADJUSTMENT (Continued)

Monthly customer group specific RPC targets are calculated by dividing the number of customers for each month into the monthly distribution revenue approved in the Company's most recent base rate filing. On a monthly basis, the allowed revenue shall be calculated by multiplying the customer group specific RPC target by the actual number of customers for that month in the customer group.

RPC Targets (\$/customer)

Month	Group A	Group B	Group C
Jul	78.35	259.72	2,820.97
Aug	78.90	300.80	2,896.44
Sep	65.72	254.89	2,145.01
Oct	44.79	210.65	3,245.17
Nov	43.02	230.44	3,422.46
Dec	48.01	242.20	3,071.14
Jan	56.86	236.88	2,928.16
Feb	48.67	198.58	2,540.24
Mar	43.33	202.18	2,291.07
Apr	40.45	226.44	2,811.01
May	41.37	241.96	3,768.58
Jun	53.36	230.78	2,991.16

The Company will determine the maximum amount of revenue the Company may collect in a program year through the CIP Adjustment charges. The maximum amount of revenue will be determined by taking 6.5% of the customer charge revenue, distribution usage revenue, and distribution demand revenue of customer groups A-C. If the amount to be collected (*i.e.*, the difference between actual revenue and allowed revenue) is larger than baseline amount established by the savings test, the difference between the total amount to be collected and the baseline will be deferred for collection in the following year.

ISSUED: EFFECTIVE:

ISSUED BY: Robert Sanchez, President Mahwah, New Jersey 07430

Revised Leaf No. 65C Superseding Revised Leaf No. 65C

GENERAL INFORMATION

No. 40 CONSERVATION INCENTIVE PROGRAM ("CIP") ADJUSTMENT (Continued)

Each month, the Company will compare the monthly actual distribution revenue to the monthly target distribution revenue for each customer group. A carrying charge will be calculated on the deferred balance for any over-collection or under-collection. The carrying charge will be calculate in accordance with the Board's Order dated October 21, 2008 in BPU Docket No. ER08060455.

Commencing June 15, 2022 and every June 15 thereafter, the Company will file to determine each customer group specific CIP Adjustment applicable for the 12-month period commencing July 1.

For any given year, each customer group specific CIP Adjustment shall not exceed a charge or a credit of 2.0 cents per kWh, including SUT. In the event the 2.0 cents per kWh limit is imposed, any remaining over- or under-collection balance shall be included in the subsequent year's reconciliation charges to the extent possible within the 2.0 cents per kWh limitation.

	CIP Adjustment (¢ per kWh)	
	Excluding SUT Including SUT	
Group A	0.0000	0.0000
Group B	0.0000	0.0000
Group C	0.0000	0.0000

ISSUED: EFFECTIVE:

ISSUED BY: Robert Sanchez, President Mahwah, New Jersey 07430

Revised Leaf No. 56 Superseding Revised Leaf No. 56

GENERAL INFORMATION

No. 33 SOCIETAL BENEFITS CHARGE ("SBC")

The SBC shall be applied to the kWh usage on the bills of all customers served under this Schedule. The SBC shall include costs, including current costs and any refund or recovery of prior period over- or under-collection balances, related to:

- (1) demand-side management ("DSM"), including the costs associated with DSM programs and DSM bidding programs;
- (2) Clean Energy Program, ("CEP"); and
- (3) Universal Service Fund and Lifeline; and
- (4) Clean Energy Act Energy Efficiency ("EE") and Peak Demand Reduction ("PDR") programs.

The SBC to be effective on and after the date indicated below shall be set at 0.56690.5979 cents per kWh, including sales and use tax ("SUT"). The SBC includes the following rate components:

	SBC Rate Components (¢ per kWh)		
	Excluding SUT	Including SUT	
DSM & CEP	0.3359	0.3582	
Universal Service Fund	0.1249	0.1332	
Lifeline	0.0708	0.0755	
Clean Energy Act	<u>0.0290</u>	<u>0.0310</u>	
Total SBC	0. 5316 <u>5606</u>	0.5669 <u>0.5979</u>	

The difference between actual costs incurred by the Company for the SBC components described above and SBC recoveries will be deferred, with interest, for future recovery in accordance with the Company's Plan for Resolution of Proceedings approved by the Board in its Summary Order dated July 28, 1999 and Final Order dated July 22, 2002 in Docket Nos. EO97070464, EO97070465 and EO97070466.

100	ntin	
(60	mum	ued)

ISSUED: EFFECTIVE:

ISSUED BY: Robert Sanchez, President Mahwah, New Jersey 07430

Revised Leaf No. 57 Superseding Revised Leaf No. 57

GENERAL INFORMATION

No. 33 SOCIETAL BENEFITS CHARGE ("SBC") (Continued)

On April 1 of each year, the Company shall file with the Board the SBC rate components listed in (a) and (b) above for inclusion in the SBC effective for the twelve-month period commencing the following August 1. Such rate components shall be set to amortize any over- or under-recovered balances, including interest, calculated as determined by the Board in its Order dated October 21, 2008 in Docket Number ER08060455, and to provide current program cost recovery over the twelve-month period commencing the following August 1.

On July 1 of each year, the Company shall file with the Board the Universal Service Fund and Lifeline rate components for inclusion in the SBC effective for the twelve-month period commencing the following October 1. Such rate components shall be set to recover any under recovered balances, including interest, calculated as determined by the Board in its Order dated October 21, 2008 in Docket Number ER08060455, and to provide current program cost recovery over the twelve-month period commencing the following October 1, consistent with the Board's Universal Service Fund and Lifeline directives.

The Clean Energy Act component of the SBC will be subject to deferred accounting, with interest, and reconciled annually by comparing the actual amounts subject to recovery to the actual amounts collected. Any difference will be included in the Clean Energy Act component of the following year's SBC. The difference between the actual monthly revenue requirement associated with the Clean Energy Act EE and PDR programs and actual recoveries through the Clean Energy Act component of the SBC will be deferred, with interest, for future recovery in the case of an under-collection or for future credits in the case of an over-collection. Beginning XXXX, and on August 1 of each year thereafter, the Company shall file with the Board the Clean Energy Act component of the SBC to be effective for the twelve-month period commencing the following October 1. The Clean Energy Act component of the SBC shall be set to recover any prior period over- or under-recovered balances, including interest, and to provide current recovery of the forecasted Clean Energy Act EE and PDR programs revenue requirement over the twelve-month period commencing the following October 1.

ISSUED: EFFECTIVE:

ISSUED BY: Robert Sanchez, President

Saddle River, New Jersey 07458

Revised Leaf No. 65A Superseding Revised Leaf No. 65A

GENERAL INFORMATION

No. 40 CONSERVATION INCENTIVE PROGRAM ("CIP") ADJUSTMENT

Subject to an earnings test, the non-bypassable CIP Adjustment shall be applied to the kWh delivered under Service Classification ("SC") Nos. 1, 2, 3, and 5. For CIP Adjustment purposes, the following customer groups have been established:

Group A - SC Nos. 1, 3, and 5 Group B – SC No. 2 – Secondary Group C - SC No. 2 - Primary

The earnings test will compare the Company's actual return on equity ("ROE") to its allowed ROE from the most recently approved base rate filing. Should the actual ROE exceed the approved base rate filing ROE by 50 basis points or more, the CIP Adjustment surcharge or sur-credit shall not be allowed for the applicable program year.

The CIP Adjustment shall be based on the difference between actual revenue and allowed revenue based upon group specific Revenue Per Customer ("RPC") targets for the twelve-month period ended May 31 of each year.

Actual Revenue shall be equal to the sum of billed distribution charge revenue (i.e., customer charge revenue, distribution usage revenue, and distribution demand revenue). Actual Revenue will not include revenues derived from the CIP Adjustment.

ISSUED: **EFFECTIVE:**

ISSUED BY: Robert Sanchez, President

Mahwah, New Jersey 07430

Revised Leaf No. 65B Superseding Revised Leaf No. 65B

GENERAL INFORMATION

No. 40 CONSERVATION INCENTIVE PROGRAM ("CIP") ADJUSTMENT (Continued)

Monthly customer group specific RPC targets are calculated by dividing the number of customers for each month into the monthly distribution revenue approved in the Company's most recent base rate filing. On a monthly basis, the allowed revenue shall be calculated by multiplying the customer group specific RPC target by the actual number of customers for that month in the customer group.

RPC Targets (\$/customer)

<u>Month</u>	Group A	Group B	Group C
<u>Jul</u>	<u>78.35</u>	<u>259.72</u>	<u>2,820.97</u>
Aug	<u>78.90</u>	<u>300.80</u>	<u>2,896.44</u>
<u>Sep</u>	<u>65.72</u>	<u>254.89</u>	<u>2,145.01</u>
<u>Oct</u>	<u>44.79</u>	<u>210.65</u>	<u>3,245.17</u>
Nov	43.02	<u>230.44</u>	<u>3,422.46</u>
<u>Dec</u>	<u>48.01</u>	<u>242.20</u>	<u>3,071.14</u>
<u>Jan</u>	<u>56.86</u>	<u>236.88</u>	<u>2,928.16</u>
<u>Feb</u>	<u>48.67</u>	<u>198.58</u>	<u>2,540.24</u>
<u>Mar</u>	<u>43.33</u>	<u>202.18</u>	<u>2,291.07</u>
<u>Apr</u>	<u>40.45</u>	226.44	<u>2,811.01</u>
<u>May</u>	41.37	<u>241.96</u>	<u>3,768.58</u>
<u>Jun</u>	<u>53.36</u>	230.78	<u>2,991.16</u>

The Company will determine the maximum amount of revenue the Company may collect in a program year through the CIP Adjustment charges. The maximum amount of revenue will be determined by taking 6.5% of the customer charge revenue, distribution usage revenue, and distribution demand revenue of customer groups A – C. If the amount to be collected (i.e., the difference between actual revenue and allowed revenue) is larger than baseline amount established by the savings test, the difference between the total amount to be collected and the baseline will be deferred for collection in the following year.

ISSUED: EFFECTIVE:

ISSUED BY: Robert Sanchez, President Mahwah, New Jersey 07430

Revised Leaf No. 65C Superseding Revised Leaf No. 65C

GENERAL INFORMATION

No. 40 CONSERVATION INCENTIVE PROGRAM ("CIP") ADJUSTMENT (Continued)

Each month, the Company will compare the monthly actual distribution revenue to the monthly target distribution revenue for each customer group. A carrying charge will be calculated on the deferred balance for any over-collection or under-collection. The carrying charge will be calculate in accordance with the Board's Order dated October 21, 2008 in BPU Docket No. ER08060455.

Commencing June 15, 2022 and every June 15 thereafter, the Company will file to determine each customer group specific CIP Adjustment applicable for the 12-month period commencing July 1.

For any given year, each customer group specific CIP Adjustment shall not exceed a charge or a credit of 2.0 cents per kWh, including SUT. In the event the 2.0 cents per kWh limit is imposed, any remaining over- or under-collection balance shall be included in the subsequent year's reconciliation charges to the extent possible within the 2.0 cents per kWh limitation.

	CIP Adjustment (¢ per kWh)		
	Excluding SUT	Including SUT	
Group A	<u>0.0000</u>	0.0000	
Group B	<u>0.0000</u>	0.0000	
Group C	<u>0.0000</u>	0.0000	

ISSUED: EFFECTIVE:

ISSUED BY: Robert Sanchez, President Mahwah, New Jersey 07430

NOTICE TO ROCKLAND ELECTRIC COMPANY CUSTOMERS

Notice of a Filing And Notice of Public Hearings

IN THE MATTER OF THE IMPLEMENTATION OF P.L. 2018, c. 17 REGARDING THE ESTABLISHMENT OF ENERGY EFFICIENCY AND PEAK DEMAND REDUCTION PROGRAMS BPU DOCKET NO. QO19010040

AND

IN THE MATTER OF THE PETITION OF ROCKLAND ELECTRIC COMPANY FOR APPROVAL OF ITS ENERGY EFFICIENCY AND PEAK DEMAND REDUCTION PROGRAMS BPU DOCKET NO._____

PLEASE TAKE NOTICE that on September 25, 2020 Rockland Electric Company ("RECO" or "the Company") filed a Verified Petition and supporting documents ("Petition") with the New Jersey Board of Public Utilities ("Board" or "BPU") requesting approval of the Company's Energy Efficiency ("EE") and Peak Demand Reduction ("PDR") Programs. On June 10, 2020, the BPU issued an Order directing the New Jersey public utilities to achieve energy reduction targets set by the BPU and implement EE and PDR programs to achieve those energy reduction targets. The Order established penalties against the utilities if the targets were not achieved and incentives if the targets were exceeded. The Order also permitted the utilities to recover the costs of their EE and PDR programs and any revenues lost by the utilities as a result of the EE and PDR programs.

The Company's Petition requests BPU approval to implement five EE programs and two PDR programs in compliance with the Board's Order. The forecasted increase in revenue requirement associated with the proposed EE and PDR programs in 2021 is \$402,907. The Company anticipates that program costs in the first year of the EE and PDR programs will be \$5,000,252. As directed in the Board Order, the Company calculated the amortization expense associated with the EE and PDR program using a ten-year asset life for expenditures

The Company proposes to recover the costs of the EE and PDR programs by establishing the Clean Energy Act component of the Company's existing System Benefits Charge ("SBC"). The Clean Energy Act component of the SBC will be a non-bypassable charge that will be set annually based on the sum of: (1) the Company's forecasted revenue requirement and any incremental Operation and Maintenance expenses associated with the EE and PDR programs; and (2) any prior period overor under-recoveries, including interest. That total sum will then be divided by the forecast of the Company's kWh deliveries to all customers served under the Company's electric tariff for the annual recovery period. The resulting rate in cents per kWh will then be increased to reflect Sales and Use Tax ("SUT"). Each month the actual revenue collected through the Clean Energy Act component of the SBC will be compared to the sum of the month's revenue requirement and any incremental Operation and Maintenance expenses. A carrying charge will be included in the deferred balance for both an over-collection and for an under-collection of revenues. The carrying charge will be calculated as determined by the Board in the October 2008 Order. The interest rate shall be the

interest rate based on two-year constant maturity Treasuries as published in the Federal Reserve Statistical Release on the first day of each month (or the closest day thereafter on which rates are published), plus 60 basis points, but not to exceed the Company's overall rate of return. The interest rate will be reset each month. The Company proposes to make annual filings to be made on or before August 1 of each year that will reconcile the prior period program year collections versus recoveries and will forecast the revenue requirement for the following program year. The Company proposes an effective date of October 1 for the proposed change to the Clean Energy Act component of the SBC.

The BPU's June 10, 2020 Order also allowed directed the utilities to establish a mechanism to recover revenues lost as a result of the EE and PDR programs. The Company is proposing a modified Conservation Incentive Program ("CIP") to recover lost revenues associated with the implementation of the EE and PDR Programs. The CIP will recover lost revenues through a CIP Adjustment Mechanism ("CAM") which will include customer group specific non-bypassable charges or credits applicable to customers included in the modified CIP calculation. The customer classes included in the CIP are Service Classification ("SC") Nos. 1, 2, 3, and 5. The Company has grouped the SCs together as follows:

Group A (Residential): SC Nos. 1, 3, and 5
Group B (Secondary Commercial): SC No. 2 – Secondary
Group C (Primary Commercial): SC No. 2 – Primary

Under the CAM, each month the Company will compare the monthly target revenue to the actual distribution revenue. At the end of the annual period, the customer group-specific RECO CIP adjustments will be determined on a cents per kWh basis by dividing the sum of the distribution revenue over- or under-collection, including a carrying charge, for the current program year for each customer group and any prior period over- or under-collections by the forecast of the Company's kWh deliveries to customers for the annual recovery period. The resulting customer group rates in cents per kWh will then be increased to reflect SUT. The RECO CIP Adjustment mechanism will not become effective until after the end of the first program year (i.e., the 12 months ending May 31, 2022). The Company will then make an annual filing on or before June 15th of each year to determine the RECO CIP Adjustments that will become effective July 1 of each year. Because the RECO CIP Adjustment mechanism will not become effective until after the end of the first program year (i.e., the 12 months ending May 31, 2022), the Company has no current estimate of any customer group specific surcharge or credit.

The Company's proposes the initial Clean Energy Act component of the SBC be set at 0.031 ϕ per kWh, including SUT (0.029 ϕ per kWh excluding SUT).

The effect of the proposed Clean Energy Act component of the Company's existing SBC on typical residential electric bills, if approved by the Board, is illustrated below:

Res	sidential Electr	ic Service		
Тур	ical Average M	onthly Bill		
(Inc	cludes Sales and	Use Tax)		
	Bill Amount		Increase	
	Present	Proposed	Amount	Domoont
	(1)	(2)	Amount	Percent
650 kWh average monthly use	\$127.26	\$127.46	\$0.20	0.16

925 kWh average monthly use	\$183.42	\$183.71	\$0.29	0.16
1,500 kWh average monthly use	\$300.65	\$301.11	\$0.46	0.15

- (1) Based upon Basic Generation Service Residential Small Commercial Pricing (BGS-RSCP) and Delivery Rates in effect September 1, 2020 and assumes that the customer receives BGS-RSCP service from RECO.
- (2) Same as (1) except includes addition of Clean Energy Act component of the SBC.

Based upon the Company's September 25, 2020 filing, the Statewide Average residential customer using 808 kilowatt hours per summer month, and 7,800 kilowatt hours on an annual basis, would see an increase of \$2.44 in the annual bill from \$1,527.08 to \$1,529.52, or approximately 0.16%. The percentage change applicable to specific customers will vary according to the applicable service classification and the level of the customer's usage.

The Company's September 25, 2020 Petition is posted on the Company's website at https://www.oru.com/en/nj-rates-tariffs.

The following date and time(s) for telephonic public hearings have been scheduled for telephonic public hearings on the Company's EE and PDR programs filing so that members of the public may present their views:

Date: XXX
Times: XXX
Telephone number: XXX
Passcode: XXX

Due to the COVID-19 pandemic, a telephonic hearing on the Company's September 25, 2020 Petition will be conducted at the date and times listed above by a hearing officer designated by the Board. Representatives from the Company, Board's Staff and the New Jersey Division of Rate Counsel will participate via phone in the public hearing. Members of the public are invited to listen and participate by phone via the above designated Telephone number and passcode and may express their views on this filing. Any comments made will be part of the final record of the proceeding to be considered by the Board. In order to encourage full participation in this opportunity for public comment, please submit any requests for needed accommodations, such as interpreters or listening devices, 48 hours prior to the above hearings to the Board's Secretary at board.secretary@bpu.nj.gov. The Board is also accepting written and/or 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, Trenton, P.O. Box 350, New Jersey 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.

ROCKLAND ELECTRIC COMPANY

ROCKLAND ELECTRIC COMPANY

DIRECT TESTIMONY OF DONALD E. KENNEDY

I	Q.	Please state your name and business address.
2	A.	My name is Donald E. Kennedy and my business address is 1 Blue Hill Plaza,
3		Pearl River, NY 10965.
4	Q.	By whom are you employed and in what capacity?
5	A.	I am employed by Orange and Rockland Utilities, Inc. ("O&R") as the Director of
6		Energy Services for Orange and Rockland and its utility subsidiaries, including
7		Rockland Electric Company ("RECO" or the "Company"). My professional and
8		educational background is annexed to the end of my testimony as Attachment A.
9		I have participated in the preparation of testimony and exhibits in rate cases and
10		regulatory proceedings in New York, New Jersey and Pennsylvania.
11	SUM	MARY OF TESTIMONY
12	Q.	What is the scope of your testimony?
13	A.	I am testifying in support of the Company's proposed Energy Efficiency ("EE")
14		and Peak Demand Reduction ("DR") Program ("EE and DR Program."). The
15		Company is proposing the EE and DR programs in compliance with the Board of
16		
		Public Utilities' Order Directing the Utilities to Establish Energy Efficiency and
7		Public Utilities' Order Directing the Utilities to Establish Energy Efficiency and Peak Demand Reduction Programs, dated June 10, 2020, in Docket No.
17 18		
		Peak Demand Reduction Programs, dated June 10, 2020, in Docket No.
18	Q.	Peak Demand Reduction Programs, dated June 10, 2020, in Docket No. 0019010040, Docket No. 0019060748, and Docket No. 0017091004 ("June 10
18	Q.	Peak Demand Reduction Programs, dated June 10, 2020, in Docket No. 0019010040, Docket No. 0019060748, and Docket No. 0017091004 ("June 10 Order").

- 1 A. Yes, I am familiar with the MFR. In addition, I am specifically familiar with and
- 2 sponsor the information provided in DEK-1 and the appendices to DEK-1 that
- address the MFR.
- 4 Q. Has the Company provided a description of its proposed EE and PDR programs,
- 5 energy saving, and budgets?
- 6 A. Attached is Exhibit DEK-1, which provides description of the Company's
- 7 proposed programs, budgets, savings, and how the programs meet MFR
- 8 requirements.
- 9 Q. Is the Company proposing the core programs required by the June 10 Order?
- 10 A. Yes.
- 11 Q. Are the Company's core programs aligned with the core programs of the other
- New Jersey electric utilities?
- 13 A. Yes. The Company's core programs are aligned with the core programs of the
- other New Jersey electric utilities. RECO participated in the many utility
- Working Groups ("WGs") that have been developing these utility core programs.
- RECO's core programs are aligned with the core programs developed in the
- 17 utility WGs.
- 18 Q. What core programs is the Company proposing?
- 19 A. RECO is proposing five core programs to support New Jersey's ambitious energy
- efficiency goals and to support the 2019 New Jersey Energy Master Plan. The
- 21 core programs proposed are: Residential Efficient Products, Home Performance
- with Energy Star, Multi-Family, C&I Direct Install, and C&I Rebate Programs.
- Q. Is the Company proposing a Peak Demand Reduction ("PDR") program?

- 1 A. Yes. The Company is proposing two PDR programs, which are pilot programs.
- The PDR programs are Peak Demand Reduction Program and the Clean Heat
- 3 Beneficial Electrification Program. More detailed descriptions of the Company's
- 4 proposed core and PDR programs are in Exhibit DEK-1 and its appendices.
- 5 Q. Q. How does the Company intend to market these programs?
- 6 A. The Company's target markets or segments and marketing plan for each program
- 7 are set out in Exhibit DEK-1.
- 8 Q. Will the Company offer financing programs for these programs?
- 9 A. Yes. Exhibit DEK-1 and appendices sets out the proposed financing for each
- program.
- 11 Q. Is the Company proposing a budget for each program?
- 12 A. Yes. Exhibit DEK-1 and appendices sets out the proposed budget for each
- program.
- Q. Has the Company calculated proposed energy savings for each program?
- A. Yes. Exhibit DEK-1 sets out the projected participation and energy savings
- 16 for each program.
- Q. Is the Company proposing a modified Conservation Incentive Program
- 18 ("CIP")
- 19 A. Yes. The Company's modified CIP is explained in the Direct Testimony of the
- Rate and Forecasting Panel. In addition, RECO proposes to implement initiatives
- 21 to further customer conservation efforts, providing a funding amount ("Company
- contribution") of \$37,000 per year as long as the CIP remains in place,
- commencing with the start of the CIP deferrals.

- 1 Q. Do you sponsor any exhibits as part of your direct testimony?
- 2 A. Yes I am sponsoring Exhibit DEK-1, and the Appendices to Exhibit DEK-1.
- 3 Q. Does this conclude your testimony?
- 4 A. Yes, it does.

Attachment A

Donald E. Kennedy

PROFESSIONAL AND EDUCATIONAL BACKGROUND

I am the Director of Energy Services for Orange and Rockland Utilities, Inc.

("Orange and Rockland") in the Customer Service Organization. I have over seven years' experience developing and implementing programs supporting the Customer Service Department, including energy efficiency, demand response programs, net metering and renewable resources. I have been employed by Orange and Rockland since 1981 in a variety of capacities, including meter reading supervisor, manager of customer accounting, director of customer assistance and director of new construction services. In my current capacity, I am responsible for energy efficiency and retail choice programs for Orange and Rockland and its utility subsidiaries, Rockland Electric Company and Pike County Light & Power Company. I have represented Orange and Rockland and Rockland Electric Company in numerous regulatory proceedings. I was awarded a Bachelor of Science Degree from the State University of New York, Empire State College and an MBA from Walden University.

ROCKLAND ELECTRIC COMPANY DIRECT TESTIMONY OF THE RATE AND FORECASTING PANEL

1	Q.	Would the members of the Rate and Forecasting Panel ("Panel") please state your
2		names and business addresses.
3	A.	Cheryl Ruggiero, Hock Ng, and Michael DiGravina, 4 Irving Place, New York,
4		NY 10003.
5	Q.	By whom and in what capacity are you employed?
6	A.	(Ruggiero) I am employed by Consolidated Edison Company of New York, Inc.
7		("Con Edison") where I hold the position of Department Manager of the Orange
8		and Rockland Rate Design section in the Rate Engineering Department.
9		(Ng) I am employed by Con Edison where I hold the position of Section Manager
10		of Electricity Forecasting in the Energy Management Department.
11		(DiGravina) I am employed by Con Edison where I hold the position of Senior
12		Rate Analyst in the Orange and Rockland Rate Design section in the Rate
13		Engineering Department.
14	Q.	Please briefly outline your educational and business experience.
15	A.	(Ruggiero) In 2000, I graduated from Polytechnic University with a Bachelor of
16		Science degree in Electrical Engineering. In 2009, I graduated from Baruch
17		College with a Master of Business Administration degree in Finance and
18		Investments. I joined Con Edison in 2000 as a Management Intern with rotational
19		assignments in Electric Operations, Engineering Services, and Gas Operations. In
20		July 2001, I accepted a position as Associate Engineer - A in Distribution
21		Engineering. In November 2005, I accepted a position as Senior Analyst in Rate
22		Engineering and since then, I have held positions with increasing responsibility. I
23		was promoted to my current position in March 2013. I have previously testified

1	before the State of New Jersey Board of Public Utilities (the "Board"), the New
2	York Public Service Commission, and the Pennsylvania Public Utility
3	Commission in numerous rate proceedings on behalf of Orange and Rockland
4	Utilities, Inc. and its subsidiaries, including Rockland Electric Company ("the
5	Company").
6	(Ng) In 1983, I graduated from the University of Western Australia with a
7	Bachelor of Economics degree. I also received a PhD degree in Economics in
8	1992 from Stanford University. Prior to joining Con Edison, I taught and
9	performed research in economics and econometrics at various universities. In
10	2005, I began my employment with Con Edison as a Senior Planning Analyst in
11	Corporate Accounting. In April 2018, I was promoted to my current position in
12	Energy Management. My responsibilities include overseeing the development of
13	the electric delivery volume and revenue forecast. I have also co-authored two
14	articles dealing with forecast modeling issues that have been published in the
15	International Journal of Forecasting, and Systems Analysis Modeling Simulation.
16	(DiGravina) In 1986, I graduated from Rutgers University with Bachelor of Arts
17	degree in Accounting. Prior to joining Con Edison, I worked in the retail industry
18	performing roles in Accounting and Management Information Systems. I began
19	my employment with Con Edison in September 2007 as a Staff Accountant in
20	General Accounting. In June 2013, I accepted a position in the Orange and
21	Rockland Rate Design section in the Rate Engineering Department.
22	
23	

1		SUMMARY OF TESTIMONY
2	Q.	What is the purpose of your direct testimony in this proceeding?
3	A.	The purpose of our direct testimony is to describe the cost recovery mechanisms
4		related to the Company's energy efficiency ("EE") and peak demand response
5		("PDR") programs being proposed in the Company's Petition in compliance with
6		the Board's June 10, 2020 order in BPU Docket Nos. QO19010040,
7		QO19060748, and QO17091004 (the "Order"). In particular, the cost recovery
8		mechanisms will provide for: (1) recovery of revenue impact associated with sales
9		losses resulting from implementation of the EE and PDR programs; and (2)
10		recovery of the EE and PDR program costs.
11	Q.	Please identify the exhibits to your direct testimony.
12	A.	There are two exhibits to the Panel's direct testimony:
13		Exhibit RFP-1 RECO's Conservation Incentive Program ("CIP")
14		Workpapers
15		Exhibit RFP-2 Bill Impacts
16		RECO CIP PROPOSAL
17	Q.	The Order provided each utility with the option of either using the Lost Revenue
18		Adjustment Mechanism ("LRAM") or proposing a modified Conservation
19		Incentive Program ("CIP") to recover lost revenues associated with the
20		implementation of the EE and PDR Programs. Which option has the Company
21		chosen?
22	A.	The Company has opted for a modified CIP. The modified CIP workpapers are
23		attached as Exhibit RFP-1.

1	Q.	Please describe the Company's proposed modified CIP.
2	A.	Subject to an earnings test, as discussed below, the modified CIP will consist of
3		comparing a target revenue level with actual revenue for the program year (i.e.,
4		the 12-month periods ending May 31 of every year). If the actual revenue is
5		greater than the target revenue level, the Company will refund customers the
6		difference between the actual revenue and the target revenue. If the actual
7		revenue is less than the target revenue level, the Company will charge customers
8		the difference between the actual revenue and the target revenue. Both the target
9		and the actual revenue will be based on customer charge, distribution usage
10		charge, and distribution demand charge revenue ("distribution revenue").
11	Q.	What classes will be included in the modified CIP?
12	A.	Service Classification ("SC") Nos. 1, 2, 3, and 5 are included in the modified CIP.
13		The Company has grouped the SCs together as follows:
14		Group A (Residential): SC Nos. 1, 3, and 5
15		Group B (Secondary Commercial): SC No. 2 – Secondary
16		Group C (Primary Commercial): SC No. 2 – Primary
17	Q.	Why are you not including SC Nos. 4, 6, and 7 in the modified CIP?
18	A.	SC Nos. 4 and 6 are the Company's lighting classes. The majority of street
19		lighting distribution revenue is billed on a dollar per luminaire basis. Although
20		customers served under SC Nos. 4 and 6 have the option to install LED light
21		fixtures, the difference between the price per luminaire for the LED light fixture
22		and the non-LED equivalent light does not warrant inclusion of these classes at
23		this time. SC No. 7 is the class for the Company's largest commercial and

1		industrial customers, those with demands greater than 1 MW. There are fewer
2		than 25 customers currently served under SC No. 7, a number which has been
3		consistent in recent years. Given the small number of customers in this class and
4		the diversity of their loads, the Company decided not to include this class in the
5		modified CIP.
6	Q.	How has the Company determined the target revenue level for each customer
7		group?
8	A.	For each customer group, the Company has established a revenue per customer
9		("RPC") target. The Company calculated the monthly customer group specific
10		RPC targets by taking the monthly distribution revenue from the priced-out
11		billing determinants approved in the Company's most recent base rate filing (BPU
12		Docket No. ER19050552) and dividing such monthly distribution revenue by the
13		number of customers in the group for each month. To determine the annual target
14		revenue level for a customer group, the Company will take the monthly RPC
15		target and multiply by the actual number of customers in that month and sum up
16		these monthly revenues for the program year.
17	Q.	Did the Company include the calculation of the RPC targets?
18	A.	Yes. The calculation of these targets is outlined in Schedule 1 of Exhibit RFP-1.
19	Q.	How often will the Company change the RPC targets?
20	A.	The Company will only change the monthly RPC targets if there is a Board-
21		approved change in base distribution rates.
22	Q.	How will the Company determine the actual revenue for each customer group?
23	Δ	Actual revenue will be equal to the sum of the hilled distribution charge revenue

1	Q.	Please describe the earnings test.
2	A.	The Company will annually compare its actual return on equity ("ROE") to its
3		allowed ROE from its most recently approved rate case. If the calculated ROE
4		exceeds the allowed ROE from the Company's most recent base rate case by 50
5		basis points or more, the recovery of or credit of revenue differences through the
6		CIP shall not be allowed for the applicable program year.
7	Q.	How will the Company collect or credit revenue differences from customers?
8	A.	The Company will establish the RECO CIP Adjustment mechanism which will
9		include customer group specific non-bypassable charges or credits applicable to
10		customers included in the modified CIP calculation. Each month the Company
11		will compare the monthly target revenue to the actual distribution revenue. A
12		carrying charge will be included in the deferred balance for both an over-
13		collection and for an under-collection. The carrying charge will be calculated as
14		determined by the Board in its Order dated October 21, 2008 in BPU Docket No.
15		ER08060455 ("October 2008 Order"). As set forth in the October 2008 Order,
16		the interest rate shall be the interest rate based on two-year constant maturity
17		Treasuries as published in the Federal Reserve Statistical Release on the first day
18		of each month (or the closest day thereafter on which rates are published), plus 60
19		basis points, but not to exceed the Company's overall rate of return. The interest
20		rate will be reset each month. At the end of the annual period, the customer
21		group-specific RECO CIP Adjustments will be determined on a cents per kWh
22		basis by dividing the sum of the distribution revenue over- or under-collection,
23		including the carrying charge, for the current program year for each customer

1		group and any prior period over- or under-collections by the forecast of the
2		Company's kWh deliveries to customers for the annual recovery period. The
3		resulting customer group rates in cents per kWh will then be increased to reflect
4		Sales and Use Tax ("SUT").
5	Q.	Are there limits on how much can be charged to customers through the RECO
6		CIP Adjustment mechanism in any year?
7	A.	Yes. As recommended by Staff in the Order, the incorporation of an alternative to
8		the Basic Gas Supply Service ("BGSS") Savings Test would be necessary for the
9		electric utilities given their participation in the Basic Generation Service ("BGS")
10		Auction Process. The Company has proposed two caps that will limit the amount
11		charged to customers through the RECO CIP Adjustment mechanism in any year.
12		The first cap will take 6.5% of the actual distribution revenues from the CIP
13		groups and will set that revenue as a baseline. If the total amount to be collected
14		is larger than the baseline established by the 6.5% cap, the difference between the
15		total amount to be collected and the baseline will be deferred to the following year
16		for collection. Additionally, in a similar manner to the existing BGS
17		Reconciliation Charges, for any given period, the RECO CIP Adjustment
18		mechanism group specific rates shall not exceed a charge or credit of 2.0 cents per
19		kWh, including SUT. In the event the 2.0 cents per kWh limit is imposed, any
20		remaining over- or under-collection balance shall be included in the subsequent
21		period's RECO CIP Adjustment mechanism group specific rates to the extent
22		possible within the 2.0 cents per kWh limitation.
2	0	Have you included an illustrative example of the annual reconciliation?

1	A.	Yes. An illustrative example showing the reconciliation of the target to actual
2		revenues, the earnings test, and the alternative to the BGSS Savings Test is
3		included in Exhibit RFP-1, Schedule 2.
4	Q.	When would filings be made to reconcile the RECO CIP Adjustments.
5	A.	The Company will make an annual filing on or before June 15th of each year to
6		determine the RECO CIP Adjustments that will become effective July 1 of each
7		year.
8	Q.	Have you included any bill impacts associated with the RECO CIP Adjustment
9		mechanism?
10	A.	No. Because the RECO CIP Adjustment mechanism will not become effective
11		until after the end of the first program year (i.e., the 12 months ending May 31,
12		2022), the Company has no current estimate of any customer group specific
13		surcharge or credit.
14	Q.	Has the Company proposed any amendments to its electric tariff to implement the
15		RECO CIP Adjustment?
16	A.	Yes. The Company has included draft tariff leaves associated with these changes
17		in Appendix A to the Company's Petition.
18		PROGRAM COST RECOVERY
19	Q.	How will the costs of the EE and PDR programs contained in the Company's
20		Petition be recovered from customers?
21	A.	The Company proposes to establish the Clean Energy Act component of the
22		existing System Benefits Charge ("SBC"). The Clean Energy Act component of
23		the SBC is a non-bypassable charge that will be set annually based on the sum of:

1		(1) the Company's forecasted revenue requirement (the calculation of which is
2		detailed in the direct testimony of the Accounting Panel) and any incremental
3		Operation and Maintenance expenses associated with the EE and PDR Programs;
4		and (2) any prior period over- or under-recoveries, including interest. Such
5		quantity will then be divided by the forecast of the Company's kWh deliveries to
6		all customers served under the Company's electric tariff for the annual recovery
7		period. The resulting rate in cents per kWh will then be increased to reflect SUT.
8	Q.	How will any over- or under-collection of revenue be treated?
9	A.	Each month the actual revenue collected through the Clean Energy Act
10		component of the SBC will be compared to the sum of the month's revenue
11		requirement (the calculation of which is outlined in the direct testimony of the
12		Accounting Panel) and any incremental Operation and Maintenance expenses.
13		The difference will be deferred as a regulatory asset or regulatory liability with an
14		offsetting charge to expense.
15		A carrying charge will be included in the deferred balance for both an over-
16		collection and for an under-collection. The carrying charge will be calculated as
17		determined by the Board in the October 2008 Order. As discussed above, the
18		interest rate shall be the interest rate based on two-year constant maturity
19		Treasuries as published in the Federal Reserve Statistical Release on the first day
20		of each month (or the closest day thereafter on which rates are published), plus 60
21		basis points, but not to exceed the Company's overall rate of return. The interest
22		rate will be reset each month.

1	Q.	When do you propose the Clean Energy Act component of the SBC should
2		become effective?
3	A.	We propose the effective date of the initial Clean Energy Act component of the
4		SBC be the first of the month following the Board's approval of the Company's
5		Petition.
6	Q.	When would subsequent filings be made to adjust the Clean Energy Act
7		component of the SBC?
8	A.	The Company proposes to make annual filings to be made on or before August 1
9		of each year that will reconcile the prior period program year collections versus
10		recoveries and will forecast the revenue requirement for the following program
11		year. The Company would propose an effective date of October 1 for the
12		proposed change to the Clean Energy Act component of the SBC.
13	Q.	What would the initial level of the Clean Energy Act component of the SBC be
14		set at?
15	A.	Based on a first-year revenue requirement of \$402,907 for the EE and PDR
16		Programs as provided by the Accounting Panel, the initial Clean Energy Act
17		component of the SBC will be 0.031 cents per kWh, including SUT.
18	Q.	What impact will the Clean Energy Act component of the SBC have on a typical
19		residential customer's electric bill?
20	A.	At rates effective September 1, 2020, the monthly electric bill for a typical
21		residential customer with an average annualized monthly usage of 925 kWh is
22		\$183.42. The Clean Energy Act component of the SBC would increase this bill
23		by \$0.29 from \$183.42 to \$183.71 or by 0.16% in the first year of the surcharge.

Q. 1 Have you calculated what the impact will be for other residential customer usages 2 and for other classes? 3 A. Yes. Exhibit RFP-2, Schedules 2 - 4 set forth the effects that the proposed rate 4 component will have on the bills of SC Nos. 1, 2, 5 and 7 customers at various 5 levels of consumption for the first three years of the program. 6 Q. Has the Company proposed any amendments to its electric tariff to implement the 7 Clean Energy Act component of the SBC? 8 A. Yes. The draft tariff leaves associated with these changes are included in 9 Appendix A to the Company's Petition, which also includes the tariff changes 10 associated with the RECO CIP Adjustment. 11 Q. Does this conclude your direct testimony? 12 A. Yes, it does.

1		I. INTRODUCTION
2	Q.	Would the members of the Accounting Panel ("Panel") please state their name
3		and business addresses?
4	A.	Wenqi Wang, 4 Irving Place, New York, NY 10003 and Kevin Lyons, One
5		Blue Hill Plaza, Pearl River, NY 10965.
6	Q.	By whom are you employed, in what capacity, and what are your professional
7		backgrounds and qualifications?
8	A.	(Wang) I am employed by Consolidated Edison Company of new York, Inc.
9		("Con Edison"), an affiliate of Rockland Electric Company ("RECO" or the
10		"Company) where I hold the position of Department Manager of Regulatory
11		Accounting and Revenue Requirements.
12		(Lyons) I am employed by Orange and Rockland and Rockland Utilities, Inc.
13		("Orange and Rockland"), the parent company of RECO, where I hold the
14		position of Project Specialist in the O&R Financial Planning and Analysis
15		department.
16	Q.	Please briefly outline your educational and business experience.
17	A.	(Wang) In June 1999, I received a Bachelor of Science Degree in Accounting
18		from the University at Albany, State University of New York. I began my
19		employment with Con Edison in July 1999 as a Management Intern. I worked
20		in the Corporate Accounting Department from July 2000 until April 2014,
21		primarily in the General Accounts section starting as a Staff Accountant, then
22		Supervisor and ultimately reaching the Department Manager level. In May

1		2014, I assumed my current position as Department Manager of Regulatory
2		Accounting and Revenue Requirements
3		(Lyons) I received a Bachelor of Science degree in Finance in 1988 from St.
4		Thomas Aquinas College and a Juris Doctorate degree from New York Law
5		School in 1995. In August 2011, I assumed my current position of Project
6		Specialist – Financial Services. From May 2008 through July 2011, I was
7		employed as a Senior Accountant in the Regulatory Filings Department within
8		Con Edison. Prior to joining Con Edison I held a variety of managerial
9		positions in Regulatory, External Reporting and Corporate Accounting at
10		Verizon Communications, Kraft Foods and Realogy Corporation.
11		II. PURPOSE OF TESTIMONY
12	Q.	What is the purpose of your testimony in this proceeding?
13	A.	The purpose of this testimony is to explain how the Company developed the
14		revenue requirement associated with the energy efficiency ("EE") and peak
15		demand reduction ("PDR") programs proposed in the Company's Petition filed
16		in compliance with the Board of Public Utilities' ("Board") Order Directing
17		the Utilities to Establish Energy Efficiency and Peak Demand Reduction
18		Programs dated June 10, 2020 in BPU Docket Nos. QO19010040,
19		QO19060748, and QO17091004 (the "Order"). We also address the following
20		exhibits, all of which were prepared under the Panel's supervision and
21		direction: Exhibits AP-1 through 5.

1		III. <u>REVENUE REQUIREMENT</u>
2	Q.	Please briefly describe RECO's proposal to recover the costs associated with
3		the Company's EE and PDR Program.
4	A.	RECO is seeking Board approval to recover the revenue requirement
5		associated with certain program costs of the EE and PDR Program through a
6		newly established Clean Energy Act component of the existing System
7		Benefits Charge ("SBC") which is further detailed in the direct testimony of
8		the Rate and Forecasting Panel. The forecasted increase in revenue
9		requirement associated with EE and PDR Program costs in 2021 is \$402,907
10		rising to \$2,742,794 by 2024 and totaling \$23,822,826 over the life of the
11		underlying assets. The revenue requirement calculation summary is included
12		in Exhibit AP-1.
13	Q.	What are the program cost assumptions used to derive the EE and PDR
14		Program revenue requirement?
15	A	The Company anticipates total program costs of \$18,009,216 from 2021-2023
16		to be incurred across the five EE and two PDR subprograms described in detail
17		in the Direct Testimony of Donald E. Kennedy. A breakdown of costs by
18		subprogram is included within Exhibit AP-2. Given that the Company does
19		not anticipate incurring capital spending for these programs, all costs are
20		modeled to be deferred as regulatory assets. The Company assumed a ten-year
21		asset life, consistent with the terms articulated in the Order.
22	Q.	How did the Company calculate the EE and PDR Program Rate Base?

A.	The EE and PDR Program Rate Base in the filing represents the actual
	program expenditures recorded as regulatory assets, less accumulated
	amortization and less associated accumulated deferred income taxes. For
	purposes of calculating deferred income taxes, the Company assumed a full tax
	deduction for all regulatory asset expenditures in the year costs are incurred.
	The Company assumed a mid-year convention for annual program spending
	being recorded as a regulatory asset. The calculation of rate base is included in
	Exhibit AP-4. Note that given the number of subprograms being proposed, the
	Company only included an illustrative calculation of rate base for the
	cumulative cost of all programs. Calculations by individual subprogram are
	available upon request.
Q.	What is the rate of return that the Company applied to the EE and PDR
	Program Rate Base?
A.	The Company applied a pre-tax weighted average cost of capital to the EV
	Program Rate Base using the capital structure and rate of return approved in
	the Company's last electric base rate case, consistent with the terms of the
	Company's most recent rate order. 1 The equity portion of the approved rate of
	return was then adjusted for the effect of federal and state income taxes. The
	Company's calculation of the pre-tax weighted average cost of capital is shown
	on Exhibit AP-3.
	Q.

¹ I/M/O the Verified Petition of Rockland Electric Company for Approval of Changes in Its Electric Rates, Its Tariff for Electric Service and Its Depreciation Rates; and for Other Relief, BPU Docket No. ER19050552, Decision and Order Adopting Initial Decision and Stipulation of Settlement (dated January 22, 2020).

1	Q.	How did the Company calculate the amortization expense associated with the
2		EE and PDR Program?
3	A.	As noted above, the Company calculated the amortization expense associated
4		with the EE and PDR Program using a ten-year asset life for expenditures
5		deferred as regulatory assets in accordance with the Order. This calculation is
6		included in Exhibit AP-4.
7	Q.	Does the revenue requirement include any tax adjustments and, if so, how were
8		they calculated?
9	A.	There are no tax adjustments other than the book/tax timing differences shown
10		in Exhibit AP-4, related to regulatory assets.
11	Q.	Please discuss the gross up factor employed in the revenue requirement
12		calculation.
13	A.	The gross up factor adjusts the revenue requirement for uncollectibles. RECO
14		used a gross up factor of 1.002 consistent with the percentage in the
15		Company's last electric base rate case.
16	Q.	How are Operation and Maintenance expenses handled in the calculation of the
17		proposed revenue requirements?
18	A.	RECO has included utility administration and marketing expenses associated
19		with the EE and PDR Program in the calculation of the proposed revenue
20		requirement and proposes to defer such program costs as regulatory assets over
21		ten years. Any additional incremental Operation and Maintenance expenses
22		will be expensed and included in RECO's annual cost recovery petition.

1	Q.	Have you provided the detailed calculations supporting the revenue
2		requirement?
3	A.	Yes. The detailed calculations supporting the revenue requirement are set
4		forth in Exhibit AP-4. Due to the size of the calculation, the revenue
5		requirement from $2021 - 2026$ is illustrated within the schedule while
6		subsequent years are available and will be provided by the Company
7		electronically upon request. Revenue requirement calculations by subprogram
8		are also available upon request.
9	Q.	Did the Company include historical financial information as part of this filing?
10	A.	Yes. The Company included comparative balance sheets and income
11		statements for the past three years and a balance sheet as of June 30, 2020, the
12		most recent date available. These are included in Exhibit AP-5, Schedule 1
13		and AP-5, Schedule 2.
14	Q.	Does this conclude your direct testimony?
15	A.	Yes, it does.

1		BEFORE THE
2		NEW JERSEY BOARD OF PUBLIC UTILITIES
3		
4		ROCKLAND ELECTRIC COMPANY
5		BPU DOCKET NO. <u>QO19010040,</u>
6		QO19060748, QO17091004
7		
8		DIRECT TESTIMONY OF ANDREW W. COTTRELL
9		ON BEHALF OF ROCKLAND ELECTRIC COMPANY
10		
11		I. <u>INTRODUCTION AND PURPOSE</u>
12	Q.	Please state your name, business address, and title.
13	A.	My name is Andrew W. Cottrell, my business address is 200 Monmouth Street, Suite 280,
14		Red Bank, NJ 07701. I am Managing Director at Applied Energy Group ("AEG"), an energy
15		consulting firm.
16	Q.	Please describe your educational background and business experience.
17	A.	My educational background consists of a Bachelor of Arts degree in Engineering with a minor
18		in Government & Law from Lafayette College in Easton, Pennsylvania in 2004. I also
19		obtained a Master of Public Policy from the Edward J. Bloustein School of Planning and
20		Public Policy at Rutgers University in New Brunswick, New Jersey in 2006. I have
21		performed professional internships with the Sustainable Development Fund in Philadelphia,
22		PA and was a Graduate Assistant for the Center for Energy, Economic, and Environmental
23		Policy in New Brunswick, NJ.

In my employment history prior to joining AEG, I worked for four years as the
Research Project Coordinator at the Center for Energy, Economic, and Environmental Policy
(CEEEP) at Rutgers University, performing wholesale electricity market modeling, designing
cost-benefit analysis models, and evaluating energy efficiency programs. While working at
CEEEP I also performed independent consulting with Independent Electricity Consultants in
Ridgewood NI

In my employment history prior to joining AEG, I worked for four years as the Research Project Coordinator at the Center for Energy, Economic, and Environmental Policy (CEEEP) at Rutgers University, performing wholesale electricity market modeling, designing cost-benefit analysis models, and evaluating energy efficiency programs. While working at CEEEP I also performed independent consulting with Independent Electricity Consultants in Ridgewood, NJ.

I joined AEG in 2010 as a Senior Analyst in the Utility Consulting practice supporting utility clients in the Northeast and Mid-West. My duties included the following: energy efficiency/demand response cost-effectiveness analysis and modeling, DSM implementation plan filings, baseline and market analysis studies, energy efficiency potential studies, tracking of new technologies and DSM industry developments, and performing energy efficiency process and impact evaluations.

I have held several roles of increasing responsibility including Project Manager, Senior Project Manager, Director, and now Managing Director. I assumed my current position in March 2017. I am a Certified Measurement and Verification Professional by the Association of Energy Engineers.

Q. Have you previously testified on benefit-cost analysis issues?

1	A.	Yes. I have testified in multiple cases across the country on benefit-cost analysis issues. I
2		have testified in the following cases:
3		• Indiana Utility Regulatory Commission, Case No. 45285. Indiana Michigan Power
4		Company, Approval of Demand Side Management Plan.
5		• Michigan Public Service Commission, Case No. U-20374. Indiana Michigan Power
6		Company, Approvals Necessary for Indiana Michigan Power Company to Fully
7		Comply with Public Act 295 of 2008, as Amended by Public Act 342 of 2016.
8		• Colorado Public Utility Commission, Docket No. 18A-0279E. Black Hills/Colorado
9		Electric Utility Company, Approval of its Electric Demand Side Management (DSM)
10		Plan for Program Years 2019-2021.
11		• Illinois Commerce Commission, Docket No. 18-0211. Ameren Illinois Company,
12		Approval of Voltage Optimization Plan
13		• New York State Public Service Commission, Case 17-G-0460, Rates, Charges, Rules
14		and Regulations of Central Hudson Gas and Electric Corporation for Gas Service
15		• New York State Public Service Commission, Case 17-E-0459, Charges, Rules and
16		Regulations of Central Hudson Gas and Electric Corporation for Electric Service
17		• Illinois Commerce Commission, Docket No. 17-0311. Ameren Illinois Company,
18		Approval of the Energy Efficiency and Demand-Response Plan
19		• Illinois Commerce Commission, Docket No. 16-0413. Ameren Illinois Company,
20		Approval of the Energy Efficiency and Demand-Response
21		• Colorado Public Utility Commission, Docket No. 15A-042E. Black Hills/Colorado
22		Electric Utility Company, Approval of its Electric Demand Side Management (DSM)
23		Plan for Program Years 2016-2018.

1	• Illinois Commerce Commission, Docket No. 13-0498. Ameren Illinois Company,
2	Approval of the Energy Efficiency and Demand-Response
3	Q. What is the purpose of your testimony in this proceeding?
4	A. AEG has been asked by Rockland Electric Company ("RECO" or the "Company") to
5	perform benefit-cost analysis ("BCA") as part of their establishment of energy efficiency ("EE")
6	and peak demand reduction ("PDR") programs. Benefit-cost analysis of programs and the portfolio
7	is required as a minimum filing requirement as set forth in Docket No. Q019010040. RECO is a
8	wholly-owned subsidiary of Orange and Rockland Utilities, Inc ("O&R"), and O&R is a wholly-
9	owned subsidiary of Consolidated Edison, Inc. ("CEI").
10	II. <u>SUMMARY OF TESTIMONY</u>
11	Q. How was cost-effectiveness for RECO's 2021-2023 EE and PDR Plan calculated?
12	A. The BCA was calculated primarily using the New Jersey Cost Test ("NJCT") using AEG's
	A. The BCA was calculated primarily using the New Jersey Cost Test (NJC1) using AEO s
13	BenCost model. Cost-effectiveness was also calculated using five other BCA tests for informational
13	BenCost model. Cost-effectiveness was also calculated using five other BCA tests for informational
13 14	BenCost model. Cost-effectiveness was also calculated using five other BCA tests for informational purposes.
131415	BenCost model. Cost-effectiveness was also calculated using five other BCA tests for informational purposes. Q. What were the results overall results of benefit-cost analysis (BCA)?
13 14 15 16	BenCost model. Cost-effectiveness was also calculated using five other BCA tests for informational purposes. Q. What were the results overall results of benefit-cost analysis (BCA)? A. The benefit-cost analysis found that the RECO EE portfolio is cost-effective with an

21

20

Q.

A.

No.

Do you have exhibits accompanying your testimony?

III. TESTS AND ASSUMPTIONS USED IN BENEFIT-COST ANALYSIS

- 2 Q. What is the primary benefit-cost test used to evaluate cost-effectiveness for energy
- 3 efficiency and peak demand reduction programs?
- 4 A. On August 24, 2020 the Board of Public Utilities ("Board") issued an order adopting the
- 5 New Jersey Cost Test as the primary benefit-cost test for the purposes for evaluating EE and PDR
- 6 programs proposed and implemented by each New Jersey utility. The NJCT Order describes
- 7 Staff's recommendations regarding the inputs, values, and methodologies on how to perform the
- 8 NJCT.

1

- 9 Q. How were the global inputs associated with the NJCT developed?
- 10 A. The NJCT Order includes guidance on the discount rate and the line loss factors to include
- in the BCA. Consistent with the NJCT Order, AEG used a 3% real discount rate to calculate the net
- present value of benefits and costs associated with the proposed EE and PDR programs. AEG
- developed separate loss factors for electric energy, electric peak demand, and natural gas impacts.
- 14 The electric energy loss factor is based on the amount of energy supply required to meet the
- delivery requirements for each RECO service classification. The electric peak demand loss factor is
- based on the amount of installed capacity necessary to meet the peak demand requirements for each
- 17 RECO service classification. The natural gas loss factor is based on the average loss factor filed by
- 18 PSE&G in a recent rate case. The average loss factors were multiplied by 1.5 to convert average to
- marginal losses, consistent with the NJCT Order guidance.
- 20 Q. What are the costs and benefits associated in the NJCT?
- 21 A. The NJCT Order describes a series of utility system costs, benefits, and non-energy
- impacts ("NEI") to include in the NJCT benefit-cost analysis.

-

¹ New Jersey Board of Public Utilities, Order Adopting the First New Jersey Cost Test. August 24, 2020. Direct Testimony of Andrew W. Cottrell on

1 The costs included in the NJCT are: 2 measure incremental costs program administration costs 3 4 The benefits included in the NJCT are: avoided wholesale electric energy costs 5 6 avoided wholesale electric capacity costs avoided wholesale electric transmission and distribution ("T&D") costs 7 8 avoided wholesale electric ancillary services costs 9 avoided wholesale natural gas supply costs 10 avoided delivered fuel costs electric energy demand reduction induced price effects ("DRIPE") 11 electric capacity DRIPE 12 The Non Energy Impacts ("NEIs") included in the NJCT are: 13 Avoided emissions impacts 14 15 Low income benefits Non-energy benefits 16 In addition to the costs, benefits, and NEIs, the NJCT Order also describes the global inputs that 17 should be used in the NJCT including the discount rate, electric line losses, and natural gas losses. 18 Q. How were the energy savings and demand reductions associated with the NJCT 19 calculated? 20 21 A. The energy savings and demand reductions associated with the proposed EE and PDR programs were developed based on the New Jersey Protocols to Measure Resource Savings 22

- 1 (Protocols) for fiscal year 2020.² AEG used secondary sources to develop more robust estimates
- where detailed information on savings was not available in the Protocols. In particular, measure
- 3 savings estimates were augmented with additional data sources including recent reported actuals
- 4 from the New Jersey Clean Energy Program, measure tracking data from similar programs
- 5 implemented by Orange & Rockland in the New York service territory, as well as other regional
- 6 sources such as the Mid-Atlantic Technical Reference Manual and the New York Technical
- 7 Reference Manual.

8 Q. How were the costs associated with the NJCT developed?

- 9 A. AEG developed the NJCT cost inputs to evaluate the cost-effectiveness for the EE and
- 10 PDR programs proposed for RECO's New Jersey service territory based on the guidance and
- 11 recommendations included in the NJCT Order. As such, each cost input was developed
- independently and described herein.

Measure Incremental Costs

13

14

15

16

17

18

19

20

According to the NJCT Order the measure incremental costs should reflect the total costs associated with the efficiency measure implemented less the costs of the baseline measure. Since the Protocols do not currently include guidance on the measure incremental cost, AEG relied on other data sources to develop the incremental costs. In particular, AEG relied on similar source documentation referenced in Table 2 of the Cost-Benefit Analysis of the NJCEP Energy Efficiency Programs report, which is the current source for the NJCEP.³ The source references for the measure incremental costs included in the proposed EE and PDR programs were based on measure tracking

² New Jersey Board of Public Utilities. New Jersey's Clean Energy Program. Protocols to Measure Resource Savings FY2020. Available at:

 $[\]frac{https://njcleanenergy.com/files/file/NJCEP\%20Protocols\%20to\%20Measure\%20Resource\%20Savings\%20FY20_FIN}{AL.pdf}$

³ Rutgers Center for Green Building, Cost-Benefit Analysis of the NJCEP Energy Efficiency Programs: FY2017 Retrospective and FY2019 Summary Reports (May 2019), available at https://www.njcleanenergy.com/files/file/BPU/FY17%20CBA%20Report%20Update%20Final.pdf.

- data from similar programs implemented by Orange & Rockland in the New York service territory,
- 2 as well as other regional sources such as the Mid-Atlantic Technical Reference Manual.

Program Administration Costs

3

- 4 According to the NJCT Order, program administration costs are defined as non-measure
- 5 level program costs that are included in the portfolio. As such, the non-measure level program costs
- 6 for the NJCT include program administration, marketing, implementation, inspections and quality
- 7 control, financing, and evaluation costs. All non-measure level program costs were developed and
- 8 included in the NJCT in close collaboration with Orange & Rockland to align with the costs
- 9 associated with the EE/PDR programs.

10 Q. How were the benefits associated (avoided costs) with the NJCT developed?

- 11 A. AEG developed the NJCT inputs for the benefits to evaluate the cost-effectiveness for the
- 12 EE and PDR programs proposed for RECO's New Jersey service territory based on the guidance
- and recommendations included in the NJCT Order. As such, each benefit input was developed
- independently and described herein.

Avoided Wholesale Electric Energy Costs

- Based on the NJCT Order guidance, the avoided wholesale electric energy costs should be
- calculated using the three-year rolling average of historic PJM wholesale prices multiplied by the
- quantity of electricity not consumed. To develop this input, AEG first obtained hourly Day-Ahead
- 19 Locational Marginal Price data from PJM Interconnection for the RECO load zone for 2017
- through 2019. Next, AEG used hourly load data for RECO for the same time period to calculate a
- 21 three-year load weighted average LMP to use as the wholesale electricity costs in the NJCT. The
- 22 three-year load weighted average LMP is applied to the electric energy savings associated with
- each EE and PDR program.

15

Avoided Wholesale Electric Capacity Costs

avoided electric capacity costs.

2	The NJCT Order provides two options for calculating the avoided wholesale electric
3	capacity costs depending on whether capacity costs are monetized. As such, AEG calculated the
4	avoided wholesale electric capacity costs based on revenues earned from the PJM capacity market
5	associated with offering and clearing EE into PJM's Reliability Pricing Model (RPM). In particular
6	AEG used the 2021/2022 Base Residual Auction Results for the RECO zone as the basis for the

Avoided Wholesale Electric Transmission and Distribution (T&D) Costs

The NJCT Order provides separate guidance for the avoided transmission and distribution components of electric peak demand savings. The avoided transmission costs are calculated using the most recent Network Integration Transmission Service ("NITS") Rate for each utility service territory. AEG used the NITS Rate for the RECO transmission zone as referenced in the Annual Transmission Revenue Requirements and Rates for PJM effective January 1, 2020.4 The NJCT Order recommends calculating the avoided distribution cost component based on the total annual distribution charges paid by the customer. To accommodate this recommendation, AEG used the RECO billed distribution revenue impacts for residential and commercial service classifications as the basis for the avoided distribution cost. For the purposes of the NJCT BCA, AEG combined the transmission and distribution cost components and applied them to the peak demand impacts associated with the EE and PDR programs.

Avoided Wholesale Electric Ancillary Services Costs

Based on the NJCT guidance the avoided wholesale electric ancillary services costs include the value of spinning reserves, frequency regulation, black start capabilities, reactive power

⁴ https://www.pjm.com/-/media/markets-ops/settlements/network-integration-trans-service-january-2020.ashx?la=en Direct Testimony of Andrew W. Cottrell on

and other features required for safe and effective grid operation. In collaboration with the ConEd

2 Resource Analysis group, the planning team determined that avoided wholesale electric ancillary

services costs have limited applicability to the proposed programs. As such, AEG did not attribute

any benefits associated with ancillary services products in the NJCT BCA.

Avoided Wholesale Natural Gas Supply Costs

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Based on guidance from the NJCT Order avoided wholesale natural gas supply costs are calculated using New York Mercantile Exchange ("NYMEX") Henry Hub forward trading prices then multiplied by the quantity of gas not purchased. The NJCT Order also allows utilities to include the actual gas transportation rates and any local distribution company transportation rates to determine the full delivered cost of gas for any individual customer. Consistent with the NJCT Order guidance, AEG took a multi-step approach to developing avoided natural gas costs. First, AEG developed the avoided wholesale natural gas supply costs based on recent gas futures prices for 2021 weighted by volumes. Next, AEG developed a transportation rate adder based on a threeyear average annual Northeast day-ahead natural gas prices for Henry Hub and Transco Zone 6 obtained from market assessments published by the Federal Energy Regulatory Commission (FERC). AEG combined the Henry Hub gas futures prices and the transportation rates to calculate a fully delivered avoided cost of gas for use in the NJCT BCA. The avoided wholesale natural gas supply cost was applied to the natural gas savings associated with the EE and PDR programs as a benefit in the NJCT. Natural gas benefits accrue because of the implementation RECO programs, so these benefits were accounted for in the NJCT for measures and programs administered by the utility that result in gas savings.

Electric Energy and Capacity Demand Reduction Induced Price Effects (DRIPE)

The NJCT Order includes two DRIPE benefits to value the demand reduction induced

price effects for both electric energy and demand savings. The electric energy DRIPE is calculated

Direct Testimony of Andrew W. Cottrell on

behalf of Rockland Electric Company

- through a regression analysis of historical electric energy prices as a function of load to determine
- 2 the impact of load on electric energy prices. Electric capacity DRIPE is calculated using a linear
- 3 extrapolation of price differentials between auction result and the scenario in which PJM removes
- 4 3000 MW of capacity supply from the bottom of the supply curve for the Mid-Atlantic Area
- 5 Council (MAAC) region.
- 6 Q. Does the NJCT Order describe any additional impacts to include in the NJCT?
- 7 A. Yes. The NJCT Order describes a series of Non-Energy Impacts (NEIs) to include in the
- 8 NJCT, including avoided emissions impacts, non-energy benefits, and low-income benefits.
- 9 Q. How were the NEIs determined for the NJCT?
- 10 A. AEG determined the NEIs based on the guidance and recommendations included in the
- 11 NJCT Order. As such, each NEI was developed independently and described herein.
- 12 Avoided Emissions Impacts
- According to the NJCT Order the avoided emissions impacts include avoided carbon
- dioxide (CO2) emissions associated with the EE and PDR programs. Consistent with the NJCT
- Order, AEG applied separate emissions factors from the Protocols to the electricity and natural gas
- savings associated with the proposed EE and PDR programs. AEG valued CO2 emission reductions
- 17 consistent with the methodology described in the NJCT Order using the social cost of carbon (SCC)
- for the 3% discount rate scenario listed in the August 2016 Technical Update of the Social Cost of
- 19 Carbon for Regulatory Impact Analysis.⁵
- 20 Non-Energy Benefits
- 21 Consistent with the NJCT Order, AEG applied a 5% adder to the total electric, natural gas,

12/documents/sc_co2_tsd_august_2016.pdf

⁵ Interagency Working Group on Social Cost of Greenhouse Gases, United States Government, Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (August 2016), available at https://www.epa.gov/sites/production/files/2016-

- and delivered fuel benefits to account for the non-energy benefits associated with the EE and PDR
- 2 programs.
- 3 Low Income Benefits
- The NJCT Order describes a 10% adder to the total electric, natural gas, and delivered fuel
- 5 benefits associated with low income programs.
- 6 Q. What additional BCA tests are required for reporting by NJCT Order?
- 7 A. The NJCT Order requires utilities to report five other cost-effectiveness tests in addition to
- 8 the NJCT. The additional tests include the Participant Cost Test (PCT), the Program Administrator
- 9 Cost Test (PACT), the Ratepayer Impact Measure Test (RIM), and the Societal Cost Test (SCT).
- 10 All five tests were calculated in the BCA.
- 11 Q. How were the BCAs calculated?
- 12 A. AEG calculated the benefit-cost ratios using AEG's BenCost model. The BenCost model is
- a proprietary AEG cost-effectiveness model that is utilized in multiple states throughout the
- country. Ben-Cost is a fully customizable cost-effectiveness modeling platform that enabled AEG
- to evaluate the costs, benefits, and risks of DSM programs and services using utility-specific
- 16 measures and programs.
 - IV. <u>BENEFIT-COST ANALYSIS RESULTS</u>
- 18 Q. Please summarize the findings of the NJCT.
- 19 A. Consistent with the NJCT Order, AEG calculated the NJCT benefit-cost ratios using
- 20 AEG's BenCost model for each of the proposed EE and PDR programs. Total portfolio and
- 21 program-level NJCT results by program year are summarized below:

17

EE Portfolio NJCT Ratios	
Program	Ratio
Residential Efficient Products Program	4.05
Home Performance with Energy Star Program	0.71
Multi-Family Program	1.19
Small Business Direct Install Program	2.10
Commercial and Industrial Rebate Program	2.58
Electric Portfolio Total	1.58

1

PDR Portfolio NJCT Ratio	
Program	Ratio
Peak Demand Reduction Program	2.07

2

BE Portfolio NJCT Ratio	
Program	Ratio
Clean Heat Beneficial Electrification Program	1.17

3

4 Q. Please summarize the findings of the SCT, TRC, PCT, PAC and RIM tests?

- 5 A. Consistent with the California Standard Practice Manual, AEG calculated the five standard
- 6 benefit-cost ratios using AEG's BenCost model for each of the proposed EE and PDR programs.
- 7 Total portfolio and program-level benefit-cost test results by program year are summarized below:

EE Portfolio SCT Ratios	
Program	Ratio
Residential Efficient Products Program	3.95
Home Performance with Energy Star Program	0.70
Multi-Family Program	1.18
Small Business Direct Install Program	2.04
Commercial and Industrial Rebate Program	2.50
Electric Portfolio Total	1.54

EE Portfolio TRC Ratios	
Program	Ratio
Residential Efficient Products Program	2.14
Home Performance with Energy Star Program	0.36
Multi-Family Program	0.57
Small Business Direct Install Program	1.11
Commercial and Industrial Rebate Program	1.51
Electric Portfolio Total	0.84

EE Portfolio PACT Ratios	
Program	Ratio
Residential Efficient Products Program	2.15
Home Performance with Energy Star Program	1.29
Multi-Family Program	0.25
Small Business Direct Install Program	1.04
Commercial and Industrial Rebate Program	2.18
Electric Portfolio Total	1.56

EE Portfolio PCT Ratios	
Program	Ratio
Residential Efficient Products Program	5.74
Home Performance with Energy Star Program	0.17
Multi-Family Program	1.82
Small Business Direct Install Program	2.40
Commercial and Industrial Rebate Program	2.98
Electric Portfolio Total	1.20

EE Portfolio RIM Ratios	
Program	Ratio
Residential Efficient Products Program	0.67
Home Performance with Energy Star Program	0.61
Multi-Family Program	0.19
Small Business Direct Install Program	0.44
Commercial and Industrial Rebate Program	0.68
Electric Portfolio Total	0.59

PDR Portfolio Benefit-Cost Ratios	
Benefit-Cost Test	Ratio
Societal Cost Test	2.07
Total Resource Cost Test	1.97
Program Administrator Cost Test	1.97
Participant Cost Test	1.00
Ratepayer Impact Measure Test	1.97

BE Portfolio Benefit-Cost Ratios	
Benefit-Cost Test Ratios	Ratio
Societal Cost Test	1.17
Total Resource Cost Test	0.63
Program Administrator Cost Test	0.08
Participant Cost Test	4.35
Ratepayer Impact Measure Test	0.08

4 Q. Please provide all BCA results for the portfolio and by program.

5 A. The compiled results of the six BCA tests, for the portfolio and by program, are summarized

Direct Testimony of Andrew W. Cottrell on behalf of Rockland Electric Company 14 of 16

1

2

3

EE Portfolio Total	
Benefit-Cost Test Ratios	Ratio
New Jersey Cost Test	1.58
Societal Cost Test	1.54
Total Resource Cost Test	0.84
Program Administrator Cost Test	1.56
Participant Cost Test	1.20
Ratepayer Impact Measure Test	0.59

Residential Efficient Products Program	
Benefit-Cost Test Ratios	Ratio
New Jersey Cost Test	4.05
Societal Cost Test	3.95
Total Resource Cost Test	2.14
Program Administrator Cost Test	2.15
Participant Cost Test	5.74
Ratepayer Impact Measure Test	0.67

Home Performance with Energy Star Program	
Benefit-Cost Test Ratios	Ratio
New Jersey Cost Test	0.71
Societal Cost Test	0.70
Total Resource Cost Test	0.36
Program Administrator Cost Test	1.29
Participant Cost Test	0.17
Ratepayer Impact Measure Test	0.61

Multi-Family Program	
Benefit-Cost Test Ratios	Ratio
New Jersey Cost Test	1.19
Societal Cost Test	1.18
Total Resource Cost Test	0.57
Program Administrator Cost Test	0.25
Participant Cost Test	1.82
Ratepayer Impact Measure Test	0.19

Small Business Direct Install Program	
Benefit-Cost Test Ratios	Ratio
New Jersey Cost Test	2.10
Societal Cost Test	2.04
Total Resource Cost Test	1.11
Program Administrator Cost Test	1.04
Participant Cost Test	2.40
Ratepayer Impact Measure Test	0.44

Commercial and Industrial Rebate Program	
Benefit-Cost Test Ratios	Ratio
New Jersey Cost Test	2.58
Societal Cost Test	2.50
Total Resource Cost Test	1.51
Program Administrator Cost Test	2.18
Participant Cost Test	2.98
Ratepayer Impact Measure Test	0.68

2

PDR Portfolio Total		
Benefit-Cost Test Ratios		
New Jersey Cost Test	2.07	
Societal Cost Test	2.07	
Total Resource Cost Test	1.97	
Program Administrator Cost Test	1.97	
Participant Cost Test	1.00	
Ratepayer Impact Measure Test	1.97	

3

BE Portfolio Total		
Benefit-Cost Test Ratios		
New Jersey Cost Test	1.17	
Societal Cost Test	1.17	
Total Resource Cost Test	0.63	
Program Administrator Cost Test	0.08	
Participant Cost Test	4.35	
Ratepayer Impact Measure Test	0.08	

4

5

V. <u>CONCLUSIONS</u>

- 6 Q. Please summarize the results of your direct testimony.
- 7 A. The RECO EE and PDR programs were evaluated for cost-effectiveness using inputs and
- 8 methodologies consistent with the NJCT Order and industry practices. Based on results of the
- 9 NJCT, RECO's EE portfolio is cost-effective with an average 1.58 benefit-cost ratio.
- 10 Q. Does this conclude your direct testimony?
- 11 A. Yes, it does.

Energy Efficiency Portfolio 2

	Jersey Cost Test Benefit-Cost Test Component	Description	Efficient Products	Home Performance with ENERGY STAR	Multi-Family	Small Business Direct Install	Commercial & Industrial Rebate	Total EE Portfolio
1	Lifetime Avoided Electric	NPV of electric energy reduction at wholesale cost	\$4,372,893	¢1 120 100	\$231,215	62 242 067	¢4.745.200	¢12.000.000
	Energy Cost Lifetime Avoided Electric	wholesale cost	\$4,372,893	\$1,138,190	\$231,215	\$3,212,067	\$4,715,290	\$13,669,655
2	Capacity Cost	NPV of peak electric capacity cost	\$1,818,866	\$664,129	\$52,150	\$724,476	\$2,027,943	\$5,287,564
3	Lifetime Avoided Electric T&D Cost	NPV of avoided transmission and distribution cost	\$1,697,914	\$619,965	\$48,682	\$694,692	\$1,944,572	\$5,005,826
	Lifetime Avoided Electric		7 = , 5 5 1 , 5 = 1	70=0,000	Ţ :0,00 <u>=</u>	700.7002	7 = / = 1 / 5 / =	+-//
4	Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0	\$0	\$0	\$0	\$0	\$0
	Lifetime Avoided Natural	NPV of natural gas reduction at wholesale						
5	Gas Supply Cost	cost	\$256,488	\$4,611,372	\$879,650	\$1,141,012	\$0	\$6,888,522
6	Lifetime Avoided Delivered Fuel Cost, Propane	NPV of avoided delivered propane fuel costs	\$0	\$0	\$0	\$0	\$0	\$0
7	Lifetime Avoided Delivered Fuel Cost, Fuel Oil	NPV of avoided delivered fuel oil costs	\$0	\$0	\$0	\$0	\$0	\$0
8	Lifetime Demand Reduction Induced Price Effects Benefits, Energy	NPV of DRIPE electric market benefits, energy	\$402,537	\$104,774	\$21,284	\$295,680	\$434,056	\$1,258,331
9	Lifetime Demand Reduction Induced Price Effects Benefits, Peak Demand	NPV of DRIPE electric market benefits, peak demand	\$15	\$104,774	\$21,254	\$255,000	\$17	\$1,238,331
	Lifetime Avoided Electric				·			
10	Emissions Cost	NPV of electric CO2 emissions savings	\$4,662,023	\$1,213,446	\$246,502	\$3,424,444	\$5,027,059	\$14,573,474
11	Lifetime Avoided Natural Gas Emissions Cost	NPV of natural gas CO2 emissions savings	\$210,926	\$3,792,214	\$723,390	\$938,324	\$0	\$5,664,855
12	Lifetime Non-Energy Impacts	NPV of non-energy impacts	\$2,013,249	\$1,821,614	\$330,431	\$521,535	\$707,447	\$5,394,277
	Total Benefits	1+2+3+4+5+6+7+8+9+10+11+12	\$15,434,911	\$13,965,710	\$2,533,306	\$10,952,238	\$14,856,383	\$57,742,548
13	Lifetime Participant Costs	NPV of incremental participant costs	\$1,684,139	\$18,768,992	\$1,682,151	\$3,733,660	\$3,514,771	\$29,383,714
14	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$2,123,823	\$928,018	\$445,506	\$1,485,289	\$2,245,897	\$7,228,532
	Total Costs	13+14	\$3,807,962	\$19,697,010	\$2,127,657	\$5,218,949	\$5,760,668	\$36,612,246
	Benefit Cost Ratio	(1+2+3+4+5+6+7+8+9+10+11+12)/(13+14)	4.05	0.71	1.19	2.10	2.58	1.58

New Jersey Cost Test

	Benefit-Cost Test Component	Description	Residential Total	Multi-Family Total	Commercial & Industrial Total	Total EE Portfolio
	Lifetime Avoided Electric	NPV of electric energy reduction at				
1	Energy Cost	wholesale cost	\$5,511,084	\$231,215	\$7,927,357	\$13,669,655
	Lifetime Avoided Electric					
2	Capacity Cost	NPV of peak electric capacity cost	\$2,482,994	\$52,150	\$2,752,419	\$5,287,564
	Lifetime Avoided Electric	NPV of avoided transmission and distribution				
3	T&D Cost	cost	\$2,317,879	\$48,682	\$2,639,264	\$5,005,826
	Lifetime Avoided Electric				.	
4	Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0	\$0	\$0	\$0
_	Lifetime Avoided Natural	NPV of natural gas reduction at wholesale	4		4	4
5	Gas Supply Cost	cost	\$4,867,860	\$879,650	\$1,141,012	\$6,888,522
	Lifetime Avoided					
6	Delivered Fuel Cost, Propane	NPV of avoided delivered propane fuel costs	\$0	\$0	\$0	\$0
0	Lifetime Avoided	NPV of avoided delivered propane just costs	ŞU	- υς	ŞU	ŞU
	Delivered Fuel Cost, Fuel					
7	Oil	NPV of avoided delivered fuel oil costs	\$0	\$0	\$0	\$0
•	Lifetime Demand	v oj avelaca acimerca jaci en ecoto	Ţ.	Ψ-	Ψ°	Ψ.σ
	Reduction Induced Price	NPV of DRIPE electric market benefits,				
8	Effects Benefits, Energy	energy	\$507,311	\$21,284	\$729,736	\$1,258,331
9	Lifetime Demand Reduction Induced Price Effects Benefits, Peak Demand	NPV of DRIPE electric market benefits, peak demand	\$21	\$0	\$23	\$44
	Lifetime Avoided Electric					
10	Emissions Cost	NPV of electric CO2 emissions savings	\$5,875,469	\$246,502	\$8,451,503	\$14,573,474
	Lifetime Avoided Natural					
11	Gas Emissions Cost	NPV of natural gas CO2 emissions savings	\$4,003,140	\$723,390	\$938,324	\$5,664,855
	Lifetime Non-Energy					
12	Impacts	NPV of non-energy impacts	\$3,834,864	\$330,431	\$1,228,982	\$5,394,277
	Total Benefits	1+2+3+4+5+6+7+8+9+10+11+12	\$29,400,622	\$2,533,306	\$25,808,621	\$57,742,548
13	Lifetime Participant Costs	NPV of incremental participant costs	\$20,453,132	\$1,682,151	\$7,248,431	\$29,383,714
	Lifetime Non-Incentive					
14	Program Expenditures	NPV of non-incentive program costs	\$3,051,841	\$445,506	\$3,731,186	\$7,228,532
	Total Costs	13+14	\$23,504,973	\$2,127,657	\$10,979,617	\$36,612,246
	Benefit Cost Ratio	(1+2+3+4+5+6+7+8+9+10+11+12)/(13+14)	1.25	1.19	2.35	1.58

Societal Cost Test

	Benefit-Cost Test Component	Description	Efficient Products	Home Performance with ENERGY STAR	Multi-Family	Small Business Direct Install	Commercial & Industrial Rebate	Total EE Portfolio
	Lifetime Avoided Electric	NPV of electric energy reduction at						
1	Energy Cost	wholesale cost	\$4,372,893	\$1,138,190	\$231,215	\$3,212,067	\$4,715,290	\$13,669,655
	Lifetime Avoided Electric							
2	Capacity Cost	NPV of peak electric capacity cost	\$1,818,866	\$664,129	\$52,150	\$724,476	\$2,027,943	\$5,287,564
	Lifetime Avoided Electric	NPV of avoided transmission and distribution						
3	T&D Cost	cost	\$1,697,914	\$619,965	\$48,682	\$694,692	\$1,944,572	\$5,005,826
	Lifetime Avoided Electric							
4	Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0	\$0	\$0	\$0	\$0	\$0
	Lifetime Avoided Natural	NPV of natural gas reduction at wholesale					.	
5	Gas Supply Cost	cost	\$256,488	\$4,611,372	\$879,650	\$1,141,012	\$0	\$6,888,522
	Lifetime Avoided Delivered Fuel Cost,							
6	Propane	NPV of avoided delivered propane fuel costs	\$0	\$0	\$0	\$0	\$0	\$0
7	Lifetime Avoided Delivered Fuel Cost, Fuel Oil	NOV of maided delivered find all pasts	\$0	\$0	\$0	\$0	ćo	ćo
	Lifetime Avoided Electric	NPV of avoided delivered fuel oil costs	\$0	\$0	\$0	\$0	\$0	\$0
8	Emissions Cost	NPV of electric CO2 emissions savings	\$4,662,023	\$1,213,446	\$246,502	\$3,424,444	\$5,027,059	\$14,573,474
•	Lifetime Avoided Natural	NPV of electric CO2 emissions savings	\$4,002,023	\$1,213,440	\$240,502	\$3,424,444	\$5,027,059	\$14,573,474
9	Gas Emissions Cost	NPV of natural gas CO2 emissions savings	\$210,926	\$3,792,214	\$723,390	\$938,324	\$0	\$5,664,855
10	Lifetime Non-Energy Impacts	NPV of non-energy impacts	\$2,013,249	\$1,821,614	\$330,431	\$521,535	\$707,447	\$5,394,277
	Total Benefits	1+2+3+4+5+6+7+8+9+10	\$15,032,359	\$13,860,931	\$2,512,021	\$10,656,552	\$14,422,310	\$56,484,173
11	Lifetime Participant Costs	NPV of incremental participant costs	\$1,684,139	\$18,768,992	\$1,682,151	\$3,733,660	\$3,514,771	\$29,383,714
	Lifetime Non-Incentive							
12	Program Expenditures	NPV of non-incentive program costs	\$2,123,823	\$928,018	\$445,506	\$1,485,289	\$2,245,897	\$7,228,532
	Total Costs	11+12	\$3,807,962	\$19,697,010	\$2,127,657	\$5,218,949	\$5,760,668	\$36,612,246
	Benefit Cost Ratio	(1+2+3+4+5+6+7+8+9+10)/(11+12)	3.95	0.70	1.18	2.04	2.50	1.54

Societal Cost Test

	Benefit-Cost Test Component	Description	Residential Total	Multi-Family Total	Commercial & Industrial Total	Total EE Portfolio
	Lifetime Avoided Electric	NPV of electric energy reduction at				
1	Energy Cost	wholesale cost	\$5,511,084	\$231,215	\$7,927,357	\$13,669,655
	Lifetime Avoided Electric					
2	Capacity Cost	NPV of peak electric capacity cost	\$2,482,994	\$52,150	\$2,752,419	\$5,287,564
2	Lifetime Avoided Electric	NPV of avoided transmission and distribution	62 247 070	¢40.602	¢2.620.264	¢5 005 026
3	T&D Cost	cost	\$2,317,879	\$48,682	\$2,639,264	\$5,005,826
4	Lifetime Avoided Electric	NDV of avoided electric appillant continue costs	ćo	\$0	\$0	ćo
4	Ancillary Services Cost Lifetime Avoided Natural	NPV of avoided electric ancillary service costs	\$0	\$0	\$0	\$0
5	Gas Supply Cost	NPV of natural gas reduction at wholesale cost	\$4,867,860	\$879,650	\$1,141,012	\$6,888,522
	Lifetime Avoided	COST	54,807,800	\$675,030	\$1,141,012	Ş0,888,322
	Delivered Fuel Cost,					
6	Propane	NPV of avoided delivered propane fuel costs	\$0	\$0	\$0	\$0
	Lifetime Avoided	с ој и се и и и и и и и и и и и и и и и и и	7 -	7-	7-	7-
	Delivered Fuel Cost, Fuel					
7	Oil	NPV of avoided delivered fuel oil costs	\$0	\$0	\$0	\$0
	Lifetime Avoided Electric					
8	Emissions Cost	NPV of electric CO2 emissions savings	\$5,875,469	\$246,502	\$8,451,503	\$14,573,474
	Lifetime Avoided Natural					
9	Gas Emissions Cost	NPV of natural gas CO2 emissions savings	\$4,003,140	\$723,390	\$938,324	\$5,664,855
	Lifetime Non-Energy					
10	Impacts	NPV of non-energy impacts	\$3,834,864	\$330,431	\$1,228,982	\$5,394,277
	Total Benefits	1+2+3+4+5+6+7+8+9+10	\$28,893,290	\$2,512,021	\$25,078,862	\$56,484,173
11	Lifetime Participant Costs	NPV of incremental participant costs	\$20,453,132	\$1,682,151	\$7,248,431	\$29,383,714
	Lifetime Non-Incentive					
12	Program Expenditures	NPV of non-incentive program costs	\$3,051,841	\$445,506	\$3,731,186	\$7,228,532
	Total Costs	11+12	\$23,504,973	\$2,127,657	\$10,979,617	\$36,612,246
	Benefit Cost Ratio	(1+2+3+4+5+6+7+8+9+10)/(11+12)	1.23	1.18	2.28	1.54

Total Resource Cost Test

	Benefit-Cost Test Component	Description	Efficient Products	Home Performance with ENERGY STAR	Multi-Family	Small Business Direct Install	Commercial & Industrial Rebate	Total EE Portfolio
	Lifetime Avoided Electric	NPV of electric energy reduction at						
1	Energy Cost	wholesale cost	\$4,372,893	\$1,138,190	\$231,215	\$3,212,067	\$4,715,290	\$13,669,655
	Lifetime Avoided Electric							
2	Capacity Cost	NPV of peak electric capacity cost	\$1,818,866	\$664,129	\$52,150	\$724,476	\$2,027,943	\$5,287,564
	Lifetime Avoided Electric	NPV of avoided transmission and distribution						
3	T&D Cost	cost	\$1,697,914	\$619,965	\$48,682	\$694,692	\$1,944,572	\$5,005,826
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0	\$0	\$0	\$0	\$0	\$0
5	Lifetime Avoided Natural Gas Supply Cost	NPV of natural gas reduction at wholesale cost	\$256,488	\$4,611,372	\$879,650	\$1,141,012	\$0	\$6,888,522
6	Lifetime Avoided Delivered Fuel Cost, Propane	NPV of avoided delivered propane fuel costs	\$0	\$0	\$0	\$0	\$0	\$0
	Lifetime Avoided Delivered Fuel Cost, Fuel	n r oj aroutet temeret propane just coste	·	·	, , , , , , , , , , , , , , , , , , ,	·	·	·
7	Oil	NPV of avoided delivered fuel oil costs	\$0	\$0	\$0	\$0	\$0	\$0
	Total Benefits	1+2+3+4+5+6+7	\$8,146,161	\$7,033,656	\$1,211,697	\$5,772,248	\$8,687,805	\$30,851,567
8	Lifetime Participant Costs	NPV of incremental participant costs	\$1,684,139	\$18,768,992	\$1,682,151	\$3,733,660	\$3,514,771	\$29,383,714
9	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$2,123,823	\$928,018	\$445,506	\$1,485,289	\$2,245,897	\$7,228,532
	Total Costs	8+9	\$3,807,962	\$19,697,010	\$2,127,657	\$5,218,949	\$5,760,668	\$36,612,246
	Benefit Cost Ratio	(1+2+3+4+5+6+7)/(8+9)	2.14	0.36	0.57	1.11	1.51	0.84

Total Resource Cost Test

	Benefit-Cost Test Component	Description	Residential Total	Multi-Family Total	Commercial & Industrial Total	Total EE Portfolio
	Lifetime Avoided Electric	NPV of electric energy reduction at				
1	Energy Cost	wholesale cost	\$5,511,084	\$231,215	\$7,927,357	\$13,669,655
	Lifetime Avoided Electric					
2	Capacity Cost	NPV of peak electric capacity cost	\$2,482,994	\$52,150	\$2,752,419	\$5,287,564
	Lifetime Avoided Electric	NPV of avoided transmission and distribution				
3	T&D Cost	cost	\$2,317,879	\$48,682	\$2,639,264	\$5,005,826
	Lifetime Avoided Electric					
4	Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0	\$0	\$0	\$0
	Lifetime Avoided Natural	NPV of natural gas reduction at wholesale				
5	Gas Supply Cost	cost	\$4,867,860	\$879,650	\$1,141,012	\$6,888,522
	Lifetime Avoided Delivered Fuel Cost,					
6	Propane	NPV of avoided delivered propane fuel costs	\$0	\$0	\$0	\$0
7	Lifetime Avoided Delivered Fuel Cost, Fuel Oil	NPV of avoided delivered fuel oil costs	\$0	\$0	\$0	\$0
	Total Benefits	1+2+3+4+5+6+7	\$15,179,817	\$1,211,697	\$14,460,052	\$30,851,567
8	Lifetime Participant Costs	NPV of incremental participant costs	\$20,453,132	\$1,682,151	\$7,248,431	\$29,383,714
	Lifetime Non-Incentive					
9	Program Expenditures	NPV of non-incentive program costs	\$3,051,841	\$445,506	\$3,731,186	\$7,228,532
	Total Costs	8+9	\$23,504,973	\$2,127,657	\$10,979,617	\$36,612,246
	Benefit Cost Ratio	(1+2+3+4+5+6+7)/(8+9)	0.65	0.57	1.32	0.84

Program Administrator Cost Test

	Benefit-Cost Test Component	Description	Efficient Products	Home Performance with ENERGY STAR	Multi-Family	Small Business Direct Install	Commercial & Industrial Rebate	Total EE Portfolio
	Lifetime Avoided Electric	NPV of electric energy reduction at						
1	Energy Cost	wholesale cost	\$4,372,893	\$1,138,190	\$231,215	\$3,212,067	\$4,715,290	\$13,669,655
	Lifetime Avoided Electric							
2	Capacity Cost	NPV of peak electric capacity cost	\$1,818,866	\$664,129	\$52,150	\$724,476	\$2,027,943	\$5,287,564
•	Lifetime Avoided Electric	NPV of avoided transmission and distribution	44 507 044	4540.055	440.500	4504.500	44.044.570	45.005.006
3	T&D Cost	cost	\$1,697,914	\$619,965	\$48,682	\$694,692	\$1,944,572	\$5,005,826
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0	\$0	\$0	\$0	\$0	\$0
	Total Benefits	1+2+3+4	\$7,889,673	\$2,422,284	\$332,047	\$4,631,235	\$8,687,805	\$23,963,045
5	Lifetime Incentive Costs	NPV of program incentive costs	\$1,545,122	\$946,737	\$900,162	\$2,961,657	\$1,733,133	\$8,086,810
6	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$2,123,823	\$928,018	\$445,506	\$1,485,289	\$2,245,897	\$7,228,532
- 0		, , ,	. , ,				. , ,	
	Total Costs	5+6	\$3,668,945	\$1,874,755	\$1,345,668	\$4,446,945	\$3,979,030	\$15,315,342
	Benefit Cost Ratio	(1+2+3+4)/(5+6)	2.15	1.29	0.25	1.04	2.18	1.56

Program Administrator Cost Test

	Benefit-Cost Test Component	Description	Residential Total	Multi-Family Total	Commercial & Industrial Total	Total EE Portfolio
	Lifetime Avoided Electric	NPV of electric energy reduction at				
1	Energy Cost	wholesale cost	\$5,511,084	\$231,215	\$7,927,357	\$13,669,655
2	Lifetime Avoided Electric Capacity Cost	NPV of peak electric capacity cost	\$2,482,994	\$52,150	\$2,752,419	\$5,287,564
3	Lifetime Avoided Electric T&D Cost	NPV of avoided transmission and distribution cost	\$2,317,879	\$48,682	\$2,639,264	\$5,005,826
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0	\$0	\$0	\$0
	Total Benefits	1+2+3+4	\$10,311,957	\$332,047	\$13,319,040	\$23,963,045
5	Lifetime Incentive Costs	NPV of program incentive costs	\$2,491,858	\$900,162	\$4,694,790	\$8,086,810
6	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$3,051,841	\$445,506	\$3,731,186	\$7,228,532
	Total Costs	5+6	\$5,543,699	\$1,345,668	\$8,425,975	\$15,315,342
	Benefit Cost Ratio	(1+2+3+4)/(5+6)	1.86	0.25	1.58	1.56

Participant Cost Test

	Benefit-Cost Test Component	Description	Efficient Products	Home Performance with ENERGY STAR	Multi-Family	Small Business Direct Install	Commercial & Industrial Rebate	Total EE Portfolio
	Lifetime Avoided							
	Delivered Fuel Cost,							
1	Propane	NPV of avoided delivered propane fuel costs	\$0	\$0	\$0	\$0	\$0	\$0
	Lifetime Avoided							
	Delivered Fuel Cost, Fuel							
2	Oil	NPV of avoided delivered fuel oil costs	\$0	\$0	\$0	\$0	\$0	\$0
	Lifetime Electric Bill	NPV of electric bill reductions / lost utility						
3	Savings / Lost Revenue	revenue	\$8,116,383	\$2,112,558	\$429,150	\$5,961,811	\$8,751,895	\$25,371,798
	Lifetime Gas Bill Savings /	NPV of natural gas bill reductions / lost						
4	Lost Revenue	utility revenue	\$4,312	\$77,532	\$1,728,575	\$19,184	\$0	\$1,829,604
5	Lifetime Incentive Costs	NPV of program incentive costs	\$1,545,122	\$946,737	\$900,162	\$2,961,657	\$1,733,133	\$8,086,810
	Total Benefits	1+2+3+4+5	\$9,665,817	\$3,136,826	\$3,057,887	\$8,942,652	\$10,485,028	\$35,288,211
6	Lifetime Participant Costs	NPV of incremental participant costs	\$1,684,139	\$18,768,992	\$1,682,151	\$3,733,660	\$3,514,771	\$29,383,714
	Total Costs	6	\$1,684,139	\$18,768,992	\$1,682,151	\$3,733,660	\$3,514,771	\$29,383,714
	Benefit Cost Ratio	(1+2+3+4+5)/(6)	5.74	0.17	1.82	2.40	2.98	1.20

Participant Cost Test

	Benefit-Cost Test Component	Description	Residential Total	Multi-Family Total	Commercial & Industrial Total	Total EE Portfolio
	Lifetime Avoided					
	Delivered Fuel Cost,			4		4.0
1	Propane	NPV of avoided delivered propane fuel costs	\$0	\$0	\$0	\$0
	Lifetime Avoided					
	Delivered Fuel Cost, Fuel			4		4.0
2	Oil	NPV of avoided delivered fuel oil costs	\$0	\$0	\$0	\$0
	Lifetime Electric Bill	NPV of electric bill reductions / lost utility				
3	Savings / Lost Revenue	revenue	\$10,228,941	\$429,150	\$14,713,706	\$25,371,798
	Lifetime Gas Bill Savings /	NPV of natural gas bill reductions / lost				
4	Lost Revenue	utility revenue	\$81,845	\$1,728,575	\$19,184	\$1,829,604
5	Lifetime Incentive Costs	NPV of program incentive costs	\$2,491,858	\$900,162	\$4,694,790	\$8,086,810
	Total Benefits	1+2+3+4+5	\$12,802,644	\$3,057,887	\$19,427,680	\$35,288,211
6	Lifetime Participant Costs	NPV of incremental participant costs	\$20,453,132	\$1,682,151	\$7,248,431	\$29,383,714
	Total Costs	6	\$20,453,132	\$1,682,151	\$7,248,431	\$29,383,714
	Benefit Cost Ratio	(1+2+3+4+5)/(6)	0.63	1.82	2.68	1.20

Ratepayer Impact Measure

	Benefit-Cost Test Component	Description	Efficient Products	Home Performance with ENERGY STAR	Multi-Family	Small Business Direct Install	Commercial & Industrial Rebate	Total EE Portfolio
	Lifetime Avoided Electric	NPV of electric energy reduction at						
1	Energy Cost	wholesale cost	\$4,372,893	\$1,138,190	\$231,215	\$3,212,067	\$4,715,290	\$13,669,655
2	Lifetime Avoided Electric Capacity Cost	NPV of peak electric capacity cost	\$1,818,866	\$664,129	\$52,150	\$724,476	\$2,027,943	\$5,287,564
	Lifetime Avoided Electric	NPV of avoided transmission and distribution	\$1,818,800	3004,123	\$32,130	\$724,470	\$2,027,343	\$3,267,304
3	T&D Cost	cost	\$1,697,914	\$619,965	\$48,682	\$694,692	\$1,944,572	\$5,005,826
	Lifetime Avoided Electric							
4	Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0	\$0	\$0	\$0	\$0	\$0
	Total Benefits	1+2+3+4	\$7,889,673	\$2,422,284	\$332,047	\$4,631,235	\$8,687,805	\$23,963,045
	Lifetime Electric Bill	NPV of electric bill reductions / lost utility						
5	Savings / Lost Revenue	revenue	\$8,116,383	\$2,112,558	\$429,150	\$5,961,811	\$8,751,895	\$25,371,798
6	Lifetime Incentive Costs	NPV of program incentive costs	\$1,545,122	\$946,737	\$900,162	\$2,961,657	\$1,733,133	\$8,086,810
7	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$2,123,823	\$928,018	\$445,506	\$1,485,289	\$2,245,897	\$7,228,532
	Total Costs	5+6+7	\$11,785,328	\$3,987,312	\$1,774,818	\$10,408,757	\$12,730,925	\$40,687,140
	Benefit Cost Ratio	(1+2+3+4)/(5+6+7)	0.67	0.61	0.19	0.44	0.68	0.59

Ratepayer Impact Measure

nate	Jayer Impact Measure					
	Benefit-Cost Test Component	Description	Residential Total	Multi-Family Total	Commercial & Industrial Total	Total EE Portfolio
	Lifetime Avoided Electric	NPV of electric energy reduction at				
1	Energy Cost	wholesale cost	\$5,511,084	\$231,215	\$7,927,357	\$13,669,655
	Lifetime Avoided Electric					
2	Capacity Cost	NPV of peak electric capacity cost	\$2,482,994	\$52,150	\$2,752,419	\$5,287,564
3	Lifetime Avoided Electric T&D Cost	NPV of avoided transmission and distribution cost	\$2,317,879	\$48,682	\$2,639,264	\$5,005,826
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0	\$0	\$0	\$0
	Total Benefits	1+2+3+4	\$10,311,957	\$332,047	\$13,319,040	\$23,963,045
5	Lifetime Electric Bill Savings / Lost Revenue	NPV of electric bill reductions / lost utility revenue	\$10,228,941	\$429,150	\$14,713,706	\$25,371,798
	Savings / Lost Neverlue	revenue	\$10,220,341	3429,130	\$14,713,700	\$25,571,790
6	Lifetime Incentive Costs	NPV of program incentive costs	\$2,491,858	\$900,162	\$4,694,790	\$8,086,810
	Lifetime Non-Incentive					
7	Program Expenditures	NPV of non-incentive program costs	\$3,051,841	\$445,506	\$3,731,186	\$7,228,532
	Total Costs	5+6+7	\$15,772,640	\$1,774,818	\$23,139,682	\$40,687,140
	Benefit Cost Ratio	(1+2+3+4)/(5+6+7)	0.65	0.19	0.58	0.59

Peak Demand Reduction Portfolio

New Jersey Cost Test

1

	Benefit-Cost Test Component	Description	Total PDR Portfolio
1	Lifetime Avoided Electric Energy Cost	NPV of electric energy reduction at wholesale cost	\$0
2	Lifetime Avoided Electric Capacity Cost	NPV of peak electric capacity cost	\$1,248,154
3	Lifetime Avoided Electric T&D Cost	NPV of avoided transmission and distribution cost	\$1,181,898
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0
5	Lifetime Avoided Natural Gas Supply Cost	NPV of natural gas reduction at wholesale cost	\$0
6	Lifetime Avoided Delivered Fuel Cost, Propane	NPV of avoided delivered propane fuel costs	\$0
7	Lifetime Avoided Delivered Fuel Cost, Fuel Oil	NPV of avoided delivered fuel oil costs	\$0
8	Lifetime Demand Reduction Induced Price Effects Benefits, Energy	NPV of DRIPE electric market benefits, energy	\$0
9	Lifetime Demand Reduction Induced Price Effects Benefits, Peak Demand	NPV of DRIPE electric market benefits, peak demand	\$10
10	Lifetime Avoided Electric Emissions Cost	NPV of electric CO2 emissions savings	\$0
11	Lifetime Avoided Natural Gas Emissions Cost	NPV of natural gas CO2 emissions savings	\$0
12	Lifetime Non-Energy Impacts	NPV of non-energy impacts	\$121,503
	Total Benefits	1+2+3+4+5+6+7+8+9+10+11+12	\$2,551,565
13	Lifetime Participant Costs	NPV of incremental participant costs	\$453,921
14	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$779,571
	Total Costs	13+14	\$1,233,492
	Benefit Cost Ratio	(1+2+3+4+5+6+7+8+9+10+11+12)/(13+14)	2.07

Societal Cost Test

	Benefit-Cost Test Component	Description	Total PDR Portfolio
1	Lifetime Avoided Electric Energy Cost	NPV of electric energy reduction at wholesale cost	\$0
2	Lifetime Avoided Electric Capacity Cost	NPV of peak electric capacity cost	\$1,248,154
3	Lifetime Avoided Electric T&D Cost	NPV of avoided transmission and distribution cost	\$1,181,898
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0
5	Lifetime Avoided Natural Gas Supply Cost	NPV of natural gas reduction at wholesale cost	\$0
6	Lifetime Avoided Delivered Fuel Cost, Propane	NPV of avoided delivered propane fuel costs	\$0
7	Lifetime Avoided Delivered Fuel Cost, Fuel Oil	NPV of avoided delivered fuel oil costs	\$0
8	Lifetime Avoided Electric Emissions Cost	NPV of electric CO2 emissions savings	\$0
9	Lifetime Avoided Natural Gas Emissions Cost	NPV of natural gas CO2 emissions savings	\$0
10	Lifetime Non-Energy Impacts	NPV of non-energy impacts	\$121,503
	Total Benefits	1+2+3+4+5+6+7+8+9+10	\$2,551,555
11	Lifetime Participant Costs	NPV of incremental participant costs	\$453,921
12	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$779,571
	Total Costs	11+12	\$1,233,492
	Benefit Cost Ratio	(1+2+3+4+5+6+7+8+9+10)/(11+12)	2.07

Total Resource Cost Test

	Benefit-Cost Test Component	Description	Total PDR Portfolio
1	Lifetime Avoided Electric Energy Cost	NPV of electric energy reduction at wholesale cost	\$0
2	Lifetime Avoided Electric Capacity Cost	NPV of peak electric capacity cost	\$1,248,154
3	Lifetime Avoided Electric T&D Cost	NPV of avoided transmission and distribution cost	\$1,181,898
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0
5	Lifetime Avoided Natural Gas Supply Cost	NPV of natural gas reduction at wholesale cost	\$0
6	Lifetime Avoided Delivered Fuel Cost, Propane	NPV of avoided delivered propane fuel costs	\$0
7	Lifetime Avoided Delivered Fuel Cost, Fuel Oil	NPV of avoided delivered fuel oil costs	\$0
	Total Benefits	1+2+3+4+5+6+7	\$2,430,052
8	Lifetime Participant Costs	NPV of incremental participant costs	\$453,921
9	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$779,571
	Total Costs	8+9	\$1,233,492
	Benefit Cost Ratio	(1+2+3+4+5+6+7)/(8+9)	1.97

Program Administrator Cost Test

	Benefit-Cost Test Component	Description	Total PDR Portfolio
1	Lifetime Avoided Electric Energy Cost	NPV of electric energy reduction at wholesale cost	\$0
2	Lifetime Avoided Electric Capacity Cost	NPV of peak electric capacity cost	\$1,248,154
3	Lifetime Avoided Electric T&D Cost	NPV of avoided transmission and distribution cost	\$1,181,898
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0
	Total Benefits	1+2+3+4	\$2,430,052
5	Lifetime Incentive Costs	NPV of program incentive costs	\$453,921
6	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$779,571
	Total Costs	5+6	\$1,233,492
	Benefit Cost Ratio	(1+2+3+4)/(5+6)	1.97

Participant Cost Test

	Benefit-Cost Test Component	Description	Total PDR Portfolio
1	Lifetime Avoided Delivered Fuel Cost, Propane	NPV of avoided delivered propane fuel costs	\$0
2	Lifetime Avoided Delivered Fuel Cost, Fuel Oil	NPV of avoided delivered fuel oil costs	\$0
3	Lifetime Electric Bill Savings / Lost Revenue	NPV of electric bill reductions / lost utility revenue	\$0
4	Lifetime Gas Bill Savings / Lost Revenue	NPV of natural gas bill reductions / lost utility revenue	\$0
5	Lifetime Incentive Costs	NPV of program incentive costs	\$453,921
	Total Benefits	1+2+3+4+5	\$453,921
6	Lifetime Participant Costs	NPV of incremental participant costs	\$453,921
	Total Costs	6	\$453,921
	Benefit Cost Ratio	(1+2+3+4+5)/(6)	1.00

Ratepayer Impact Measure

	Benefit-Cost Test Component	Description	Total PDR Portfolio
1	Lifetime Avoided Electric Energy Cost	NPV of electric energy reduction at wholesale cost	\$0
2	Lifetime Avoided Electric Capacity Cost	NPV of peak electric capacity cost	\$1,248,154
3	Lifetime Avoided Electric T&D Cost	NPV of avoided transmission and distribution cost	\$1,181,898
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0
	Total Benefits	1+2+3+4	\$2,430,052
5	Lifetime Electric Bill Savings / Lost Revenue	NPV of electric bill reductions / lost utility revenue	\$0
6	Lifetime Incentive Costs	NPV of program incentive costs	\$453,921
7	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$779,571
	Total Costs	5+6+7	\$1,233,492
	Benefit Cost Ratio	(1+2+3+4)/(5+6+7)	1.97

Clean Heat Beneficial Electrification Portfolio

New Jersey Cost Test

1

	lersey Cost Test		
	Benefit-Cost Test Component	Description	Total CHBE Portfolio
1	Lifetime Avoided Electric Energy Cost	NPV of electric energy reduction at wholesale cost	(\$461)
2	Lifetime Avoided Electric Capacity Cost	NPV of peak electric capacity cost	\$80,613
3	Lifetime Avoided Electric T&D Cost	NPV of avoided transmission and distribution cost	\$75,253
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0
5	Lifetime Avoided Natural Gas Supply Cost	NPV of natural gas reduction at wholesale cost	\$473,071
6	Lifetime Avoided Delivered Fuel Cost, Propane	NPV of avoided delivered propane fuel costs	\$0
7	Lifetime Avoided Delivered Fuel Cost, Fuel Oil	NPV of avoided delivered fuel oil costs	\$0
8	Lifetime Demand Reduction Induced Price Effects Benefits, Energy	NPV of DRIPE electric market benefits, energy	(\$42)
9	Lifetime Demand Reduction Induced Price Effects Benefits, Peak Demand	NPV of DRIPE electric market benefits, peak demand	\$1
10	Lifetime Avoided Electric Emissions Cost	NPV of electric CO2 emissions savings	(\$492)
11	Lifetime Avoided Natural Gas Emissions Cost	NPV of natural gas CO2 emissions savings	\$389,036
12	Lifetime Non-Energy Impacts	NPV of non-energy impacts	\$152,547
	Total Benefits	1+2+3+4+5+6+7+8+9+10+11+12	\$1,169,525
13	Lifetime Participant Costs	NPV of incremental participant costs	\$261,358
14	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$742,114
	Total Costs	13+14	\$1,003,472
	Benefit Cost Ratio	(1+2+3+4+5+6+7+8+9+10+11+12)/(13+14)	1.17

Societal Cost Test

	Benefit-Cost Test Component	Description	Total CHBE Portfolio
1	Lifetime Avoided Electric Energy Cost	NPV of electric energy reduction at wholesale cost	(\$461)
2	Lifetime Avoided Electric Capacity Cost	NPV of peak electric capacity cost	\$80,613
3	Lifetime Avoided Electric T&D Cost	NPV of avoided transmission and distribution cost	\$75,253
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0
5	Lifetime Avoided Natural Gas Supply Cost	NPV of natural gas reduction at wholesale cost	\$473,071
6	Lifetime Avoided Delivered Fuel Cost, Propane	NPV of avoided delivered propane fuel costs	\$0
7	Lifetime Avoided Delivered Fuel Cost, Fuel Oil	NPV of avoided delivered fuel oil costs	\$0
8	Lifetime Avoided Electric Emissions Cost	NPV of electric CO2 emissions savings	(\$492)
9	Lifetime Avoided Natural Gas Emissions Cost	NPV of natural gas CO2 emissions savings	\$389,036
10	Lifetime Non-Energy Impacts	NPV of non-energy impacts	\$152,547
	Total Benefits	1+2+3+4+5+6+7+8+9+10	\$1,169,567
11	Lifetime Participant Costs	NPV of incremental participant costs	\$261,358
12	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$742,114
	Total Costs	11+12	\$1,003,472
	Benefit Cost Ratio	(1+2+3+4+5+6+7+8+9+10)/(11+12)	1.17

Total Resource Cost Test

	Benefit-Cost Test Component	Description	Total CHBE Portfolio
1	Lifetime Avoided Electric Energy Cost	NPV of electric energy reduction at wholesale cost	(\$461)
2	Lifetime Avoided Electric Capacity Cost	NPV of peak electric capacity cost	\$80,613
3	Lifetime Avoided Electric T&D Cost	NPV of avoided transmission and distribution cost	\$75,253
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0
5	Lifetime Avoided Natural Gas Supply Cost	NPV of natural gas reduction at wholesale cost	\$473,071
6	Lifetime Avoided Delivered Fuel Cost, Propane	NPV of avoided delivered propane fuel costs	\$0
7	Lifetime Avoided Delivered Fuel Cost, Fuel Oil	NPV of avoided delivered fuel oil costs	\$0
	Total Benefits	1+2+3+4+5+6+7	\$628,476
8	Lifetime Participant Costs	NPV of incremental participant costs	\$261,358
9	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$742,114
	Total Costs	8+9	\$1,003,472
	Benefit Cost Ratio	(1+2+3+4+5+6+7)/(8+9)	0.63

Program Administrator Cost Test

	Benefit-Cost Test Component	Description	Total CHBE Portfolio
1	Lifetime Avoided Electric Energy Cost	NPV of electric energy reduction at wholesale cost	(\$461)
2	Lifetime Avoided Electric Capacity Cost	NPV of peak electric capacity cost	\$80,613
3	Lifetime Avoided Electric T&D Cost	NPV of avoided transmission and distribution cost	\$75,253
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0
	Total Benefits	1+2+3+4	\$155,405
5	Lifetime Incentive Costs	NPV of program incentive costs	\$1,128,733
6	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$742,114
	Total Costs	5+6	\$1,870,848
	Benefit Cost Ratio	(1+2+3+4)/(5+6)	0.08

Participant Cost Test

	Benefit-Cost Test Component	Description	Total CHBE Portfolio
1	Lifetime Avoided Delivered Fuel Cost, Propane	NPV of avoided delivered propane fuel costs	\$0
2	Lifetime Avoided Delivered Fuel Cost, Fuel Oil	NPV of avoided delivered fuel oil costs	\$0
3	Lifetime Electric Bill Savings / Lost Revenue	NPV of electric bill reductions / lost utility revenue	(\$856)
4	Lifetime Gas Bill Savings / Lost Revenue	NPV of natural gas bill reductions / lost utility revenue	\$7,954
5	Lifetime Incentive Costs	NPV of program incentive costs	\$1,128,733
	Total Benefits	1+2+3+4+5	\$1,135,831
6	Lifetime Participant Costs	NPV of incremental participant costs	\$261,358
	Total Costs	6	\$261,358
	Benefit Cost Ratio	(1+2+3+4+5)/(6)	4.35

Ratepayer Impact Measure

	Benefit-Cost Test Component	Description	Total CHBE Portfolio
1	Lifetime Avoided Electric Energy Cost	NPV of electric energy reduction at wholesale cost	(\$461)
2	Lifetime Avoided Electric Capacity Cost	NPV of peak electric capacity cost	\$80,613
3	Lifetime Avoided Electric T&D Cost	NPV of avoided transmission and distribution cost	\$75,253
4	Lifetime Avoided Electric Ancillary Services Cost	NPV of avoided electric ancillary service costs	\$0
	Total Benefits	1+2+3+4	\$155,405
5	Lifetime Electric Bill Savings / Lost Revenue	NPV of electric bill reductions / lost utility revenue	(\$856)
6	Lifetime Incentive Costs	NPV of program incentive costs	\$1,128,733
7	Lifetime Non-Incentive Program Expenditures	NPV of non-incentive program costs	\$742,114
	Total Costs	5+6+7	\$1,869,992
	Benefit Cost Ratio	(1+2+3+4)/(5+6+7)	0.08

CORE Programs

RESIDENTIAL EFFICIENT PRODUCTS (MFR II.a.i)

The Residential Efficient Products 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 access to financing 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 provide a means to encourage customers to take the first steps toward energy-efficiency. A behavioral component will provide customers a home energy report ("HER"). This HER benchmarks customers' energy usage against their historical usage and similar homes in the area. This report also compares monthly energy usage and prompts consumers to reduce usage in order to improve against their previous month's usage and benchmark relative to their neighbors.

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 instore 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.
- Provide direct mailings and electronic HERs to benchmark energy use against prior usage and against similar homes usage
- Provide a Web portal, via the O&R website, showing real time usage information
- Cross market where engagement in the behavioral program is used to drive participation in other residential efficiency and peak demand reduction programs

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. Access to financing 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.

RECO 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 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: RECO 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: RECO 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: RECO 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.
- **Behavioral Initiative:** RECO will send customers HERs both electronically via email and printed reports via direct mail, intended to change customer behavior and cross market energy efficiency initiatives to increase participation.

By developing relationships with both program and trade allies, the program will develop a broad reach across the marketplace and 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. Installation services may be offered to install some equipment offerings found on the marketplace.

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

The target market for this program will be all residential electric and/or natural gas customers. 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

EXHIBIT DEK-1

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 RECO's 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, and other activity in the Efficient Products program including behavioral HERs. RECO 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.
- RECO 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. Access to financing 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.
- 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: RECO 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.

<u>Delivery Method, Contractor Roles and Implementation Plan (MFR II.a.v) (MFR II.a.viii)</u> (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, RECO 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. RECO 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. RECO and/or a third-party implementation contractor will be responsible for the management of the online marketplace. RECO will utilize a third-party contractor to implement the behavioral initiative. 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. RECO 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

EXHIBIT DEK-1

maturity in the marketplace. Refer to Appendix A, Table 2 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 B for the Summary of Proposed Financing for this program.

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

Refer to Appendix F for a description of how RECO will provide for customers to access their energy data.

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

Refer to Appendix C for the Summary of Participation and Energy Savings associated with this program.

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

Refer to Appendix D for the Summary of Residential Efficient Products Program Budget and Cost Categories.

Proposed Quality Control Standards and Remediation Policies (MFR II.b.i)

Refer to Appendix H for the Summary of Quality Control Standards and Remediation Policies for this program and remediation policy.

EXISTING HOMES: Home Performance with ENERGY STAR and Quick Home Energy Check-Up (QHEC) (MFR II.a.i)

The Home Performance with ENERGY STAR ("HPwES") Program will provide a holistic approach for customers to explore and invest in the efficiency and comfort of their homes and includes a Quick Home Energy Checkup ("QHEC"). All participants in this program must have an initial energy audit performed directly by a qualified HPwES contractor or auditor where QHEC measures may be installed. 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 access to financing.

This program 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 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.

The QHEC 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 standard energy saving measures at no additional cost to participants. Interested customers will sign up for an in-home visit from a qualified energy auditor, participating contractor, a RECO employee, or a third-party implementation contractor. During the visit, the auditor will perform a walk-through of the customer's home to provide education about the opportunities to save energy. The auditor may also identify 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 Efficient Products Program, the potential for comprehensive upgrades through either the HPwES Program, or the Comfort Partners Program. This no-risk program is intended to appeal and provide benefits to both renters and homeowners.

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

HPwES and QHEC will be available to all single-family and single-family attached (1 to 4 unit properties¹) electric and/or natural gas customers.

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

For QHEC, standard energy efficiency measures installed during the 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 opportunities as well as the availability of enhanced incentives. There are also additional options through other program offerings for Low-to-Moderate income ("LMI")

¹ Properties larger than 4 units will be referred for consideration in the Multi-family Program.

EXHIBIT DEK-1

customers (up to 400% of Federal Poverty Level or potential automatic eligibility based on physical location) and access to financing. 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)

The utilities will utilize many marketing strategies to assure program awareness and participation is maximized. These traditional marketing strategies may include web-based engagement and information, digital advertising, media advertising, hard-copy materials, behavioral HERs, bill inserts, and door-to-door marketing to promote awareness among trade allies and customers. The utilities will also cross promote this program to participants in other energy efficiency program offerings. Information garnered from other programs, such as the Residential Efficient Products could also be used to identify prime candidates for participation in the HPwES and QHEC program. For example, a review of usage data contained in HERs from the behavioral initiative 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 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 the HPwES or other programs.

Consistent with current New Jersey HPwES program practices, the utilities may offer cooperative marketing funding to encourage contactors to promote the program.

The primary market barriers that impact this program include:

- Initial Cost of Comprehensive Home Retrofits: Home retrofits are more expensive and involved than purchasing efficient equipment and 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 and by offering the QHEC at no additional cost to the customer.
- 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.
- **Split Incentives:** Many renters may not consider participating in energy efficiency programs because they do not own the premise and do not have a role in decisions regarding equipment replacement or structural improvements. This program addresses this barrier by providing simple energy efficiency measures that provide immediate energy savings and do not require landlord approval to install or use (e.g. smart strips, LEDs).
- Customer Skepticism of Contractor Proposals: Some customers are skeptical that contractors do not have their best interests at heart since contractors are interested in performing the work. This program addresses this barrier by ensuring the entity performing the assessment would meet stringent eligibility requirements and have been selected by the utility.

- 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:
 - o continuing to educate customers about the HPwES program and how both the structure and equipment work together
 - o highlighting the extra training that participating contractors must have
 - o identifying how the shell measure improvements can improve their comfort within the home
 - o noting that an audit includes health and safety testing
 - o reinforcing that the investments in equipment and shell measures may increase the value of their home.
- 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.

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

The utilities will administer this HPwES and QHEC program and may also choose to select a third-party implementation contractors to manage delivery of this program. RECO has an existing relationship with an implementation contractor that provides customers with a free in-home audit and professionally installed insulation and energy savings technologies through its parent, Orange and Rockland Utilities ("O&R"). This service is offered through its existing Customer Engagement and Marketplace Platform ("CEMP") which provides a whole home solution for residential customers looking to increase the overall comfort in their homes. Up-front rebates are provided to reduce the total cost of the project and the remaining cost recovered through the customer's monthly bill savings. Typical measures include air sealing, duct sealing, building envelope insulation, WiFi thermostats, and ENERGY STAR lighting. RECO plans to integrate this model into this program.

RECO staff and/or third-party implementation contractors will oversee all aspects of the program, 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. RECO staff and/or third-party implementation contractors will maintain a close relationship with trade allies to ensure consistent program delivery experience and high customer satisfaction. RECO 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 programs 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 Program, such as home appliances (e.g. clothes washers) to increase energy savings and leverage those additional programs and incentives.

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

The utilities will provide incentives for HPwES 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 Efficient 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.

The utilities 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.

Refer to Appendix A, Table 2 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 B for the Summary of Proposed Financing for the HPwES Program. There is no need for a financing component for QHEC since there is no cost for participating customers.

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

Refer to Appendix F for a description of how RECO will provide for customers to access their energy data.

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

Refer to Appendix C for the Summary of Participation and Energy Savings associated with this program.

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

Refer to Appendix D for the Summary of HPwES Program Budget and Cost Categories.

Proposed Quality Control Standards and Remediation Policies (MFR II.b.i)

Refer to Appendix H for the Summary of Quality Control Standards and Remediation Policies for this program and remediation policy.

MULTI-FAMILY PROGRAM (MFR II.a.i)

The Multi-Family Program addresses multi-family structures with five or more units. As such, there can be significant variation in the types of structures served under this Program ranging from residential dwellings with five 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 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 emergency equipment replacement. In addition, the Multi-Family Program will provide access to low to no-interest interest financing and enhanced incentives for low income/affordable housing properties.

The Multi-Family Program will 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, and custom designed projects), with an emphasis on encouraging 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 a project plan that best fits 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 heating and/or cooling 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 custom designed 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. HPwES, Efficient Products, C&I Direct Install or C&I Rebate Program). 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 five or more units that 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 the low 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, property managers, apartment associations, tenant groups, municipalities, and community organizations about the benefits of the program and participation processes
- Printed collateral 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 five 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 been underserved. 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 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

.

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.

- **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 effected by energy costs are able to participate in the program, provide low- and no-cost measures to the tenant or the landlord, and offer comprehensive approaches for the Multi-Family Program, including technical and engineering support to design cost-effective projects.
- Complex Buying Process: There can be a broad range of potential energy efficiency investments and 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 ongoing 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 relationships, communication channels, data, and brand in the marketplace to identify and confront market barriers on an ongoing basis.

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

The Multi-Family Program will be delivered in coordination between both electric and gas 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 to coordinate scheduling of an 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 of standard energy savings measures, installation of prescriptive measures, or custom projects. The installation contractors will be trained on the technical and educational aspects of the energy saving devices. Contractors will leave educational materials in each unit describing the work performed and explaining the energy-saving benefits.

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

Refer to Appendix A, Table 3 for the Summary of Proposed Incentive Ranges for this program

Customer Financing Options (MFR II.a.vi)

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

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

Refer to Appendix F for a description of how RECO will provide for customers to access their energy data.

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

Refer to Appendix C for the Summary of Participation and Energy Savings associated with this program.

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.

EXHIBIT DEK-1

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

Refer to Appendix D for the Summary of Multi-Family Program Budget and Cost Categories.

Proposed Quality Control Standards and Remediation Policies (MFR II.b.i)

Refer to Appendix H for the Summary of Quality Control Standards and Remediation Policies for this program and remediation policy.

ENERGY SAVINGS FOR BUSINESS: Commercial & Industrial Direct Install Program (MFR II.a.i)

The Commercial and Industrial ("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 a turnkey streamlined customer experience and 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. RECO 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, RECO 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 RECO to ensure the program is properly addressing the market in RECO's service territory.

Marketing Plan (MFR II.a.xiv)

EXHIBIT DEK-1

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

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. RECO 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 program will employ strategies to help the landlord understand the long-term benefits of participating. This program 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.

RECO 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. RECO'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, RECO will cross-promote program offerings to spread awareness of the range of efficiency opportunities proposed in this plan.

<u>Delivery Method, Contractor Roles and Implementation Plan (MFR II.a.v) (MFR II.a.viii)</u> (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 for their portion of the project cost. RECO 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.

RECO will administer and manage the program with the support of third-party implementation contractor(s) and/or RECO staff. The third-party implementation contractor or RECO Staff will have responsibility for most delivery tasks and customer outreach on behalf of RECO. The third-party implementation contractor will work closely with RECO 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

The third-party implementation contractor or RECO Staff will take on the responsibility of implementing the program, directing the qualification and enrollment of participating contractors, and will work to assure that ample participating contractors are available to complete all work derived from the program. The participating contractors will perform the energy assessments and installations, working with RECO and/or the third-party implementation contractor's oversight to undertake all construction and installation work identified in the energy assessment process.

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

EXHIBIT DEK-1

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. may 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.

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 B for the Summary of Proposed Financing for this program.

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

Refer to Appendix C for the Summary of Participation and Energy Savings associated with this program.

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

Refer to Appendix D for the Summary of Direct Install Program Budget and Cost Categories.

Proposed Quality Control Standards and Remediation Policies (MFR II.b.i)

Refer to Appendix H for the Summary of Quality Control Standards and Remediation Policies for this program and remediation policy.

ENERGY SOLUTIONS FOR BUSINESS: C&I Rebate Program-Prescriptive and Custom Measures (MFR II.a.i)

The C&I Rebate Program will promote the installation of high-efficiency electric and/or natural gas equipment by RECO C&I customers, via the installation of prescriptive or custom measures or projects. The program provides prescriptive and custom based incentives to commercial and industrial customers to purchase and install energy efficient products. The program will continue to support and/or provide downstream approaches to ensure the market is properly supported. The program may also provide midstream or upstream incentives or buydowns and support to manufacturers, distributors, contractors, and retailers that sell select energy efficient products. The rebates 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 vary 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 RECO'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 program also rebates custom measures that provide calculated or performance-based savings for electric and/or natural gas efficiency opportunities for commercial, industrial, and other non-residential customers that are non-standard and not captured by prescriptive rebates. 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 system 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.

Potential participants are required to submit an application for pre-approval to confirm project eligibility and reserve funding. RECO and/or implementation contractors will develop electronic rebate application forms that will guide applicants through eligibility guidelines, program requirements, terms and conditions, and general information. In addition, RECO 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 program administration as it identifies projects that are in the pipeline. If accepted and pre-approved by RECO, 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 Rebate Program will be available to all commercial, industrial, and other non-residential customers located within RECO's service territory. This program 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, and typically include building types such as light/heavy industrial, manufacturing, data centers, and distribution centers, among others.

Marketing Plan (MFR II.a.xiv)

The C&I Rebate Program will engage with customers and trade allies at multiple levels, including broad-based energy efficiency awareness campaigns, direct outreach by program 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, program 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 RECO to present information about the program, raise awareness and encourage participation.

Marketing will be used to target specific customer sectors to ensure awareness in the program and enhance participation. RECO 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-forone replacements, measure-specific collateral pieces will be developed for new 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 also be used to promote specific measures. Custom marketing efforts require a consistent and directed outreach to trade allies and associations, RECO 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, RECO and/or implementation contractor will target market to 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 utilized to bring awareness of the opportunities and savings available through the custom offering.

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 premium cost 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: C&I 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, RECO 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, RECO 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 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.
- Landlord/Tenant Arrangements: Split incentives between landlords, who own the energy-using equipment, and tenants, who pay for energy use, present a unique challenge because the investor in the equipment does not experience an immediate benefit. The program will employ strategies to help the landlord understand the long-term benefits of participating. This program will be marketed to both landlords and tenants to assure those who incur energy costs are able to participate in program. Utilities may also provide technical and outreach assistance to property owners and managers in developing and marketing green properties.
- Sufficient Stocking and Availability of Efficient Products: To support a robust marketplace for efficient equipment, RECO may 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.

RECO 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. RECO's established customer communication channels, data, and brand in the marketplace will all be leveraged to deliver best-practice programs that identify and address market barriers on an ongoing basis. RECO will cross-promote programs to spread awareness of the range of efficiency opportunities proposed in this plan.

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

RECO may outsource some, or all, of the implementation of this program 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 program. To maximize customer participation and streamline the customer experience, RECO will use its strong customer and marketplace relationships to support multiple implementation strategies to achieve program goals:

• Trade Allies: RECO 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. Preserving this downstream approach will ensure that customers and trade allies are properly supported. Trade allies will be able to leverage the program and offer customers rebates through their normal course of business. By developing relationships with trade allies, the program 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:

- o Design, engineering, and controls firms
- o HVAC and lighting distributors, contractors, and retail providers
- o Food service retailers and service providers
- O Commercial lighting distributors and wholesalers
- Retail: RECO staff, the implementation contractor, and/or field representatives will work with retailers and distributors that directly target C&I customers to inform them of the participation process and available equipment incentives. RECO 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 RECO application forms.
- Midstream: RECO 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. RECO 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 RECO rebate program. RECO 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 program offerings
- **Digital:** The program will be marketed directly to C&I customers on RECO's 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 enduses.
- Targeted Customer Outreach: RECO 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. RECO staff will 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, fostering long-term relationships. Additionally, RECO anticipates utilizing hourly usage data and software analytics to deliver energy saving insights to C&I customers that are on real-time pricing and/or hourly metered. Once AMI is installed systemwide, software analytics can be used for all C&I customers. These insights will accelerate and expand the adoption of energy efficient upgrades, optimizing EE programs, and increasing customer engagement and satisfaction. In addition, the integration of software data analytics or virtual audits, which are specifically designed to analyze individual customer facilities to determine cost and savings associated with EE improvements, will provide a customer platform that supports the utility's role as a trusted energy advisor. Software analytics will be utilized to target C&I customers and provide a detailed view of their energy usage, as well as insights and personalized EE recommendations to drive efficiency.
- **Technical Customer Assistance:** An important element of the C&I Rebate Program is the availability of technical support. RECO and/or implementation contractor will provide technical support to customers on the application of the energy efficiency measures and technologies included in this program, including supporting project identification, developing energy savings calculations, and assessing project payback economics.

Measurement & Verification ("M&V") for projects that do not have reliable information to accurately forecast energy savings may require energy monitoring before and after project installation to determine savings and incentive amounts.

Third-party implementation contractors will work closely with RECO to optimize the program's strategic direction, including, but not limited to, the following activities:

- Design incentive levels and strategies
- Assess customer satisfaction
- Measure and verify savings during on-site visits
- Monitor program data tracking
- Process rebate payments

RECO 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.

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 A, Table 1 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 B for the Summary of Proposed Financing for this program.

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

Refer to Appendix C for the Summary of Participation and Energy Savings associated with this program.

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

Refer to Appendix D for the Summary of C&I Rebate Program Budget and Cost Categories.

Proposed Quality Control Standards and Remediation Policies (MFR II.b.i)

Refer to Appendix H for the Summary of Quality Control Standards and Remediation Policies for this program and remediation policy.

PILOT Programs

CLEAN HEAT BENEFICIAL ELECTRIFICATION PROGRAM - PILOT (MFR II.a.i)

The Clean Heat Beneficial Electrification Program is designed to promote the installation of clean heat pump technology by residential, multi-family, and C&I customers by offering a range of incentives to advance the adoption of this clean and highly efficient air-source and groundsource heat pump technology for space and water heating. O&R, RECO's parent company, is implementing a similar program³ in its New York territory and RECO will benefit from the synergy of implementing the same program across its contiguous service territories.

This program supports the 2019 New Jersey Energy Master Plan ("EMP") to reach the goals of 100% clean energy and 80% emissions reductions from 2006 levels by 2050. Specifically, this program supports three EMP key strategies: 1) to reduce energy consumption and emissions in the building sector; 2) to decarbonize and modernize New Jersey's energy grid; and 3) to expand the clean energy innovation economy. This program will begin to electrify the building sector and reduce carbon emission from fossil fuel alternatives like oil and propane.

Additionally, on page 10 of the Order Directing the Utilities to Establish Energy Efficiency and Peak Demand Reduction Programs⁴, proposes that "utilities should also develop programs that, where possible, incorporate energy controls and strategic energy management, reduce peak demand, incorporate strategies to change behavior, advance strategic electrification, provide opportunity for fuel switching, utilize heat pumps, and include design elements that promote participation of all customers, regardless of income, annual usage, or other demographic characteristics." This program will address several of the above BPU strategies and will provide opportunities for fuel switching and advance strategic electrification, with energy savings measured in MMBTu.

According to the Department of Energy⁵, heat pumps provide the equivalent space conditioning at as little as one quarter of the cost of operating conventional heating or cooling appliances. In addition, air-source heat pump technology has advanced so that it now offers a legitimate space heating alternative in colder regions.

Cold Climate Air-Source Heat Pumps ("ccASHPs⁶")

For many homeowners across the county, ccASHPs can be a cost-effective option for improving home comfort while delivering energy and cost savings that make their homes more affordable to live in. These newer technologies are capable of delivering heating in extremely cold regions, such as New England and the upper Midwest. The Northeast Energy Efficiency Partnerships (NEEP) identifies ccASHPs and this program will promote the installation of ccASHPs to meet our climate heating needs and provide a whole home heating solution.

This program will incentivize the purchase of ccASHPs, ground-source or geothermal heat pumps and heat pump water heaters. A custom component will be utilized for larger

³ NYS Clean Heat Program Manual and Implementation Plan

⁴ In the Matter of Electric Public Utilities and Gas Public Utilities Offering Energy Efficiency and Conservation Programs, issued June 10, 2020

⁵ Department of Energy

commercial projects not eligible under the prescriptive rebate schedule. Heat pump technology can provide customers with the following:

- Less volatile annual energy bills, especially advantageous for customers with fixed, low, or moderate incomes and service-oriented institutions like nonprofits, schools, community centers, and houses of worship.
- Greater comfort and health because of added air conditioning and improved indoor air quality delivered by emissions-free technology.
- A long-term solution to heating and cooling needs that is easier to maintain than fossil fuel alternatives.

Up-front rebates via a midstream delivery mechanism utilizing a network of trade allies will also be offered to increase stocking patterns of heat pump technology and to reduce initial costs.

The program is designed to:

- Provide incentives for heat pump technology utilized for space heating and/or water heating.
- Provide midstream incentives to contractors and/or distributors to increase adoption
 of energy efficient heat pump technology as an alternative to fossil fuel heating
 equipment.
- Ensure the participation process is clear, easy to understand and simple for the customer and contractor.

This program will increase adoption of heat pump equipment by harnessing the contractor-customer relationship to positively impact the entire sales process surrounding heat pump equipment, from education and awareness of customers, engagement with trade ally contractors and equipment distributors and retailers, and provide access to no or low cost financing.

To launch this program, RECO will utilize its third-party implementation contractor in its O&R service territory to assist with the administration, oversight, and delivery of the program. Activities will include efforts to raise awareness of the program, 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 heat pump equipment through the program. Customer engagement and sales channels may include:

- Midstream Rebates: RECO will pursue a midstream rebate component to encourage the purchase of heat pump equipment. A third-party implementation contractor will work with distributors or manufacturers to assure that measures are available. Midstream rebates encourage market transformation and wider availability of heat pump equipment. Products that are rebated via a midstream approach may be passed on or discounted to the customer.
- **Trade Allies:** The implementation contractor will establish a network of trade allies to promote the program with a consistent experience to the customer where applicable. The trade ally network will consist of qualified HVAC installation contractors, designers, ground-loop drillers, and other trade service professionals who meet all applicable program 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.

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

- Heat pump distributors and manufacturers
- HVAC contractors
- General contractors and other trade service professionals

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

The target market for this program will be all customers served by RECO. The program is focused on promoting the sale and installation of heat pump equipment across all major residential, multi-family, and commercial end-use categories, and can be easily promoted to program allies, trade allies and customers via prescriptive or custom rebates. Technologies incentivized through this program include air source heat pumps (mini-split or central), ground source heat pumps and desuperheaters, and heat pump water heaters.

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)

RECO and/or the third-party implementation contractor 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. Distributors, manufacturers, and trade allies will be contacted to develop networks and promote involvement in the program where applicable. RECO will also look to leverage the behavior program for 'warm leads' into the program through both the home energy reports and online audit tool.

Targeting and promotion within this program will be enabled through intelligence gained through other programs or offerings, primarily behavioral HERs, HPwES, and the Efficient Products program. RECO will explore opportunities to provide customized information to customers with prioritized action items, to maximize availability and uptake.

The market development effort includes support for training and qualification of contractors, processes to assure quality installations, and marketing and education to help customers understand and select among options and to operate systems optimally. A combination of strategies will be used to train and support 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. Access to financing will also help mitigate the up-front cost barrier.
- Customer Awareness and Engagement: Customers may not be aware of the benefits of installing heat pump equipment and realize the technology as a whole home or building heat solution and lack the time and resources to pursue efficient equipment when replacing existing equipment. To address this barrier, RECO and its implementation contractor 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, RECO will 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 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: RECO 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.

RECO 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 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, RECO will cross-promote programs to spread awareness of the range of efficiency opportunities proposed in this plan.

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

A third-party implementation contractor will be responsible for identifying and engaging contractors and distributors dealing in heat pump equipment to on-board them with the program vision, eligible products, rebates, and ways to participate. Additionally, the third-party implementation contractor will engage trade allies, including local HVAC and other contractors to educate them on program benefits and build a trade ally network which will reliably install heat pump equipment for participating customers. The third-party implementation contractor 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.

To select qualified third-party implementation contractors to complement the existing trade ally network from its O&R program, RECO will prioritize criteria including but not limited to:

- Experience delivering similar programs or initiatives
- Resources and marketing strength
- 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. RECO will perform customer satisfaction and other quality
 assurance and quality control activities to monitor, ensure program delivery and verify quality
 standards are met.

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

RECO proposes 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 A, Table 4 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
- Midstream incentives to distributors or manufacturers to encourage them to stock and promote heat pumps or to provide product incentives at time of purchase

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.

Customer Financing Options (MFR II.a.vi)

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

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

Refer to Appendix F for a description of how RECO will provide for customers to access their energy data.

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

New York State Electric Utilities and the Department of Public Service Staff recently revised the New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs⁷, or the NYS

⁷ New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs – Residential, Multi-Family, and Commercial/Industrial Measures, Version 8, Issue Date – July 31, 2020

Technical Resource Manual, to include the overall annual and lifetime fuel energy savings of heat pumps as a strategic beneficial electrification measure. RECO has used the NY TRM to estimate the cost-effectiveness and is proposing to use the NY TRM when calculating energy savings. Refer to Appendix C for the Summary of Participation and Energy Savings associated with this program.

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

Refer to Appendix D for the Summary of Clean Heat Program Budget and Cost Categories.

Proposed Quality Control Standards and Remediation Policies (MFR II.b.i)

Refer to Appendix H for the Summary of Quality Control Standards and Remediation Policies for this program and remediation policy.

PEAK DEMAND REDUCTION PROGRAM - PILOT (MFR II.a.i)

RECO will offer a peak demand response ("DR") pilot, emulating the existing programs that operate in the Company's New York service territory. The pilot will include a Bring Your Own Thermostat ("BYOT") program for residential and small commercial customers that are eligible to participate in the Company's C&I Direct Install Program, a behavioral DR component for residential customers, and a Commercial System Relief Program ("CSRP") option for commercial customers. The BYOT program will remotely control central heat pump and central air conditioning ("AC") equipment in residential customers' homes and small businesses during peak shaving or critical contingency events. The behavioral DR program will educate and engage residential customers, utilizing data analytics to provide personalized usage and demand history to establish an additional peak shaving resource. CSRP will serve as a peak shaving program that can be called on a day-ahead basis when the day-ahead forecast load approaches the Company's forecasted summer electric system peak.

These programs will provide incentives for reducing demand when called upon and will be used in conjunction with energy efficiency ("EE") programs to provide a holistic approach to customer engagement and program offerings. The BYOT program will leverage the Company's online marketplace and will enable combining rebates on smart thermostats from EE programs, resulting in reduced costs for the customer and additional benefits for both the customer and utility. Similarly, the behavioral DR program provides a no-cost opportunity for customers seeking to utilize billing and usage data and an educational and cost-saving resource. RECO will utilize CSRP to enhance the suite of available programs to commercial customers, seeking to pair DR with EE when possible and providing commercial customers with another revenue stream, and the utility with demand response resources. CSRP participants will have the opportunity to enroll directly, or through an aggregator/third-party energy supplier as part of an aggregation network.

The program is designed to:

- Provide incentives for products and mechanisms that reduce energy use during peak times and facilitate the creation of holistic EE and DR programs that can be seamlessly paired together.
- Encourage residential and commercial customers to actively engage with their energy usage, providing opportunities for bill-savings and the creation of additional revenue streams.
- Provide a marketing mechanism for retailer and aggregators/third-party energy suppliers to promote demand response opportunities and/or products to end users.
- Ensure the participation process is clear, easy to understand and simple for the customer and aggregator/third-party energy supplier.
- Provide an additional opportunity for the online marketplace, which will streamline the customer journey, pair EE and DR rebates, and reduce up-front costs for smart thermostats.
- 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, helping to increase comfort and reduce energy burden.

The utilities will use their brand and customer outreach infrastructure to increase the availability, awareness, and customer uptake of demand response-enabled products and opportunities. Access to financing will be available in accordance with Appendix B, Table 4.

RECO staff and/or a third-party implementation contractor(s) will assist with the administration, oversight, and delivery of the program. RECO will explore the selection of a Demand Response Management System ("DRMS") or Distributed Energy Resources Management System ("DERMS"), enabling the Company to manage residential and commercial resources, schedule and call demand

response events, analyze performance data, tailor program offerings and process payments, providing a streamlined, turnkey software platform for program management as the program matures.

- **Post Purchase (Downstream) BYOT Rebates:** Rebates will be made available to customers after they have made their purchase. Applications will be available online to submit electronically. See Appendix A, Table 5.
- Online Marketplace BYOT Rebates: Eligible smart-thermostats will be available for purchase on the online marketplace, and the platform may be expanded to include additional DR-capable devices, such as EV chargers, battery storage systems, etc. The Company will explore the viability of implementing instant rebates and auto-enrollment opportunities, which would enable a streamlined purchasing and enrollment process, resulting in an easy and intuitive customer experience. Customers will also be able to purchase additional energy efficient appliances and bundle them, which may make purchases eligible for no-to-low interest financing options. See Appendix A, Table 5.
- Behavioral Messaging: Behavioral peak demand messaging engages customers with timely,
 personalized communications that motivate them to reduce energy demand during the most
 critical hours of the year. Behavioral peak demand programs are designed to deliver behavioral
 prompts and tools to engage customers to reduce consumption during the limited duration of the
 system peak.
- **CSRP Rebates:** RECO will pay commercial customers or third-party aggregators/energy service providers a monthly reservation payment from May September, which will serve as the "Capability Period", and any applicable performance payments. Reservation payments will be calculated based on load reduction pledge, performance factor, and a fixed \$/kW calculation. Performance payments will be calculated on actual load reduction during an event and a fixed \$/kWh calculation. See Appendix A, Table 5.
- **Trade Allies:** RECO will establish and leverage a network of trade allies to install thermostats at a fixed rate for customers that are unable to do so themselves.

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

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

The target market for this program will be all electric customers served by RECO. The residential component is focused on promoting the sale and installation of program eligible smart thermostats that control a central heat pump or central AC unit and are connected to WiFi, along with educating customers on behavioral adjustments that could result in bill savings. The commercial component is primarily focused on energy users that can shed at least 50 kW, though smaller commercial customers can be aggregated into a network so long as the network exceeds 50 kW in total pledges. These commercial customers will provide load relief through a variety of strategies, including shifting operation processes to off-peak times, curtailing usage, or utilizing to localized on-site generation.

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. Residential demand response offerings will be marketed to customers both independently and in conjunction with broad-based energy efficiency awareness campaigns, web-based engagement and information, digital advertising, social media, and hard-copy materials to promote awareness. Retailers and trade allies will be contacted directly and through trade associations to develop networks to promote eligible product availability, point-of-sale rebates, and installation services. The utilities will also look to leverage the behavioral EE initiative for 'warm leads' into the program through both the home energy reports and online audit tool. RECO staff will engage directly with commercial customers and aggregators/third-party energy service providers. The Company will leverage existing relationships and relationships developed through promoting C&I programs to promote CSRP.

Targeting and promotion within this program will be enabled through intelligence gained directly though DR marketing and through other EE offerings, including behavioral HERs, HPwES, activity in the Residential Efficient Products program, marketplace engagement, and commercial utilization of C&I programs. The utilities will explore opportunities to provide customized information to customers with prioritized action items, to maximize availability and uptake.

The primary market barriers that impact this program include:

- Lack of Familiarity with Demand Response Programs: Currently, the Office of Clean Energy does not offer demand response initiatives of incentives for either residential or commercial customers. Because of this, educating the customer base will be a key requirement in developing the DR portfolio. Furthermore, information regarding eligibility requirements must be conveyed in a simple, easy to understand manner to help facilitate a positive customer experience. (e.g., BYOT customers must have an eligible smart thermostat that controls a central heat pump or central AC unit, not just heat). The benefits and reasoning for offering DR programs also must be conveyed in an understandable manner, as customers are not as familiar with the concept of reducing peak demand.
- Customer Awareness and Engagement: Residential customers may not be aware of the benefits of installing efficient, demand response compatible thermostats and/or lack the time and resources to pursue and install smart thermostats. To address this barrier, the utilities will educate customers on the benefits of smart thermostats through targeted marketing, ensuring that incentives are easily accessible. Through outreach efforts, RECO will seek to partner with the trade ally community to ensure that customers that do not have the ability to install a smart thermostat themselves will have access to resources than can assist in the installation process. Behavioral peak demand messaging engages customers with timely, personalized communications to motivate them to reduce energy demand during the most critical hours of the year.
- Metering Infrastructure: Commercial customers will need interval metering, either through legacy interval meters or through AMI. The Company will continue its AMI deployment efforts to ensure commercial customers that wish to participate either have the necessary metering infrastructure or will be able to have it installed in a timely manner. Additionally, the Company will be able to assist customers with holistic energy usage strategies by utilizing interval data, providing a value-added service.

The utilities will seek to manage 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 demand response opportunities proposed in this plan.

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

RECO will seek to procure a DRMS or DERMS platform, enabling the Company to manage residential and commercial resources, schedule and call demand response events, analyze performance data, tailor program offerings and process payments, providing a streamlined, turnkey software platform for program management. Additionally, the company will market the program to both residential and commercial customers, both independently and in conjunction with EE program offerings, seeking to pair the EE and DR whenever possible. The Company will utilize customer, provide tailored Home Energy Reports, and assist commercial customers with forming comprehensive energy usage strategies. Eligible thermostats will be available in local retail stores, along with the utility's online marketplace, and the Company will pursue offering point-of-sales rebates, instant-rebates, and auto-enrollment mechanisms to simplify and streamline the customer experience. Additionally, RECO will establish a trade ally network which will provide installation services for smart thermostats for customers that are unable to install the devices themselves, reducing this barrier. RECO staff will also directly engage with commercial customers and aggregators/third-party energy suppliers to promote the program and help convey program benefits and potential revenue streams.

To select qualified installation 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 A, Table 5 for the Summary of Proposed Incentive Ranges for this program.

Customer Financing Options (MFR II.a.vi)

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

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

Refer to Appendix F for a description of how RECO will provide for customers to access their energy data.

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

Refer to Appendix C for the Summary of Participation and Energy Savings associated with this program.

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

Refer to Appendix D for the Summary of Efficient Product Program Budget and Cost Categories.

Proposed Quality Control Standards and Remediation Policies (MFR II.b.i)

Refer to Appendix H for the Summary of Quality Control Standards and Remediation Policies for this program and remediation policy.

Reporting Plan (MFR VIII)

RECO will provide quarterly reports, no later than 60 days following the end of each quarter, in a user-friendly, public report, with accompanying spreadsheet(s), that include 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:

- Energy savings: gross and net savings
- Number of program participants
 - o total, low-income, moderate-income, and small commercial
- Program expenditures

RECO will provide annual progress reports, no later than 75 days following the end of each program year, in 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.

RECO will provide triennial reports, no later than 90 days following the end of the third program year, that take 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.

RECO will provide evaluation studies, no later than 365 days following the end of the third program year, including a process and impact evaluations pursuant to requirements issued by the Board.

Overview of Utility Energy Efficiency Program Evaluation, Measurement and Verification Plan (MFR II.b.v., VI.a)

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 on a program-by-program basis in Appendix D.

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 Appendix D. These budgets were established with consideration of the industry standard of reserving 3% to 5% of budget for this type of work⁸, excluding the cost of financing and any anticipated costs associated with a Statewide Evaluator.

-

⁸ https://www.aceee.org/toolkit/2020/02/evaluation-measurement-verification

Overview of Workforce Development Provisions (MFR II.b.ii.)

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.

RECO 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 estimated at \$50,000 annually for RECO. 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.

EE as a Resource Potential

The Company provided initial estimates of the PJM Summer MW EE potential for each PJM delivery year as shown in Appendix E. These estimates were developed from the MWh savings modeled in the EE Plan, with the following additional assumptions and modifications.

- RECO identified and removed energy savings of all measures not eligible for PJM including:
 - o online audits
 - o appliance recycling
 - o building lighting controls and occupancy sensors
 - o smart thermostats, energy management systems or smart homes
 - o behavioral programs
 - o educational programs
- RECO assumes utilities retain all Utility EE program Capacity Rights to support their offered EE resources and to ensure no double counting of EE resources by third parties
- RECO will categorize all PJM eligible measures by PJM Program name
- RECO will segregate EE Plan MWh estimates provided for NJ fiscal year (July-June) into the applicable PJM delivery year (June-May)
- RECO will assign an initial savings load shape to each PJM eligible EE measure
- RECO will estimate the potential KW savings values for each measure for the PJM defined Summer and Winter periods using the appropriate load shape curve values including estimates for HVAC interactive factors and fuel type
- RECO included T & D line losses to adjust retail kW values to wholesale kW values

The Capacity Performance potential kW will be the lesser of the Summer or Winter kW values by installation period.

EE Offer Determination

The Board Order requires participation of EE Resources beginning with PY2 in the 2024/25 Base Residual Auction ("BRA"). All EE sell offer values and buy bids shall remain confidential as they are considered market sensitive information; however, they can be provided to BPU Staff via confidential submission and after the applicable auction results are available.

The Company proposes the following process to further evaluate the potential values provided in Appendix E to facilitate participation in the PJM Interconnection, L.L.C. ("PJM") Capacity Auctions. Adjustment of the PJM kW estimates for any Point of Sales (POS), Mid-Stream, and Up-Stream Programs. Measures from these programs require additional PJM EM&V and annual persistence studies to ensure offered EE measures are initially installed in the RECO load zone and remain in service during each applicable delivery year.

- The Initial EE Plan values are based on many assumptions including adoption/installation rates, more generic or composite measure savings curve shapes, initial incentives or rebate levels, line losses and current measure baselines. Adjustments to each must be considered for EE offers and subsequent true up of positions.
- Adjustments to recognize that EE resources have a limited offer duration of four years with additional installation period limitations.

EE Offers need to consider Capacity Market rule changes like the pending PJM Minimum Offer Price Rules ("MOPR") and Board's finalization of the Resource Adequacy activities. MOPR rules may necessitate the need for more aggressive BRA EE offers to ensure resources with significant floor prices clear vs. not clear an Incremental Auction or if the Board authorizes the use of an FRR Alternative Auction for the EDCs, PJM Capacity Market EE Offers would not be applicable.

EE Offers are made in Installed Capacity ("ICAP") values but clear in Unforced Capacity ("UCAP") values based on PJM's Planning Parameters for each specific auction. The UCAP values that clear an auction will remain the obligation for the delivery year regardless of subsequent Incremental Auction parameter changes. True ups may be needed during incremental auctions or at a minimum the Third Incremental Auction when parameters become final, to either purchase any shortfall resources or possibly sell any excess resources.

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

Table 1: Commercial and Industrial Incentives

Table 1: Commercial and Industrial Incentives Commercial and Industrial Incentives				
Measure ¹	Paid	Rebate Strategy ²	NJCEP Existing Rebate Strategy	
Lighting (Retrofit & New Construction)				
LED TROFFER LUMINAIRES				
New LED linear recessed troffer/panel for 2x2, 1x4 and 2x4 luminaires	Per Fixture	\$100	\$15 to \$25	
LED FLAT PANEL LUMINAIRES				
New LED flat panel for 2x2, 1x4 and 2x4 luminaires	Per Panel	\$50		
LED LINEAR AMBIENT/STAIRWELL LUMINAIRES				
New LED linear ambient luminaire	Per Foot	\$30	\$5 to \$7.50	
New LED stairwell luminaire	Per Fixture	\$100	\$45	
LED INTERIOR DIRECTIONAL LUMINAIRES				
New LED wall wash luminaire	Per Foot	\$30	\$55 per fixture	
New LED track/mono-point luminaire	Per Head	\$40	\$30	
LED DISPLAY CASE LUMINAIRES				
New LED display case luminaire, including refrigerator/freezer display	Per Fixture	\$50	\$15 to \$25	
LED HIGH/LOW BAY LUMINAIRES				
New LED high/low bay luminaire	Per Fixture	\$600	\$50 to \$150	
LED EXTERIOR LUMINAIRES		7 3 3 3	70000	
New LED luminaire - wall packs, flood lights, canopy, landscape	Per Fixture	\$600	\$50 to \$100	
LED RETROFIT KITS				
LED linear retrofit kit for 2x2, 1x4 and 2x4 fixtures	Per Fixture	\$45	\$15 to \$25	
LED integrated retrofit kit for 2x2, 1x4 and 2x4	D E'	Ф120	φ1 <i>5</i> , φ 0 <i>5</i>	
fixtures LED integrated flat panel retrofit kit for 2x2, 1x4 and 2x4 fixtures	Per Fixture Per Panel Kit	\$120 \$40	\$15 to \$25 \$15 to \$25	
LED retrofit kit for linear ambient luminaire	Per Foot	\$15	\$15 to \$40	
LED retrofit kit for high/low bay luminaires	Per Fixture	\$100	-	
LED retrofit kit for exterior luminaire	Per Fixture	\$100	-	
LED ENERGY STAR FIXTURES	1 CI TAXUIC	ψ100		
New LED ENERGY STAR LED fixture -				
recessed downlight, specialty, cove, under				
cabinet, vent fan, ceiling mount, etc.	Per Fixture	\$100	\$5 to \$15	

LED REPLACEMENT LAMPS			
LED linear replacement lamp with new LED			
driver for wall pack, flood light, canopy, recessed			
fixture.	Per Lamp	\$80	\$50 to \$150
LED mogul-screw base replacement for HID			
lamps and new external driver	Per Lamp	\$100	\$50 to \$150
LED SIGN LIGHTING			
Exterior/Dusk-to-Dawn, Interior and 24-hour	Per Watt		_
application	Reduced	\$2	
OTHER LIGHTING			
Exit Signs	Per Unit	\$23	-
Linear Fluorescent HE T8	Per Fixture	\$15	-
Street/Roadway and Area Lighting	Per Fixture	\$500	\$100 to \$150
Lighting Controls			
NETWORKED LIGHTING CONTROLS			
Networked lighting control system controlling efficient luminaires	Per Watt Controlled	\$0.60	-
Networked lighting control - fixture level control	Per Fixture	\$60	-
DUAL DAYLIGHT/OCCUPANCY CONTROLS			
Dual daylight & occupancy sensor (DOS)	Per Control	\$100	-
DAYLIGHT CONTROLS			
Daylight continuous dimming control	Per Control	\$100	\$45
OCCUPANCY/VACANCY CONTROLS		7 - 0 0	4.10
Vacancy or Occupancy control	Per Control	\$100	\$20
Unitary HVAC			
AIR CONDITIONERS & HEAT PUMPS			
Air Conditioning (AC) only - all sizes	Per Ton	\$250	\$72 to \$105
Heat Pumps - Air Source and Water Source - all			
sizes	Per Ton	\$250	\$40 to \$100
WATER-COOLED & EVAPORATIVE COOLING AIR CONDITIONERS			
<5.4 to <11.25 tons	Per Ton	\$250	-
\geq 11.25 to \geq 63.3 tons	Per Ton	\$250	-
GEOTHERMAL HEAT PUMPS			
Geothermal Heat Pumps – (Ground	Per Ton		
Source/Ground Water Source) Tier I or Tier II	Per Ton	\$500	\$80 to \$100
DUCTLESS, MINI SPLIT AIR CONDITIONERS OR HEAT PUMPS - ALL SIZES			
All sizes	Per Ton	\$150	-
PACKAGED TERMINAL AIR CONDITIONERS OR HEAT PUMPS			
All sizes	Per Ton	\$125	\$40
1 111 012.00	1011011	Ψ143	Ψτο

OTHER HVAC EQUIPMENT			
HVAC - Smart Thermostat	Per Unit	\$125 ³	-
Dual Enthalpy Economizer Controls	Per Unit	\$250	\$85 to \$170
ECM motors for HVAC Applications (fans/pumps) - refer to ECM motors table below			
Chillers			
Air-Cooled Chiller with Condenser	Per Ton	\$300	\$20, plus \$2.75 to \$3.50 performance
Water-Cooled Screw Chiller & Reciprocating Chillers	Per Ton	\$300	\$13 to \$30, plus \$2 to \$2.25 performance
Water-Cooled Centrifugal Chillers	Per Ton	\$300	\$8 to \$24, plus \$2 to \$2.25 performance
Chillers with a VFD			
Air-Cooled Chiller with Condenser	Per Ton	\$300	\$90 to \$92, plus \$4.00 performance
Water-Cooled Screw and Reciprocating Chillers	Per Ton	\$300	\$40 to \$44, plus \$2 to \$2.50 performance
Water-Cooled Centrifugal Chillers	Per Ton	\$300	\$20 to \$30, plus \$2 to \$2.75 performance
Refrigeration			
Anti-Fog Film	Per Sq. Ft.	\$15	-
Anti-Sweat Heat Control	Per Door	\$50	\$50
ECM Evaporator Fan Motor, <1 hp	Per Unit	\$150	\$40
Evaporator/Compressor Controller	Per Cooler	\$1,000	-
Evaporator Fan Controller on Existing Shaded- Pole Motor	Per Unit	\$100	\$75
Night Covers - Open Reach-In Coolers	Per Case	\$500	-
Reach-In Door Closer	Per Unit	\$75	-
Refrigeration Display Case Doors on Open Display Case	Per Case	\$600	-
Gaskets	Per Ln Ft.	\$4	-
Strip Curtains for Walk-In Coolers and Freezers	Per Sq. Ft.	\$5	-
Refrigerator Case Light Sensor	Per Case	\$30	-
VFD - Variable Frequency Drives			
< 100 hp	Per HP	\$250	\$50 to \$100

>100 to <200	Per HP	\$50	\$35
ECM Motors			
<1 HP	Per unit	\$150	-
1 HP	Per unit	\$150	-
2 HP	Per unit	\$175	-
3-5 HP	Per unit	\$250	-
6-10 HP	Per unit	\$500	-
11+ HP	Per unit	\$750	-
Commercial Kitchen Equipment			
COMMERCIAL DISHWASHERS	Per Unit	\$1,500	\$400 to \$1500
COOKING EQUIPMENT			
Fat Fryers	Per Unit	\$250	\$200
Griddles	Per Unit	\$300	\$300
Insulated Holding Cabinets	Per Unit	\$400	\$200 to \$300
COMBINATION and CONVECTION OVENS			
Convection Ovens	Per Unit	\$400	\$350
Combination Ovens	Per Unit	\$1,200	\$750
STEAM COOKERS	Per Pan	\$150	-
OTHER FOOD SERVICE			
Energy Star Beverage Vending Machine	Per Unit	\$75	-
Food Warmers/Rethermalizer Well/Coffee Pots	Per Unit	\$200	-
Pre-Rinse Spray Valve	Per Unit	\$75	-
ICE MACHINES - CEE Tier I	Per Unit	\$200	\$50 to \$250
ICE MACHINES - CEE Tier II	Per Unit	\$300	\$100 to \$500
SOLID DOOR REACH-IN	Per Unit	***	4.50 4200
REFRIGERATORS		\$225	\$50 to \$200
SOLID DOOR REACH-IN FREEZERS GLASS DOOR REACH-IN	Per Unit	\$500	\$100 to \$600
REFRIGERATORS	Per Unit	\$150	\$75 to \$150
GLASS DOOR REACH-IN Freezers	Per Unit	\$300	\$200 to \$1000
COMMERICAL APPLIANCES	T CI CIII	ψ300	φ200 το φ1000
CLOTHES WASHER			
CEE Tier 1	Per Unit	\$100	-
CEE Tier 2	Per Unit	\$200	-
WATER HEATING		4200	
Heat Pump Water Heater - C&I	Per Unit	\$1,500	-
PLUG LOAD CONTROLS			
Personal Occupancy Sensor	Per Unit	\$20	-
Hotel Room HVAC Controls	Per Unit	\$90	-
Hotel Room HVAC/Receptacle Control	Per Unit	\$20	-
Smart Power Strip	Per Unit	\$20	-
Electric Vehicle Charger	Per Unit	\$50	_

Per Unit	\$75	-
Per Unit	\$125	-
Per Unit	\$25	-
Per Unit	\$25	-
Per kVA	\$40	-
Per Unit	\$25	-
Per PC Controlled	\$25	-
Per Unit	\$90	-
Per Unit	\$1,000	-
Per Unit	\$215	-
Per Unit	\$1,000	-
Per Ft of Fan Blade	\$25	-
Per Unit	\$60	-
Per Unit	\$1,000	-
Per acre	\$100	-
Per Unit	\$200	-
Per Unit	\$25	-
Per Unit	Refer to Residential Incentive Table	-
	"	-
	"	-
	"	-
Ter em		
Par Unit	Refer to Residential	-
	"	-
	"	-
	"	-
	"	-
	"	-
	"	-
	"	-
	"	-
	Per Unit Per Unit Per Vnit Per Vnit Per PC Controlled Per Unit Per Unit Per Unit Per Unit Per Unit Per Hof Fan Blade Per Unit Per Unit Per Unit Per Unit Per Ft of Fan Blade Per Unit Per Unit Per Unit	Per Unit \$125 Per Unit \$25 Per Unit \$25 Per kVA \$40 Per Unit \$25 Per PC Controlled \$25 Per Unit \$90 Per Unit \$1,000 Per Unit \$1,000 Per Unit \$1,000 Per Ft of Fan Blade \$25 Per Unit \$1,000 Per Unit \$1,000 Per Unit \$1,000 Per Unit \$215 Per Unit \$25 Per Unit \$25 Per Unit \$25 Per Unit \$200 Per Unit \$25 Refer to Residential Incentive Table Per Unit " Per Unit "

Compressed Air, Refrigeration, Data Center Equipment/Servers, HVAC/Chillers, HVAC Controls, Motors/VFD - Large Building Improvements, Process Improvements, Agricultural Lighting/Process, Custom Lighting	per kWh	Up to \$0.35	\$0.16 per kWh
ENERGY MANAGEMENT			
Retro-commissioning (including Virtual and Meter Data Commissioning)	per kWh	Up to \$0.35	-
HVAC TUNE UP			
Single compressor units	Per Unit	\$175	-
Multiple compressor units	Per Unit	\$250	-
PTAC, PTHP, Mini-Splits	Per Unit	\$75	-
BUILDING TUNE UP		Up to 70% of Project Cost	-
BUILDING OPERATIONS TRAINING		Up to 70% of the cost to attend qualified BOC training up to \$1000 per person.	-
ENGINEERED SOLUTIONS			
		Formula buy down based on payback	Formula buy down based on payback

¹The 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)

Table 2: Residential Incentives

Residential Incentives						
Program	Program			NJCEP Existing Rebate Strategy		
	LED Lamps	Up to \$5 std Up to \$7 special	Up to \$3 std Up to \$5 special			
		LED Fixtures	Up to \$10	Up to \$8		
Efficient		Occupancy Sensors	Up to \$7	-		
Products		LED Holiday Lights	Up to \$5	-		
		Ceiling Fans	Up to \$35	-		
		LED Table/Desk Lamps	Up to \$15	-		
		Clothes Washer	Up to \$100	Up to \$75		

²All rebates will be offered equal to or less than the "Up to" value

³The total rebate value for a smart thermostat will be up to \$125 total between both fuel utilities

Clothes Dryer	Up to \$300	Up to \$300
Refrigerator	Up to \$100	Up to \$75
Freezers	Up to \$75	-
Dishwasher	Up to \$25	-
Induction Cooktop Stove	Up to \$25	-
Air Purifier / Cleaner	Up to \$50	Up to \$50
Room A/C Unit	Up to \$30	Up to \$15
Dehumidifier	Up to \$35	Up to \$25
Heat Pump Water Heater	Up to \$1,000	Up to \$750
Smart Thermostats	Up to \$125 ³	-
Pool Pump	Up to \$500	-
Sound Bars	Up to \$20	-
Water Cooler	Up to \$25	-
Electric Vehicle Charger	Up to \$50	-
Monitors	Up to \$25	-
Computers	Up to \$25	-
Imaging	Up to \$25	-
Smart Strip Plug Outlets	Up to \$40	Up to \$40
TVs	Up to \$50	-
Smart Home	Up to \$10	-
Refrigerator Recycling	Up to \$100	Up to \$50
Freezer Recycling	Up to \$100	Up to \$50
Room A/C Unit Recycling	Up to \$35	Up to \$25
Dehumidifier Recycling	Up to \$35	Up to \$25
EE Kits	Up to \$60	-
Central Air Conditioning	Up to \$500	Up to \$500
Air Source Heat Pump	Up to \$1,000	Up to \$1,000
Geothermal Heat Pump	Up to \$1500	-
Ductless Mini- Split Heat Pump	Up to \$400	-
Ductless Mini Split A/C	Up to \$500	Up to \$500

		Furnace Fans (ECM)	Up to \$100	-
		PTAC - CEE Tier 2 - Multi Family	Up to \$50	-
		PTHP - CEE Tier 2- Multi Family	Up to \$125	-
		Circulating Pump	Up to \$75	-
		Bathroom Fan	Up to \$20	-
		HVAC Maintenance	Up to \$100	-
		HVAC Quality Install	Up to \$450	-
	Home Performance with Energy Star (HPwES)	Home Performance with Energy Star	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	Tiered incentive cash rebate of 50% of the costs of the measures used to calculate TES up to \$4,000.
Existing Homes	Quick Home Energy Checkup (QHEC)	Quick Home Energy Checkup (QHEC)	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	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	-

¹The 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)

²All rebates will be offered equal to or less than the "Up to" value

³The total rebate value for a smart thermostat will be up to \$125 total between both fuel utilities

Table 3: Multi-Family Incentives

Multi-Fami	u-Famuy Incen ly			
Program	Program	Measure ¹	Rebate Strategy ²	NJCEP Existing Rebate Strategy
		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.	Same values offered currently in the HPwES Program.
Multi- Family	Multi- Family	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 - Engineered Solutions	MF - Engineered Solutions	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.

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

Table 4: Clean Heat Beneficial Electrification Pilot Program Incentives

	Clean Heat Beneficial Electrification Pilot Program						
Program	Measure	Paid	Rebate Strategy	NJCEP Existing Rebate Strategy ⁹			
Clean Heat Beneficial	Cold Climate Mini-Split Air Source Heat Pump (ASHP) - partial load heating	Per outdoor unit	\$500	Up to \$1,000			
Electrification Pilot Program	Cold Climate Mini-Split Air Source Heat Pump (ASHP) - full load heating	Per 10,000 Btu/h of maximum heating capacity at 5 deg F according to NEEP	\$1,600	Up to \$1,000			
	Ground Source Heat Pump (GSHP)	Per 10,000 Btu/h of full load heating capacity as certified by AHRI	\$2,000				
	Residential Heat Pump Water Heater (up to 120 Gallons)	Per unit	\$1,000	Up to \$750			
	Custom (VRF, PTHP)	Per MMBtu of annual energy savings	\$80				
	Commercial Heat Pump Water Heater (above 120 Gallons)	Per unit	\$80				
	GSHP Desuperheater	Per unit	\$150				
	Dedicated Domestic Hot Water (DHW) Water to Water Heat Pump (WWHP)	Per unit	\$1,000				
	Simultaneous Installation of Space Heating and Water Heating	Additional	\$250				

-

⁹ Existing NJCEP rebates are per unit

Table 5: Peak Demand Reduction Pilot Program Incentives

	Peak Demand Reduction Pilot Program Peak Demand Reduction Pilot Program					
Program	Program	Measure	Paid	Rebate Strategy ²	NJCEP Existing Rebate Strategy	
	Residential (BYOT)	Smart thermostats	Per eligible thermostat	\$85 per eligible thermostat (must have WiFi connection and control a central heat pump/central AC)	N/A	
Peak Demand Reduction Pilot Program	Commercial (CSRP)	Demand reduction	Per kW/kWh	Reservation Payment customers receive \$3 per kW-month pledged * Performance Factor (May – Sept) Performance Payment is \$0.50 per kWh provided during an Event Performance Factor is calculated by kW pledged/kW reduced, not to exceed 1.0, and will carry over until the next event. All Performance Factors begin at 0.5	N/A	

APPENDIX B - Customer Financing Options (MFR II.a.vi)

Financing Options

Program	Eligibility	Terms			
		Maximum to be financed	Up to \$15,000		
Efficient Products	Efficient program eligible HVAC and water heating equipment	Minimum to be financed	As low as \$2,500		
	and water reasons equipment	Interest Rate	As low as 0%		
		Term	Up to 7 years		
		Maximum to be financed	Up to \$15,000		
Existing Homes	Comprehensive HPwES projects recommended by the program audit	Minimum to be finances	As low as \$2,500		
	l loosimionada ey ino program addit	Interest Rate	As low as 0%		
		Term	Up to 10 years		
	Prescriptive/Custom equipment, retrofit and comprehensive projects, Engineered Solutions projects	Maximum to be financed	Up to \$3,000/unit with a maximum of \$250,000/project		
Multifamily		Minimum to be financed	As low as \$2,500		
		Interest Rate	As low as 0%		
		Term	Up to 10 years, depending on eligibility		
	Balance of program eligible project costs	Maximum to be financed	Up to \$75,000		
Direct Install		Minimum to be financed	As low as \$2,500		
		Interest Rate	As low as 0%		
		Term	Up to 5 years		
	Prescriptive/Custom equipment, retrofit and comprehensive projects, Engineered Solutions projects	Maximum to be financed	Up to \$250,000		
Energy Solutions for Business		Minimum to be financed	As low as \$2,500		
		Interest Rate	As low as 0%		
		Term	Up to 5 years		
	Clean Heat eligible HVAC and water heating equipment	Maximum to be financed	Up to \$15,000		
Clean Heat Beneficial		Minimum to be financed	As low as \$2,500		
Electrification		Interest Rate	As low as 0%		
		Term	Up to 7 years		

<u>APPENDIX C (MFR II.A.I): – Projected Participants (MFR II.a.ix) and Energy Savings (MFR II.a.x) – Quantitative Performance Indicators (MFR VII.a,b.i-vii)</u>

Residential Efficient Products Program				
Metric	PY1	PY2	PY3	
Estimated Participants	1,480	1,911	2,505	
Net Annual Energy Savings (MWh)	3,185	4,113	5,392	
Net Annual Peak Demand Savings (kW)	554	796	1,045	
Net Lifetime Energy Savings (MWh)	35,705	45,940	60,222	
Net Lifetime Demand Savings (kW)	6,791	10,092	13,256	
NPV of UCT Net Benefits (\$)	755,722	1,413,890	2,051,117	
Net Lifetime Energy Savings Derived from Qualifying Low-Income Customers (MWh)	1,785	2,297	3,011	
Net Lifetime Energy Savings Derived from Qualifying Small Commercial Customers (MWh)	0	0	0	

Home Performance with Energy Star Program				
Metric	PY1	PY2	PY3	
Estimated Participants	564	729	954	
Net Annual Energy Savings (MWh)	562	726	951	
Net Annual Peak Demand Savings (kW)	166	215	281	
Net Lifetime Energy Savings (MWh)	9,673	12,503	16,362	
Net Lifetime Demand Savings (kW)	2,857	3,692	4,832	
NPV of UCT Net Benefits (\$)	81,985	181,769	283,775	
Net Lifetime Energy Savings Derived from Qualifying Low-Income Customers (MWh)	484	625	818	
Net Lifetime Energy Savings Derived from Qualifying Small Commercial Customers (MWh)	0	0	0	

Multi-Family Program				
Metric	PY1	PY2	PY3	
Estimated Participants	22	28	37	
Net Annual Energy Savings (MWh)	268	346	453	
Net Annual Peak Demand Savings (kW)	32	40	53	
Net Lifetime Energy Savings (MWh)	1,697	2,160	2,854	
Net Lifetime Demand Savings (kW)	194	247	326	
NPV of UCT Net Benefits (\$)	(276,895)	(325,652)	(411,073)	
Net Lifetime Energy Savings Derived from Qualifying Low-Income Customers (MWh)	85	108	143	
Net Lifetime Energy Savings Derived from Qualifying Small Commercial Customers (MWh)	0	0	0	

Commercial and Industrial Direct Install Program			
Metric	PY1	PY2	PY3
Estimated Participants	80	103	135
Net Annual Energy Savings (MWh)	1,784	2,304	3,021
Net Annual Peak Demand Savings (kW)	204	262	344
Net Lifetime Energy Savings (MWh)	26,494	34,111	44,708
Net Lifetime Demand Savings (kW)	3,024	3,894	5,104
NPV of UCT Net Benefits (\$)	(71,596)	52,422	203,464
Net Lifetime Energy Savings Derived from Qualifying Low-Income Customers (MWh)	0	0	0
Net Lifetime Energy Savings Derived from Qualifying Small Commercial Customers (MWh)	26,494	34,111	44,708

Commercial and Industrial Rebate Program				
Metric	PY1	PY2	PY3	
Estimated Participants	166	214	280	
Net Annual Energy Savings (MWh)	3,123	4,033	5,286	
Net Annual Peak Demand Savings (kW)	740	957	1,270	
Net Lifetime Energy Savings (MWh)	37,996	49,251	64,561	
Net Lifetime Demand Savings (kW)	8,107	10,511	14,062	
NPV of UCT Net Benefits (\$)	1,060,859	1,515,673	2,132,243	
Net Lifetime Energy Savings Derived from Qualifying Low-Income Customers (MWh)	0	0	0	
Net Lifetime Energy Savings Derived from Qualifying Small Commercial Customers (MWh)	0	0	0	

Electric Energy Efficiency Portfolio Total				
Metric	PY1	PY2	PY3	
Estimated Participants	2,312	2,986	3,912	
Net Annual Energy Savings (MWh)	8,922	11,522	15,103	
Net Annual Peak Demand Savings (kW)	1,694	2,270	2,992	
Net Lifetime Energy Savings (MWh)	111,565	143,964	188,707	
Net Lifetime Demand Savings (kW)	20,973	28,436	37,579	
NPV of UCT Net Benefits (\$)	1,550,075	2,838,101	4,259,527	
Net Lifetime Energy Savings Derived from Qualifying Low-Income Customers (MWh)	2,354	3,030	3,972	
Net Lifetime Energy Savings Derived from Qualifying Small Commercial Customers (MWh)	26,494	34,111	44,708	

Clean Heat Beneficial Electrification Pilot Program			
Metric	PY1	PY2	PY3

Estimated Participants	116	144	179
Net Annual Energy Savings (MMBtu)	2,169	3,484	4,363
Net Annual Peak Demand Savings (kW)	19	30	38
Net Lifetime Energy Savings (MMBtu)	33,501	53,669	67,361
Net Lifetime Demand Savings (kW)	296	471	594
NPV of UCT Net Benefits (\$)	(399,944)	(588,225)	(727,274)
Net Lifetime Energy Savings Derived from Qualifying Low-Income Customers (MMBtu)	1,675	2,683	3,368
Net Lifetime Energy Savings Derived from Qualifying Small Commercial Customers (MMBtu)	0	0	0

Peak Demand Reduction Pilot Program				
Metric	PY1	PY2	PY3	
Estimated Participants	757	1,008	1,260	
Net Annual Energy Savings (MWh)	0	0	0	
Net Annual Peak Demand Savings (kW)	4,930	5,680	6,430	
Net Lifetime Energy Savings (MWh)	0	0	0	
Net Lifetime Demand Savings (kW)	4,930	5,680	6,430	
NPV of UCT Net Benefits (\$)	306,707	404,758	485,095	
Net Lifetime Energy Savings Derived from Qualifying Low-Income Customers (MWh)	0	0	0	
Net Lifetime Energy Savings Derived from Qualifying Small Commercial Customers (MWh)	0	0	0	

These programs are designed to achieve annual energy savings of 0.57% in 2021, 0.74% in 2022, and 0.97% in 2023, of the three-year average of RECO sales for 2017, 2018, and 2019 as established in BPU order. The program descriptions above provide the implementation plans to strategic initiative to achieve these targets.

Residential Efficient Products Program			
Cost Category	PY1	PY2	PY3
Capital Cost			
Utility Administration	\$87,000	\$88,863	\$90,772
Marketing	\$35,000	\$35,875	\$36,772
Outside Services	\$482,277	\$449,337	\$490,700
Incentives-Rebates	\$337,240	\$435,528	\$570,895
Incentives-Financing	\$41,968	\$54,199	\$71,045
Inspections and Quality Control	\$59,200	\$38,227	\$50,108
Evaluation	\$45,032	\$47,152	\$55,766
Total	\$1,087,717	\$1,149,182	\$1,366,057

Home Performance with Energy Star Program			
Cost Category	PY1	PY2	PY3
Capital Cost			
Utility Administration	\$60,900	\$62,204	\$63,540
Marketing	\$24,500	\$25,113	\$25,740
Outside Services	\$73,340	\$69,182	\$82,719
Incentives-Rebates	\$227,637	\$293,982	\$385,354
Incentives-Financing	\$68,291	\$88,195	\$115,606
Inspections and Quality Control	\$33,840	\$29,160	\$38,160
Evaluation	\$18,910	\$21,584	\$26,798
Total	\$507,418	\$589,419	\$737,918

Multi-Family Program			
Cost Category	PY1	PY2	PY3
Capital Cost			
Utility Administration	\$26,100	\$26,659	\$27,231
Marketing	\$10,500	\$10,763	\$11,032
Outside Services	\$66,381	\$60,195	\$70,939
Incentives-Rebates	\$211,444	\$273,069	\$357,942
Incentives-Financing	\$12,195	\$15,749	\$20,644
Inspections and Quality Control	\$13,200	\$17,047	\$22,346
Evaluation	\$14,743	\$17,448	\$22,027
Total	\$354,563	\$420,930	\$532,161

Commercial and Industrial Direct Install Program

Cost Category	PY1	PY2	PY3
Capital Cost			
Utility Administration	\$87,000	\$88,863	\$90,772
Marketing	\$35,000	\$35,875	\$36,772
Outside Services	\$274,231	\$256,259	\$256,259
Incentives-Rebates	\$713,736	\$921,753	\$1,208,244
Incentives-Financing	\$30,589	\$39,504	\$51,782
Inspections and Quality Control	\$4,800	\$4,133	\$5,417
Evaluation	\$50,165	\$58,810	\$71,886
Total	\$1,195,521	\$1,405,196	\$1,721,132

Commercial and Industrial Rebate Program			
Cost Category	PY1	PY2	PY3
Capital Cost			
Utility Administration	\$87,000	\$88,863	\$90,772
Marketing	\$35,000	\$35,875	\$36,772
Outside Services	\$180,716	\$182,321	\$223,056
Incentives-Rebates	\$546,454	\$705,717	\$925,062
Incentives-Financing	\$140,517	\$181,470	\$237,873
Inspections and Quality Control	\$19,211	\$19,256	\$25,241
Evaluation	\$39,077	\$46,441	\$58,541
Total	\$1,047,975	\$1,259,944	\$1,597,317

Electric Energy Efficiency Portfolio Total			
Cost Category	PY1	PY2	PY3
Capital Cost			
Utility Administration	\$348,000	\$355,450	\$363,086
Marketing	\$140,000	\$143,500	\$147,088
Outside Services	\$1,076,944	\$1,017,296	\$1,123,673
Incentives-Rebates	\$2,036,512	\$2,630,050	\$3,447,499
Incentives-Financing	\$293,559	\$379,117	\$496,950
Inspections and Quality Control	\$130,251	\$107,822	\$141,272
Evaluation	\$167,927	\$191,435	\$235,018
Total	\$4,193,193	\$4,824,671	\$5,954,585

Clean Heat Beneficial Electrification Pilot Program				
Cost Category	Cost Category PY1 PY2 PY3			
Capital Cost				
Utility Administration	\$30,000	\$30,750	\$31,519	

Marketing	\$20,000	\$20,500	\$21,013
Outside Services	\$77,057	\$99,236	\$120,302
Incentives-Rebates	\$231,485	\$374,582	\$468,254
Incentives-Financing	\$46,297	\$74,916	\$93,651
Inspections and Quality Control	\$6,960	\$2,880	\$3,580
Evaluation	\$16,448	\$23,758	\$29,010
Total	\$428,246	\$626,622	\$767,328

Peak Demand Reduction Pilot Program			
Cost Category	PY1	PY2	PY3
Capital Cost			
Utility Administration	\$30,000	\$30,750	\$31,519
Marketing	\$20,000	\$20,000	\$20,000
Outside Services	\$193,750	\$180,000	\$186,250
Incentives-Rebates	\$113,750	\$145,000	\$176,250
Incentives-Financing	\$0	\$0	\$0
Inspections and Quality Control	\$5,000	\$5,000	\$5,000
Evaluation	\$16,313	\$17,134	\$18,856
Total	\$378,813	\$397,884	\$437,875

APPENDIX E: – PJM Summer MW EE Potential

EE as a Resource - Summer			
	2021	2022	2023
Total EE Demand Reductions (MW)	1.9	4.5	7.8
Less Ineligible PJM Measure Demand Reductions (MW)	0.2	0.5	0.7
Total Bid Target Reduction (MW)	1.7	4.0	7.1

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

General: RECO shares granular usage data with customers (collected via AMI) through Home Energy Reports ("HERs"), weekly AMI reports, and customers' My Account portal. This usage data provides customers visibility into their own unique usage patterns and gives them the information to help them make more informed decisions to reduce their utility bills through active management of their usage. Customers can play an active role in providing benefits to the electric grid by managing their consumption to support peak load reduction. Further, making customer data available to third parties, with the appropriate customer consent and subject to all applicable privacy and security provisions, provides solar developers and other DER providers with the data needed to market and manage DERs of their customers.

GBD: The Company implemented Green Button Download in May 2016 giving customers the ability to obtain and analyze up to 13 months of energy use data in a simple spreadsheet. This data can be used by customers for a variety of purposes, such as measuring EE impacts, and analyzing and reviewing solutions to cost-effectively manage their energy usage. In addition, it provides the customer the ability to download their energy usage data in an Extensible Markup Language ("XML") standard format file, making it easier for customers to analyze their data because the XML format is a default file type for Microsoft programs (i.e., Word, PowerPoint, and Excel). Customers can choose to share this information with third-parties enabling them to tailor their energy savings solutions based on the customer's needs or preferences.

GBC: As part of the Company's AMI deployment and the accompanying Customer Engagement Plan, the Company is improving its customer data sharing capabilities through the implementation of GBC. GBC is a national data sharing standard that allows customers to authorize registered third-parties to access the customer's energy data through an automated process in machine-readable format. It provides a reliable protocol for customer authorization, data transfer, data formatting, and data exchange.

Share My Data leverages the more granular data available from AMI to allow customers to authorize registered third-parties to access their energy data through an automated process in machine-readable

APPENDIX G - NJ Statewide Coordinator Role and Responsibilities for Plan Development

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)

<u>APPENDIX H – Quality Control Standards and Remediation Policy (MFR II.b.i)</u>

Residential Efficient Products Program

Customer Rebate Initiative

Applications and tracking will include information necessary to verify that the customer and equipment information submitted meet the program qualification criteria. This includes confirming the customer account, eligibility information and sales data, including equipment make and model numbers, to meet rebate requirements. In addition, unique equipment serial numbers are verified to prevent multiple rebates issued for the same equipment. RECO and third-party contractors will perform on-site verification inspections for at least 10 percent of participants to confirm that equipment is purchased and installed as required to meet the program guidelines. Data tracking software will streamline rebate processing, increase productivity, and minimize reporting inaccuracies.

Behavioral Initiative

RECO will provide quality assurance on claimed savings by using the control group to quantify the savings of the treatment group. This is performed using an industry accepted methodology. Further, RECO will develop po10tial metrics to track the success of the program with the vendor. If total savings, as measured by the impact evaluation comparing the control and treatment groups, are falling short of expected results, RECO will work with the selected vendor to improve performance and examine other alternatives or enhancements to the program.

Midstream Initiative

RECO will work with its retailer/distributor partners so that only quality Energy Star® or DLC certified bulbs are incentivized, and that the partner is able to track all bulbs purchased through the initiative. Energy savings products will be added over time to move rebates upstream, streamline customer participation, and to increase stocking patterns of energy saving equipment. The third-party implementation vendors visit stores to verify that signage communicates program participation and tracks data points necessary to calculate energy savings for products rebated in midstream efforts.

Home Performance with Energy Star / Multi-Family / C&I Direct Install Program

RECO will conduct a sampling of pre- and post- on-site inspections to confirm that contractor surveys are accurate, and that equipment installed meets the program eligibility guidelines. RECO internal staff and third-party contractors will perform on-site inspections designed to gauge both customer satisfaction and address any issues with program compliance. Data tracking software will help streamline rebate processing, increase productivity, and minimize reporting inaccuracies.

Commercial & Industrial Rebate Program

Downstream Rebate Initiative

Applications and tracking will include information necessary to verify that the customer and equipment information submitted meet the program qualification criteria. This includes confirming the customer account, eligibility information and sales data, including equipment make and model numbers, to meet rebate requirements. In addition, unique equipment serial numbers are verified to prevent multiple rebates issued for the same equipment. RECO and third-party contractors will perform on-site verification inspections for at least 10% percent of participants to confirm that equipment is purchased and installed as

required to meet the program guidelines. Data tracking software will streamline rebate processing, increase productivity, and minimize reporting inaccuracies.

Midstream Initiative

RECO will work with its retailer/distributor partners so that Energy Star® or better HVAC equipment is incentivized, and that the partner is able to track all equipment purchased through the program. RECO and third-party contractors will perform on-site verification inspections for at least 10% of participants to confirm that equipment is purchased and installed as required to meet program guidelines. Data tracking software will streamline rebate processing, increase productivity, and minimize reporting inaccuracies.

Custom Initiative

RECO will conduct pre-inspections on all custom projects to determine the existing baseline conditions and post-inspections to determine if the project was installed as approved. Post-inspections will be performed on a minimum of 10 percent of all other prescriptive projects. RECO staff and third-party contractors will be engaged in performing on-site inspection designed to gauge both customer satisfaction and address any issues with program compliance. Data tracking software will streamline rebate processing, increase productivity, and minimize reporting inaccuracies.

Clean Heat Beneficial Electrification Program - Pilot

Applications and tracking will include information necessary to verify that the customer and equipment information submitted meet the program qualification criteria. This includes confirming the customer account, eligibility information and sales data, including equipment make and model numbers, to meet rebate requirements. In addition, unique equipment serial numbers are verified to prevent multiple rebates issued for the same equipment. RECO and third-party contractors will perform on-site verification inspections for at least 10% percent of participants to confirm that equipment is purchased and installed as required to meet the program guidelines. Data tracking software will streamline rebate processing, increase productivity, and minimize reporting inaccuracies.

Peak Demand Reduction Program - Pilot

Bring Your Own Thermostat Program

Applications and tracking will include information necessary to verify that the customer and equipment information submitted meet the program qualification criteria. This includes confirming the customer account, eligibility information and sales data, including equipment make and model numbers, to meet rebate requirements. In addition, unique equipment serial numbers are verified to prevent multiple rebates issued for the same equipment. The Company will clearly display eligibility requirement with regards to central heat pump/central AC systems. Data tracking software will streamline rebate processing, increase productivity, and minimize reporting inaccuracies. Tech support will be available directly through the the implementation contractor.

Behavioral Initiative

RECO will provide quality assurance on claimed savings by using the control group to quantify the savings of the treatment group. This is performed using an industry accepted methodology. Further, RECO will develop po10tial metrics to track the success of the program with the vendor. If total savings, as measured by the impact evaluation comparing the control and treatment groups, are falling short of expected results, RECO will work with the selected vendor to improve performance and examine other alternatives or enhancements to the program.

Commercial System Relief Program Initiative

RECO will work with direct participants and aggregators/third-party energy suppliers to analyze baseload data and demand response options and opportunities. RECO will confirm customer account and eligibility requirements and data tracking software will streamline rebate processing, increase productivity, and minimize reporting inaccuracies.

Remediation Policy for all Programs

RECO will address all customer complaints expeditiously and all contractors will inform the Company within 24 hours of any customer complaints received during normal business hours.

APPENDIX I: - Benefit Cost Analysis (MFR II.b.iv)

New Jersey Cost Test – Core and Pilot Programs

EE Portfolio NJCT Ratios	
Program	Ratio
Residential Efficient Products Program	4.05
Home Performance with Energy Star Program	0.71
Multi-Family Program	1.19
Small Business Direct Install Program	2.10
Commercial and Industrial Rebate Program	2.58
Electric Portfolio Total	1.58

Peak Demand Reduction Portfolio NJCT Ratio	
Program	Ratio
Peak Demand Reduction Program	2.07

Clean Heat Beneficial Electrification Portfolio NJCT Ratio	
Program	Ratio
Clean Heat Beneficial Electrification Program	1.17

Societal Cost Test, Total Resource Cost Test, Program Administrator Cost Test, Ratepayer Impact Measure Test Results

EE Portfolio SCT Ratios	
Program	Ratio
Residential Efficient Products Program	3.95
Home Performance with Energy Star Program	0.70
Multi-Family Program	1.18
Small Business Direct Install Program	2.04
Commercial and Industrial Rebate Program	2.50
Electric Portfolio Total	1.54

EE Portfolio TRC Ratios	
Program	Ratio
Residential Efficient Products Program	2.14
Home Performance with Energy Star Program	0.36
Multi-Family Program	0.57
Small Business Direct Install Program	1.11
Commercial and Industrial Rebate Program	1.51
Electric Portfolio Total	0.84

EE Portfolio PACT Ratios	
Program	Ratio
Residential Efficient Products Program	2.15
Home Performance with Energy Star Program	1.29
Multi-Family Program	0.25
Small Business Direct Install Program	1.04
Commercial and Industrial Rebate Program	2.18
Electric Portfolio Total	1.56

EE Portfolio PCT Ratios	
Program	Ratio
Residential Efficient Products Program	5.74
Home Performance with Energy Star Program	0.17
Multi-Family Program	1.82
Small Business Direct Install Program	2.40
Commercial and Industrial Rebate Program	2.98
Electric Portfolio Total	1.20

EE Portfolio RIM Ratios	
Program	Ratio
Residential Efficient Products Program	0.67
Home Performance with Energy Star Program	0.61
Multi-Family Program	0.19
Small Business Direct Install Program	0.44
Commercial and Industrial Rebate Program	0.68
Electric Portfolio Total	0.59

Peak Demand Reduction Portfolio Benefit-Cost Ratios	
Benefit-Cost Test	Ratio
Societal Cost Test	2.07
Total Resource Cost Test	1.97
Program Administrator Cost Test	1.97
Participant Cost Test	1.00
Ratepayer Impact Measure Test	1.97

Clean Heat Beneficial Electrification Portfolio Benefit-Cost	
Ratios	
Benefit-Cost Test Ratios	Ratio
Societal Cost Test	1.17
Total Resource Cost Test	0.63
Program Administrator Cost Test	0.08
Participant Cost Test	4.35
Ratepayer Impact Measure Test	0.08

RATE AND FORECASTING PANEL

EXHIBIT RFP

TITLE OF SCHEDULES

RFP-1, Schedule 1	RECO CIP - Calculation of RPC Targets
RFP-1, Schedule 2	RECO CIP - Illustrative Reconciliation
RFP-2, Schedule 1	Calculation of Surcharges
RFP-2, Schedule 2	Monthly Billing Comparisons - Year 1
RFP-2, Schedule 3	Monthly Billing Comparisons - Year 2
RFP-2, Schedule 4	Monthly Billing Comparisons - Year 3

Revenue Per Customer Factor - SC Nos. 1, 3, and 5

	Distribution		RPC Factor
<u>Month</u>	Revenue (1)	# of Customers	\$ / Customer
Jul	5,031,778	64,224	78.35
Aug	5,072,760	64,296	78.90
Sep	4,226,012	64,307	65.72
Oct	2,868,715	64,050	44.79
Nov	2,758,604	64,119	43.02
Dec	3,078,793	64,127	48.01
Jan	3,648,133	64,163	56.86
Feb	3,125,538	64,214	48.67
Mar	2,783,919	64,248	43.33
Apr	2,596,693	64,203	40.45
May	2,657,111	64,223	41.37
Jun	3,427,074	64,220	53.36

^{1.} Distribution Revenue based on billing determinants for the 12 ME September 2019 approved in the Company's base rate proceeding in BPU Docket No. ER19050552. Distribution Revenue is defined as revenue from the customer charge, the distribution usage charges, and the distribution demand charges.

Revenue Per Customer Factor - SC No. 2 - Secondary

	Distribution		RPC Factor
<u>Month</u>	Revenue (1)	# of Customers	\$ / Customer
Jul	2,238,237	8,618	259.72
Aug	2,592,913	8,620	300.80
Sep	2,194,831	8,611	254.89
Oct	1,812,651	8,605	210.65
Nov	1,987,301	8,624	230.44
Dec	2,090,465	8,631	242.20
Jan	2,044,529	8,631	236.88
Feb	1,712,931	8,626	198.58
Mar	1,743,177	8,622	202.18
Apr	1,949,902	8,611	226.44
May	2,084,956	8,617	241.96
Jun	1,989,107	8,619	230.78

^{1.} Distribution Revenue based on billing determinants for the 12 ME September 2019 approved in the Company's base rate proceeding in BPU Docket No. ER19050552. Distribution Revenue is defined as revenue from the customer charge, the distribution usage charges, and the distribution demand charges.

Revenue Per Customer Factor - SC No. 2 - Primary

	Distribution		RPC Factor
<u>Month</u>	Revenue (1)	# of Customers	<pre>\$ / Customer</pre>
Jul	220,036	78	2,820.97
Aug	225,922	78	2,896.44
Sep	165,166	77	2,145.01
Oct	246,633	76	3,245.17
Nov	260,107	76	3,422.46
Dec	233,407	76	3,071.14
Jan	219,612	75	2,928.16
Feb	187,978	74	2,540.24
Mar(2)	169,539	74	2,291.07
Apr	210,826	75	2,811.01
May	286,412	76	3,768.58
Jun	230,319	77	2,991.16

- 1. Distribution Revenue based on billing determinants for the 12 ME September 2019 approved in the Company's base rate proceeding in BPU Docket No. ER19050552. Distribution Revenue is defined as revenue from the customer charge, the distribution usage charges, and the distribution demand charges.
- 2. March includes a normalizing adjustment to remove out of period revenue adjustments.

Illustrative Reconciliation - Revenue Per Customer - SC Nos. 1, 3, and 5

	Actual Customer	RPC Factor	Target	Actual	(Over)/Under	Interest	(Over)/Under
<u>Month</u>	<u>Count</u>	\$ / Customer	<u>Revenue</u>	Revenue	Collection	<u>Rate</u>	with Interest
Jul-21	64,498	78.35	\$5,053,392	\$5,051,000	\$2,392	2.50%	\$2,395
Aug-21	64,570	78.90	5,094,571	5,242,000	(147,430)	3.27%	(147,718)
Sep-21	64,581	65.72	4,244,264	4,390,000	(145,736)	3.26%	(146,020)
Oct-21	64,627	44.79	2,894,644	3,125,000	(230,356)	3.42%	(230,828)
Nov-21	64,664	43.02	2,781,853	2,512,000	269,853	3.44%	270,409
Dec-21	64,703	48.01	3,106,409	2,959,000	147,409	3.43%	147,712
Jan-22	64,767	56.86	3,682,642	3,239,000	443,642	3.10%	444,466
Feb-22	64,762	48.67	3,151,957	2,858,000	293,957	3.12%	294,507
Mar-22	64,772	43.33	2,806,565	2,623,000	183,565	3.12%	183,908
Apr-22	64,790	40.45	2,620,743	2,403,000	217,743	3.12%	218,150
May-22	64,787	41.37	2,680,256	2,395,000	285,256	3.12%	285,790
Jun-22	64,784	53.36	<u>3,456,896</u>	<u>3,351,000</u>	<u>105,896</u>	3.12%	106,094
			\$41,574,191	\$40,148,000	\$1,426,191		\$1,428,863

Fed & State Income Tax Rate

 Federal Income Tax Rate (Effective 1/1/2018)
 21.00%

 State Income Tax Rate
 9.00%

 Income Tax Gross Up Factor = 1 / [(1 - 0.21) * (1 - 0.0900)]
 28.11%

Illustrative Reconciliation - Revenue Per Customer - SC No. 2 - Secondary

	Actual Customer	RPC Factor	Target	Actual	(Over)/Under	Interest	(Over)/Under
<u>Month</u>	<u>Count</u>	\$ / Customer	<u>Revenue</u>	Revenue	Collection	<u>Rate</u>	with Interest
Jul-21	8,674	259.72	\$2,252,811	\$2,288,000	(\$35,189)	2.50%	(\$35,241)
Aug-21	8,676	300.80	2,609,741	2,377,000	232,741	3.27%	233,197
Sep-21	8,666	254.89	2,208,877	2,208,000	877	3.26%	878
Oct-21	8,675	210.65	1,827,389	2,016,000	(188,611)	3.42%	(188,998)
Nov-21	8,678	230.44	1,999,758	1,846,000	153,758	3.44%	154,075
Dec-21	8,688	242.20	2,104,234	1,763,000	341,234	3.43%	341,935
Jan-22	8,707	236.88	2,062,514	1,982,000	80,514	3.10%	80,664
Feb-22	8,713	198.58	1,730,228	1,816,000	(85,772)	3.12%	(85,933)
Mar-22	8,709	202.18	1,760,786	1,783,000	(22,214)	3.12%	(22,256)
Apr-22	8,725	226.44	1,975,689	1,802,000	173,689	3.12%	174,014
May-22	8,737	241.96	2,114,005	1,722,000	392,005	3.12%	392,737
Jun-22	8,736	230.78	2,016,094	<u>1,892,000</u>	<u>124,094</u>	3.12%	<u>124,326</u>
			\$24,662,124	\$23,495,000			\$1,169,398

Fed & State Income Tax Rate

 Federal Income Tax Rate (Effective 1/1/2018)
 21.00%

 State Income Tax Rate
 9.00%

 Income Tax Gross Up Factor = 1 / [(1 - 0.21) * (1 - 0.0900)]
 28.11%

Illustrative Reconciliation - Revenue Per Customer - SC No. 2 - Primary

	Actual Customer	RPC Factor	Target	Actual	(Over)/Under	Interest	(Over)/Under
<u>Month</u>	<u>Count</u>	\$ / Customer	Revenue	Revenue	Collection	<u>Rate</u>	with Interest
Jul-21	76	2,820.97	\$214,394	\$210,000	\$4,394	2.50%	\$4,400
Aug-21	76	2,896.44	220,129	200,000	20,129	3.27%	20,169
Sep-21	75	2,145.01	160,876	150,000	10,876	3.26%	10,897
Oct-21	73	3,245.17	236,897	250,000	(13,103)	3.42%	(13,129)
Nov-21	74	3,422.46	253,262	245,000	8,262	3.44%	8,279
Dec-21	74	3,071.14	227,264	220,000	7,264	3.43%	7,279
Jan-22	75	2,928.16	219,612	210,000	9,612	3.10%	9,630
Feb-22	75	2,540.24	190,518	190,000	518	3.12%	519
Mar-22	75	2,291.07	171,830	250,000	(78,170)	3.12%	(78,316)
Apr-22	76	2,811.01	213,637	214,000	(363)	3.12%	(364)
May-22	75	3,768.58	282,644	255,000	27,644	3.12%	27,695
Jun-22	76	2,991.16	227,328	221,300	<u>6,028</u>	3.12%	<u>6,039</u>
			\$2,618,391	\$2,615,300			\$3,099

Fed & State Income Tax Rate

 Federal Income Tax Rate (Effective 1/1/2018)
 21.00%

 State Income Tax Rate
 9.00%

 Income Tax Gross Up Factor = 1 / [(1 - 0.21) * (1 - 0.0900)]
 28.11%

Determination of Surcharge/Credits Illustrative Reconciliation

		SC Nos. 1, 3, and 5	SC No. 2 Secondary	SC No. 2 Primary
Earnings Test - Pass or Fail			Pass	
Current Period (Over)/Under-Collection	(1)	\$1,428,863	\$1,169,398	\$3,099
Prior Period (Over) / Under-Collection	(2)	0	0	0
Amount to be Deferred for Future Recovery	(3)	0	0	0
Amount to be Deferred due to 2¢ Cap	(4) (5) =	\$0	\$0	\$0
Total Collection/(Credit)	(3) - (1) + (2) - (3) + (4)	\$1,428,863	\$1,169,398	\$3,099
Forecasted Sales	(6)	677,785,000	355,979,000	50,402,000
Rate (\$/kWh), excluding SUT	(7) = (5) / (6)	0.00211	0.00329	0.00006
SUT	(8)	1.06625	1.06625	1.06625
Rate (\$/kWh), including SUT	(9) = (7) * (8)	0.00225	0.00351	0.00006

Rockland Electric Company Proposed Lost Revenue Recovery Mechanism July 2021 - June 2022

Cap on Recoverable Amount - Illustrative Example

Calculation of	Fixed	Recovery	√ Cap
----------------	-------	----------	-------

Actual Distribution Revenues for Current Reconciliation Period	\$66,258,300
6.5% Factor	6.5%
Total Fixed Recovery Cap	\$4,306,790
Current Period (Over)/Under-Collection	\$2,601,360
Prior Period Deferred Balance Carry Forward	\$0
Allowable Amount for Recovery	\$2,601,360
Amount to Defer for Future Recovery	\$0

Allocation of Recoverable Amounts

	Distribution Revenue Target	% of Total
SC Nos. 1, 3, and 5	\$40,148,000	60.6%
SC No. 2 Secondary	23,495,000	35.5%
SC No. 2 Primary	<u>2,615,300</u>	3.9%
	\$66,258,300	
Allowed Amount to Recover in Current Period		\$2,601,360
To Be Recovered in a Future Period		\$0
Allocation of Future Recoverable Amount (By Gr	oup)	
	SC Nos. 1, 3, and 5	\$0
	SC No. 2 Secondary	\$0
	SC No. 2 Primary	\$0

Illustrative Earnings Test

(1)	Equity Base for Earnings Test	\$250,000,000
(2) (3)	Allowed ROE* ROE Limit buffer	9.5% 0.5%
(4) = (2) + (3)	Maximum ROE	10.0%
(5)	Actual Net Income	\$15,000,000
(6) = (5) / (1)	ROE for Earnings Test	6.0%
(7) = If (4) > (6), Pass else Fail	Earnings Test Pass / Fail	Pass

^{*} ROE as approved in BPU Docket No. ER19050552

Rockland Electric Company

Clean Energy Act Component of SBC Year 1 Surcharge

Revenue Requirement Year 1	\$402,907
Estimated kWh Sales October 2021 - September 2022	1,413,278,000
Year 1 Surcharge (\$/kWh) Excluding SUT	0.00029
SUT	6.625%
Year 1 Surcharge (\$/kWh) Including SUT	0.00031
Year 1 Surcharge (¢/kWh) Including SUT	0.031

Rockland Electric Company

Clean Energy Act Component of SBC Year 2 Surcharge

Revenue Requirement Year 2	\$1,261,082
Estimated kWh Sales October 2022 - September 2023	1,387,946,000
Year 2 Surcharge (\$/kWh) Excluding SUT*	0.00091
SUT	6.625%
Year 2 Surcharge (\$/kWh) Including SUT	0.00097
Year 2 Surcharge (¢/kWh) Including SUT	0.097

^{*} Will also include any prior period reconciliation.

Rockland Electric Company

Clean Energy Act Component of SBC Year 3 Surcharge

Revenue Requirement Year 3	\$2,258,461
Estimated kWh Sales October 2023 - September 2024	1,352,697,000
Year 3 Surcharge (\$/kWh) Excluding SUT*	0.00167
SUT	6.625%
Year 3 Surcharge (\$/kWh) Including SUT	0.00178
Year 3 Surcharge (¢/kWh) Including SUT	0.178

^{*} Will also include any prior period reconciliation.

Monthly Billing Comparisons - Year 1

SC1 Residential

	Monthly Usage <u>(kWh)</u>	Bill at Present <u>Rates</u>	Bill at Proposed Rates	<u>Change</u> Amount	<u>Percent</u>
	(17771)	<u>1 (4) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5</u>	11000	<u> </u>	<u>1 0100111</u>
<u>Summer</u>					
	0	\$5.41	\$5.41	\$0.00	0.0
	50	12.96	12.97	0.01	0.1
	100	20.51	20.54	0.03	0.1
	200	35.61	35.67	0.06	0.2
	250	43.15	43.23	0.08	0.2
	300	50.70	50.80	0.10	0.2
	400	65.80	65.92	0.12	0.2
	500	80.90	81.05	0.15	0.2
	750	126.71	126.94	0.23	0.2
	1,000	177.90	178.21	0.31	0.2
	1,500	280.27	280.74	0.47	0.2
	2,000	382.65	383.27	0.62	0.2
<u>Winter</u>					
	0	\$5.41	\$5.41	\$0.00	0.0
	50	14.03	14.05	0.02	0.1
	100	22.66	22.69	0.03	0.1
	200	39.91	39.97	0.06	0.2
	250	48.53	48.61	0.08	0.2
	300	57.15	57.25	0.10	0.2
	400	74.40	74.52	0.12	0.2
	500	91.65	91.80	0.15	0.2
	750	134.77	135.00	0.23	0.2
	1,000	177.89	178.20	0.31	0.2
	1,500	264.12	264.59	0.47	0.2
	2,000	350.36	350.98	0.62	0.2

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 1

SC2 General Service - Unmetered

	Monthly Usage	Bill at Present	Bill at Proposed	<u>Change</u>)
	(kWh)	<u>Rates</u>	Rates	Amount	Percent
Summer					
	0 100	\$14.00 \$27.43	\$14.00 \$27.46	\$0.00 0.03	0.0 0.1
	200	\$40.86	\$40.92	0.06	0.1
	300	\$54.28	\$54.38	0.10	0.2
	400 500	\$67.71 \$81.14	\$67.83 \$81.29	0.12 0.15	0.2 0.2
	750	\$114.71	\$114.94	0.23	0.2
	1,000 1,250	\$148.28 \$181.84	\$148.59 \$182.23	0.31 0.39	0.2 0.2
	1,500	\$215.41	\$215.88	0.47	0.2
	1,750 2,000	\$248.98 \$282.55	\$249.52 \$283.17	0.54 0.62	0.2 0.2
Winter					
	0 50	\$14.00 \$20.09	\$14.00 \$20.10	\$0.00 0.01	0.0 0.0
	100	\$26.18	\$26.21	0.03	0.1
	200	\$38.36	\$38.42	0.06	0.2
	250 300	\$44.45 \$50.54	\$44.52 \$50.63	0.07 0.09	0.2 0.2
	400	\$62.71	\$62.84	0.13	0.2
	500 750	\$74.89 \$105.34	\$75.05 \$105.57	0.16 0.23	0.2 0.2
	1,000	\$135.79	\$136.10	0.31	0.2
	1,500 2,000	\$196.68 \$257.57	\$197.14 \$258.19	0.46 0.62	0.2 0.2

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 1

SC2 General Service - Non-Demand Metered

	Monthly Usage	Bill at Present	Bill at Proposed	Change	
	(kWh)	Rates	Rates	Amount	<u>Percent</u>
Summer					
	0	\$16.00	\$16.00	\$0.00	0.0
	100 200	\$29.43 \$42.86	\$29.46 \$42.92	0.03 0.06	0.1 0.1
	300	\$56.28	\$56.38	0.10	0.2
	400 500	\$69.71 \$83.14	\$69.83 \$83.29	0.12 0.15	0.2 0.2
	750	\$116.71	\$116.94	0.23	0.2
	1,000 1,250	\$150.28 \$183.84	\$150.59 \$184.23	0.31 0.39	0.2 0.2
	1,500	\$217.41	\$217.88	0.47	0.2
	1,750 2,000	\$250.98 \$284.55	\$251.52 \$285.17	0.54 0.62	0.2 0.2
<u>Winter</u>					
	0	\$16.00	\$16.00	\$0.00	0.0
	50 100	\$22.09 \$28.18	\$22.10 \$28.21	0.01 0.03	0.0 0.1
	200	\$40.36	\$40.42	0.06	0.1
	250 300	\$46.45 \$52.54	\$46.52 \$52.63	0.07 0.09	0.2 0.2
	400	\$64.71	\$64.84	0.13	0.2
	500 750	\$76.89 \$107.34	\$77.05 \$107.57	0.16 0.23	0.2 0.2
	1,000	\$137.79	\$138.10	0.31	0.2
	1,500 2,000	\$198.68 \$259.57	\$199.14 \$260.19	0.46 0.62	0.2 0.2

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 1

SC2 General Secondary Service - Summer

	Monthly	Bill at	Bill at		
Demand	Usage	Present	Proposed	<u>Change</u>	<u>!</u>
<u>(kW)</u>	(kWh)	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
7	700	\$160.49	\$160.71	\$0.22	0.1
7	1,400	\$241.51	\$241.95	0.44	0.2
7	2,100	\$322.53	\$323.19	0.66	0.2
7	2,800	\$403.56	\$404.42	0.86	0.2
10	1,000	\$230.86	\$231.17	0.31	0.1
	· ·	•	•		
10	2,000	\$346.60	\$347.22	0.62	0.2
10	3,000	\$462.35	\$463.28	0.93	0.2
10	4,000	\$578.09	\$579.33	1.24	0.2
25	2,500	\$582.67	\$583.45	0.78	0.1
25	5,000	\$867.01	\$868.56	1.55	0.2
25	7,500	\$999.40	\$1,001.72	2.32	0.2
25	10,000	\$1,131.79	\$1,134.89	3.10	0.3
			_		
50	5,000	\$1,164.01	\$1,165.56	1.55	0.1
50	10,000	\$1,428.79	\$1,431.89	3.10	0.2
50	15,000	\$1,693.56	\$1,698.21	4.65	0.3
50	20,000	\$1,958.34	\$1,964.54	6.20	0.3
100	10,000	\$2,022.79	\$2,025.89	3.10	0.2
100	20,000	\$2,552.34	\$2,558.54	6.20	0.2
100	30,000	\$3,081.89	\$3,091.19	9.30	0.2
100	40,000			9.30 12.40	0.3
100	40,000	\$3,611.44	\$3,623.84	12.40	0.3
150	15,000	\$2,881.56	\$2,886.21	4.65	0.2
150	30,000	\$3,675.89	\$3,685.19	9.30	0.3
150	45,000	\$4,470.21	\$4,484.16	13.95	0.3
150	60,000	\$5,264.54	\$5,283.14	18.60	0.4

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 1

SC2 General Secondary Service - Winter

	Monthly	Bill at	Bill at		
Demand	Usage	Present	Proposed	<u>Change</u>	<u>e</u>
<u>(kW)</u>	<u>(kWh)</u>	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
7	700	\$146.44	\$146.66	\$0.22	0.2
7	1,400	222.38	222.81	0.43	0.2
7	2,100	298.32	298.97	0.65	0.2
7	2,800	374.26	375.13	0.87	0.2
10	1,000	209.50	209.81	0.31	0.1
10	2,000	317.98	318.60	0.62	0.2
10	3,000	426.47	427.40	0.93	0.2
10	4,000	534.95	536.19	1.24	0.2
	1,000				
25	2,500	524.77	525.55	0.78	0.1
25	5,000	791.49	793.04	1.55	0.2
25	7,500	922.36	924.68	2.32	0.3
25	10,000	1,053.22	1,056.32	3.10	0.3
F0	F 000	1 045 74	4 0 4 7 0 0	4.55	0.4
50 50	5,000	1,045.74	1,047.29	1.55	0.1
50 50	10,000	1,307.47	1,310.57	3.10	0.2
50 50	15,000	1,569.19	1,573.84	4.65	0.3
50	20,000	1,830.92	1,837.12	6.20	0.3
100	10,000	1,815.97	1,819.07	3.10	0.2
100	20,000	2,339.42	2,345.62	6.20	0.3
100	30,000	2,862.87	2,872.17	9.30	0.3
100	40,000	3,386.32	3,398.72	12.40	0.4
450	45.000	0.500.40	0.500.04	4.05	0.0
150	15,000	2,586.19	2,590.84	4.65	0.2
150	30,000	3,371.37	3,380.67	9.30	0.3
150	45,000	4,156.54	4,170.49	13.95	0.3
150	60,000	4,941.72	4,960.32	18.60	0.4

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 1

SC2 General Primary Service - Summer

Damand	Monthly	Bill at	Bill at	01	
Demand	Usage	Present	Proposed	<u>Change</u>	
<u>(kW)</u>	<u>(kWh)</u>	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
100	20,000	\$3,430.50	\$3,436.70	\$6.20	0.2
100	30,000	4,403.05		9.30	0.2
	,	,	4,412.35		_
100	40,000	5,375.60	5,388.00	12.40	0.2
100	50,000	6,348.15	6,363.65	15.50	0.2
150	30,000	5,106.55	5,115.85	9.30	0.2
150	45,000	6,565.38	6,579.33	13.95	0.2
150	60,000	8,024.20	8,042.80	18.60	0.2
150	75,000	9,483.03	9,506.28	23.25	0.2
100	70,000	0, 100.00	0,000.20	20.20	0.2
200	40,000	6,782.60	6,795.00	12.40	0.2
200	60,000	8,727.70	8,746.30	18.60	0.2
200	80,000	10,672.80	10,697.60	24.80	0.2
200	100,000	12,617.90	12,648.90	31.00	0.2
500	100,000	16,838.90	16,869.90	31.00	0.2
500	150,000	21,701.65	21,748.15	46.50	0.2
500	200,000	26,564.40	26,626.40	62.00	0.2
500	250,000	31,427.15	31,504.65	77.50	0.2
750	150,000	25,219.15	25,265.65	46.50	0.2
750	225,000	32,513.28	32,583.03	69.75	0.2
750	300,000	39,807.40	39,900.40	93.00	0.2
750	375,000	47,101.53	47,217.78	116.25	0.2
1000	200,000	33,599.40	33,661.40	62.00	0.2
1000	300,000	43,324.90	43,417.90	93.00	0.2
1000	400,000	53,050.40	53,174.40	124.00	0.2
1000	500,000	62,775.90	62,930.90	155.00	0.2

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 1

SC2 General Primary Service - Winter

	Monthly	Bill at	Bill at		
Demand	Usage	Present	Proposed	<u>Change</u>	<u>!</u>
<u>(kW)</u>	<u>(kWh)</u>	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
100	20,000	\$3,129.25	\$3,135.45	\$6.20	0.2
100	30,000	4,047.50	4,056.80	9.30	0.2
100	40,000	4,965.75	4,978.15	12.40	0.2
100	50,000	5,884.00	5,899.50	15.50	0.3
150	30,000	4,654.00	4,663.30	9.30	0.2
150	45,000	6,031.38	6,045.33	13.95	0.2
150	60,000	7,408.75	7,427.35	18.60	0.2
150	75,000	8,786.13	8,809.38	23.25	0.3
130	75,000	0,700.13	0,009.30	23.25	0.3
200	40,000	6,178.75	6,191.15	12.40	0.2
200	60,000	8,015.25	8,033.85	18.60	0.2
200	80,000	9,851.75	9,876.55	24.80	0.3
200	100,000	11,688.25	11,719.25	31.00	0.3
500	400.000	45 007 05	45.050.05	24.00	0.0
500	100,000	15,327.25	15,358.25	31.00	0.2
500	150,000	19,918.50	19,965.00	46.50	0.2
500	200,000	24,509.75	24,571.75	62.00	0.3
500	250,000	29,101.00	29,178.50	77.50	0.3
750	150,000	22,951.00	22,997.50	46.50	0.2
750	225,000	29,837.88	29,907.63	69.75	0.2
750	300,000	36,724.75	36,817.75	93.00	0.3
750	375,000	43,611.63	43,727.88	116.25	0.3
1000	200,000	30,574.75	30,636.75	62.00	0.2
1000	300,000	39,757.25	39,850.25	93.00	0.2
1000	400,000	48,939.75	49,063.75	124.00	0.3
1000	500,000	58,122.25	58,277.25	155.00	0.3

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 1

SC5 Residential with Space Heating

	Monthly Usage <u>(kWh)</u>	Bill at Present <u>Rates</u>	Bill at Proposed <u>Rates</u>	<u>Change</u> <u>Amount</u>	Percent	
Summer						
	0	\$5.41	\$5.41	\$0.00	0.0	
	50	12.94	12.95	0.01	0.1	
	100	20.47	20.50	0.03	0.1	
	200	35.53	35.59	0.06	0.2	
	250	43.06	43.13	0.07	0.2	
	300	50.59	50.68	0.09	0.2	
	400	65.64	65.77	0.13	0.2	
	500	80.70	80.86	0.16	0.2	
	750	126.42	126.65	0.23	0.2	
	1,000	177.51	177.82	0.31	0.2	
	1,500	279.69	280.15	0.46	0.2	
	2,000	381.87	382.49	0.62	0.2	
Winter						
	0	\$5.41	\$5.41	\$0.00	0.0	
	50	14.01	14.03	0.02	0.1	
	100	22.62	22.65	0.03	0.1	
	200	39.83	39.89	0.06	0.2	
	250	48.43	48.51	0.08	0.2	
	300	57.04	57.13	0.09	0.2	
	400	74.24	74.37	0.13	0.2	
	500	91.45	91.61	0.16	0.2	
	750	134.47	134.71	0.24	0.2	
	1,000	177.50	177.81	0.31	0.2	
	1,500	263.54	264.00	0.46	0.2	
	2,000	349.58	350.20	0.62	0.2	

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 1 Service Classification No. 7

Annual Bill

Demand	Monthly Usage	Perd Energy		Bill at Present	Bill at Proposed	<u>Chang</u>	e
<u>(kW)</u>	<u>(kWh)</u>		Off-Peak	Rates	Rates	Amount	Percent
(/	(100011)	<u>r oan</u>	on roun	<u> </u>	<u>110100</u>	<u>, unounc</u>	<u> </u>
1,000	300,000	35%	65%	\$533,841	\$534,957	1,116	0.2
1,000	300,000	50%	50%	536,244	537,360	1,116	0.2
1,000	400,000	35%	65%	629,700	631,188	1,488	0.2
1,000	400,000	50%	50%	632,904	634,392	1,488	0.2
2,000	600,000	35%	65%	1,064,683	1,066,915	2,232	0.2
2,000	600,000	50%	50%	1,069,489	1,071,721	2,232	0.2
2,000	800,000	35%	65%	1,256,401	1,259,377	2,976	0.2
2,000	800,000	50%	50%	1,262,809	1,265,785	2,976	0.2
3,000	900,000	35%	65%	1,595,524	1,598,872	3,348	0.2
3,000	900,000	50%	50%	1,602,733	1,606,081	3,348	0.2
3,000	1,200,000	35%	65%	1,883,101	1,887,565	4,464	0.2
3,000	1,200,000	50%	50%	1,892,713	1,897,177	4,464	0.2
4,000	1,200,000	35%	65%	2,126,366	2,130,830	4,464	0.2
4,000	1,200,000	50%	50%	2,135,978	2,140,442	4,464	0.2
4,000	1,600,000	35%	65%	2,509,801	2,515,753	5,952	0.2
4,000	1,600,000	50%	50%	2,522,617	2,528,569	5,952	0.2
5,000	1,500,000	35%	65%	2,657,207	2,662,787	5,580	0.2
5,000	1,500,000	50%	50%	2,669,222	2,674,802	5,580	0.2
5,000	2,000,000	35%	65%	3,136,502	3,143,942	7,440	0.2
5,000	2,000,000	50%	50%	3,152,522	3,159,962	7,440	0.2

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 1 Service Classification No. 7

Summer Bill

	Monthly	Perc		Bill at	Bill at		
Demand	Usage	<u>Energy</u>	/ Split	Present	Proposed	<u>Chang</u>	<u>e</u>
<u>(kW)</u>	<u>(kWh)</u>	<u>Peak</u>	Off-Peak	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
1,000	300,000	35%	65%	\$44,720.12	\$44,813.12	\$93.00	0.2
1,000	300,000	50%	50%	44,920.37	45,013.37	93.00	0.2
	,			•	•		
1,000	400,000	35%	65%	52,708.36	52,832.36	124.00	0.2
1,000	400,000	50%	50%	52,975.36	53,099.36	124.00	0.2
2,000	600,000	35%	65%	89,190.24	89,376.24	186.00	0.2
2,000	600,000	50%	50%	89,590.74	89,776.74	186.00	0.2
2,000	800,000	35%	65%	105,166.72	105,414.72	248.00	0.2
2,000	800,000	50%	50%	105,700.72	105,948.72	248.00	0.2
2,000	800,000	30 /6	30 /6	103,700.72	103,940.72	240.00	0.2
3,000	900,000	35%	65%	133,660.36	133,939.36	279.00	0.2
3,000	900,000	50%	50%	134,261.11	134,540.11	279.00	0.2
3,000	1,200,000	35%	65%	157,625.08	157,997.08	372.00	0.2
3,000	1,200,000	50%	50%	158,426.08	158,798.08	372.00	0.2
4,000	1,200,000	35%	65%	178,130.48	178,502.48	372.00	0.2
4,000	1,200,000	50%	50%	178,931.48	179,303.48	372.00	0.2
4,000	1,600,000	35%	65%	210,083.44	210,579.44	496.00	0.2
4,000	1,600,000	50%	50%	211,151.44	211,647.44	496.00	0.2
5,000	1,500,000	35%	65%	222,600.60	223,065.60	465.00	0.2
5,000	1,500,000	50%	50%	223,601.85	224,066.85	465.00	0.2
5,000	2,000,000	35%	65%	262,541.80	263,161.80	620.00	0.2
5,000	2,000,000	50%	50%	263,876.80	264,496.80	620.00	0.2

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 1 Service Classification No. 7

Winter Bill

Demand	Monthly Usage	Perd Energy		Bill at Present	Bill at Proposed	Chang	e
(kW)	<u>(kWh)</u>		Off-Peak	Rates	Rates	Amount	Percent
<u> </u>	(1)	<u>ı can</u>	on roan	<u>110100</u>	<u>110100</u>	, unoune	<u>1 0100111</u>
1,000	300,000	35%	65%	\$44,370.12	\$44,463.12	\$93.00	0.2
1,000	300,000	50%	50%	44,570.37	44,663.37	93.00	0.2
1,000	400,000	35%	65%	52,358.36	52,482.36	124.00	0.2
1,000	400,000	50%	50%	52,625.36	52,749.36	124.00	0.2
2,000	600,000	35%	65%	88,490.24	88,676.24	186.00	0.2
2,000	600,000	50%	50%	88,890.74	89,076.74	186.00	0.2
2,000	800,000	35%	65%	104,466.72	104,714.72	248.00	0.2
2,000	800,000	50%	50%	105,000.72	105,248.72	248.00	0.2
3,000	900,000	35%	65%	132,610.36	132,889.36	279.00	0.2
3,000	900,000	50%	50%	133,211.11	133,490.11	279.00	0.2
3,000	1,200,000	35%	65%	156,575.08	156,947.08	372.00	0.2
3,000	1,200,000	50%	50%	157,376.08	157,748.08	372.00	0.2
4,000	1,200,000	35%	65%	176,730.48	177,102.48	372.00	0.2
4,000	1,200,000	50%	50%	177,531.48	177,903.48	372.00	0.2
4,000	1,600,000	35%	65%	208,683.44	209,179.44	496.00	0.2
4,000	1,600,000	50%	50%	209,751.44	210,247.44	496.00	0.2
5,000	1,500,000	35%	65%	220,850.60	221,315.60	465.00	0.2
5,000	1,500,000	50%	50%	221,851.85	222,316.85	465.00	0.2
5,000	2,000,000	35%	65%	260,791.80	261,411.80	620.00	0.2
5,000	2,000,000	50%	50%	262,126.80	262,746.80	620.00	0.2

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 1 Service Classification No. 7 - High Voltage Distribution

Annual Bill

	Monthly	Perc		Bill at	Bill at		
Demand	Usage	Energy	<u> Split</u>	Present	Proposed	<u>Change</u>	!
<u>(kW)</u>	(kWh)	<u>Peak</u>	Off-Peak	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	Percent
1,000	300,000	35%	65%	\$468,943	\$470,059	1,116	0.2
1,000	300,000	50%	50%	469,224	470,340	1,116	0.2
1,000	400,000	35%	65%	549,063	550,551	1,488	0.3
1,000	400,000	50%	50%	549,438	550,926	1,488	0.3
2.000	600,000	250/	CE0/	040 400	040.004	0.000	0.0
2,000	600,000	35%	65%	910,429	912,661	2,232	0.2
2,000	600,000	50%	50%	910,990	913,222	2,232	0.2
2,000	800,000	35%	65%	1,070,669	1,073,645	2,976	0.3
2,000	800,000	50%	50%	1,071,418	1,074,394	2,976	0.3
3,000	900,000	35%	65%	1,351,914	1,355,262	3,348	0.2
3,000	900,000	50%	50%	1,352,757	1,356,105	3,348	0.2
3,000	1,200,000	35%	65%	1,592,275	1,596,739	4,464	0.3
3,000	1,200,000	50%	50%	1,593,398	1,597,862	4,464	0.3
4,000	1,200,000	35%	65%	1,793,400	1,797,864	4,464	0.2
4,000	1,200,000	50%	50%	1,794,523	1,798,987	4,464	0.2
4,000	1,600,000	35%	65%	2,113,881	2,119,833	5,952	0.2
4,000	1,600,000	50%	50%	2,115,379	2,119,033	•	0.3
4,000	1,000,000	30%	30%	2,115,379	2,121,331	5,952	0.3
5,000	1,500,000	35%	65%	2,234,886	2,240,466	5,580	0.2
5,000	1,500,000	50%	50%	2,236,290	2,241,870	5,580	0.2
5,000	2,000,000	35%	65%	2,635,487	2,642,927	7,440	0.3
5,000	2,000,000	50%	50%	2,637,359	2,644,799	7,440	0.3

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 1 Service Classification No. 7 - High Voltage Distribution

Summer Bill

	Monthly	Perc	ent	Bill at	Bill at		
Demand	Usage	Energy	/ Split	Present	Proposed	<u>Change</u>	!
<u>(kW)</u>	(kWh)	<u>Peak</u>	Off-Peak	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	Percent
1,000	300,000	35%	65%	\$39,138.59	\$39,231.59	\$93.00	0.2
1,000	300,000	50%	50%	39,161.99	39,254.99	93.00	0.2
1,000	400,000	35%	65%	45,815.28	45,939.28	124.00	0.3
1,000	400,000	50%	50%	45,846.48	45,970.48	124.00	0.3
2,000	600,000	35%	65%	75,989.06	76,175.06	186.00	0.2
2,000	600,000	50%	50%	76,035.86	76,221.86	186.00	0.2
2,000	800,000	35%	65%	89,342.44	89,590.44	248.00	0.3
2,000	800,000	50%	50%	89,404.84	89,652.84	248.00	0.3
3,000	900,000	35%	65%	112,839.53	113,118.53	279.00	0.2
3,000	900,000	50%	50%	112,909.73	113,188.73	279.00	0.2
3,000	1,200,000	35%	65%	132,869.60	133,241.60	372.00	0.3
3,000	1,200,000	50%	50%	132,963.20	133,335.20	372.00	0.3
4,000	1,200,000	35%	65%	149,690.00	150,062.00	372.00	0.2
4,000	1,200,000	50%	50%	149,783.60	150,155.60	372.00	0.2
4,000	1,600,000	35%	65%	176,396.76	176,892.76	496.00	0.3
4,000	1,600,000	50%	50%	176,521.56	177,017.56	496.00	0.3
5,000	1,500,000	35%	65%	186,540.47	187,005.47	465.00	0.2
5,000	1,500,000	50%	50%	186,657.47	187,122.47	465.00	0.2
5,000	2,000,000	35%	65%	219,923.92	220,543.92	620.00	0.3
5,000	2,000,000	50%	50%	220,079.92	220,699.92	620.00	0.3

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 1 Service Classification No. 7 - High Voltage Distribution

Winter Bill

	Monthly	Perc	ent	Bill at	Bill at		
Demand	Usage	Energy	/ Split	Present	Proposed	<u>Change</u>	<u>!</u>
<u>(kW)</u>	<u>(kWh)</u>	<u>Peak</u>	Off-Peak	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
1,000	300,000	35%	65%	\$39,048.59	\$39,141.59	\$93.00	0.2
1,000	300,000	50%	50%	39,071.99	39,164.99	93.00	0.2
1,000	400,000	35%	65%	45,725.28	45,849.28	124.00	0.3
1,000	400,000	50%	50%	45,756.48	45,880.48	124.00	0.3
2 000	600,000	35%	65%	75,809.06	75,995.06	186.00	0.2
2,000	•			•	•		0.2
2,000	600,000	50%	50%	75,855.86	76,041.86	186.00	
2,000	800,000	35%	65%	89,162.44	89,410.44	248.00	0.3
2,000	800,000	50%	50%	89,224.84	89,472.84	248.00	0.3
3,000	900,000	35%	65%	112,569.53	112,848.53	279.00	0.2
3,000	900,000	50%	50%	112,639.73	112,918.73	279.00	0.2
3,000	1,200,000	35%	65%	132,599.60	132,971.60	372.00	0.3
3,000	1,200,000	50%	50%	132,693.20	133,065.20	372.00	0.3
4,000	1,200,000	35%	65%	149,330.00	149,702.00	372.00	0.2
4,000	1,200,000	50%	50%	149,423.60	149,795.60	372.00	0.2
4,000	1,600,000	35%	65%	176,036.76	176,532.76	496.00	0.3
4,000	1,600,000	50%	50%	176,161.56	176,657.56	496.00	0.3
5,000	1,500,000	35%	65%	186,090.47	186,555.47	465.00	0.2
5,000	1,500,000	50%	50%	186,207.47	186,672.47	465.00	0.2
5,000	2,000,000	35%	65%	219,473.92	220,093.92	620.00	0.3
5,000	2,000,000	50%	50%	219,629.92	220,249.92	620.00	0.3

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2

SC1 Residential

	Monthly Usage	Bill at Present	Bill at Proposed	Change	
	(kWh)	Rates	Rates	<u>Change</u> <u>Amount</u>	Percent
Summer					
	0	\$5.41	\$5.41	\$0.00	0.0
	50 100	12.97 20.54	13.01 20.60	0.04 0.06	0.3 0.3
	200	35.67	35.80	0.13	0.4
	250 300	43.23 50.80	43.40 50.99	0.17 0.19	0.4 0.4
	400	65.92	66.19	0.27	0.4
	500 750	81.05 126.94	81.38 127.44	0.33 0.50	0.4 0.4
	1,000	178.21	178.87	0.66	0.4
	1,500 2,000	280.74 383.27	281.73 384.59	0.99 1.32	0.4 0.3
Winter					
	0 50	\$5.41 14.05	\$5.41 14.08	\$0.00 0.03	0.0 0.2
	100	22.69	22.75	0.06	0.2
	200	39.97	40.10	0.13	0.3
	250 300	48.61 57.25	48.77 57.44	0.16 0.19	0.3 0.3
	400	74.52	74.79	0.27	0.4
	500 750	91.80 135.00	92.13 135.49	0.33 0.49	0.4 0.4
	1,000	178.20	178.86	0.66	0.4
	1,500 2,000	264.59 350.98	265.58 352.30	0.99 1.32	0.4 0.4

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2

SC2 General Service - Unmetered

	Monthly Usage	Bill at Present	Bill at Proposed	<u>Change</u>	
	(kWh)	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
Summer					
	0	\$14.00	\$14.00	\$0.00	0.0
	100	\$27.46	\$27.52	0.06	0.2
	200	\$40.92	\$41.05	0.13	0.3
	300	\$54.38	\$54.57	0.19	0.3
	400	\$67.83	\$68.10	0.27	0.4
	500	\$81.29	\$81.62	0.33	0.4
	750	\$114.94	\$115.43	0.49	0.4
	1,000	\$148.59	\$149.25	0.66	0.4
	1,250	\$182.23	\$183.06	0.83	0.5
	1,500	\$215.88	\$216.87	0.99	0.5
	1,750	\$249.52	\$250.68	1.16	0.5
	2,000	\$283.17	\$284.49	1.32	0.5
Winter					
	0	\$14.00	\$14.00	\$0.00	0.0
	50	\$20.10	\$20.14	0.04	0.2
	100	\$26.21	\$26.28	0.07	0.3
	200	\$38.42	\$38.55	0.13	0.3
	250	\$44.52	\$44.69	0.17	0.4
	300	\$50.63	\$50.83	0.20	0.4
	400	\$62.84	\$63.10	0.26	0.4
	500	\$75.05	\$75.38	0.33	0.4
	750	\$105.57	\$106.07	0.50	0.5
	1,000	\$136.10	\$136.76	0.66	0.5
	1,500	\$197.14	\$198.13	0.99	0.5
	2,000	\$258.19	\$259.51	1.32	0.5

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2

SC2 General Service - Non-Demand Metered

	Monthly Usage	Bill at Present	Bill at Proposed	Change	
	(kWh)	Rates	<u>Rates</u>	Amount	<u>Percent</u>
Summer					
	0	\$16.00	\$16.00	\$0.00	0.0
	100	\$29.46	\$29.52	0.06	0.2
	200	\$42.92	\$43.05	0.13	0.3
	300	\$56.38	\$56.57	0.19	0.3
	400	\$69.83	\$70.10	0.27	0.4
	500	\$83.29	\$83.62	0.33	0.4
	750	\$116.94	\$117.43	0.49	0.4
	1,000	\$150.59	\$151.25	0.66	0.4
	1,250	\$184.23	\$185.06	0.83	0.5
	1,500	\$217.88	\$218.87	0.99	0.5
	1,750	\$251.52	\$252.68	1.16	0.5
	2,000	\$285.17	\$286.49	1.32	0.5
<u>Winter</u>					
	0	\$16.00	\$16.00	\$0.00	0.0
	50	\$22.10	\$22.14	0.04	0.2
	100	\$28.21	\$28.28	0.07	0.2
	200	\$40.42	\$40.55	0.13	0.3
	250	\$46.52	\$46.69	0.17	0.4
	300	\$52.63	\$52.83	0.20	0.4
	400	\$64.84	\$65.10	0.26	0.4
	500	\$77.05	\$77.38	0.33	0.4
	750	\$107.57	\$108.07	0.50	0.5
	1,000	\$138.10	\$138.76	0.66	0.5
	1,500	\$199.14	\$200.13	0.99	0.5
	2,000	\$260.19	\$261.51	1.32	0.5

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2

SC2 General Secondary Service - Summer

Damand	Monthly	Bill at	Bill at	Observa	
Demand	Usage	Present	Proposed	<u>Change</u>	
<u>(kW)</u>	<u>(kWh)</u>	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
7	700	\$160.71	\$161.17	\$0.46	0.3
7	1,400	\$241.95	\$242.87	0.92	0.4
7	2,100	\$323.19	\$324.57	1.38	0.4
7	2,800	\$404.42	\$406.27	1.85	0.5
10	1,000	\$231.17	\$231.83	0.66	0.3
10	2,000	\$347.22	\$348.54	1.32	0.4
10	3,000	\$463.28	\$465.26	1.98	0.4
10	4,000	\$579.33	\$581.97	2.64	0.5
25	2,500	\$583.45	\$585.10	1.65	0.3
25	5,000	\$868.56	\$871.86	3.30	0.4
25	7,500	\$1,001.72	\$1,006.67	4.95	0.5
25	10,000	\$1,134.89	\$1,141.49	6.60	0.6
50	5,000	\$1,165.56	\$1,168.86	3.30	0.3
50	10,000	\$1,431.89	\$1,438.49	6.60	0.5
50	15,000	\$1,698.21	\$1,708.11	9.90	0.6
50	20,000	\$1,964.54	\$1,977.74	13.20	0.7
100	10,000	\$2,025.89	\$2,032.49	6.60	0.3
100	20,000	\$2,558.54	\$2,571.74	13.20	0.5
100	30,000	\$3,091.19	\$3,110.99	19.80	0.6
100	40,000	\$3,623.84	\$3,650.24	26.40	0.7
150	15,000	\$2,886.21	\$2,896.11	9.90	0.3
150	30,000	\$3,685.19	\$3,704.99	19.80	0.5
150	45,000	\$4,484.16	\$4,513.86	29.70	0.7
150	60,000	\$5,283.14	\$5,322.74	39.60	0.7
	,		• •		

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2

SC2 General Secondary Service - Winter

	Monthly	Bill at	Bill at		
Demand	Usage	Present	Proposed	<u>Change</u>	<u> </u>
<u>(kW)</u>	<u>(kWh)</u>	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
7	700	\$146.66	\$147.12	\$0.46	0.3
7	1,400	222.81	223.74	0.93	0.4
7	2,100	298.97	300.36	1.39	0.5
7	2,800	375.13	376.97	1.84	0.5
10	1,000	209.81	210.47	0.66	0.3
10	2,000	318.60	319.92	1.32	0.4
10	3,000	427.40	429.38	1.98	0.5
10	4,000	536.19	538.83	2.64	0.5
05	2.500	E0E	507.00	4.05	0.0
25	2,500	525.55	527.20	1.65	0.3
25	5,000	793.04	796.34	3.30	0.4
25	7,500	924.68	929.63	4.95	0.5
25	10,000	1,056.32	1,062.92	6.60	0.6
50	5,000	1,047.29	1,050.59	3.30	0.3
50	10,000	1,310.57	1,317.17	6.60	0.5
50	15,000	1,573.84	1,583.74	9.90	0.6
50	20,000	1,837.12	1,850.32	13.20	0.7
100	10,000	1,819.07	1,825.67	6.60	0.4
100	20,000	2,345.62	2,358.82	13.20	0.6
100	30,000	2,872.17	2,891.97	19.80	0.7
100	40,000	3,398.72	3,425.12	26.40	0.8
150	15,000	2,590.84	2,600.74	9.90	0.4
150	30,000	3,380.67	3,400.47	19.80	0.6
150	45,000	4,170.49	4,200.19	29.70	0.7
150	60,000	4,960.32	4,999.92	39.60	0.8

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2

SC2 General Primary Service - Summer

	Monthly	Bill at	Bill at		
Demand	Usage	Present	Proposed	<u>Change</u>	<u>!</u>
<u>(kW)</u>	<u>(kWh)</u>	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
100	20,000	\$3,436.70	\$3,449.90	\$13.20	0.4
100	30,000	4,412.35	4,432.15	19.80	0.4
100	40,000	5,388.00	5,414.40	26.40	0.5
100	50,000	6,363.65	6,396.65	33.00	0.5
150	30,000	5,115.85	5,135.65	19.80	0.4
150	45,000	6,579.33	6,609.03	29.70	0.5
150	60,000	8,042.80	8,082.40	39.60	0.5
150	75,000	9,506.28	9,555.78	49.50	0.5
200	40,000	6,795.00	6,821.40	26.40	0.4
200	60,000	8,746.30	8,785.90	39.60	0.5
200	80,000	10,697.60	10,750.40	52.80	0.5
200	100,000	12,648.90	12,714.90	66.00	0.5
500	100,000	16,869.90	16,935.90	66.00	0.4
500	150,000	21,748.15	21,847.15	99.00	0.5
500	200,000	26,626.40	26,758.40	132.00	0.5
500	250,000	31,504.65	31,669.65	165.00	0.5
750	150,000	25,265.65	25,364.65	99.00	0.4
750	225,000	32,583.03	32,731.53	148.50	0.5
750	300,000	39,900.40	40,098.40	198.00	0.5
750	375,000	47,217.78	47,465.28	247.50	0.5
1000	200,000	33,661.40	33,793.40	132.00	0.4
1000	300,000	43,417.90	43,615.90	198.00	0.5
1000	400,000	53,174.40	53,438.40	264.00	0.5
1000	500,000	62,930.90	63,260.90	330.00	0.5

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2

SC2 General Primary Service - Winter

Damand	Monthly	Bill at	Bill at	01	
Demand	Usage	Present	Proposed	<u>Change</u>	
<u>(kW)</u>	<u>(kWh)</u>	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
400	20.000	0.405.45	ФЭ 440 CE	¢42.20	0.4
100	20,000	\$3,135.45	\$3,148.65	\$13.20	0.4
100	30,000	4,056.80	4,076.60	19.80	0.5
100	40,000	4,978.15	5,004.55	26.40	0.5
100	50,000	5,899.50	5,932.50	33.00	0.6
150	20.000	4 662 20	4 692 40	10.90	0.4
	30,000	4,663.30	4,683.10	19.80	0.4
150	45,000	6,045.33	6,075.03	29.70	0.5
150	60,000	7,427.35	7,466.95	39.60	0.5
150	75,000	8,809.38	8,858.88	49.50	0.6
	40.000			00.40	
200	40,000	6,191.15	6,217.55	26.40	0.4
200	60,000	8,033.85	8,073.45	39.60	0.5
200	80,000	9,876.55	9,929.35	52.80	0.5
200	100,000	11,719.25	11,785.25	66.00	0.6
500	100,000	15,358.25	15,424.25	66.00	0.4
500	150,000	19,965.00	20,064.00	99.00	0.5
500	200,000	24,571.75	24,703.75	132.00	0.5
500	250,000	29,178.50	29,343.50	165.00	0.6
750	150,000	22,997.50	23,096.50	99.00	0.4
750	225,000	29,907.63	30,056.13	148.50	0.5
750	300,000	36,817.75	37,015.75	198.00	0.5
750	375,000	43,727.88	43,975.38	247.50	0.6
1000	200,000	30,636.75	30,768.75	132.00	0.4
1000	300,000	39,850.25	40,048.25	198.00	0.5
1000	400,000	49,063.75	49,327.75	264.00	0.5
1000	500,000	58,277.25	58,607.25	330.00	0.6
_	,	,	,		

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2

SC5 Residential with Space Heating

	Monthly Usage	Bill at Present	Bill at Proposed	Change	
	<u>(kWh)</u>	Rates	Rates	<u>Change</u> <u>Amount</u>	Percent
Summer					
	0	\$5.41	\$5.41	\$0.00	0.0
	50 100	12.95 20.50	12.99 20.57	0.04 0.07	0.3 0.3
	200	35.59	35.72	0.13	0.4
	250 300	43.13 50.68	43.30 50.88	0.17 0.20	0.4 0.4
	400	65.77	66.03	0.26	0.4
	500 750	80.86 126.65	81.19 127.14	0.33 0.49	0.4 0.4
	1,000	177.82 280.15	178.48	0.66	0.4 0.4
	1,500 2,000	382.49	281.14 383.81	0.99 1.32	0.4
Winter					
	0 50	\$5.41 14.03	\$5.41 14.06	\$0.00 0.03	0.0 0.2
	100	22.65	22.72	0.03	0.2
	200 250	39.89 48.51	40.02 48.67	0.13 0.16	0.3 0.3
	300	57.13	57.33	0.20	0.4
	400 500	74.37 91.61	74.63 91.94	0.26 0.33	0.3 0.4
	750	134.71	135.20	0.49	0.4
	1,000 1,500	177.81 264.00	178.47 264.99	0.66 0.99	0.4 0.4
	2,000	350.20	351.52	1.32	0.4

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2 Service Classification No. 7

Annual Bill

Demand	Monthly Usage	Perd Energy		Bill at Present	Bill at Proposed	<u>Chang</u>	e
(kW)	<u>(kWh)</u>		Off-Peak	Rates	Rates	<u>Amount</u>	<u>Percent</u>
(KVV)	(KVVII)	<u>ı cak</u>	OII-I Cak	<u>itates</u>	<u>rtates</u>	Amount	<u>r ercent</u>
1,000	300,000	35%	65%	\$534,957	\$537,333	2,376	0.4
1,000	300,000	50%	50%	537,360	539,736	2,376	0.4
1,000	400,000	35%	65%	631,188	634,356	3,168	0.5
1,000	400,000	50%	50%	634,392	637,560	3,168	0.5
2,000	600,000	35%	65%	1,066,915	1,071,667	4,752	0.4
2,000	600,000	50%	50%	1,071,721	1,076,473	4,752	0.4
2,000	800,000	35%	65%	1,259,377	1,265,713	6,336	0.5
2,000	800,000	50%	50%	1,265,785	1,272,121	6,336	0.5
3,000	900,000	35%	65%	1,598,872	1,606,000	7,128	0.4
3,000	900,000	50%	50%	1,606,081	1,613,209	7,128	0.4
3,000	1,200,000	35%	65%	1,887,565	1,897,069	9,504	0.5
3,000	1,200,000	50%	50%	1,897,177	1,906,681	9,504	0.5
4,000	1,200,000	35%	65%	2,130,830	2,140,334	9,504	0.4
4,000	1,200,000	50%	50%	2,140,442	2,149,946	9,504	0.4
4,000	1,600,000	35%	65%	2,515,753	2,528,425	12,672	0.5
4,000	1,600,000	50%	50%	2,528,569	2,541,241	12,672	0.5
5,000	1,500,000	35%	65%	2,662,787	2,674,667	11,880	0.4
5,000	1,500,000	50%	50%	2,674,802	2,686,682	11,880	0.4
5,000	2,000,000	35%	65%	3,143,942	3,159,782	15,840	0.5
5,000	2,000,000	50%	50%	3,159,962	3,175,802	15,840	0.5

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2 Service Classification No. 7

Summer Bill

	Monthly	Perc	ent	Bill at	Bill at		
Demand	Usage	Energy	/ Split	Present	Proposed	<u>Chang</u>	<u>e</u>
<u>(kW)</u>	<u>(kWh)</u>	<u>Peak</u>	Off-Peak	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
1,000	300,000	35%	65%	\$44,813.12	\$45,011.12	\$198.00	0.4
1,000	300,000	50%	50%	45,013.37	45,211.37	198.00	0.4
	•			•	,		
1,000	400,000	35%	65%	52,832.36	53,096.36	264.00	0.5
1,000	400,000	50%	50%	53,099.36	53,363.36	264.00	0.5
2,000	600,000	35%	65%	89,376.24	89,772.24	396.00	0.4
2,000	600,000	50%	50%	89,776.74	90,172.74	396.00	0.4
2,000	800,000	35%	65%	105,414.72	105,942.72	528.00	0.5
2,000	800,000	50%	50%	105,948.72	106,476.72	528.00	0.5
,	•			,	,		
3,000	900,000	35%	65%	133,939.36	134,533.36	594.00	0.4
3,000	900,000	50%	50%	134,540.11	135,134.11	594.00	0.4
3,000	1,200,000	35%	65%	157,997.08	158,789.08	792.00	0.5
3,000	1,200,000	50%	50%	158,798.08	159,590.08	792.00	0.5
4,000	1,200,000	35%	65%	178,502.48	179,294.48	792.00	0.4
4,000	1,200,000	50%	50%	179,303.48	180,095.48	792.00	0.4
4,000	1,600,000	35%	65%	210,579.44	211,635.44	1,056.00	0.5
4,000	1,600,000	50%	50%	211,647.44	212,703.44	1,056.00	0.5
F 000	4 500 000	050/	050/	000 005 00	004.055.00	000.00	0.4
5,000	1,500,000	35%	65%	223,065.60	224,055.60	990.00	0.4
5,000	1,500,000	50%	50%	224,066.85	225,056.85	990.00	0.4
5,000	2,000,000	35%	65%	263,161.80	264,481.80	1,320.00	0.5
5,000	2,000,000	50%	50%	264,496.80	265,816.80	1,320.00	0.5

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2 Service Classification No. 7

Winter Bill

Demand	Monthly Usage	Perd Energy		Bill at Present	Bill at Proposed	<u>Chang</u>	ie
<u>(kW)</u>	<u>(kWh)</u>		Off-Peak	Rates	<u>Rates</u>	Amount	Percent
	\ 						
1,000	300,000	35%	65%	\$44,463.12	\$44,661.12	\$198.00	0.4
1,000	300,000	50%	50%	44,663.37	44,861.37	198.00	0.4
1,000	400,000	35%	65%	52,482.36	52,746.36	264.00	0.5
1,000	400,000	50%	50%	52,749.36	53,013.36	264.00	0.5
2,000	600,000	35%	65%	88,676.24	89,072.24	396.00	0.4
2,000	600,000	50%	50%	89,076.74	89,472.74	396.00	0.4
2,000	800,000	35%	65%	104,714.72	105,242.72	528.00	0.5
2,000	800,000	50%	50%	105,248.72	105,776.72	528.00	0.5
3,000	900,000	35%	65%	132,889.36	133,483.36	594.00	0.4
3,000	900,000	50%	50%	133,490.11	134,084.11	594.00	0.4
3,000	1,200,000	35%	65%	156,947.08	157,739.08	792.00	0.5
3,000	1,200,000	50%	50%	157,748.08	158,540.08	792.00	0.5
4,000	1,200,000	35%	65%	177,102.48	177,894.48	792.00	0.4
4,000	1,200,000	50%	50%	177,903.48	178,695.48	792.00	0.4
4,000	1,600,000	35%	65%	209,179.44	210,235.44	1,056.00	0.5
4,000	1,600,000	50%	50%	210,247.44	211,303.44	1,056.00	0.5
5,000	1,500,000	35%	65%	221,315.60	222,305.60	990.00	0.4
5,000	1,500,000	50%	50%	222,316.85	223,306.85	990.00	0.4
5,000	2,000,000	35%	65%	261,411.80	262,731.80	1,320.00	0.5
5,000	2,000,000	50%	50%	262,746.80	264,066.80	1,320.00	0.5

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2 Service Classification No. 7 - High Voltage Distribution

Annual Bill

	Monthly	Perc		Bill at	Bill at		
Demand	Usage	<u>Energy</u>	<u> Split</u>	Present	Proposed	<u>Change</u>	<u>!</u>
<u>(kW)</u>	<u>(kWh)</u>	<u>Peak</u>	Off-Peak	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	Percent
1,000	300,000	35%	65%	\$470,059	\$472,435	2,376	0.5
1,000	300,000	50%	50%	470,340	472,716	2,376	0.5
1,000	400,000	35%	65%	550,551	553,719	3,168	0.6
1,000	400,000	50%	50%	550,926	554,094	3,168	0.6
				·	·		
2,000	600,000	35%	65%	912,661	917,413	4,752	0.5
2,000	600,000	50%	50%	913,222	917,974	4,752	0.5
2,000	800,000	35%	65%	1,073,645	1,079,981	6,336	0.6
2,000	800,000	50%	50%	1,074,394	1,080,730	6,336	0.6
3,000	900,000	35%	65%	1,355,262	1,362,390	7,128	0.5
3,000	900,000	50%	50%	1,356,105	1,363,233	7,128	0.5
3,000	1,200,000	35%	65%	1,596,739	1,606,243	9,504	0.6
3,000	1,200,000	50%	50%	1,597,862	1,607,366	9,504	0.6
				, ,	, ,	•	
4,000	1,200,000	35%	65%	1,797,864	1,807,368	9,504	0.5
4,000	1,200,000	50%	50%	1,798,987	1,808,491	9,504	0.5
4,000	1,600,000	35%	65%	2,119,833	2,132,505	12,672	0.6
4,000	1,600,000	50%	50%	2,121,331	2,134,003	12,672	0.6
5,000	1,500,000	35%	65%	2,240,466	2,252,346	11,880	0.5
5,000	1,500,000	50%	50%	2,241,870	2,253,750	11,880	0.5
5,000	2,000,000	35%	65%	2,642,927	2,658,767	15,840	0.5
5,000	2,000,000	50%	50%	2,644,799	2,660,639	15,840	0.6
5,000	2,000,000	JU /0	JU /0	2,077,700	2,000,000	15,040	0.0

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2 **Service Classification No. 7 - High Voltage Distribution**

Summer Bill

	Monthly	Perc	ent	Bill at	Bill at		
Demand	Usage	Energy	/ Split	Present	Proposed	Change	<u>)</u>
<u>(kW)</u>	<u>(kWh)</u>	<u>Peak</u>	Off-Peak	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
1,000	300,000	35%	65%	\$39,231.59	\$39,429.59	\$198.00	0.5
1,000	300,000	50%	50%	39,254.99	39,452.99	198.00	0.5
1,000	·	35%	65%	45,939.28	46,203.28	264.00	0.5
•	400,000			•	•		
1,000	400,000	50%	50%	45,970.48	46,234.48	264.00	0.6
2,000	600,000	35%	65%	76,175.06	76,571.06	396.00	0.5
2,000	600,000	50%	50%	76,221.86	76,617.86	396.00	0.5
2,000	800,000	35%	65%	89,590.44	90,118.44	528.00	0.6
2,000	800,000	50%	50%	89,652.84	90,180.84	528.00	0.6
3,000	900,000	35%	65%	113,118.53	113,712.53	594.00	0.5
3,000	900,000	50%	50%	113,188.73	113,782.73	594.00	0.5
3,000	1,200,000	35%	65%	133,241.60	134,033.60	792.00	0.6
3,000	1,200,000	50%	50%	133,335.20	134,127.20	792.00	0.6
4,000	1,200,000	35%	65%	150,062.00	150,854.00	792.00	0.5
•					•		
4,000	1,200,000	50%	50%	150,155.60	150,947.60	792.00	0.5
4,000	1,600,000	35%	65%	176,892.76	177,948.76	1,056.00	0.6
4,000	1,600,000	50%	50%	177,017.56	178,073.56	1,056.00	0.6
5,000	1,500,000	35%	65%	187,005.47	187,995.47	990.00	0.5
5,000	1,500,000	50%	50%	187,122.47	188,112.47	990.00	0.5
5,000	2,000,000	35%	65%	220,543.92	221,863.92	1,320.00	0.6
5,000	2,000,000	50%	50%	220,699.92	222,019.92	1,320.00	0.6

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 2 Service Classification No. 7 - High Voltage Distribution

Winter Bill

	Monthly	Perc	ent	Bill at	Bill at		
Demand	Usage	Energy	/ Split	Present	Proposed	<u>Change</u>	<u>)</u>
<u>(kW)</u>	<u>(kWh)</u>	<u>Peak</u>	Off-Peak	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
1,000	300,000	35%	65%	\$39,141.59	\$39,339.59	\$198.00	0.5
1,000	300,000	50%	50%	39,164.99	39,362.99	198.00	0.5
1,000	400,000	35%	65%	45,849.28	46,113.28	264.00	0.5
•	·			•	·		
1,000	400,000	50%	50%	45,880.48	46,144.48	264.00	0.6
2,000	600,000	35%	65%	75,995.06	76,391.06	396.00	0.5
2,000	600,000	50%	50%	76,041.86	76,437.86	396.00	0.5
2,000	800,000	35%	65%	89,410.44	89,938.44	528.00	0.6
2,000	800,000	50%	50%	89,472.84	90,000.84	528.00	0.6
3,000	900,000	35%	65%	112,848.53	113,442.53	594.00	0.5
3,000	900,000	50%	50%	112,918.73	113,512.73	594.00	0.5
3,000	1,200,000	35%	65%	132,971.60	133,763.60	792.00	0.6
3,000	1,200,000	50%	50%	133,065.20	133,857.20	792.00	0.6
4.000	4 000 000	050/	050/	4.40.700.00	450 404 00	700.00	0.5
4,000	1,200,000	35%	65%	149,702.00	150,494.00	792.00	0.5
4,000	1,200,000	50%	50%	149,795.60	150,587.60	792.00	0.5
4,000	1,600,000	35%	65%	176,532.76	177,588.76	1,056.00	0.6
4,000	1,600,000	50%	50%	176,657.56	177,713.56	1,056.00	0.6
5,000	1,500,000	35%	65%	186,555.47	187,545.47	990.00	0.5
5,000	1,500,000	50%	50%	186,672.47	187,662.47	990.00	0.5
5,000	2,000,000	35%	65%	220,093.92	221,413.92	1,320.00	0.6
5,000	2,000,000	50%	50%	220,249.92	221,569.92	1,320.00	0.6

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3

SC1 Residential

	Monthly	Bill at	Bill at	01	
	Usage <u>(kWh)</u>	Present <u>Rates</u>	Proposed <u>Rates</u>	<u>Change</u> <u>Amount</u>	<u>Percent</u>
<u>Summer</u>					
	0	\$5.41	\$5.41	\$0.00	0.0
	50	13.01	13.05	0.04	0.3
	100	20.60	20.69	0.09	0.4
	200	35.80	35.96	0.16	0.4
	250	43.40	43.60	0.20	0.5
	300	50.99	51.24	0.25	0.5
	400	66.19	66.51	0.32	0.5
	500	81.38	81.79	0.41	0.5
	750	127.44	128.04	0.60	0.5
	1,000	178.87	179.68	0.81	0.5
	1,500	281.73	282.94	1.21	0.4
	2,000	384.59	386.21	1.62	0.4
Winter					
	0	\$5.41	\$5.41	\$0.00	0.0
	50	14.08	14.12	0.04	0.3
	100	22.75	22.84	0.09	0.4
	200	40.10	40.26	0.16	0.4
	250	48.77	48.97	0.20	0.4
	300	57.44	57.69	0.25	0.4
	400	74.79	75.11	0.32	0.4
	500	92.13	92.54	0.41	0.4
	750	135.49	136.10	0.61	0.5
	1,000	178.86	179.67	0.81	0.5
	1,500	265.58	266.79	1.21	0.5
	2,000	352.30	353.92	1.62	0.5

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3

SC2 General Service - Unmetered

	Monthly Usage	Bill at Present	Bill at Proposed	Change	
	(kWh)	Rates	<u>Rates</u>	Amount	<u>Percent</u>
Summer					
	0	\$14.00	\$14.00	\$0.00	0.0
	100	\$27.52	\$27.61	0.09	0.3
	200	\$41.05	\$41.21	0.16	0.4
	300	\$54.57	\$54.82	0.25	0.5
	400	\$68.10	\$68.42	0.32	0.5
	500	\$81.62	\$82.03	0.41	0.5
	750	\$115.43	\$116.04	0.61	0.5
	1,000	\$149.25	\$150.06	0.81	0.5
	1,250	\$183.06	\$184.07	1.01	0.6
	1,500	\$216.87	\$218.08	1.21	0.6
	1,750	\$250.68	\$252.10	1.42	0.6
	2,000	\$284.49	\$286.11	1.62	0.6
<u>Winter</u>					
	0	\$14.00	\$14.00	\$0.00	0.0
	50	\$20.14	\$20.18	0.04	0.2
	100	\$26.28	\$26.36	0.08	0.3
	200	\$38.55	\$38.71	0.16	0.4
	250	\$44.69	\$44.89	0.20	0.4
	300	\$50.83	\$51.07	0.24	0.5
	400	\$63.10	\$63.43	0.33	0.5
	500	\$75.38	\$75.78	0.40	0.5
	750	\$106.07	\$106.67	0.60	0.6
	1,000	\$136.76	\$137.57	0.81	0.6
	1,500	\$198.13	\$199.35	1.22	0.6
	2,000	\$259.51	\$261.13	1.62	0.6

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3

SC2 General Service - Non-Demand Metered

	Monthly Usage	Bill at Present	Bill at Proposed	Change	
	(kWh)	Rates	<u>Rates</u>	Amount	Percent
Summer					
	0	\$16.00	\$16.00	\$0.00	0.0
	100	\$29.52	\$29.61	0.09	0.3
	200	\$43.05	\$43.21	0.16	0.4
	300	\$56.57	\$56.82	0.25	0.4
	400	\$70.10	\$70.42	0.32	0.5
	500	\$83.62	\$84.03	0.41	0.5
	750	\$117.43	\$118.04	0.61	0.5
	1,000	\$151.25	\$152.06	0.81	0.5
	1,250	\$185.06	\$186.07	1.01	0.5
	1,500	\$218.87	\$220.08	1.21	0.6
	1,750	\$252.68	\$254.10	1.42	0.6
	2,000	\$286.49	\$288.11	1.62	0.6
<u>Winter</u>					
	0	\$16.00	\$16.00	\$0.00	0.0
	50	\$22.14	\$22.18	0.04	0.2
	100	\$28.28	\$28.36	0.08	0.3
	200	\$40.55	\$40.71	0.16	0.4
	250	\$46.69	\$46.89	0.20	0.4
	300	\$52.83	\$53.07	0.24	0.5
	400	\$65.10	\$65.43	0.33	0.5
	500	\$77.38	\$77.78	0.40	0.5
	750	\$108.07	\$108.67	0.60	0.6
	1,000	\$138.76	\$139.57	0.81	0.6
	1,500	\$200.13	\$201.35	1.22	0.6
	2,000	\$261.51	\$263.13	1.62	0.6

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3

SC2 General Secondary Service - Summer

Daniel	Monthly	Bill at	Bill at	01	
Demand	Usage	Present	Proposed	<u>Change</u>	
<u>(kW)</u>	<u>(kWh)</u>	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
7	700	\$161.17	\$161.74	\$0.57	0.4
7	1,400	\$242.87	\$244.01	φυ.57 1.14	0.4
7	·	•	\$326.27	1.70	0.5
	2,100	\$324.57	•		
7	2,800	\$406.27	\$408.54	2.27	0.6
10	1,000	\$231.83	\$232.64	0.81	0.3
10	2,000	\$348.54	\$350.16	1.62	0.5
10	3,000	\$465.26	\$467.69	2.43	0.5
10	4,000	\$581.97	\$585.21	3.24	0.6
	1,000	,	4 5 5 5 5 5		
25	2,500	\$585.10	\$587.12	2.02	0.3
25	5,000	\$871.86	\$875.91	4.05	0.5
25	7,500	\$1,006.67	\$1,012.75	6.08	0.6
25	10,000	\$1,141.49	\$1,149.59	8.10	0.7
	·				
50	5,000	\$1,168.86	\$1,172.91	4.05	0.3
50	10,000	\$1,438.49	\$1,446.59	8.10	0.6
50	15,000	\$1,708.11	\$1,720.26	12.15	0.7
50	20,000	\$1,977.74	\$1,993.94	16.20	8.0
100	10,000	\$2,032.49	\$2,040.59	8.10	0.4
100	20,000	\$2,571.74	\$2,587.94	16.20	0.6
100	30,000	\$3,110.99	\$3,135.29	24.30	8.0
100	40,000	\$3,650.24	\$3,682.64	32.40	0.9
150	15,000	\$2,896.11	\$2,908.26	12.15	0.4
150	30,000	\$3,704.99	\$3,729.29	24.30	0.7
150	45,000	\$4,513.86	\$4,550.31	36.45	8.0
150	60,000	\$5,322.74	\$5,371.34	48.60	0.9

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3

SC2 General Secondary Service - Winter

	Monthly	Bill at	Bill at		
Demand	Usage	Present	Proposed	<u>Change</u>	<u> </u>
<u>(kW)</u>	<u>(kWh)</u>	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
_		.	.	*	
7	700	\$147.12	\$147.69	\$0.57	0.4
7	1,400	223.74	224.87	1.13	0.5
7	2,100	300.36	302.06	1.70	0.6
7	2,800	376.97	379.24	2.27	0.6
10	1,000	210.47	211.28	0.81	0.4
10	2,000	319.92	321.54	1.62	0.5
10	3,000	429.38	431.81	2.43	0.6
10	4,000	538.83	542.07	3.24	0.6
05	0.500	507.00	500.00	0.00	0.4
25	2,500	527.20	529.22	2.02	0.4
25	5,000	796.34	800.39	4.05	0.5
25	7,500	929.63	935.71	6.08	0.7
25	10,000	1,062.92	1,071.02	8.10	8.0
50	5,000	1,050.59	1,054.64	4.05	0.4
50	10,000	1,317.17	1,325.27	8.10	0.6
50	15,000	1,583.74	1,595.89	12.15	0.8
50	20,000	1,850.32	1,866.52	16.20	0.9
100	10,000	1,825.67	1,833.77	8.10	0.4
100	20,000	2,358.82	2,375.02	16.20	0.7
100	30,000	2,891.97	2,916.27	24.30	0.7
100	40,000	3,425.12	3,457.52	32.40	0.9
100	40,000	3,423.12	3,437.32	32.40	0.9
150	15,000	2,600.74	2,612.89	12.15	0.5
150	30,000	3,400.47	3,424.77	24.30	0.7
150	45,000	4,200.19	4,236.64	36.45	0.9
150	60,000	4,999.92	5,048.52	48.60	1.0

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3

SC2 General Primary Service - Summer

	Monthly	Bill at	Bill at		
Demand	Usage	Present	Proposed	<u>Change</u>	
<u>(kW)</u>	<u>(kWh)</u>	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
100	20,000	\$3,449.90	\$3,466.10	\$16.20	0.5
100	30,000	4,432.15	4,456.45	24.30	0.5
100	40,000	5,414.40	5,446.80	32.40	0.6
100	50,000	6,396.65	6,437.15	40.50	0.6
150	30,000	5,135.65	5,159.95	24.30	0.5
150	45,000	6,609.03	6,645.48	36.45	0.6
150	60,000	8,082.40	8,131.00	48.60	0.6
150	75,000	9,555.78	9,616.53	60.75	0.6
	40.000			00.40	
200	40,000	6,821.40	6,853.80	32.40	0.5
200	60,000	8,785.90	8,834.50	48.60	0.6
200	80,000	10,750.40	10,815.20	64.80	0.6
200	100,000	12,714.90	12,795.90	81.00	0.6
500	100 000	40 005 00	47.040.00	04.00	0.5
500	100,000	16,935.90	17,016.90	81.00	0.5
500	150,000	21,847.15	21,968.65	121.50	0.6
500	200,000	26,758.40	26,920.40	162.00	0.6
500	250,000	31,669.65	31,872.15	202.50	0.6
750	150,000	25,364.65	25,486.15	121.50	0.5
750	225,000	32,731.53	32,913.78	182.25	0.6
750	300,000	40,098.40	40,341.40	243.00	0.6
750	375,000	47,465.28	47,769.03	303.75	0.6
700	070,000	17,100.20	17,700.00	000.10	0.0
1000	200,000	33,793.40	33,955.40	162.00	0.5
1000	300,000	43,615.90	43,858.90	243.00	0.6
1000	400,000	53,438.40	53,762.40	324.00	0.6
1000	500,000	63,260.90	63,665.90	405.00	0.6

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3

SC2 General Primary Service - Winter

	Monthly	Bill at	Bill at		
Demand	Usage	Present	Proposed	<u>Change</u>	
<u>(kW)</u>	<u>(kWh)</u>	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
100	20,000	\$3,148.65	\$3,164.85	\$16.20	0.5
100	30,000	4,076.60	4,100.90	24.30	0.6
100	40,000	5,004.55	5,036.95	32.40	0.6
100	50,000	5,932.50	5,973.00	40.50	0.7
150	30,000	4,683.10	4,707.40	24.30	0.5
150	45,000	6,075.03	6,111.48	36.45	0.6
150	60,000	7,466.95	7,515.55	48.60	0.7
150	75,000	8,858.88	8,919.63	60.75	0.7
150	75,000	0,000.00	0,919.03	00.75	0.7
200	40,000	6,217.55	6,249.95	32.40	0.5
200	60,000	8,073.45	8,122.05	48.60	0.6
200	80,000	9,929.35	9,994.15	64.80	0.7
200	100,000	11,785.25	11,866.25	81.00	0.7
E00	100.000	15 404 05	15 EOE 25	94.00	0.5
500	100,000	15,424.25	15,505.25	81.00	0.5
500	150,000	20,064.00	20,185.50	121.50	0.6
500	200,000	24,703.75	24,865.75	162.00	0.7
500	250,000	29,343.50	29,546.00	202.50	0.7
750	150,000	23,096.50	23,218.00	121.50	0.5
750	225,000	30,056.13	30,238.38	182.25	0.6
750	300,000	37,015.75	37,258.75	243.00	0.7
750	375,000	43,975.38	44,279.13	303.75	0.7
4000	000 000	20 700 75	20,000,75	100.00	0.5
1000	200,000	30,768.75	30,930.75	162.00	0.5
1000	300,000	40,048.25	40,291.25	243.00	0.6
1000	400,000	49,327.75	49,651.75	324.00	0.7
1000	500,000	58,607.25	59,012.25	405.00	0.7

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3

SC5 Residential with Space Heating

	Monthly Usage (kWh)	Bill at Present <u>Rates</u>	Bill at Proposed <u>Rates</u>	<u>Change</u> <u>Amount</u>	Percent
Summer	, ,				
	0	\$5.41	\$5.41	\$0.00	0.0
	50	12.99	13.03	0.04	0.3
	100	20.57	20.65	0.08	0.4
	200	35.72	35.88	0.16	0.4
	250	43.30	43.50	0.20	0.5
	300	50.88	51.12	0.24	0.5
	400	66.03	66.36	0.33	0.5
	500	81.19	81.59	0.40	0.5
	750	127.14	127.75	0.61	0.5
	1,000	178.48	179.29	0.81	0.5
	1,500	281.14	282.36	1.22	0.4
	2,000	383.81	385.43	1.62	0.4
Winter					
	0	\$5.41	\$5.41	\$0.00	0.0
	50	14.06	14.10	0.04	0.3
	100	22.72	22.80	0.08	0.4
	200	40.02	40.18	0.16	0.4
	250	48.67	48.88	0.21	0.4
	300	57.33	57.57	0.24	0.4
	400	74.63	74.96	0.33	0.4
	500	91.94	92.34	0.40	0.4
	750	135.20	135.81	0.61	0.5
	1,000	178.47	179.28	0.81	0.5
	1,500	264.99	266.21	1.22	0.5
	2,000	351.52	353.14	1.62	0.5

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3 Service Classification No. 7

Annual Bill

Demand	Monthly Usage	Perd Energy		Bill at Present	Bill at Proposed	<u>Chang</u>	e
<u>(kW)</u>	<u>(kWh)</u>		Off-Peak	Rates	Rates	Amount	Percent
\\		<u> </u>	<u> </u>	<u></u>	<u> </u>	<u></u>	<u> </u>
1,000	300,000	35%	65%	\$537,333	\$540,249	2,916	0.5
1,000	300,000	50%	50%	539,736	542,652	2,916	0.5
1,000	400,000	35%	65%	634,356	638,244	3,888	0.6
1,000	400,000	50%	50%	637,560	641,448	3,888	0.6
2,000	600,000	35%	65%	1,071,667	1,077,499	5,832	0.5
2,000	600,000	50%	50%	1,076,473	1,082,305	5,832	0.5
2,000	800,000	35%	65%	1,265,713	1,273,489	7,776	0.6
2,000	800,000	50%	50%	1,272,121	1,279,897	7,776	0.6
3,000	900,000	35%	65%	1,606,000	1,614,748	8,748	0.5
3,000	900,000	50%	50%	1,613,209	1,621,957	8,748	0.5
3,000	1,200,000	35%	65%	1,897,069	1,908,733	11,664	0.6
3,000	1,200,000	50%	50%	1,906,681	1,918,345	11,664	0.6
4,000	1,200,000	35%	65%	2,140,334	2,151,998	11,664	0.5
4,000	1,200,000	50%	50%	2,149,946	2,161,610	11,664	0.5
4,000	1,600,000	35%	65%	2,528,425	2,543,977	15,552	0.6
4,000	1,600,000	50%	50%	2,541,241	2,556,793	15,552	0.6
5,000	1,500,000	35%	65%	2,674,667	2,689,247	14,580	0.5
5,000	1,500,000	50%	50%	2,686,682	2,701,262	14,580	0.5
5,000	2,000,000	35%	65%	3,159,782	3,179,222	19,440	0.6
5,000	2,000,000	50%	50%	3,175,802	3,195,242	19,440	0.6

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3 Service Classification No. 7

Summer Bill

Daniel	Monthly	Perc		Bill at	Bill at	01	
Demand	Usage	Energy		Present	Proposed	<u>Chang</u>	
<u>(kW)</u>	<u>(kWh)</u>	<u>Peak</u>	Off-Peak	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
1,000	300,000	35%	65%	\$45,011.12	\$45,254.12	\$243.00	0.5
1,000	300,000	50%	50%	45,211.37	45,454.37	243.00	0.5
1,000	400,000	35%	65%	53,096.36	53,420.36	324.00	0.6
1,000	400,000	50%	50%	53,363.36	53,687.36	324.00	0.6
2,000	600,000	35%	65%	89,772.24	90,258.24	486.00	0.5
2,000	600,000	50%	50%	90,172.74	90,658.74	486.00	0.5
2,000	800,000	35%	65%	105,942.72	106,590.72	648.00	0.6
2,000	800,000	50%	50%	106,476.72	107,124.72	648.00	0.6
3,000	900,000	35%	65%	134,533.36	135,262.36	729.00	0.5
3,000	900,000	50%	50%	135,134.11	135,863.11	729.00	0.5
3,000	1,200,000	35%	65%	158,789.08	159,761.08	972.00	0.6
3,000	1,200,000	50%	50%	159,590.08	160,562.08	972.00	0.6
4,000	1,200,000	35%	65%	179,294.48	180,266.48	972.00	0.5
4,000	1,200,000	50%	50%	180,095.48	181,067.48	972.00	0.5
4,000	1,600,000	35%	65%	211,635.44	212,931.44	1,296.00	0.6
4,000	1,600,000	50%	50%	212,703.44	213,999.44	1,296.00	0.6
5,000	1,500,000	35%	65%	224,055.60	225,270.60	1,215.00	0.5
5,000	1,500,000	50%	50%	225,056.85	226,271.85	1,215.00	0.5
5,000	2,000,000	35%	65%	264,481.80	266,101.80	1,620.00	0.6
5,000	2,000,000	50%	50%	265,816.80	267,436.80	1,620.00	0.6

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3 Service Classification No. 7

Winter Bill

Demand	Monthly Usage	Perc Energy		Bill at Present	Bill at Proposed	<u>Chang</u>	e
<u>(kW)</u>	<u>(kWh)</u>		Off-Peak	<u>Rates</u>	<u>Rates</u>	Amount	Percent
, ,	,						
1,000	300,000	35%	65%	\$44,661.12	\$44,904.12	\$243.00	0.5
1,000	300,000	50%	50%	44,861.37	45,104.37	243.00	0.5
1,000	400,000	35%	65%	52,746.36	53,070.36	324.00	0.6
1,000	400,000	50%	50%	53,013.36	53,337.36	324.00	0.6
2,000	600,000	35%	65%	89,072.24	89,558.24	486.00	0.5
2,000	600,000	50%	50%	89,472.74	89,958.74	486.00	0.5
2,000	800,000	35%	65%	105,242.72	105,890.72	648.00	0.6
2,000	800,000	50%	50%	105,776.72	106,424.72	648.00	0.6
3,000	900,000	35%	65%	133,483.36	134,212.36	729.00	0.5
3,000	900,000	50%	50%	134,084.11	134,813.11	729.00	0.5
3,000	1,200,000	35%	65%	157,739.08	158,711.08	972.00	0.6
3,000	1,200,000	50%	50%	158,540.08	159,512.08	972.00	0.6
4,000	1,200,000	35%	65%	177,894.48	178,866.48	972.00	0.5
4,000	1,200,000	50%	50%	178,695.48	179,667.48	972.00	0.5
4,000	1,600,000	35%	65%	210,235.44	211,531.44	1,296.00	0.6
4,000	1,600,000	50%	50%	211,303.44	212,599.44	1,296.00	0.6
5,000	1,500,000	35%	65%	222,305.60	223,520.60	1,215.00	0.5
5,000	1,500,000	50%	50%	223,306.85	224,521.85	1,215.00	0.5
5,000	2,000,000	35%	65%	262,731.80	264,351.80	1,620.00	0.6
5,000	2,000,000	50%	50%	264,066.80	265,686.80	1,620.00	0.6

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3 Service Classification No. 7 - High Voltage Distribution

Annual Bill

	Monthly	Perc		Bill at	Bill at		
Demand	Usage	Energy	<u>′ Split</u>	Present	Proposed	<u>Change</u>	<u>!</u>
<u>(kW)</u>	<u>(kWh)</u>	<u>Peak</u>	Off-Peak	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	<u>Percent</u>
1,000	300,000	35%	65%	\$472,435	\$475,351	2,916	0.6
1,000	300,000	50%	50%	472,716	475,632	2,916	0.6
1,000	400,000	35%	65%	553,719	557,607	3,888	0.7
1,000	400,000	50%	50%	554,094	557,982	3,888	0.7
0.000	600,000	050/	050/	047.440	000 045	F 000	0.0
2,000	600,000	35%	65%	917,413	923,245	5,832	0.6
2,000	600,000	50%	50%	917,974	923,806	5,832	0.6
2,000	800,000	35%	65%	1,079,981	1,087,757	7,776	0.7
2,000	800,000	50%	50%	1,080,730	1,088,506	7,776	0.7
3,000	900,000	35%	65%	1,362,390	1,371,138	8,748	0.6
3,000	900,000	50%	50%	1,363,233	1,371,981	8,748	0.6
3,000	1,200,000	35%	65%	1,606,243	1,617,907	11,664	0.7
3,000	1,200,000	50%	50%	1,607,366	1,619,030	11,664	0.7
4,000	1,200,000	35%	65%	1,807,368	1,819,032	11,664	0.6
4,000	1,200,000	50%	50%	1,808,491	1,820,155	11,664	0.6
4,000	1,600,000	35%	65%	2,132,505	2,148,057	15,552	0.0
•						•	
4,000	1,600,000	50%	50%	2,134,003	2,149,555	15,552	0.7
5,000	1,500,000	35%	65%	2,252,346	2,266,926	14,580	0.6
5,000	1,500,000	50%	50%	2,253,750	2,268,330	14,580	0.6
5,000	2,000,000	35%	65%	2,658,767	2,678,207	19,440	0.7
5,000	2,000,000	50%	50%	2,660,639	2,680,079	19,440	0.7

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3 **Service Classification No. 7 - High Voltage Distribution**

Summer Bill

	Monthly	Perc	ent	Bill at	Bill at		
Demand	Usage	Energy	/ Split	Present	Proposed	<u>Change</u>	<u>)</u>
<u>(kW)</u>	(kWh)	<u>Peak</u>	Off-Peak	<u>Rates</u>	<u>Rates</u>	<u>Amount</u>	Percent
1 000	200,000	250/	CE0/	\$20,420 F0	\$20 672 FO	\$243.00	0.6
1,000	300,000	35%	65%	\$39,429.59	\$39,672.59	•	
1,000	300,000	50%	50%	39,452.99	39,695.99	243.00	0.6
1,000	400,000	35%	65%	46,203.28	46,527.28	324.00	0.7
1,000	400,000	50%	50%	46,234.48	46,558.48	324.00	0.7
2,000	600,000	35%	65%	76,571.06	77,057.06	486.00	0.6
2,000	600,000	50%	50%	76,617.86	77,103.86	486.00	0.6
2,000	800,000	35%	65%	90,118.44	90,766.44	648.00	0.7
2,000	800,000	50%	50%	90,180.84	90,828.84	648.00	0.7
,	,			,	,		
3,000	900,000	35%	65%	113,712.53	114,441.53	729.00	0.6
3,000	900,000	50%	50%	113,782.73	114,511.73	729.00	0.6
3,000	1,200,000	35%	65%	134,033.60	135,005.60	972.00	0.7
3,000	1,200,000	50%	50%	134,127.20	135,099.20	972.00	0.7
4.000	4 000 000	050/	050/	450.054.00	454 000 00	070.00	0.0
4,000	1,200,000	35%	65%	150,854.00	151,826.00	972.00	0.6
4,000	1,200,000	50%	50%	150,947.60	151,919.60	972.00	0.6
4,000	1,600,000	35%	65%	177,948.76	179,244.76	1,296.00	0.7
4,000	1,600,000	50%	50%	178,073.56	179,369.56	1,296.00	0.7
5,000	1,500,000	35%	65%	187,995.47	189,210.47	1,215.00	0.6
5,000	1,500,000	50%	50%	188,112.47	189,327.47	1,215.00	0.6
5,000	2,000,000	35%	65%	221,863.92	223,483.92	1,620.00	0.7
5,000	2,000,000	50%	50%	222,019.92	223,639.92	1,620.00	0.7

^{*}All Rates Include Sales and Use Tax

Monthly Billing Comparisons - Year 3 Service Classification No. 7 - High Voltage Distribution

Winter Bill

	Monthly	Perc	ent	Bill at	Bill at		
Demand	Usage	Energy	/ Split	Present	Proposed	Change	<u> </u>
<u>(kW)</u>	(kWh)	<u>Peak</u>	Off-Peak	<u>Rates</u>	<u>Rates</u>	Amount	Percent
1,000	300,000	35%	65%	\$39,339.59	\$39,582.59	\$243.00	0.6
	· ·			•			
1,000	300,000	50%	50%	39,362.99	39,605.99	243.00	0.6
1,000	400,000	35%	65%	46,113.28	46,437.28	324.00	0.7
1,000	400,000	50%	50%	46,144.48	46,468.48	324.00	0.7
2,000	600,000	35%	65%	76,391.06	76,877.06	486.00	0.6
2,000	600,000	50%	50%	76,437.86	76,923.86	486.00	0.6
2,000	800,000	35%	65%	89,938.44	90,586.44	648.00	0.7
2,000	800,000	50%	50%	90,000.84	90,648.84	648.00	0.7
,	,			,	,		
3,000	900,000	35%	65%	113,442.53	114,171.53	729.00	0.6
3,000	900,000	50%	50%	113,512.73	114,241.73	729.00	0.6
3,000	1,200,000	35%	65%	133,763.60	134,735.60	972.00	0.7
3,000	1,200,000	50%	50%	133,857.20	134,829.20	972.00	0.7
4 000		0=0/	0 =0/	.=	4-4 400 00		
4,000	1,200,000	35%	65%	150,494.00	151,466.00	972.00	0.6
4,000	1,200,000	50%	50%	150,587.60	151,559.60	972.00	0.6
4,000	1,600,000	35%	65%	177,588.76	178,884.76	1,296.00	0.7
4,000	1,600,000	50%	50%	177,713.56	179,009.56	1,296.00	0.7
5,000	1,500,000	35%	65%	187,545.47	188,760.47	1,215.00	0.6
5,000	1,500,000	50%	50%	187,662.47	188,877.47	1,215.00	0.6
5,000	2,000,000	35%	65%	221,413.92	223,033.92	•	0.6
•				·	·	1,620.00	
5,000	2,000,000	50%	50%	221,569.92	223,189.92	1,620.00	0.7

^{*}All Rates Include Sales and Use Tax

Rockland Electric Company

Accounting Panel Exhibits AP1 – AP5

Rockland Electric Company
Revenue Requirement Calculation Exhibit AP-1

Witness: Accounting Panel

(amounts in 000s)	<u> 2021</u>	2022	<u>2023</u>	<u>2024</u>	<u> 2025</u>	,	<u> 2026</u>	R	Revenue equirement r. 1 - Yr. 13)
Revenue Requirement									
Net Rate Base (Capital & Reg. Assets) ROR	\$ 1,707 8.91%	\$ 5,233 8.91%	\$ 8.91%	\$ 8.91%	\$ 9,218 8.91%	\$	7,923 8.91%		
Earnings Base	152	466	811	936	821		706		
Depreciation Gross up for Uncollectibles	250 1	792 3	1,443 5	1,801 5	1,801 5		1,801 5		
Revenue Requirement	\$ 403	\$ 1,261	\$ 2,258	\$ 2,743	\$ 2,627	\$	2,512	\$	23,823
Revenue Requirement Breakdown by Program Energy Efficiency Subprograms									
Residential Efficient Products Program	\$ 88	\$ 264	\$ 456	\$ 548	\$ 525	\$		\$	4,766
Home Performance with Energy Star Program	41	128	229	279	268		256		2,427
Multi-Family Program	29	90	163	199	191		183		1,730
Commercial and Industrial Direct Install Program	96	302	542	658	631		603		5,717
Commercial and Industrial Rebate Program Peak Demand Reduction Subprograms Peak Demand Reduction Program	84 31	267 92	487 156	595 184	570 177		545 169		5,166 1,607
Clean Heat Beneficial Electrification Program	35	118	226	278	267		255		2,410
Total Revenue Requirement	\$ 403	\$ 1,261	\$ 	\$ 2,743	\$ 2,627	\$	2,512	\$	23,823

Rockland Electric Company
Energy Efficiency and Peak Demand Reduction Programs
Exhibit AP-2

Witness: Accounting Panel

Residential Ef	ficient Products I	Program	
Cost Category	PY1	PY2	PY3
Capital Cost			
Utility Administration	\$87,000	\$88,863	\$90,772
Marketing	\$35,000	\$35,875	\$36,772
Outside Services	\$482,277	\$449,337	\$490,700
Incentives-Rebates	\$337,240	\$435,528	\$570,895
Incentives-Financing	\$41,968	\$54,199	\$71,045
Inspections and Quality Control	\$59,200	\$38,227	\$50,108
Evaluation	\$45,032	\$47,152	\$55,766
Total	\$1,087,717	\$1,149,182	\$1,366,057

Home Performan	ce with Energy St	ar Program	
Cost Category	PY1	PY2	PY3
Capital Cost			
Utility Administration	\$60,900	\$62,204	\$63,540
Marketing	\$24,500	\$25,113	\$25,740
Outside Services	\$73,340	\$69,182	\$82,719
Incentives-Rebates	\$227,637	\$293,982	\$385,354
Incentives-Financing	\$68,291	\$88,195	\$115,606
Inspections and Quality Control	\$33,840	\$29,160	\$38,160
Evaluation	\$18,910	\$21,584	\$26,798
Total	\$507,418	\$589,419	\$737,918

Multi-	Family Program		
Cost Category	PY1	PY2	PY3
Capital Cost			
Utility Administration	\$26,100	\$26,659	\$27,231
Marketing	\$10,500	\$10,763	\$11,032
Outside Services	\$66,381	\$60,195	\$70,939
Incentives-Rebates	\$211,444	\$273,069	\$357,942
Incentives-Financing	\$12,195	\$15,749	\$20,644
Inspections and Quality Control	\$13,200	\$17,047	\$22,346
Evaluation	\$14,743	\$17,448	\$22,027
Total	\$354,563	\$420,930	\$532,161

Commercial and Industrial Direct Install Program									
Cost Category	Cost Category PY1 PY2 PY								
Capital Cost									
Utility Administration	\$87,000	\$88,863	\$90,772						
Marketing	\$35,000	\$35,875	\$36,772						
Outside Services	\$274,231	\$256,259	\$256,259						
Incentives-Rebates	\$713,736	\$921,753	\$1,208,244						
Incentives-Financing	\$30,589	\$39,504	\$51,782						
Inspections and Quality Control	\$4,800	\$4,133	\$5,417						
Evaluation	\$50,165	\$58,810	\$71,886						
Total	\$1,195,521	\$1,405,196	\$1,721,132						

Commercial and Industrial Rebate Program						
Cost Category	PY1	PY2	PY3			
Capital Cost						
Utility Administration	\$87,000	\$88,863	\$90,772			
Marketing	\$35,000	\$35,875	\$36,772			
Outside Services	\$180,716	\$182,321	\$223,056			
Incentives-Rebates	\$546,454	\$705,717	\$925,062			
Incentives-Financing	\$140,517	\$181,470	\$237,873			
Inspections and Quality Control	\$19,211	\$19,256	\$25,241			
Evaluation	\$39,077	\$46,441	\$58,541			
Total	\$1,047,975	\$1,259,944	\$1,597,317			

Electric Portfolio Total						
Cost Category	PY1	PY2	PY3			
Capital Cost						
Utility Administration	\$348,000	\$355,450	\$363,086			
Marketing	\$140,000	\$143,500	\$147,088			
Outside Services	\$1,076,944	\$1,017,296	\$1,123,673			
Incentives-Rebates	\$2,036,512	\$2,630,050	\$3,447,499			
Incentives-Financing	\$293,559	\$379,117	\$496,950			
Inspections and Quality Control	\$130,251	\$107,822	\$141,272			
Evaluation	\$167,927	\$191,435	\$235,018			
Total	\$4,193,193	\$4,824,671	\$5,954,585			

Peak Demand Reduction Program									
Cost Category PY1 PY2 PY3									
Capital Cost									
Utility Administration	\$30,000	\$30,750	\$31,519						
Marketing	\$20,000	\$20,000	\$20,000						
Outside Services	\$193,750	\$180,000	\$186,250						
Incentives-Rebates	\$113,750	\$145,000	\$176,250						
Incentives-Financing	\$0	\$0	\$0						
Inspections and Quality Control	\$5,000	\$5,000	\$5,000						
Evaluation	\$16,313	\$17,134	\$18,856						
Total	\$378,813	\$397,884	\$437,875						

Clean Heat Beneficial Electrification Program						
Cost Category	PY2	PY3				
Capital Cost						
Utility Administration	\$30,000	\$30,750	\$31,519			
Marketing	\$20,000	\$20,500	\$21,013			
Outside Services	\$77,057	\$99,236	\$120,302			
Incentives-Rebates	\$231,485	\$374,582	\$468,254			
Incentives-Financing	\$46,297	\$74,916	\$93,651			
Inspections and Quality Control	\$6,960	\$2,880	\$3,580			
Evaluation	\$16,448	\$23,758	\$29,010			
Total	\$428,246	\$626,622	\$767,328			

Total Plan - EE+PDR+CH									
Cost Category PY1 PY2 PY3									
Capital Cost									
Utility Administration	\$408,000	\$416,950	\$426,124						
Marketing	\$180,000	\$184,000	\$188,100						
Outside Services	\$1,347,751	\$1,296,532	\$1,430,225						
Incentives-Rebates	\$2,381,747	\$3,149,632	\$4,092,002						
Incentives-Financing	\$339,856	\$454,033	\$590,601						
Inspections and Quality Control	\$142,211	\$115,702	\$149,852						
Evaluation	\$200,687	\$232,327	\$282,884						
Total	\$5,000,252	\$5,849,176	\$7,159,787						

Rockland Electric Company

Pre-Tax Rate of Return Calculation Exhibit AP-3

Witness: Accounting Panel

	Cost *	Capital Structure % *	Weighted After-Tax Cost	Weighted Pre-Tax Cost
Long Term Debt Rate	4.88%	51.68%	2.52%	2.52%
Regulated Return on Equity	9.50%	48.32%	4.59%	6.39%
			7.11%	8.91%
State tax rate	9.00%	а		
Federal tax rate	21.00%	b		
Combined Income Tax Rate after		-		
Federal Tax Deduction for State Income	28.11%	c = 1-(1-b)*(1-a)		
Taxes Paid				
Net of Tax Factor	71.89%	d = 1/(1-c)		
After-Tax Return on Equity	4.59%			
Divide by: Net of Tax Factor	71.89%			
Pre-Tax Return on Equity	6.39%	-		
	·			

^{*} From RECO's most recently approved electric base rate case, ER19050552

Rockland Electric Company
Revenue Requirement Calculation
Exhibit AP-4
Witness: Accounting Panel

+ Additions 5,000,252 5,849,176 7,159,787				1 2021	2 2022	3 2023	4 2024	5 2025	6 2026
+ Additions 5,000,252 5,849,176 7,159,787 7,100,0522 1,800,0521 1,800,	REVENUE REQUIREMENT								
- Depreciation							15,523,787	13,722,865	11,921,944
End of period Churlainte Defend Taxes							(1,800,922)	(1,800,922)	(1,800,922)
Rate Base					-	-	-	-	-
Rate Base				, ,	.,				
Avg. rate base									
Pieda WACC for rev req				, ,-			, ,		
Carrying charge			0.040/						
Popericiation	Pre-tax WACC for rev req		8.91%	8.91%	8.91%	8.91%	8.91%	8.91%	8.91%
Property tax Pro									705,756
Total Expense 1.002 1.									
Total Expense 1.002 1.00					- 0	0	- 0		(
Supporting Schedule				402.102	1.258.565	2.253.953	2.737.320	2.621.998	2 506 677
Supporting Schedules			1.002						1.002
Reg Asset & Program Implementation									2,511,691
Spend Spen	SUPPORTING SCHEDULES								
Sept Sound Sound									
\$\frac{202}{2024} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \									
\$\frac{2023}{2024} \frac{7}{15,9787} 10				250,013					
Company				-	292,459				
New tax basis per year 2025 7 7 7 7 7 7 7 7 7		7,159,787		-	-		715,979		
New tax basis per year		-		-			_	-	-
Less: bonus depreciation per year 0% 5,000,252 5,849,176 7,159,787 -			U	250013	792484		1800922	1800922	1800922
Less: bonus depreciation per year 0% 5,000,252 5,849,176 7,159,787 -	New tay basis per year			5 000 252	5 8/0 176	7 150 787	_	_	_
CapEx eligible for MACRS depreciation per vintage Spend 1 Tax life 2021 5,000,252 1 5,000,252 -		0%		-	-	-	_	_	_
Spend 1 Tax life				5.000.252	5.849.176	7.159.787	-	-	_
Company		Spend	1 Tax life						
1	2021	5,000,252	1	5,000,252	-	-	-	-	-
Company Comp	2022	5,849,176	1		5,849,176	-	-	-	-
Company Comp	2023	7,159,787	1			7,159,787	-	-	-
Annual tax depreciation 5,000,252 5,849,176 7,159,787		-	•				-	-	-
Deferred Tax Calculation Federal Tax Calculation Federal Tax depreciation Federal Tax depreciation Federal Tax depreciation (excluding cost of removal) Federal Tax depreciation Federal Tax depreci		-	1	5.000.252	5.849.176	7.159.787		-	
Federal 5,000,252 5,849,176 7,159,787 - - - - Book depreciation (excluding cost of removal) 250013 792484 1442932 1800922 1800922 1800922 1800922 1800922 1,800,922 (1,800,922) <	·			0,000,202	0,0 10,110	.,,			
Tax depreciation 5,000,252 5,849,176 7,159,787 -									
Book depreciation (excluding cost of removal) 250013 79248 1442932 1800922 1800922 1800922 1800922 180092				5 000 252	5 8/0 176	7 150 797	_	_	
Difference between tax and book depreciation 4,750,239 5,056,692 5,716,855 (1,800,922)							1800922	1800922	180092
*Tax rate 28% 28% 28% 28% 28% 28% 28% 28% 28% 28%									
Increase/(decrease) in normalized deferred taxes 1,335,292 1,421,436 1,607,008 (506,239) (506,239) (506,239)			28%						28%
		xes	2073						(506,239
					, ,				2,845,019

Exhibit AP-5

ROCKLAND ELECTRIC COMPANY

INDEX OF SCHEDULES

<u>Schedule</u>	<u>Title of Schedules</u>
1	Comparative Balance Sheets
2	Comparative Statement of Income

Rockland Electric Company Comparative Balance Sheets - Assets Year 2017 to 2020

ETS AND OTHER DEBITS	DECEMBER 31, 2017	DECEMBER 31, 2018	DECEMBER 31, 2019	JUNE 30, 2020
Utility Plant				
Electric Plant in Service	\$364,525,914	\$392,711,881	\$410,054,514	\$419,687,984
Electric Plant Held for Future Use	208,709	208,709	208,709	208,709
Construction Work in Progress	15,657,245	17,145,365	29,610,382	34,908,954
Total Utility Plant	380,391,868	410,065,955	439,873,606	454,805,647
Accum. Provision for Depreciation				
Electric Plant in Service	85,804,125	88,687,118	87,745,603	96,685,269
Retirement Work in Progress	(64,819)	(107)	(38,599)	(22,221)
Electric Plant Held for Future Use	(01,010)	-	(00,000)	(,
Total Accumulated Provision				
for Depreciation	85,739,306	88,687,010	87,707,004	96,663,048
Net Utility Plant	294,652,562	321,378,945	352,166,602	358,142,599
Other Property and Investments				
Investments in Subsidiary Companie	231,500	231,500	231,500	231,500
Other Investments	201,000	201,000	201,300	201,300
Total Other Property				
and Investments	231,500	231,500	231,500	231,500
_	,	,		
Cash	308,775	306,183	475,986	325,955
Special Deposits	-	=		
Working Funds		-		-
Temporary Cash Investments	40,450,000	17,425,000	22,575,000	12,825,000
Customer Accounts Receivable	17,243,036	20,302,280	15,883,704	17,687,403
Other Accounts Receivable	4,146,307	2,850,293	2,661,642	557,363
Accumulated Provision	(000,000)	(550.040)	(504.000)	(744.740)
for Uncollectible Accounts	(826,260)	(552,343)	(581,329)	(741,719)
Accounts Receivable from Associated Companies	107 204	7,122,116	7 202 002	11 201 204
Materials and Supplies	197,294 3,278,702	3,388,576	7,292,083 3,700,173	11,201,394 4,063,781
Nuclear Materials Held for Sale	3,270,702	3,366,376	3,700,173	4,003,761
Prepayments	609,586	1,606,966	607,243	6,241,413
Unbilled Revenues	8,202,207	4,260,048	7,077,954	8,169,511
Miscellaneous Current and	0,202,201	4,200,040	7,077,004	0,100,011
Accrued Assets	_	_	_	_
Derivative Instrument Asset Hodges	77,672	320,263	17,916	-
Total Current and	,	•	,	
Accrued Assets	73,687,318	57,029,383	59,710,374	60,330,100
<u>Deferred Debits</u>				
Deferred Fuel Costs	-	-	-	-
Unamortized Debt Expense	44.000.004	- 00 007 047	- 04 000 407	-
Other Regulatory Assets	14,368,034	20,227,047	21,088,127	30,941,668
Clearing Accounts Miscellaneous Deferred Debits	1 DE4 024	010 500	(20,860) 761,366	(28,551) 892,709
Research and Development Expens	1,054,934	910,598	101,300	092,709
Accumulated Deferred Federal Inco	21,123,465	23,244,143	27,245,341	26,622,783
_			49,073,974	58,428,609
Total Deferred Debits	36,546,433	44,381,788	+10,010,0 1	
Total Deferred Debits	36,546,433	44,361,788	40,010,014	00,120,000

Rockland Electric Company Comparative Balance Sheets - Liabilities Year 2017 to 2020

LIABILITIES AND OTHER CREDITS	DECEMBER 31, 2017	DECEMBER 31, 2018	DECEMBER 31, 2019	JUNE 30, 2020
Proprietary Capital				
Common Stock Issued	\$11,200,000	\$11,200,000	\$11,200,000	\$11,200,000
Capital Stock Expense	Ψ11,200,000	Ψ11,200,000	ψ11,200,000 -	ψ11,200,000
Retained Earnings	261,715,007	276,282,289	287,078,117	291,775,780
Paid in Capital			10,000,000	15,000,000
Total Proprietary Capital	272,915,007	287,482,289	308,278,117	317,975,780
Law Tama Bahi				
Long Term Debt				
Bonds	-	-	-	-
Unamortized Discount on Long Term Debt	-	-	-	-
Total Long Term Debt	<u> </u>	-	<u>-</u>	-
Other Noncurrent Liabilities				
Accumulated Provision for Misc Operating	2,221,041	-	-	-
Obligations Under Capital Leases - Noncurrer	-	-	-	179,374
Total Noncurrent Liabilities	2,221,041	-	-	179,374
Current and Accrued Liabilities				
Long Term Debt Due Within one Year	_	_	_	
Accounts Payable	9,904,541	10,726,821	20,537,557	23,578,741
Accounts Payable to Associated Companies	9,327,631	10,497,852	8,934,236	10,312,778
Customer Deposits	3,294,584	2,834,055	2,639,858	2,898,294
Taxes Accrued	1,105,142	(74,692)	(169,712)	(160,570)
Interest Accrued	229,093	25,742	44,078	67,659
Tax Collections Payable	79,427	107,441	154,860	195,702
Miscellaneous Current and Accrued Liabilities	,	1,613,954	2,393,400	2,983,757
Obligations Under Capital Leases - Current	_,,	-	28,635	40,835
Derivative Instrument Liabilities - Hedges	-	-	695,738	554,058
Total Current and				
Accrued Liabilities	25,963,823	25,731,173	35,258,650	40,471,253
Deferred Credits				
Customer Advances for Construction	573,462	1,254,145	618,613	482,794
Other Deferred Credits	920,881	1,236,426	1,100,581	1,126,388
Regulatory Liabilities	28,779,934	24,487,763	23,833,050	20,903,168
Accumulated Deferred Income Taxes-Other F	•	65,933,781	70,228,148	72,599,917
Accumulated Deferred Income Taxes-Other	13,558,381	16,637,190	21,644,427	23,190,074
Accumulated Deferred Investment Tax Credit		258,849	220,864	204,061
Total Deferred Credits	104,017,941	109,808,154	117,645,683	118,506,402
Total Liabilities and				
Total Liabilities and				

Rockland Electric Company Comparative Income Statement

Utility Operating Income	DECEMBER 31, 2017	12 Months Ended DECEMBER 31, 2018	DECEMBER 31, 2019
Operating Revenue	\$173,732,353	\$175,160,210	\$174,475,809
Operating Expenses:			
Operation Expenses	129,861,618	137,759,907	143,139,582
Maintenance Expenses	13,844,959	12,215,002	11,208,563
Depreciation Expense	8,123,366	8,186,405	8,746,937
Amortization of Other Limited Term Plant	35,169	34,887	34,887
Amortization of Property Losses	-		-
Taxes Other than Income Taxes Income Taxes	1,849,478	1,797,149	1,764,331
Federal Income Taxes	5,522,531	1,761,475	- (715,574)
NJ State Income Taxes	1,829,117	1,053,648	1,087,367
Gain/loss on disposition of utility plant	1,020,117	1,000,040	1,007,307
Total Utility Operating Expenses	161,066,237	162,808,471	165,266,091
rotar other processing Experience		,,	.00,200,001
Net Utility Operating Income	12,666,116	12,351,739	9,209,718
Other Income			
Expenses of Nonutility Operations	-		
Equity in Earnings of Subsidiary Companies	200.000	-	400.000
Investment Income Allowance for Other Funds	306,000	509,549	439,208
Used During Construction (AFDC)	356,805	541 705	581,592
Miscellaneous Non-Operating Income	330,003	541,795	301,392
Gain on Disposition of Properties	-	-	-
		4.054.044	4 000 004
Total Other Income	662,805	1,051,344	1,020,801
Taxes Applicable to Other Income Deductions			
Taxes Other than Income Taxes	18,954	19,245	19,504
Income Taxes - Non Operating	(61,325)	(880,261)	(605,637)
Miscellaneous Income Deductions	189,091	171,830	210,916
Total Taxes Applicable			
to Other Income Deductions	146,720	(689,186)	(375,218)
Net Other Income and Deductions	516,085	1,740,531	1,396,018
Interest Charges			
Interest on Long Term Debt	_	_	_
Amortization of Debt Discount	-	-	_
and Expense	_	_	_
Other Interest Expense	68,253	(180,028)	101,999
Allowance for Borrowed Funds	,	(,)	. ,
Used During Construction	(184,065)	(294,984)	(292,090)
Total Interest Charges	(115,812)	(475,013)	(190,092)
Ç		, , , ,	, , , ,
Net Income	\$13,298,014	\$14,567,282	\$10,795,827