System Energy Efficiency Plan (SEEP) 2019-2025

Consolidated Edison Company of New York, Inc.
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Introduction

Consolidated Edison Company of New York, Inc. ("Con Edison" or the "Company") submits this System Energy Efficiency Plan ("SEEP") for 2019-2025, as required by Department of Public Service Staff's ("Staff") Clean Energy CE:02 SEEP Guidance Document issued September 1, 2020.[1]

The Company continues to support the State's clean energy objectives.[2] To help meet the State's goals, Con Edison is investing over $1.5 billion by 2025 to gain energy efficiency savings. The Company's suite of energy efficiency initiatives is aligned with the State's clean energy policies and priorities to reduce greenhouse gas emissions, provide clean heating alternatives, support low- and moderate-income ("LMI") customers and Disadvantaged Communities ("DACs"), and help customers manage their energy use.

This filing outlines the Company's budgets, targets, programs, and approaches to achieve the above goals, as well as the targets established by the New York State Public Service Commission ("the Commission").

Executive Summary

Energy Efficiency Advances State Clean Energy Goals

New York's Climate Leadership and Community Protection Act ("CLCPA") establishes ambitious clean energy goals for New York State, including reducing greenhouse gas ("GHG") emissions by 85 percent by 2050 and supporting disadvantaged communities in taking part in the clean energy transition. The Company supports these and other clean energy objectives and is committed to helping New Yorkers in its service territory benefit from clean energy.

[1] DPS Office of Markets and Innovation, Clean Energy Guidance CE-02: SEEP Content Guidance, September 1, 2020.

[2] The New York State Public Service Commission's (the "Commission") Order Adopting Accelerated Energy Efficiency Targets ("Accelerated Efficiency Order") established a goal of reducing customer energy usage by 185 trillion British thermal units ("TBtu") statewide by 2025. Following the Accelerated Efficiency Order, New York adopted the Climate Leadership and Community Protection Act ("CLCPA"). The CLCPA requires the State to achieve a carbon free electricity system by 2040 and reduce greenhouse gas emissions 85 percent below 1990 levels by 2050. The CLCPA also mandates that 35 percent of overall benefits of spending on clean energy and energy efficiency programs be directed towards disadvantaged communities. Most recently, the Commission's Order Authorizing Utility Energy Efficiency And Building Electrification Portfolios Through 2025 ("2020 NENY Order") directs an additional incremental 35.8 TBtu utility-driven energy efficiency saving, with corollary goals of achieving (i) 3 percent annual reduction in electricity sales by 2025 and 1.3 percent of natural gas sales, (ii) an aggregate reduction of 3.6 TBtu through heat pump deployment, and (iii) the continued provision and enhancement of programs for LMI customers. *See*, *e.g.*, Case 18-M-0084, *In the Matter of a Comprehensive Energy Efficiency Initiative* ("NENY Proceeding"), Order Adopting Accelerated Energy Efficiency Targets ("Accelerated Efficiency Order"), (issued December 13, 2018); Chapter 106 of the Laws of 2019. CLCPA is available at https://legislation.nysenate.gov/pdf/bills/2019/S6599; and NENY Proceeding, Order Authorizing Utility Energy Efficiency and Building Electrification Portfolios Through 2025 (issued January 16, 2020) ("2020 NENY Order").

Energy efficiency is crucial to achieving CLCPA goals – every megawatt-hour of electricity or dekatherm of natural gas that does not need to be used reduces emissions and losses throughout the energy supply chain, from extraction to transportation to generation. Compared to other clean energy strategies, energy efficiency is cost effective, implementable, and can directly benefits customers. Furthermore, energy efficiency has a long track record of success – delivering more than seven times more GHG emissions reductions than all operating renewable energy resources procured through the Clean Energy Standard in 2020 and growing from there.[3] Con Edison has contributed to that success, implementing programs providing 56.3 million MMBtu in lifetime energy savings since 2020. These programs have helped thousands of customers increase the comfort of their homes and businesses and manage their energy bills.

The recently initiated New Efficiency: New York ("NENY") Interim Review,[4] paired with support from other State and Federal initiatives, can improve future program growth and evolution. To advance achievement of statewide goals, energy efficiency targets and budgets should be expanded, deeper energy savings measures should be prioritized over lighting and gas appliance measures, clean heating and low-and-moderate income customer programs should be grown and extended, and flexibility in program implementation should be expanded.

Energy Efficiency Targets and Budgets Should be Expanded

The targets and budgets prescribed in the 2020 NENY Order[5] were a necessary step to reducing statewide GHG emissions. The NENY Interim Review should double down on that initial investment to realize energy efficiency's full potential to accelerate achievement of CLCPA goals. The CLCPA Scoping Plan envisions that electrification and energy efficiency will need to reduce CO_2e by 94 MMT by 2050. To begin to meet that goal our current energy efficiency achievement will need to more than double by 2030.[6]

Expanded targets and budgets can also help further catalyze markets for energy efficiency measures that are in earlier stages of adoption, including growing the businesses and jobs that make up the clean

[3] Tier 1 Renewable Energy Credits (RECs) sold by NYSERDA totalled 1,667,824 MWh in 2020, the last year for which this data has been publicly reported. Using an average CO_2 emissions rate of 233.5 lbs/MWh for Upstate New York electricity generation from the U.S. EPA's eGrid tool, these RECs account for reducing emissions by approximately 180,000 metric tons of CO_2e. The New York State Clean Energy Dashboard indicates that statewide energy efficiency programs acquired annual energy savings equivalent to approximately 1,400,000 metric tons of CO_2e in the same year. *See*, Case 15-M-0302, *Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard*, 2021 Divergence Test and Target Setting Filing (Filed November 29, 2021), p. 3.; U.S. Environmental Protection Agency eGrid Power Profiler – NYUP Emissions rate, at: https://www.epa.gov/egrid/power-profiler#/NYUP; *and* NYSERDA Clean Energy Dashboard filtered for energy efficiency programs at: https://www.nyserda.ny.gov/Researchers-and-Policymakers/Clean-Energy-Dashboard/View-the-Dashboard.

[4] NENY Proceeding, Order Initiating the New Efficiency: New York Interim Review and Clean Energy Fund Review (issued September 15, 2022).

[5] NENY Proceeding, 2020 NENY Order, p. 110.

[6] Projected 2030 energy savings reflect 2025 NENY energy savings goals scaled up based on the growth in emissions reductions attributed to energy efficiency in the Climate Action Council Draft Scoping Plan. *See*, Climate Action Council Draft Scoping Plan, Appendix G: Annex 2: Key Drivers and Outputs, https://climate.ny.gov/-/media/Project/Climate/Files/IA-Tech-Supplement-Annex-2-Key-Drivers-Outputs.xlsx.

energy market. As measures reach scale in adoption, costs will likely decrease bringing adoption of these measures within reach for more customers and potentially reducing the amount of financial support that is needed. As with lighting, codes and standards can then begin to take over in pushing adoption of a measure throughout the state and energy efficiency programs can move on to supporting the next energy saving technology or measure. Without higher targets and additional funding for these programs, the State risks stagnating adoption of important measures, clean energy businesses and jobs may be lost to other states with more supportive programs, and the momentum New York has built may dissipate.

Deeper Measures Should be Prioritized Over Lighting and Gas Appliances

As the State continues to advance CLCPA objectives and achieve the Governor's recent goal to electrify one million homes and make one million additional homes electrification-ready by 2030, energy efficiency portfolios must shift toward deeper savings measures, including building envelope, ground-source heat pumps, and waste heat recovery. Program budgets must be reconsidered to account for the transition away from lower-cost measures like lighting and gas appliances to higher cost programs like those noted above.

Beginning in 2023, new lighting efficiency standards set out in the Energy Independence and Security Act of 2007 ("EISA") will make many lighting upgrades standard, reducing the energy savings that are available from these measures. This change will have significant impacts on energy efficiency portfolio design across the state: Con Edison estimates these changes will reduce energy savings claimed from the regulated measures by approximately one million MMBtu, more than one-third of its non-LMI electric portfolio. The Company expects this change to impact the Retail Lighting, Marketplace, and SmartKids program savings.

To replace these savings, the Company will seek to increase adoption of deeper measures that provide greater reductions in building energy use for longer time periods. Many of these measures also help ready homes and businesses for electrification by reducing the amount of energy needed to heat and cool the building. In addition to helping customers manage energy costs, these deeper measures can help reduce system costs by reducing the impact of electrification on peak load. Unfortunately, these durable benefits come at a cost – both in terms of the incentives that are needed to move the market and in the costs associated with administering the programs. Unit costs for these deeper measures tend to be 20 to 150 percent higher than the rest of the NENY portfolio average. More intensive engineering, Evaluation, Measurement, and Verification ("EM&V") marketing, and outreach will be required to analyze, evaluate, and stimulate adoption of these deeper measures. Because these deeper efficiency measures are needed to manage electricity load growth, program budgets must be aligned with these higher costs in order for future targets to be met.

LMI and Clean Heat Programs Should be Expanded and Extended

Growing engagement by low- and moderate-income ("LMI") customers in our energy efficiency programs is a core objective of the State and Con Edison. The CLCPA Scoping Plan highlights that many LMI and disadvantaged communities continue to be impacted by a legacy of underinvestment in their building stock.[7] Altering that trajectory requires dedicated and robust program support – including

[7] New York State Climate Action Council Draft Scoping Plan, p. 132, https://climate.ny.gov/Our-Climate-Act/Draft-Scoping-Plan.

higher incentive levels than those that are currently available to well-resourced market-rate participants, simpler program designs, and expanded marketing and outreach. The Company's Affordable Multifamily Energy Efficiency Program ("AMEEP") launched in late 2021 is seeing significant interest and uptake in Con Edison's service territory and must be continued and expanded to secure and grow the traction that has been established in the marketplace so that it can contribute to to achievement of the State's equity goals.

Similar to LMI customer engagement, transitioning the building stock to highly-efficient electric heating is another cornerstone of the State's and Con Edison's clean energy future. Also similar to LMI customer engagement, electric heat pumps continue to face headwinds as they compete with natural gas appliances for heating – both in terms of the upfront installation costs as well as the ongoing operating costs. Though market uptake has grown significantly in the past several years and the Commission has committed funding for the interim continuance of this program, [8] further support is needed build on the market momentum achieved to date and accelerate adoption. To reach the Draft CLCPA Scoping Plan's of up to two million homes electrified and 10 to 20 percent of commercial square footage electrified statewide 2030[9], building electrification and envelope improvements will have to occur at ten times the current pace. Company analysis indicates that while funding provided by the federal Inflation Reduction Act should be leveraged toward this goal, it will fall short of achieving it without additional support. The Clean Heat program must be expanded and extended to keep the State on track.

Flexibility in Program Implementation Should be Retained and Expanded

The success of Con Edison's energy efficiency programs over the past several years highlights the achievement and foresight of Department of Public Service Staff and the Commission in designing an energy efficiency framework that works for New Yorkers. Allowing utilities flexibility to implement, modify, launch, and retire pilots and programs designed for their specific service territory has been a key ingredient of that success. As has been seen in numerous programs, the clean energy market moves quickly and the ability to respond and adjust programs in step with the market has been paramount in building and maintaining a cost-effective portfolio that achieves targets within allocated budgets. The ability to move funding across portfolios and years has also enabled greater achievement at a lower overall cost than would otherwise have been incurred.

Development in both the LMI and Clean Heat Statewide programs over the past two years has underscored the importance of flexibility in program implementation. In the case of the AMEEP program, the concentration of multi-family building stock in the downstate region has led to greater interest and participation in this program than in many other regions of the State where other programs are demonstrating more success at expanding LMI customer engagement. With respect to the Clean Heat program, the rapid growth of the market in the downstate region outpaced growth seen in other areas of the State, demanding a more agile approach to managing incentive values and program requirements.

[8] NENY Proceeding, Order Approving Funding for Clean Heat Program (issued August 11, 2022) ("Clean Heat Order").

[9] New York State Climate Action Council Draft Scoping Plan, p. 121, https://climate.ny.gov/Our-Climate-Act/Draft-Scoping-Plan.

Statewide coordination of these programs has created value in aligning program offerings and sharing best practices among program administrators. Pairing this statewide coordination with tailored flexibility that allows utilities to respond to evolving market conditions and meet specific needs of their service territory would further enhance this approach. Project costs, building stock, local laws, contractor engagement and population density create very different market environments across the state – in short, program decisions that may be needed to respond to market conditions on George St. in Brooklyn may differ than those needed in Lake George. An upstate/downstate approach may strike the balance between providing the market consistent offerings within their respective regions while allowing the flexibility needed to successfully manage programs for all New Yorkers.

NE:NY EE Program Descriptions

Con Edison's energy efficiency programs are focused on providing customers greater control over their energy use. The Company's programs are tailored to each customer segment's needs. The offerings described below are not static, but rather evolving strategies through which the Company responds to market changes to serve a broad and diverse set of customers. Initiatives are designed to deliver energy efficiency savings, meet customer expectations, and offer opportunities for engagement between the Company and market partners. Customers can access information and energy efficiency saving incentives through the multiple delivery channels discussed further below.

As the Company continues to respond to market conditions, new programs are opened and some programs, like the C&I Self Direct and Retailer Incentive programs, are closed.Appendix B lists the names and statuses of all programs included in the Company's Clean Energy Dashboard Scorecard.

Commercial Sector

The Company offers a range of custom and prescriptive energy efficiency programs serving commercial and industrial customers. Commercial programs are tailored to suit the needs of specific commercial markets such as large commercial, small commercial, commercial kitchens and schools. The Company's commercial program offerings will continue to evolve through 2025 respond to market developments and policy changes. For example, the Company is currently shifting its focus to deeper measures to replace lighting savings as EISA reduces available savings from lighting equipment beginning on January 1, 2023.

Commercial & Industrial ("C&I")

The C&I program offers prescriptive and custom incentives to large (>100 kW peak load), individually-metered commercial electric and gas customers commercial customers. The Company offers prescriptive incentives for energy efficient technologies, such as high efficiency lighting and controls, chillers, HVAC measures, insulation, and variable frequency drives ("VFDs"). Currently, incentive

amounts are capped at 70 percent of the customer's project cost for eligible measures and total project incentives are capped at $1,000,000 for electric and $750,000 for gas per customer account, per year. Typical project life cycles are under four months, though very large projects may require significantly longer timelines.

The Company also offers rebates for custom efficiency projects. The custom track is a flexible and innovative equipment replacement program designed to encourage C&I customers to identify energy saving opportunities and implement cost-effective retrofit projects. Custom projects involve the installation of non-lighting measures that are not qualified for the prescriptive track and thus require additional engineering analysis to determine energy savings. Other energy saving strategies available through the program include, but are not limited to, demand control ventilation, waste heat recovery, or chilled water optimization.

The Company is focused on identifying and engaging customers in heavy energy use sectors with high potential energy savings opportunities, such as hospitals, universities, and finance. The Company expects that securing long-term partnerships with these heavy energy consumers can produce considerable savings. The Company is also exploring avenues to reward the highest-performing contractors to further incentivize high performance and savings.

The Company fosters these long-term relationships with heavy energy use customers through its Strategic Energy Partnerships ("SEP") program launched in 2019. Through this program, the Company meets with customers to understand their capital planning cycles, while providing opportunities to discuss program updates and project status. The Company provides SEP customers with information about timelines for review, inspection, or approvals of SEP projects. Through these partnerships, the Company to works with the customer to build out longer-term roadmaps that can address more time-intensive opportunities for deeper energy savings.

Instant Lighting

The Instant Lighting Program, launched in March 2018, is a midstream lighting program available to commercial and multifamily customers. Through Instant Lighting, customers receive instant incentives on eligible ENERGY STAR®-certified and Design Lights Consortium-listed lamps, fixtures and retrofit kits at the point of sale when purchased from an enrolled participant. To be eligible to enroll, participants must purchase or manufacture qualified products for sale to electrical contractors, electricians, builders, developers, building maintenance staff or service companies, or any other buyer servicing commercially-metered electric customers in Con Edison's service territory. Participants must apply the Con Edison incentive to their customers' invoices and submit the sales to Con Edison upon installation of the lighting measures to receive reimbursement.

Typically, project pipelines vary from 45-60 days, from the date of participant submission to the date of participant reimbursement. The end customer, however, receives the incentive immediately at the point of sale.

The program team is currently evaluating incorporating lighting controls to expand Instant Lighting offerings.

Commercial Kitchen

Con Edison launched a program to incentivize high-efficiency food service equipment in January 2020. As part of the program, Con Edison partners with food service equipment dealers to offer rebates at the point of sale to non-residential customers for the purchase and installation of energy efficient food service equipment. To make participation easier for equipment dealers, Con Edison coordinates with National Grid to align on program requirements, measures, and incentive levels.

This program offers incentives for electric appliances like fryers, ovens, griddles, steamers, kitchen demand ventilation controls, hot food holding cabinets, broilers and dishwashers for customers with electric water heating, and for high- efficiency gas appliances including ovens, griddles, and steamers and dishwashers for customers with gas water heating. The typical customers for these offerings are restaurants and grocery stores. The Company also offers incentives for high-efficiency ultra-low temperature freezers. These freezers typically have a temperature range of -45°C to -80°C and are usually used for the storage of drugs, enzymes, chemicals, and tissue samples. The typical customers for this offering are research laboratories and hospitals.

In 2022, the program expanded enrollment eligibility by allowing manufacturers of high-efficiency equipment to enroll directly and offer their end-use customers incentives on qualified measures. The program team is actively reviewing expanding the electric portion of this program by evaluating a variety of a new measures which would expand the technology offerings available for measure types like electric refrigerators, freezers, and ovens, which could launch in 2023.

Midstream Water and Space Heating

In April 2020, Con Edison launched a program to incentivize high-efficiency commercial water heating equipment. Initially, this program offered incentives for condensing storage, condensing instantaneous water heaters, and indirect water heaters with high efficiency boilers. In September 2020, this program expanded to include small space heating equipment by adding boilers, furnaces, unit heaters, and combination water heaters and condensing boilers. This program aims to deliver significant energy savings for commercial and multifamily customers by engaging with distributors of natural gas heating equipment to increase the stocking and sales of high-efficiency models. To make participation easier for distributors, Con Edison has been coordinating with National Grid to align on program requirements, measures, and incentive levels.

The name of this program changed from Commercial Upstream Water Heating to Midstream Water and Space Heating in Q1 2022.

Small-Medium Business

The Company also operates its Small-Medium Business ("SMB") program (formerly the Commercial Direct Install program), which serves as a significant source of megawatt-hour ("MWh") energy savings in the program portfolio. Through the SMB program, commercial customers with an average peak demand of 300 kilowatts ("kW") or less can take advantage of low-cost energy efficiency equipment upgrades for their businesses. This includes small and mid-sized business as well as religious institutions, nonprofits, and schools that may not otherwise have the time, expertise, or available capital to access and implement energy saving technology upgrades.

Traditionally, the SMB program savings have largely resulted from LED lighting upgrades, but recently, the program is shifting to a more complex and comprehensive measure list and has expanded its offerings to include gas savings and measures in the following equipment categories: refrigeration, HVAC, energy management systems, building envelope, and hot water system upgrades. In addition, the program supports eligible customers when upgrading their existing space heating or water heating systems to technologies such as Variable Refrigerant Flow, Cold Climate Air Source Heat Pump, Ground Source Heat Pump, and Heat Pump Water Heaters.

There are approximately 350,000 commercial customers eligible for the SMB program and generally, an average of 4,000 customers participate in the program annually. Eligible customers will contact Participating Contractors ("PCs") that offer the measures most relevant to their business if needed. The chosen PC will conduct a free onsite energy assessment, and if the customer chooses to move forward, the program will provide incentives up to 70 percent of the total project cost.

Residential Sector

The Company offers a variety of programs to serve residential customers in an innovative and market-oriented manner. This includes offering customers options and opportunities to reduce their energy use based on their unique needs. Examples of offerings for residential customers include rebates and incentives through market partners, shopping directly through the Online Marketplace, and the Smart Kids Education program.

Residential

The Residential portfolio offers incentives to renters and owners living in existing 1-4 family housing with a focus on acquiring new savings in non-traditional or new markets, increasing flexibility in facilitating energy savings and peak demand reduction, and improving customer experience.

The Residential program is comprised of two programs: the HVAC Gas and HVAC Tuneups programs.[10]

[10] As of 2022, the Company no longer offers electric energy efficiency measures through its Residential program, but continues to claim electric savings in the residential sector through its Smart Kids, Marketplace, Residential Home Energy Reports, Retail Lighting and Weatherization Programs.

The HVAC Tuneups program provides incentives for cleaning and tuning existing gas HVAC equipment, helping residential customers reduce energy consumed by their existing equipment.

The HVAC Gas program offers rebates for energy-efficient heating equipment, including, but not limited to, eligible boilers, furnaces, combi-boilers, and a variety of hot water heaters. The HVAC gas program works on an midstream model wherein participating distributors and contractors receive an incentive for stocking, promoting, and installing energy efficient gas heating equipment and customers also receive an incentive for purchasing and installing them through a participating contractor. To qualify, contractors submit documentation of completed projects that are reviewed by the distributor, the implementation contractor, and the Con Edison program staff for final approval and processing of payment. Each review request includes a copy of the distributor invoice and installing contractor's job invoice (including contractor and homeowner contact information). The HVAC Gas program measures include indirect water heaters, storage water heaters, combo boilers and furnaces, steam and water boilers. Rebates are calculated or per unit and are offered to individually metered gas customers.

Additionally, the Company continues to coordinate energy efficiency with peak-demand reduction efforts.[11] The Direct Load Control ("DLC") Bring Your Own Thermostat ("BYOT") offering incents customers to reduce overall energy use as well as their use during times of system peak demand. Enrollment allows Con Edison to make limited adjustments to the customers' cooling and heating equipment settings during the summer and winter seasons to reduce demand and high energy use. Customers retain final control and can override the settings at any time. BYOT customers can access a larger incentive through enrollment in the demand response program as well as the energy efficiency rebate. Customers who purchase qualifying smart thermostats on the Con Edison Marketplace can receive an instant discount of $50 and an additional incentive of $85 for registering the device with Con Edison for demand response purposes. The Company continues to explore the opportunities in coordinating energy efficiency and demand response and to test new controllable devices and incentive mechanisms to incentivize grid-beneficial behavior like peak load reduction.

Smart Kids

The Smart Kids Energy Efficiency Program is designed to educate fifth grade and high school students across the Company's service territory on the role energy plays in their daily lives and give them the tools to learn real-world energy-saving tactics. Starting in 2020, the Company updated the Smart Kids curriculum to include heat pump technology to broaden knowledge and awareness of the technology. The Company expects a reduction in energy savings from lighting measures in this program beginning in 2023 due to the EISA, which may affect this program's overall cost-effectiveness.

[11]Alongside the BYOT program, Company Provided Thermostats ("CPT") continues to be an active resource for demand response events in the DLC portfolio, even though the Company is no longer accepting new enrollments. This decision was driven primarily by cost and communication platform considerations, and a general desire to progress toward offering customers choice in the devices they place in their homes. Customers with CPTs will still be called upon to reduce load during demand response events.

Through this program, teachers guide participating students through an educational program give students a customized Smart Kids Energy Efficiency Kit to take home. The Smart Kids Energy Efficiency Kits include three nine-watt LED lightbulbs, a high-efficiency three-way showerhead, a kitchen faucet aerator, a bathroom faucet aerator, a digital thermometer, and a student guide and workbook. Instilling energy awareness in students along with knowledge and tools needed to be engaged and educated about their energy choices provides long-term positive benefits such as a cleaner energy profile. The high school program educates students on the role energy plays in their daily lives and provides early insights into the energy industry workforce.

Marketplace

The Marketplace Program serves as an e-commerce platform where customers can receive instant discounts for LED lamps, smart thermostats, advanced power strips, aerators, dehumidifiers, showerheads, and aerators. The program team has put checks into place at point of purchase to verify that discounts are being applied only to eligible purchases and customers. The Company expects a reduction in energy savings from lighting measures in this program beginning in 2023 due to the EISA, which may affect this program's overall cost-effectiveness.

The Marketplace program allows the Company to work with equipment manufacturers to offer greater discounts to our customers. The Company offers incentives during strategic periods throughout the year to maximize sales and participation and communicates these offerings through the Company's various marketing campaigns.

Residential Home Energy Reports

The Residential program includes a behavioral Home Energy Report ("HER") program. HER motivates customers to use less energy and save money on monthly bills by providing customer-specific energy usage information, "neighbor" comparisons, and personalized energy-saving advice. This program acts as another touchpoint with customers and provides educational tips through email and printed mailers to help customers better understand and manage their energy use. The HER also program provides Con Edison with measurable and verifiable information about customer behavior.

The Company continues to improve customer engagement to drive program cost efficiencies and deliver tailored messaging to customers with higher-than-average energy consumption.

Retail Lighting

The Retail Lighting program provides instant rebates to residential customers at their point of purchase in big-box retailers, as well as smaller retailers, such as drug stores and dollar stores. The Retail Lighting program coordinates with these smaller retail stores to increase accessibility for residential customers. The program has an upstream design through which Con Edison provides incentives directly to lighting manufacturers under the terms of an executed Memorandum of Understanding, requiring them to provide instant discounts to customers purchasing eligible lamps at participating retailers. Upstream incentives enable achievement of scale by reaching customers at the point of purchase. The Retail

Lighting program's outreach to LMI customers through food banks also enhances accessibility of clean energy benefits for all customers. Manufacturer invoices are provided as back-up documentation with each invoice to track the number of lamps sold at each retailer location.

To promote growth of Retail Lighting, the Company has partnered with TechniArt to offer online opportunities, via temporary websites that allow customers to purchase qualified lamps online by connecting participating organizations' employees with lighting incentives. Due to the EISA backstop and market transformation, the program is evaluating whether it will continue in 2023 and the possibility of expansion via non-lighting measures such as air purifiers and dehumidifiers.

Residential Weatherization

The Residential Weatherization Program is a single-family residential energy efficiency program that offers incentives to increase the adoption of insulation, air sealing, and duct sealing for residences. Customers can work with a qualifying participating Weatherization contractors to install the aforementioned measures and receive an instant discount. Customers also have an option to work with a third party company to finance their projects. To promote the growth of the program, the Company has partnered with NYSERDA to offer additional incentives.

Multifamily Sector

The Company offers programs to promote energy efficiency for existing multifamily (more than four units) electric and gas customers. The multifamily market consists of nearly 70,000 residential buildings across New York City and Westchester County. The Company employs strategies to continuously improve programs and provide value to the multifamily market. The Company is focused on streamlining the application process for Multifamily Property Managers and encouraging energy efficiency upgrades that address multiple building systems.

Multifamily

The Multifamily Program offers incentives to owners and property managers of residential buildings with five or more units. To be eligible, a participant must be a Con Edison electric or gas customer. Every customer who applies to the program may be able to qualify for one of three exclusive participation tracks: multifamily energy efficiency program ("MFEEP"), affordable multifamily energy efficiency program ("AMEEP") (refer to LMI Annual Report for more details on the AMEEP program performance[12]), or the Neighborhood program for electric customers for buildings located within targeted neighborhoods where Con Edison seeks additional demand-side management resources. In 2020, the Multifamily Program started reporting savings for LMI and non-LMI customers separately.

After enrolling in the Multifamily Program, customers have the option to select their desired energy efficiency products and services from a menu of offerings, which include direct installations and both

[12] NENY Proceeding, Statewide Low- and Moderate-Income Portfolio 2021 Annual Report (filed May 31, 2022).

prescriptive and custom rebates for both gas and electric measures. The program offers to help coordinate building surveys and custom assessments to help customers identify which efficiency solutions are right for them. This program offers prescriptive rebates for a preset list of mainstream energy efficiency measures that can be installed by any participating contractor that is qualified under the program, while custom rebates are for an open-ended category of efficiency technologies that require a site-specific analysis to estimate the energy savings. For custom measures, the rebate is based on a fixed-price ratio that considers energy savings and that are formulated in the custom assessment report. The remaining costs of these measures are to be paid by the customer to its selected participating contractor.

The Multifamily Program continues to leverage and foster several working relationships to support the success of the program. Con Edison continues to partner with New York City Mayor's Office on the NYC Accelerator, National Grid's Multifamily Program, New York City Department of Housing Preservation and Development: Green Housing Preservation Program, New York City's Weatherization Assistance Program and the Con Edison Neighborhood Program. These programs work toward better synchronizing efforts to coordinate offerings and increase program participation.

The program team has continued to focus on making enhancements to the program's design and documents wherever appropriate. The program team has held numerous orientation classes to recruit contractors and consultants as well as training sessions on steam heating, LED lighting, and customer non-prescriptive Technical Resource Manual ("TRM") measures. These market education orientations, onboarding, and training initiatives resulted in the participating contactor network growing to include more than 125 participating contractors who actively sell and install efficiency projects within the multifamily program.

The program team has expanded the C&I SEP program to include large multifamily building owners. The Company plans to continue to engage additional property owners to help them access energy efficiency upgrade opportunities and develop a capital plan.

Pilot Program

The Company introduced the Test-and-Learn program in the Company's 2016-2018 ETIP filing[13] to implement new technologies, programs, initiatives, and campaigns. The Company has since transitioned and formalized the Test-and-Learn strategies into the Pilot Program. The Pilot Programidentifies and evaluates new measures and program delivery methods that can be incorporated into the Company's main program portfolio.

[13] Case 15-M-0252, *In the Matter of Utility Energy Efficiency Programs*, Consolidated Edison Company of New York, Inc.'s Final Energy Efficiency Transition Implementation Plan (ETIP) 2016-2018 (filed April 1, 2016).

Active Pilots

Oil-to-Electric ("OTE") Pilot

The OTE Pilot incentivizes retrofits for up to 25 LMI households (1-4 units) in Westchester that use oil or propane for space and water heating. OTE retrofits can include weatherization measures (insulation and air sealing) installed throughout the selected homes, as well as the installation of cold climate heat pumps, heat pump water heaters, and sometimes induction stoves. OTE leverages incentives from Weatherization Assistance Program ("WAP"), NYSERDA's EmPower program, and the Clean Heat Program to complete retrofits at a reasonable cost to participants.

While this program is currently active, it is no longer accepting applications. The Company anticipates that this Pilot Program will complete all installations in Q4 2022 and conclude all related data collection and analyses in Q4 2023. This pilot will help the Company quantify the energy savings realized by full OTE conversions bundled with building envelope upgrades. This pilot also tested a strategy for increasing heat pump adoption among LMI customers and generated insights surrounding the implementation of these projects.

Heat Pump Demand Pilot

As described in the Con Edison Heat Pump Demand Pilot Implementation Plan submitted on July 1, 2020, the Heat Pump Demand Pilot offers access to near-real time energy usage information to residential customers with heat pumps on the Select Pricing Plan (SC1 Rate IV). Participating customers receive a Sense Home Energy Monitor, which uses a current transformer ("CT") based monitoring and sophisticated analytics to collect data and provides disaggregated energy usage information to customers via mobile and web applications. These insights help customers better manage their energy usage and reduce demand charges.

The Heat Pump Demand Pilot completed contracting and began customer recruitment in Q4 2021. The customer recruitment phase of this pilot was extended through August 2022 to reach additional participants. Data collection will continue through October 2023.

Subsidized Financing Pilot (formerly the SMB Financing Pilot)

The Subsidized Financing Pilot offers low-interest loans for customers completing energy efficiency upgrades incentivized by Con Edison's SMB and Multifamily Programs. Program participants access Con Edison-subsidized 2-5 year loans with no down payment and 0-3 percent interest rates. Con Edison is partnering with Ascentium Capital, which engages, trains, and supports participating contractors that wish to offer financing to their customers. Ascentium Capital is also responsible for reviewing, approving and providing loans to customers.

The goal of this pilot is to test whether low-cost third-party financing can cost effectively drive greater program participation and deeper savings by removing the barrier of upfront costs for SMB and multifamily customers. Con Edison will conduct customer research to understand the customer

experience the role of financing in the decision to complete a project, and the role of financing in deciding to complete more comprehensive retrofits.

Launched in Q1 2021 to the SMB market, this pilot expanded to serve multifamily customers in Q2 2022. The Company plans to review the impact of the Subsidized Financing Pilot on project volume, project size, and deep measure installation. Based on the results of this review, Con Edison will consider relaunching an adjusted version of the Pilot in 2023.

Virtual Commissioning
In the Virtual Commissioning Pilot, Con Edison partnered with Power TakeOff to help SMB customers identify and implement low- and no-cost operational savings measures. Power TakeOff analyzes Advanced Metering Infrastructure ("AMI") data and uses proprietary algorithms to identify specific operational changes SMB customers can make to reduce energy consumption. Power TakeOff's Energy Advisors call customers and remotely coach them through implementing recommended changes. After completing their virtual commissioning engagement, Power TakeOff will refer customers to ConEd's existing SMB program for any identified equipment upgrades.

The Company will calculate savings for this program through normalized metered energy consumption ("NMEC") and Power TakeOff will be compensated on a Pay-For-Performance basis.

The Company launched this program in July 2022 and will continue through February 2024.

Upcoming Pilots

Real Time Energy Management ("RTEM")
Expected launch January 2023. The RTEM Pilot program will offer incentives for implementing operational energy conservation measures identified by RTEM systems. Custoers will provide information on these measures in incentive applications. RTEM is a combined hardware and cloud-based software solution that continuously monitors equipment performance to detect equipment faults and identify opportunities to optimize energy use. Implementing recommended measures can reduce energy and maintenance costs while increasing operating efficiencies. The Company anticipates accepting up to 20 projects in the first year of this pilot (2023). The Company will review projects in order of submission and only commercial buildings with centrally controlled building systems will be eligible.

Inactive Pilots

- **New Movers.** *Closed Q4 2019*. New Movers provided new customers with kits containing energy efficiency products and an informational brochure. This program was incorporated into the Company's LMI energy efficiency portfolio.
- **Third-Party Residential Financing.** *Closed Q2 2019*. Third-Party Residential Financing provided energy efficiency financing to qualified residential homeowners for deep energy efficiency

projects. This Pilot Program evolved into the Residential Weatherization Program, described earlier in this document.

- **Building Energy Performance.** *Closed Q3 2019*. The Building Energy Performance pilot was designed to educate building managers on ways to save money and energy through preventative and routine maintenance. This pilot was closed in 2019 due to insufficient program engagement.
- **Aquanta Smart Gas Water Heater Controllers ("Aquanta") Pilot.** *Closed Q2 2021*. The Aquanta Pilot tested the energy efficiency and demand response potential of Aquanta smart gas water heater controllers. The evaluation of this pilot was completed in Q2 2021 and the Aquanta smart gas water heater controller is being considered for inclusion in the Residential and Non-Pipeline Alternatives programs.
- **Pay-for-Performance ("P4P").** *Closed Q1 2022*. The P4P Pilot, known to customers as Business Energy Pro, was a collaborative pilot with NYSERDA that tested a new market-based program delivery method. The transformative element of this pilot was the payment of measure-agnostic incentives based on meter-based energy savings, instead of paying incentives based on deemed savings for specific energy efficiency measures. This pilot was discontinued due to customer acquisition challenges.
- **Business Energy Analyses and Recommendations ("BEARs")**. *Closed Q1 2022.* BEARs was an email marketing pilot that leveraged insights from virtual energy audits ("VEAs") to send emails to small business and multifamily customers that contain personalized measure-level recommendations. BEARs emails were first sent to customers in July 2021 and continued through Q1 2022. Lessons learned from the BEARs pilot will be incorporated into other energy efficiency programs.

Low- to Moderate-Income Customers

The Company's LMI Customer initiatives, implemented as part of the state's Statewide LMI initiative are described in the New York Joint Utilities and NYSERDA's Statewide Low- and Moderate-Income Portfolio Implementation Plan ("LMI Implementation Plan") filed on May 31, 2022.[14] Offerings are developed in consultation and collaboration with NYSERDA and the other Joint Utilities. The portfolio of programs and offerings outlined in the LMI Implementation Plan (the "Statewide LMI Portfolio" or the "Portfolio") has been designed to create a more holistic and coordinated approach to deliver energy efficiency to LMI customers and communities in New York while improving the experience of and benefit for LMI customers seeking to access clean energy services, reducing administrative costs and increase cost-effectiveness, and providing more consistent and streamlined participation for service providers. Details of annual program performance can be found in the LMI Statewide Portfolio Annual Report 2021 May Update.[15]

[14] NENY Proceeding, Statewide Low- and Moderate-Income Portfolio Implementation Plan (filed July 24, 2020).
[15] NENY Proceeding, LMI Statewide Portfolio Annual Report 2021 May 31 Update (filed May 31, 2022).

Clean Heat Program

The Company's Clean Heat Program, implemented as part of the state's NYS Clean Heat Statewide Heat Pump Program, is described in NYS Clean Heat: Statewide Heat Pump Program Implementation Plan and Program Manual, last updated on October 20, 2022.[16] The NYS Clean Heat Program supports the installation of heat pump technologies that are best suited to heat efficiently in cold climates; requires participating contractors to follow best practices related to sizing, selecting, and installing heat pumps in cold climates; and promotes consumer education, including required guidance provided by Participating Contractors to customers who have heat pumps installed on how to operate and maintain their system. As part of program delivery, the Joint Efficiency Providers[17] work collaboratively to oversee and improve the Clean Heat program. Details of annual program performance for each of the Joint Efficiency Providers can be found in the NYS Clean Heat 2021 Annual Report.[18]

In February 2022, the Company filed a petition with the Commission for additional program funding to address the robust response from the market[19]. By April 2022, the Company's Clean Heat Program exceeded the overall 2021-2025 energy savings target and exhausted all available funding for the program. In response, the Company announced a pause on accepting new applications for air-source heat pump incentives in the Clean Heat Program on May 9, 2022 until the Commission could rule on the petition. On August 11, 2022, the Commission approved the Company's request for additional funding with a requirement to modify aspects of the program prior to accepting new projects.[20] The Company will work with Staff and market participants through 2022 to implement necessary changes to the program for re-launch.

Supplemental EE Programs

Non-Wires Solutions

In addition to energy efficiency programs detailed in this SEEP, the Company also implements energy efficiency in areas of locational need, such as through providing additional incentives or developing new programs for energy efficiency in areas targeted by NWS initiatives.

[16] NENY Proceeding, NYS Clean Heat: Statewide Heat Pump Program Implementation Plan (filed October 20, 2022).
[17] Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, New York State Electric & Gas Corporation, New York State Energy Research and Development Authority, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation (collectively, "Joint Efficiency Providers").
[18] NENY Proceeding, NYS Clean Heat 2021 Annual Report (filed April 1, 2022).
[19] NENY Proceeding, Consolidated Edison Clean Heat Petition (filed February 24, 2022).
[20] NENY Proceeding, Clean Heat Order.

As approved in the January 2020 Rate Case Order,[21] the Company implements load relief in targeted areas through customer-side solutions when it would cost effectively enable deferral or displacement of infrastructure investments. The Company is currently implementing energy efficiency solutions to help defer traditional projects identified in the Newtown area of Queens and the Brooklyn Queens Demand Management networks. The Company has met the objectives of the Water Street and Plymouth Street NWS projects. Implementation plans are filed annually as part of the 2019 Con Edison Rate Case Proceeding[22] with the most recent plan filed on January 31, 2022. Likewise, quarterly BCA filings can also be found in the aforementioned docket. The Company filed its most recent quarterly report, the Q2 2022 Non-Wires Solutions Quarterly Expenditures and Program Report, on August 31, 2022.[23]

Non-Pipeline Alternatives

Pursuant to the Company's current Commission approved Rate Plan,[24] the Company is working to implement Non Pipeline Alternatives ("NPA") to avoid building new gas infrastructure.[25] Con Edison issued a solicitation in January 2020 and submitted a request for funding approval on August 3, 2020[26] to support the implementation of additional demand-side solutions over a three-year period.

On June 23, 2021, the Commission authorized the Company to spend up to $5.9 million on a Gas Behavioral Demand Response ("GBDR") pilot and Heat as a Service ("HaaS") financing opportunities.[27] The GBDR Pilot, which planned to use messages to gas customers immediately prior to the coldest winter days to encourage them to reduce usage, was originally set to launch in the 2022-2023 winter season, but was closed in July 2022 due to challenges in implementing the program as designed. In August 2021, when filing its initial Implementation Plan,[28] the Company changed the opt-out program design and corresponding communication strategy to an opt-in program design. Con Edison worked with the Selected Respondent from the January 2020 solicitation to consider revised program designs, but the opt-in framework reduced the projected customer participation in demand response events by more than half. Discussions between the Company and Selected Respondent concluded on March 17, 2022 when it was mutually agreed that implementing a GBDR pilot was not feasible with an opt-in program

[21] Case 19-E-0065, *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service., et al.* ("2019 Rate Case Proceeding"), Order Adopting Terms of Joint Proposal and Establishig Electric and Gas Rate Plan (issued January 16, 2020) ("Jan 2020 Rate Case Order").
[22] 2019 Rate Case Proceeding.
[23] 2019 Rate Case Proceeding, Con Edison NWS Q2 2022 Report (filed August 31, 2022).
[24] 2019 Rate Case Proceeding, Jan 2020 Rate Case Order.
[25] 2019 Rate Case Proceeding, Proposal for Use of a Framework to Pursue Non-Pipeline Alternatives to Defer or Eliminate Capital Investment in Certain Traditional Natural Gas Distribution Infrastructure (filed September 14, 2020).
[26] 2019 Rate Case Proceeding, Request for funding approval (filed August 3, 2020).
[27] 2019 Rate Case Proceeding, Order Approving with Modifications the request for Funding Approval to Pursue Additional Solutions for Load Relief (issued June 23, 2021).
[28] 2019 Rate Case Proceeding, Petition of Consolidated Edison Company of New York, Inc. for Approval of Specific Non-Pipeline Alternative Projects (filed December 22, 2021) ("2021 NPA Petition").

design. The HaaS program, rebranded Clean Heat Financing, provides financial incentives through third-party vendors for clean heating systems, was distinguished from the definition of an NPA in the June 23, 2021 order and is now incorporated into the Company's Clean Energy Networks section of the Energy Efficiency & Demand Management department.

In December 2021, the Company filed a petition[29] seeking Commission approval for proposed regulatory treatment to implement a portfolio of NPA projects. In June 2022, the Commission approved[30] the Company's proposal for a set of specific NPA projects including a Main Replacement Program NPA and three area projects described below.

Main Replacement Program NPA (Whole Building Electrification Services)
The Main Replacement Program NPA is designed to eliminate the need for specific gas main replacements in the Company's Main Replacement Program, which replaces leak-prone sections of gas main. The goal of this NPA is to remove or retire leak-prone gas mains by focusing on specific radial gas main radial with a low number of services. The Company's NPA team would engage customers connected to the gas system on these leak-prone mains to with a solution for conversion of all fossil fuel end uses to electric. Each radial is treated as an individual NPA project and will proceed if all customers on a radial proceed with the Company's full electrification solution.

Area Load Relief Projects
The Company identified several areas with forecasted capacity constraints where future gas infrastructure may be needed to manage future load. The Company's Area Load Relief Projects are designed to avoid the construction of this additional gas infrastructure through geographically-targeted demand reduction. Each Load Relief Area has a target specific peak day dekatherm reduction that has to be achieved by a specific year. Demand reduction strategies will include both energy efficiency and electrification. In the 2022 NPA Order,[31] the Commission approved the Company's proposed regulatory treatment for the following Area Load Relief NPA projects:

1. Soundview (Bronx)
2. Port Chester (Westchester)
3. Bayside (Queens)

The Company is currently determining the cost effectiveness of the three area projects and each developing a go-to-market strategy for this program. More information about this program can be found in the Non-Pipeline Alternatives Implementation Plan, which is intended to be filled in Q4 2022.

[29] 2019 Rate Case Proceeding, 2021 NPA Petition.
[30] 2019 Rate Case Proceeding, Order Approving Non-Pipes Alternative Projects Amortiztion Period and Shareholder Incentive Mechanism for Specified Projects (issued June 17, 2022) ("2022 NPA Order").
[31] 2019 Rate Case Proceeding, 2022 NPA Order.

REV Demonstration Projects

Reforming the Energy Vision ("REV") Demonstration projects were launched in 2015 with the goal of testing new concepts in energy reduction, demand management and energy efficiency. The Company has launched several REV Demonstration projects and intends to launch additional REV Demonstration Projects in the coming years. The following section describes the Company's active demand reduction-related REV Demonstration projects.

Active REV Demonstration Projects

Smart Home Rate

Launched in 2017, the Smart Home Rate Demonstration Project tests how alternative rate structures can provide price signals to customers to optimize value for the customer and the system. Con Edison and Orange and Rockland Utilities (together "the Companies") jointly administer this project. The Companies recruited residential customers with AMI meters to participate in a new electric rate and provided them with home energy management technologies to help them maximize savings on the new rate. The program is scheduled to run through December 2023.

Community Power

Launched in 2018, Community Power is a 1.2-megawatt community distributed generation project that tests a new model for delivering solar energy to low- and moderate-income ("LMI") customers in the Con Edison service territory. The Project's solar panels are installed atop 40 buildings across three New York City Housing Authority ("NYCHA") developments. The Company partnered Green City Force and Solar One, who recruited, trained, and hired underemployed NYCHA residents to install the panels. Through this initiative, these residents received a living wage and gained hands-on experience working in the clean energy economy. Using revenues from the rooftop solar production, the Project provides monthly bill savings to more than 450 customers from LMI households and the solar produced helps reduce demand.

Commercial Battery Storage

Launched in 2018, the Commercial Battery Storage project is comprised of four 1-MWh battery energy storage systems located across Con Edison's service territory. Con Edison has partnered with Endurant Energy to build and operate four distribution-connected batteries at customer-owned commercial properties. These customers receive a lease payment during the project duration. Con Edison receives exclusive energy dispatch rights over the batteries to relieve localized electrical demand; when not using them for this localized support, the Companyplans to dispatch the batteries to bid the electricity in the NYISO energy market.

Curbside Electric Vehicle ("EV") Charging Network

Launched in 2019, Curbside EV Charging Network is a network of 120 Level 2 EV chargers installed and

operated across New York City. The Company has partnered with New York City Department of Transportation and Quebec-based AddEnergie, operator of FLO EV Charging Network. Con Edison provides station and foundation design input as well as installation and interconnection services. Over the course of three to four years of operation, Con Edison will report metrics on project financials, operations, and customer satisfaction and usage of the charging network.

Inactive REV Demonstration Projects

Building Efficiency Marketplace REV Demonstration Project

The Building Efficiency Marketplace, also known as Energy Insights, launched in 2016 and ended in 2019. The Project provided eligible commercial building owners with disaggregated energy use analytics paired with access to a virtual bid room. The Building Efficiency Marketplace was available to approximately 1,500 customers based on interval meter availability and building use type.

Connected Homes REV Demo Project

The Connected Homes REV demonstration project launched in 2016 and provided residential customers with a set of tools designed to proactively connect them with cost-effective energy efficiency products and services, as well as distributed generation offerings. It was designed to remove barriers to residential adoption of distributed energy resources and animate the distributed energy resource market. The project transitioned to the Company's energy efficiency portfolio beginning in 2020.

Budget and Savings Plan Summary: 2019-2025

All figures in this SEEP, including budgets, targets, forecasted expenditures, and benefit-cost analyses ("BCAs"), represent an estimate of planned and projected activities based on the Company's annual expenditures on energy efficiency programs as authorized through Commission actions. The Company will make any appropriate revisions to this plan as necessary, pursuant to Commission Orders.[32] Budget and target figures for 2022 reflect the Company's most up-to-date internal forecast through the remainder of the calendar year. Future-year planned budget and target figures are as prescribed in the 2020 NENY Order[33] and the 2022 Clean Heat Order. [34] A summary of the modifications resulting from the Clean Heat Order is included after the Budget and Savings Tables.

The Company's portfolio investments include funding dedicated to incentives for customers or market partners, and to enable the Company to work with third-party market actors as implementation contractors. The Company's portfolio investments also include administrative investments necessary to facilitate evolution and growth of the portfolio over time. Activities within Portfolio Administration include program marketing, market research and analytics, including customer segmentation studies and technical analyses of energy efficiency potential relevant to the Con Edison service territory, training for market partners on offerings and initiatives, and database development and maintenance.

Budget and Savings Tables

The Tables below include actual vs planned program spend (Tables 1A through 1D); program planned spend and budgets (Tables 2A through 2D); actual vs. planned program savings (Tables 3A through 3D);[35] and forecast program savings plans (Tables 4A through 4D) for the Company's electric, gas, NYS Clean Heat and LMI programs and portfolios.

[32] DPS Office of Markets and Innovation, Clean Energy Guidance CE-02: SEEP Content Guidance, September 1, 2020.
[33] NENY Proceeding, 2020 NENY Order.
[34] NENY Proceeding, Clean Heat Order.
[35] The Company defines achievements (analogous to acquired) as savings for which the the post-inspection process and a desk review are completed, and/or for which it has received relevant sales data and documentation.

Table 1A: Actual vs. Planned Program Spend: Electric Portfolio

PORTFOLIO (NE:NY Electric EE)	Actual Spend 2019	Actual Spend 2020	Planned Spend 2021	Actual Spend 2021	Total Actual Spend 2019 - 2021
Commercial & Industrial (C&I) Sector					
Commercial & Industrial					
Incentives & Services	$25,128,937	$26,453,003	$27,384,334	$32,357,773	$83,939,713
Program Implementation	$705,788	$1,283,430	$152,539	$2,625,121	$4,614,339
Total C&I Budget	$25,834,725	$27,736,433	$27,536,873	$34,982,894	$88,554,052
Instant Lighting					
Incentives & Services	$5,996,612	$6,998,561	$2,709,569	$3,493,105	$16,488,278
Program Implementation	$689,335	$363,934	$12,279	$183,048	$1,236,317
Total Instant Lighting Budget	$6,685,947	$7,362,495	$2,721,848	$3,676,154	$17,724,596
Commercial Kitchen					
Incentives & Services	$0	$0	$270,850	$243,729	$243,729
Program Implementation	$0	$0	$237,268	$210,804	$210,804
Total Commercial Kitchen Budget	$0	$0	$508,118	$454,533	$454,533
Small-Medium Business (SMB)					
Incentives & Services	$31,795,871	$36,888,799	$33,904,053	$22,816,515	$91,501,185
Program Implementation	$6,137,627	$5,986,281	$5,212,645	$5,045,227	$17,169,135
Total SMB Budget	$37,933,498	$42,875,080	$39,116,698	$27,861,742	$108,670,320
Residential Sector					
Marketplace					
Incentives & Services	$926,182	$3,603,573	$1,753,108	$1,036,806	$5,566,561
Program Implementation	$972,562	$426,004	$437,265	$422,525	$1,821,091
Total Marketplace Budget	$1,898,744	$4,029,577	$2,190,373	$1,459,330	$7,387,651
Pilots					
Incentives & Services	$534,715	$0	$141,756	$37,782	$572,497
Program Implementation	$37,034	$60	$400,269	$402,203	$439,297
Total Pilots Budget	$571,749	$60	$542,025	$439,985	$1,011,794
Residential					
Incentives & Services	$6,454,880	$2,557,555	$54,085	$69,025	$9,081,460
Program Implementation	$2,598,960	$719,664	$107,261	$136,368	$3,454,992
Total Residential Budget	$9,053,840	$3,277,219	$161,346	$205,393	$12,536,452
Residential Weatherization					
Incentives & Services	$0	$379,662	$0	$0	$379,662
Program Implementation	$0	$0	$0	$0	$0
Total Residential HERs Budget	$0	$379,662	$0	$0	$379,662
Resi Home Energy Reports					
Incentives & Services	$0	$0	$0	$0	$0
Program Implementation	$6,877,298	$1,630,277	$1,077,135	$552,255	$9,059,830

Total Residential HERs Budget	$6,877,298	$1,630,277	$1,077,135	$552,255	$9,059,830
Retail Lighting					
Incentives & Services	$3,962,453	$8,923,133	$10,185,726	$10,053,533	$22,939,119
Program Implementation	$2,363,748	$2,820,644	$4,406,116	$5,783,908	$10,968,300
Total Retail Lighting Budget	$6,326,201	$11,743,776	$14,591,842	$15,837,441	$33,907,418
Retailer Incentive					
Incentives & Services	$1,242,770	$1,213,985	$89,180	$89,180	$2,545,935
Program Implementation	$177,571	$210,094	$0	$15,307	$402,972
Total Retailer Incentive Budget	$1,420,341	$1,424,079	$89,180	$104,487	$2,948,907
Smart Kids					
Incentives & Services	$1,686,389	$1,236,590	$1,505,167	$1,582,457	$4,505,436
Program Implementation	$462,063	$282,016	$525,670	$316,528	$1,060,607
Total Smart Kids Budget	$2,148,452	$1,518,606	$2,030,837	$1,898,985	$5,566,043
Multifamily Sector					
Multifamily					
Incentives & Services	$11,939,372	$8,494,415	$6,825,156	$5,294,033	$25,727,820
Program Implementation	$4,656,911	$1,793,860	$1,879,414	$1,892,789	$8,343,560
Total Multifamily Budget	$16,596,283	$10,288,275	$8,704,570	$7,186,822	$34,071,380
Portfolio Administration	**$9,768,543**	**$6,377,260**	**$10,157,818**	**$3,611,941**	**$19,757,744**
Portfolio EM&V	**$4,446,590**	**$3,243,181**	**$2,693,651**	**$2,339,148**	**$10,028,919**
Total Actual Portfolio Expenditure	**$129,562,211**	**$121,885,980**	**$112,132,936**	**$100,611,111**	**$352,842,346**
Commission-Authorized Budget	**$159,178,000**	**No Annual Budgets after Clean Heat Order. See Clean Heat Budgets and Targets Updates Section**			
Budget Remaining/Unspent Funds	**$29,615,788**				

Table 1B: Actual vs. Planned Program Spend: Natural Gas Portfolio

PORTFOLIO (NE:NY Gas EE)	**Actual Spend 2019**	**Actual Spend 2020**	**Planned Spend 2021**	**Actual Spend 2021**	**Total Actual Spend 2019 - 2021**
Commercial & Industrial (C&I) Sector					
Commercial & Industrial					
Incentives & Services	$2,590,779	$6,394,977	$10,168,938	$10,834,746	$19,820,502
Program Implementation	$110,436	$343,742	$101,165	$794,674	$1,248,852
Total C&I Budget	$2,701,215	$6,738,719	$10,270,103	$11,629,419	$21,069,353
Commercial Kitchen					
Incentives & Services	$0	$311,725	$309,900	$325,235	$636,960
Program Implementation	$0	$175,356	$161,093	$256,125	$431,481
Total Commercial Kitchen Budget	$0	$487,081	$470,993	$581,360	$1,068,441
Midstream Water and Space Heating (MWSH)					
Incentives & Services	$0	$330,526	$802,919	$600,639	$931,165
Program Implementation	$0	$253,872	$509,721	$491,414	$745,286

Total MWSH Budget	$0	$584,398	$1,312,640	$1,092,053	$1,676,451
Small-Medium Business (SMB)					
Incentives & Services	$149,497	$27,305	$802,092	$555,034	$731,836
Program Implementation	$80,439	$15,792	$36,010	$84,471	$180,702
Total SMB Budget	$229,936	$43,097	$838,102	$639,505	$912,538
Residential Sector					
Marketplace					
Incentives & Services	$373,982	$262,222	$452,405	$903,580	$1,539,784
Program Implementation	$0	$28,431	$221,197	$221,197	$249,628
Total Marketplace Budget	$373,982	$290,653	$673,602	$1,124,777	$1,789,412
Pilots					
Incentives & Services	$503,947	$55,030	$0	$0	$558,977
Program Implementation	$242,384	$160,555	$0	$1,190	$404,129
Total Pilots Budget	$746,331	$215,585	$0	$1,190	$963,106
Residential					
Incentives & Services	$1,153,737	$522,168	$475,427	$220,679	$1,896,584
Program Implementation	$796,336	$367,502	$306,088	$193,980	$1,357,818
Total Residential Gas Budget	$1,950,073	$889,670	$781,515	$414,658	$3,254,401
Residential Home Energy Reports					
Incentives & Services	$0	$0	$0	$0	$0
Program Implementation	$1,646,818	$678,219	$814,635	$552,253	$2,877,290
Total Resi HERs Budget	$1,646,818	$678,219	$814,635	$552,253	$2,877,290
Residential Weatherization					
Incentives & Services	$0	$191,301	$627,147	$541,205	$732,506
Program Implementation	$0	$0	$0	$0	$0
Total Resi Weatherization Budget	$0	$191,301	$627,147	$541,205	$732,506
Smart Kids					
Incentives & Services	$326,689	$31,421	$797,231	$334,305	$692,415
Program Implementation	$202,670	$120,516	$234,702	$236,900	$560,086
Total Smart Kids Budget	$529,359	$151,938	$1,031,933	$571,205	$1,252,502
Multifamily Sector					
Multifamily					
Incentives & Services	$10,368,835	$4,803,492	$8,340,538	$5,223,982	$20,396,309
Program Implementation	$2,618,427	$1,912,363	$2,508,830	$2,351,267	$6,882,057
Total Multifamily Budget	$12,987,262	$6,715,855	$10,849,368	$7,575,249	$27,278,366
Portfolio Administration	**$1,376,105**	**$410,846**	**$2,075,547**	**$2,040,581**	**$3,827,532**
Portfolio EM&V	**$716,377**	**$785,142**	**$1,732,789**	**$1,236,066**	**$2,737,585**
Total Actual Portfolio Expenditure	**$23,257,458**	**$18,182,504**	**$31,478,376**	**$27,999,522**	**$69,439,484**
Commission-Authorized Budget	**$20,263,000**	**$30,259,737**	**$28,020,018**	**$28,020,018**	**$78,542,755**
Budget Remaining/Unspent Funds	**($2,994,458)**	**$9,082,775**	**($6,452,816)**	**$9,103,271**	**$9,103,271**

Table 1C: Actual vs. Planned Program Spend: NYS Clean Heat

PORTFOLIO (NYS Clean Heat)	Actual Spend 2019	Actual Spend 2020	Planned Spend 2021	Actual Spend 2021	Total Actual Spend 2019 - 2021
Total Actual Portfolio Expenditure		**$13,643,910**	**$113,893,574**	**$92,719,831**	**$106,363,741**
Commission-Authorized Budget		**No Annual Budgets after Clean Heat Order. See Clean Heat Budgets and Targets Updates Section**			
Budget Remaining/Unspent Funds					

Table 1D: Actual vs. Planned Program Spend: LMI

PORTFOLIO (LMI Electric)	Actual Spend 2019	Actual Spend 2020	Planned Spend 2021	Actual Spend 2021	Total Actual Spend 2019 - 2021
Incentives and Services		$4,317,782	$3,610,024	$2,295,864	$6,613,646
Program Implementation		$1,559,923	$717,673	$705,101	$2,265,024
Total LMI Budget		$5,877,705	$4,327,697	$3,000,965	$8,878,670
Portfolio Administration		**$176,444**	**$349,542**	**$546,817**	**$723,261**
Portfolio EM&V		**$318,925**	**$196,618**	**$188,872**	**$507,797**
Total Actual Portfolio Expenditure		**$6,373,073**	**$4,873,857**	**$3,736,654**	**$10,109,727**
Commission-Authorized Budget		**$11,922,224**	**$5,863,662**	**$5,863,662**	**$17,785,886**
Budget Remaining/Unspent Funds		**$5,549,151**	**$6,538,956**	**$7,676,159**	**$7,676,159**

PORTFOLIO (LMI Gas)	Actual Spend 2019	Actual Spend 2020	Planned Spend 2021	Actual Spend 2021	Total Actual Spend 2019 - 2021
Incentives and Services		**$3,392,428**	**$13,508,026**	**$10,826,207**	**$25,419,190**
Program Implementation		**$1,340,533**	**$2,396,516**	**$2,814,371**	**$4,131,937**
Total LMI Budget		**$4,732,961**	**$15,904,542**	**$13,640,578**	**$29,551,127**
Portfolio Administration		**$86,956**	**$399,975**	**$659,442**	**$810,726**
Portfolio EM&V		**$181,514**	**$599,961**	**$480,203**	**$868,433**
Total Actual Portfolio Expenditure		**$5,001,431**	**$16,904,478**	**$14,780,223**	**$23,200,676**
Commission-Authorized Budget		**$0**	**$13,681,878**	**$13,681,878**	**$13,681,878**
Budget Remaining/Unspent Funds		**($5,001,431)**	**($8,224,031)**	**$(6,099,776)**	**$(6,099,776)**

Table 2A: Forecast Program Planned Spend and Budgets: Electric Portfolio

PORTFOLIO (NE:NY Electric EE)	Planned Spend 2022	Planned Spend 2023	Planned Spend 2024	Planned Spend 2025
Commercial & Industrial (C&I) Sector				
Commercial & Industrial				
Incentives & Services	$46,813,599	$42,984,728	$31,044,526	$23,283,394
Program Implementation	$2,168,003	$2,211,870	$1,437,716	$1,078,287
Total C&I Budget	**$48,981,602**	**$45,196,598**	**$32,482,241**	**$24,361,681**
Instant Lighting				
Incentives & Services	$4,346,338	$4,129,021	$2,683,864	$2,012,898
Program Implementation	$70,427	$70,427	$45,777	$34,333
Total Instant Lighting Budget	**$4,416,765**	**$4,199,448**	**$2,729,641**	**$2,047,231**
Commercial Kitchen				
Incentives & Services	$427,589	$442,592	$287,685	$215,763
Program Implementation	$377,308	$390,547	$253,855	$190,391
Total Commercial Kitchen Budget	**$804,897**	**$833,138**	**$541,540**	**$406,155**
Small-Medium Business (SMB)				
Incentives & Services	$27,991,129	$29,274,223	$19,028,245	$14,271,184
Program Implementation	$4,999,578	$5,503,953	$3,577,569	$2,683,177
Total SMB Budget	**$32,990,707**	**$34,778,176**	**$22,605,814**	**$16,954,361**
Westchester P4P				
Incentives & Services	$0	$0	$0	$0
Program Implementation	$0	$0	$0	$0
Total Westchester P4P Budget	**$0**	**$0**	**$0**	**$0**
Residential				
Marketplace				
Incentives & Services	$542,439	$488,195	$317,327	$237,995
Program Implementation	$125,875	$125,875	$81,819	$61,364
Total Marketplace Budget	**$668,314**	**$614,070**	**$399,145**	**$299,359**
Pilots				
Incentives & Services	$355,599	$350,000	$350,000	$350,000
Program Implementation	$180,721	$150,000	$150,000	$150,000
Total Pilots Budget	**$536,320**	**$500,000**	**$500,000**	**$500,000**

PORTFOLIO (NE:NY Electric EE)	Planned Spend 2022	Planned Spend 2023	Planned Spend 2024	Planned Spend 2025
Residential				
Incentives & Services	$0	$0	$0	$0
Program Implementation	$0	$0	$0	$0
Total Residential Budget	**$0**	**$0**	**$0**	**$0**
Residential Home Energy Reports				
Incentives & Services	$0	$0	$0	$0
Program Implementation	$1,150,500	$1,150,500	$747,825	$560,869
Total Residential HERs Budget	**$1,150,500**	**$1,150,500**	**$747,825**	**$560,869**
Retail Lighting				
Incentives & Services	$6,280,730	$5,652,657	$3,674,227	$2,755,670
Program Implementation	$2,360,991	$2,360,991	$1,534,644	$1,150,983
Total Retail Lighting Budget	**$8,641,721**	**$8,013,648**	**$5,208,871**	**$3,906,653**
Retailer Incentive				
Incentives & Services	$0	$0	$0	$0
Program Implementation	$0	$0	$0	$0
Total Retailer Incentive Budget	**$0**	**$0**	**$0**	**$0**
Residential Weatherization				
Incentives & Services	$60,078	$120,155	$240,310	$480,620
Program Implementation	$25,592	$51,185	$102,369	$204,739
Total Resi. Weatherization Budget	**$85,670**	**$171,340**	**$342,680**	**$685,359**
Smart Kids				
Incentives & Services	$1,722,756	$1,722,756	$1,119,792	$839,844
Program Implementation	$521,114	$521,114	$338,724	$254,043
Total Smart Kids Budget	**$2,243,870**	**$2,243,870**	**$1,458,515**	**$1,093,887**
Multifamily Sector				
Multifamily				
Incentives & Services	$8,167,953	$6,667,717	$4,334,016	$3,250,512
Program Implementation	$1,635,512	$1,668,890	$1,084,779	$813,584
Total Multifamily Budget	**$9,803,465**	**$8,336,608**	**$5,418,795**	**$4,064,096**
Portfolio Administration	**$6,331,540**	**$5,698,386**	**$4,558,709**	**$3,646,967**
Portfolio EM&V	**$3,103,803**	**$2,793,423**	**$2,234,738**	**$1,787,791**
Total Planned Portfolio Budget	**$119,759,174**	**$114,529,205**	**$79,228,516**	**$60,314,409**

PORTFOLIO (NE:NY Electric EE)	Planned Spend 2022	Planned Spend 2023	Planned Spend 2024	Planned Spend 2025
Commission-Authorized Total Budget	**No Annual Targets after Clean Heat Order. See Clean Heat Budgets and Targets Updates Section**			
Budget Remaining/Unspent Funds				

Table 2B: Forecast Program Planned Spend and Budgets: Gas Portfolio

PORTFOLIO (NE:NY Gas EE)	Planned Spend 2022	Planned Spend 2023	Planned Spend 2024	Planned Spend 2025
Commercial & Industrial (C&I) Sector				
Commercial & Industrial				
Incentives & Services	$19,478,557	$27,864,570	$29,257,798	$7,402,223
Program Implementation	$710,191	$883,432	$883,432	$223,508
Total C&I Program Budget	**$20,188,748**	**$28,748,002**	**$30,141,230**	**$7,625,731**
Commercial Kitchen				
Incentives & Services	$440,101	$661,894	$694,988	$175,832
Program Implementation	$221,630	$333,322	$333,322	$84,331
Total Commercial Kitchen Budget	**$661,731**	**$995,216**	**$1,028,311**	**$260,163**
Midstream Water and Space Heating				
Incentives & Services	$2,534,196	$2,642,760	$2,774,898	$702,049
Program Implementation	$1,150,704	$1,200,000	$1,200,000	$303,600
Total Midstream Water and Space Heating Program Budget	**$3,684,900**	**$3,842,760**	**$3,974,898**	**$1,005,649**
Small-Medium Business				
Incentives & Services	$1,250,000	$1,499,983	$1,574,982	$398,471
Program Implementation	$200,002	$240,000	$240,000	$60,720
Total SMB Program Budget	**$1,450,002**	**$1,739,983**	**$1,814,982**	**$459,191**
Westchester P4P				
Incentives & Services	$0	$0	$0	$0
Program Implementation	$0	$0	$0	$0
Total Westchester P4P Budget	**$0**	**$0**	**$0**	**$0**
Residential Sector				
Marketplace				
Incentives & Services	$309,760	$332,450	$349,072	$88,315
Program Implementation	$125,875	$135,095	$135,095	$34,179

PORTFOLIO (NE:NY Gas EE)	Planned Spend 2022	Planned Spend 2023	Planned Spend 2024	Planned Spend 2025
Total Market Place Program Budget	**$435,635**	**$467,545**	**$484,168**	**$122,494**
Pilots				
Incentives & Services	$279,300	$250,000	$262,500	$0
Program Implementation	$300	$50,000	$38,500	$0
Total Pilot Program Budget	**$279,600**	**$300,000**	**$301,000**	**$0**
Residential				
Incentives & Services	$227,600	$236,463	$248,286	$62,816
Program Implementation	$129,940	$135,000	$135,000	$34,155
Total Residential Program Budget	**$357,540**	**$371,463**	**$383,286**	**$96,971**
Residential Home Energy Reports				
Incentives & Services	$0	$0	$0	$0
Program Implementation	$1,150,500	$1,150,500	$1,150,500	$291,076
Total Residential Home Energy Reports Program Budget	**$1,150,500**	**$1,150,500**	**$1,150,500**	**$291,076**
Residential Weatherization				
Incentives & Services	$540,698	$1,081,395	$1,135,465	$287,273
Program Implementation	$230,331	$460,663	$460,663	$116,548
Total Resi Weatherization Budget	**$771,029**	**$1,542,058**	**$1,596,128**	**$403,820**
Smart Kids				
Incentives & Services	$730,855	$648,481	$680,905	$172,269
Program Implementation	$214,014	$189,893	$189,893	$48,043
Total Smart Kids Program Budget	**$944,869**	**$838,374**	**$870,798**	**$220,312**
Multifamily Sector				
Multifamily				
Incentives & Services	$11,139,710	$20,497,041	$21,521,893	$5,445,039
Program Implementation	$2,878,407	$4,605,446	$4,605,446	$1,165,178
Total Multifamily Program Budget	**$14,018,117**	**$25,102,488**	**$26,127,340**	**$6,610,217**
Portfolio Administration	**$1,739,772**	**$2,174,715**	**$2,283,451**	**$556,950**
Portfolio EM&V	**$1,346,792**	**$1,683,489**	**$1,767,664**	**$445,236**
Total Planned Portfolio Budget	**$47,029,235**	**$68,956,593**	**$71,923,755**	**$18,097,811**
Commission-Authorized Total Budget	**$33,230,253**	**$38,566,129**	**$43,635,218**	**$48,658,593**
Budget Remaining/Unspent Funds	**$(1,701,252)**	**$(32,091,715)**	**$(60,380,252)**	**$(29,819,470)**

Table 2C: Forecast Program Planned Spend and Budgets: NYS Clean Heat

PORTFOLIO (NYS Clean Heat)	Planned Spend 2022	Planned Spend 2023	Planned Spend 2024	Planned Spend 2025
Total Planned Program Expenditure – Original NENY + Transfers	$477,475,957	$106,485,755	$30,702,279	$24,571,779
Total Planned Program Expenditure - Continuity	$0	$120,000,000	$120,000,000	$120,000,000
Commission-Authorized Total Budget	**No Annual Budgets after Clean Heat Order. See Clean Heat Budgets and Targets Updates Section**			
Budget Remaining/Unspent Funds				

Table 2D: Forecast Program Planned Spend and Budgets: LMI

PORTFOLIO (LMI Electric)	Planned Spend 2022	Planned Spend 2023	Planned Spend 2024	Planned Spend 2025
Incentives and Services	$4,378,073	$5,756,998	$7,779,557	$7,745,211
Program Implementation	$751,571	$939,798	$1,043,694	$908,859
Total LMI Budget	**$5,129,644**	**$6,696,796**	**$8,823,251**	**$8,654,071**
Portfolio Administration	**$1,054,330**	**$466,746**	**$590,327**	**$394,430**
Portfolio EM&V	**$144,456**	**$540,932**	**$518,119**	**$259,059**
Total Actual Portfolio Expenditure	**$6,328,430**	**$7,704,474**	**$9,931,696**	**$9,307,560**
Commission-Authorized Total Budget	**$7,552,448**	**$9,649,673**	**$11,738,531**	**$14,923,397**
Budget Remaining/Unspent Funds	**$8,900,177**	**$10,845,375**	**$12,652,210**	**$18,268,048**

PORTFOLIO (LMI Gas)	Planned Spend 2022	Planned Spend 2023	Planned Spend 2024	Planned Spend 2025
Incentives and Services	$19,470,766	$21,287,398	$28,569,640	$22,803,600
Program Implementation	$4,085,448	$4,289,980	$5,428,311	$3,713,024
Total LMI Budget	**$23,556,215**	**$25,577,378**	**$33,997,951**	**$26,516,624**
Portfolio Administration	**$878,523**	**$636,376**	**$700,013**	**$350,007**
Portfolio EM&V	**$528,586**	**$634,303**	**$761,164**	**$380,582**
Total Actual Portfolio Expenditure	**$24,963,324**	**$26,848,057**	**$35,459,128**	**$27,247,212**
Commission-Authorized Total Budget	**$17,622,380**	**$22,515,904**	**$27,389,906**	**$34,821,259**
Budget Remaining/Unspent Funds	**$(13,440,720)**	**$(17,772,873)**	**$(25,842,095)**	**$(18,268,048)**

Table 3A: Actual vs. Planned Program Savings: Electric

PORTFOLIO (NE:NY Electric EE)	Actual Savings 2019	Actual Savings 2020	Planned Savings 2021	Actual Savings 2021	Total Actual Savings 2019 - 2021
Commercial & Industrial (C&I) Sector					
Commercial & Industrial					
MWh (Primary)	109,904	73,075	62,871	59,757	232,532
Steam MMBtu (Secondary)	0	0	0	16,538	16,538
Instant Lighting					
MWh	50,898	41,929	16,861	17,118	108,566
Commercial Kitchen					
MWh	0	0	1,175	1,777	1,777
Small-Medium Business					
MWh	102,331	62,802	91,982	76,457	241,588
Residential Sector					
Marketplace					
MWh	12,389	12,399	10,764	11,850	36,638
Pilots					
MWh	0	0	0	0	0
Residential					
MWh	10,814	4,309	578	936	13,772
Residential Weatherization					
MWh	0	43	35	38	81
Residential Home Energy Reports					
MWh	77,164	45,677	71,879	70,997	193,837
Retail Lighting					
MWh	116,659	281,390	397,593	399,971	798,020
Retailer Incentive					
MWh	3,309	2,906	241	335	3,695
Smart Kids					
MWh	10,649	1,346	8,669	5,930	17,926
Multifamily Sector					
Multifamily					
MWh	47,298	9,752	12,204	14,229	71,280
Total Portfolio					
MWh	**541,415**	**535,628**	**677,948**	**659,395**	**1,728,521**
Steam MMBtu (Secondary)				**16,538**	**16,538**

Table 3B: Actual vs. Planned Program Savings: Gas

PORTFOLIO (NE:NY Gas EE)	Actual Savings 2019	Actual Savings 2020	Planned Savings 2021	Actual Savings 2021	Total Actual Savings 2019 - 2021
Commercial & Industrial (C&I) Sector					
Commercial & Industrial					
MMBtu	113,094	206,923	245,118	191,918	511,934
Commercial Kitchen					
MMBtu	0	11,049	10,896	11,558	22,607
Midstream Water & Space Heating					
MMBtu	0	15,849	27,999	26,379	42,227
Small-Medium Business					
MMBtu	10,184	1,081	12,279	11,855	23,121
Residential Sector					
Marketplace					
MMBtu	10,863	15,702	16,216	17,562	44,127
Pilots					
MMBtu	0	0	0	0	0
Residential					
MMBtu	25,048	18,993	13,454	12,146	56,188
Residential Weatherization					
MMBtu	0	3,515	2,875	3,121	6,636
Residential Home Energy Reports					
MMBtu	83,734	45,131	64,264	59,214	188,079
Smart Kids					
MMBtu	15,470	9,757	27,408	17,253	42,480
Multifamily Sector					
Multifamily					
MMBtu	339,890	115,395	179,627	173,069	628,354
Total Portfolio					
MMBtu	**598,283**	**443,396**	**600,138**	**524,075**	**1,565,754**

Table 3C: Actual vs. Planned Program Savings: NYS Clean Heat

PORTFOLIO (NYS Clean Heat)	Actual Savings 2019	Actual Savings 2020	Planned Savings 2021	Actual Savings 2021	Total Actual Savings 2019 - 2021
Total Portfolio					
MMBtu (Primary)		**132,370**	**700,815**	**598,716**	**731,086**

Table 3D: Actual vs. Planned Program Savings: LMI

PORTFOLIO (LMI Electric)	Actual Savings 2019	Actual Savings 2020	Planned Savings 2021	Actual Savings 2021	Total Actual Savings 2019 - 2021
Total Portfolio					
MWh		**38,544**	**13,201**	**13,363**	**51,908**

PORTFOLIO (LMI Gas)	Actual Savings 2019	Actual Savings 2020	Planned Savings 2021	Actual Savings 2021	Total Actual Savings 2019 - 2021
Total Portfolio					
MMBtu		**94,722**	**187,506**	**202,544**	**297,266**

Table 4A: Forecast Program Savings Plans: Electric

PORTFOLIO (NE:NY Electric EE)	Planned Savings 2022	Planned Savings 2023	Planned Savings 2024	Planned Savings 2025
Commercial & Industrial (C&I) Sector				
Commercial & Industrial				
MWh (Primary)	94,447	96,388	90,776	68,082
Steam MMBtu (Secondary)	144,698	147,626	0	0
Instant Lighting				
MWh	36,922	28,799	18,720	14,040
Commercial Kitchen				
MWh	2,898	3,000	1,950	1,463
Small-Medium Business				
MWh	77,769	85,615	55,650	41,737
Westchester P4P				

PORTFOLIO (NE:NY Electric EE)	Planned Savings 2022	Planned Savings 2023	Planned Savings 2024	Planned Savings 2025
MWh	0	0	0	0
Residential Sector				
Marketplace				
MWh	3,646	2,698	1,754	1,315
Pilots				
MWh	0	0	0	0
Residential				
MWh	0	0	0	0
Residential Home Energy Reports				
MWh	73,419	73,419	47,723	35,792
Retail Lighting				
MWh	278,327	83,498	54,274	40,705
Retailer Incentive				
MWh	0	0	0	0
Residential Weatherization				
MWh	627	1,254	2,509	5,018
Smart Kids				
MWh	10,091	3,027	1,968	1,476
Multifamily Sector				
Multifamily				
MWh	13,066	13,333	8,666	6,500
Total Portfolio				
MWh	**591,214**	**391,032**	**283,988**	**216,127**
Steam MMBtu (Secondary)	**144,698**	**147,626**	**0**	**0**

Table 4B: Forecast Program Savings Plans: Gas

PORTFOLIO (NE:NY Gas EE)	Planned Savings 2022	Planned Savings 2023	Planned Savings 2024	Planned Savings 2025
Commercial & Industrial (C&I) Sector				
Commercial & Industrial				

PORTFOLIO (NE:NY Gas EE)	Planned Savings 2022	Planned Savings 2023	Planned Savings 2024	Planned Savings 2025
MMBtu	352,108	438,000	438,000	110,814
Commercial Kitchen				
MMBtu	13,464	20,250	20,250	5,123
Midstream Water and Space Heating				
MMBtu	59,453	62,000	62,000	15,686
Small-Medium Business				
MMBtu	25,000	30,000	30,000	7,590
Westchester P4P				
MMBtu	0	0	0	0
Residential Sector				
Marketplace				
MMBtu	14,908	16,000	16,000	4,048
Pilots				
MMBtu	0	0	0	0
Residential				
MMBtu	6,945	7,215	7,215	1,825
Residential Weatherization				
MMBtu	11,189	22,379	22,379	5,662
Residential Home Energy Reports				
MMBtu	58,378	58,378	58,378	14,770
Smart Kids Gas				
MMBtu	28,176	25,000	25,000	6,325
Multifamily Sector				
Multifamily Gas				
MMBtu	222,123	355,396	355,396	89,915
Total Portfolio				
MMBtu	**791,745**	**1,034,618**	**1,034,618**	**261,758**

Table 4C: Forecast Program Savings Plans: NYS Clean Heat

PORTFOLIO (NYS Clean Heat)	Planned Savings 2022	Planned Savings 2023	Planned Savings 2024	Planned Savings 2025
Total Portfolio				
MMBtu (Primary) – Original NENY + Transfers	1,622,115	468,037	159,892	95,378
MMBtu (Primary) – Continuity Funding Mechanism	0	677,454	677,454	677,454

Table 4D: Forecast Program Savings Plans: LMI

PORTFOLIO (LMI Electric)	Planned Savings 2022	Planned Savings 2023	Planned Savings 2024	Planned Savings 2025
Total Portfolio				
MWh	16,006	13,121	13,682	12,218

PORTFOLIO (LMI Gas)	Planned Savings 2022	Planned Savings 2023	Planned Savings 2024	Planned Savings 2025
Total Portfolio				
MMBtu	240,922	230,807	276,892	177,542

Clean Heat Budgets and Targets Updates

The following section outlines the Company's Clean Heat budget transfers and target modifications as approved by the Commission in the recent Clean Heat Order.[36]

Clean Heat Budget Transfers

The Commission approved the transfer of unspent and previously authorized funds to the Company's Clean Heat Program and revised the budgets from annual to cumulative to allow for funding transfers between years. It authorized the transfer of $472,205,651 from non-LMI electric energy efficiency to Clean Heat and the addition of $46,078,024 of previously collected and unspent funds to the Clean Heat budget. The following table shows the NENY budgets authorized in the 2020 NENY Order[37] and the updated budgets authorized in the Clean Heat Order.

[36] NENY Proceeding, Clean Heat Order.
[37] NENY Proceeding, 2020 NENY Order.

	2020 NENY Order Budgets		Clean Heat Order Budgets	
	Non-LMI Electric	*Clean Heat*	*Non-LMI Electric*	*Clean Heat*
2020	$123,870,142	$18,037,338	$626,147,864	$745,599,511 + $10 million monthly Continuity Funding Mechanism[38]
2021	$150,873,631	$29,128,534		
2022	$168,180,548	$35,884,450		
2023	$190,807,664	$42,823,631		
2024	$213,590,016	$48,526,394		
2025	$251,031,514	$52,915,488		
2020-2025	**$1,098,353,515**	**$227,315,835**	**$1,371,747,375**	

Savings Target Modifications

In the Clean Heat Order, the Commission also authorized combining the Company's non-LMI electric energy efficiency and Clean Heat targets into one target and modifying targets from annual to cumulative to allow for additional funding transfers. The the total savings target remains the same as authorized under the 2020 NENY Order. The following table shows the NENY targets authorized in the 2020 NENY Order and the updated targets authorized in the Clean Heat Order.

	2020 NENY Order Targets (MMBTu)		Clean Heat Order Targets (MMBTu)	
	Non-LMI Electric	*Clean Heat*	*Non-LMI Electric*	*Clean Heat*
2020	1,188,119	72,921	**12,440,736**	
2021	1,495,162	119,716		
2022	1,713,493	151,334		
2023	1,998,941	186,941		
2024	2,286,344	219,927		
2025	2,758,677	249,162		
2020-2025	11,440,736	1,000,000		
Total	**12,440,736**			

[38] A Continuity Funding Mechanism will support the Clean Heat Program upon depletion of transferred funds. Funds are capped at $10 million per month and are authorized until the Commission takes action through the NENY Interim Review, expected in 2023.

Evaluation, Measurement and Verification

The Evaluation, Measurement, and Verification efforts and associated budgets are intended to serve all SEEP programs consistent with regulatory guidance to continually improve our processes and estimates of program impact. The Company's EM&V services includes three core activity types: Quality Assurance/Quality Control ("QA/QC"), Measurement & Verification ("M&V"), and Evaluation. Collectively, the proposed 2020-2025 EM&V budget will be distributed so that each activity complements and informs future efforts in addition to providing more immediate feedback by employing advanced EM&V technologies and methods.

The Company's Gross Savings Verification Specifications ("VGS Specs"), detailing the Company's overall strategy of calculating VGS for the energy efficiency portfolio within the annual SEEP, is filed as concurrently with the Company's SEEP.

Evaluation

Evaluation activities follow the methods and requirements as outlined in the Evaluation, Measurement & Verification Guidance, [39] dated November 1, 2016 and the Gross Savings Verification Guidance, [40] dated August 23, 2019.

Con Edison intends to continue conducting strategic and targeted impact and process evaluation activities, with a focus on establishing initial realization rates for the majority of existing programs by the end of 2023.

Impact Evaluation

The primary goal of an impact evaluation is to determine the verified gross savings ("VGS") realization rate ("RR") through a Gross Savings Analysis ("GSA"). The GSA is only one component of an impact evaluation, which also seeks to provide more transparent, granular, and actionable feedback to identify opportunities to improve estimation methods and the persistence of the program's savings for future years.

At the start of each impact evaluation, Con Edison's team of subject matter experts collaborates to identify the focus of the required evaluation research. This may include:

- assessing program-specific realization rates for energy (annual and lifetime) and demand savings;
- segmenting savings by measure, building type, location, time of use;
- incorporating advanced M&V through real-time evaluation using AMIas it becomes available;

[39] Office of Clean Energy, CE-05: Evaluation, Measurement & Verification Guidance, November 1, 2016, http://www3.dps.ny.gov/W/PSCWeb.nsf/96f0fec0b45a3c6485257688006a701a/255ea3546df802b585257e38005460f9/$FILE/CE-05-EMV%20Guidance%20Final%20%2011-1-2016.pdf

[40] Office of Clean Energy, CE-08: Gross Savings Verification Guidance, August 23, 2019, http://www3.dps.ny.gov/W/PSCWeb.nsf/96f0fec0b45a3c6485257688006a701a/255ea3546df802b585257e38005460f9/$FILE/GSVG%208_23_2019.FINAL.pdf

- informing future TRM updates;[41]
- confirming and updating estimates on assumed install rates for self-install programs;
- assessing target market and market saturation estimates through baseline studies; and
- informing cost effectiveness.

Process Evaluation

Process evaluations are generally used to assess and analyze program operations for new programs, modified programs, or those in a pilot phase of development. Process evaluations are also effective at diagnosing problems in programs that are underperforming or experiencing operational challenges. Because process evaluations most often examine program or portfolio operations, they can identify ways to make program or portfolio enhancements and improvements that reduce operating costs, expedite delivery, improve satisfaction, and fine-tune objectives. The Company may also undertake selective research activities for existing programs that do not require a full process evaluation or otherwise are cross-functional or inter-territorial as appropriate and recognized by the EM&V guidance documents.

Measurement & Verification

M&V plays an increasingly integral role in the activities of energy efficiency programs, not only in verifying the savings associated with a particular measure or application, but also in better characterizing the benefits attributable to new programs and measures. Such activities provide data the Company can use to improve accuracy of deemed savings assumptions, estimate of operational and behavioral influences, and identify opportunities for new technologies and services to include in program portfolios.

All M&V work is informed with industry best practices, as set forth in the International Performance Measurement and Verification Protocol ("IPMVP") standard[42]. The Company selects the M&V methodology based on the measures included within a project and/or historical performance of the measure. Each project selected receives a comprehensive M&V plan that includes components such as:

- Engineering desk review/preliminary analysis of project savings,
- M&V approach (e.g., IPMVP option, Uniform Methods Project protocol, pre/post work, data logging), and
- Sampling methodology.

Site pre-inspections typically collect data to verify:

- Existing equipment being replaced,
- Equipment operation (e.g., hours of operation, age, primary compared to standby), and
- Any other information needed to verify program eligibility and establish a baseline.

Site post-inspections typically collect data to verify:

- Equipment installation (e.g., quantities, nameplate),

[41] The TRM provides a standardized and transparent approach for measuring program energy savings across New York State's energy efficiency programs.
http://www3.dps.ny.gov/W/PSCWeb.nsf/All/72C23DECFF52920A85257F1100671BDD?OpenDocument

[42] *See,* https://evo-world.org/en/products-services-mainmenu-en/protocols/ipmvp

- Equipment operation (e.g., hours of operation, primary versus standby), and
- Any other information needed to verify reported savings.

The Company intends to use M&V data to either supplement impact evaluations to provide more accurate results, or to replace required impact data to reduce costs. The M&V scope will also support activities listed below:

- **Real-Time Continuous Program Design**: M&V allows the Company to quantify savings attributable to measures which were previously based upon deemed savings and engineering judgment. Furthermore, the information attained through M&V activities can be available earlier than it would following a typical evaluation study, supporting program managers in making more timely adjustments of savings, incentives, and overall measure strategy. The Company conducts M&V on a sample of measures representative of the number of projects and types of technologies as well as technologies deemed to be highly uncertain as to their impact on SEEP programs.

- **Technology Integration**: M&V supports the integration of new emerging energy efficiency technologies through pilots and M&V-specific studies by:

    - Supporting development of a more robust suite of measures and associated strategies the Company can use to adapt to a quickly evolving market by focusing on determining savings potential in pilot studies, and .

    - Garnering more accurate data on TRM measures which are most prevalent or most impactful in Company programs and operate in Con Edison's territory.

  M&V will also improve calculations for deemed savings within the TRM.

- **New Technologies:** EM&V monitors industry developments and customers' applications to identify new and emerging technologies that align with program goals. The Company intends to promote the wider adoption of new technologies through a series of new pilot initiatives and associated EM&V activities. All technologies and design strategies requiring a custom evaluation will be the subject of M&V until sufficient information has been gathered to inform future evaluation by either the Company's engineering staff or evaluation contractors.

The Company currently retains independent engineering consulting firms to complete M&V related work. This allows the Company to respond more quickly to the needs of customers, market partners and aggregators, and to respond to the variety of unique projects the Company encounters in our service territory.

Quality Assurance/Quality Control

As the Company develops the means and methods for each program to meet objectives, QA/QC work serves as an additional safeguard to maintain work integrity and check that program funds are used appropriately. An independent third party assesses the accuracy of the anticipated results and compliance with program rules. Conducting third-party verification for all work, including work

performed by contractors, reduces the likelihood of data inconsistencies, under- or over-reported savings, customer complaints, or potential fraud.

QA/QC site work also provides an opportunity to collect additional data that supplements the process and/or impact evaluations (e.g., customer surveys, operating hour verifications). The Company is working to facilitate new and more stringent QA/QC protocols across its efficiency program portfolio. These processes employ methods consistent with traditional evaluation practices and where practical serve as the means by which to collect data for the purpose of evaluation efforts.

Gross Savings Analysis Reports

In the past year, from Q4 2021 through Q3 2022, the Company filed 6 GSA Reports. The following summarizes each report.

Q4 2021: Con Edison filed 1 GSA report in Q4 2021

Multifamily Gas Program PY2020 Impact Evaluation

The goal of this impact evaluation was to calculate and verify the annual and lifetime gas savings and gas peak demand reduction resulting from Con Edison's program year ("PY") 2020 Multifamily gas program. The program offers incentives on common area measures (boilers, water heaters, energy management systems ("EMS"), pipe insulation, building insulation, steam traps, boiler clean and tune); comprehensive packaged measures (air sealing, combinations of common area measures); custom measures (unitary controls, non-simple controls, other custom measures); and in-unit direct installed measures (faucet aerators and showerheads). The Company evaluated EMS measures previously and thus EMS measures were out of scope for this evaluation.

Based on this evaluation, the Multifamily gas (non-EMS) portion of the program has initial VGS RRs of 75 percent for MMBtu and 53 percent for peak MMBtu. These VGS RRs are applied retrospectively, effective Q1 2020, and prospectively until completion of the next Gross Savings Analysis. Lower RRs are primarily driven by steam trap measures with unrealistically high baseline claims, a single pipe insulation project applied in conditioned spaces with a low RR, air sealing measures claiming TRM level savings when comprehensive air sealing was not completed, and an instantaneous indirect water heater project with a very low RR.

This evaluation offered a series of recommendations, both cross-programmatic and measure-specific. The Multifamily gas program adopted some of the recommendations to increase accuracy of steam trap and air sealing savings and an assessment is in progress to determine whether Alternative Prospective Realization Rates ("AP RRs") are possible for the 2021 program year to determine the most appropriate 2021 RRs. These RRs could be applied prospectively from Con Edison's implementation of Gross Savings Analysis recommendations, pending the ongoing analysis.

Q1 2022: Con Edison filed 4 GSA Reports in Q1 2022

Retail Lighting and Foodbank Bulb Distribution Impact Evaluation Report

Con Edison's Retail Lighting and Foodbank Bulb Distribution Impact Evaluation evaluated the program between September 2020 and December 2021. NMR Group, Inc. ("NMR") reviewed the program tracking data and engineering workbook and compared them to the VGS Specifications and TRM V8. NMR found few errors, omissions, or contradictions among the tracking data and engineering workbooks.

This evaluation yielded VGS RRs of 99 percent for first year MWh savings, 97 percent for lifetime MWh savings, and 99 percent for MW reduction effective March 1, 2022.

The evaluation also suggested that Con Edison adopt minor changes to the data tracking systems and savings assumptions to address the small divergences in verified vs. reported savings due to data entry errors, misinterpreted baseline wattages for a small number of reflector bulbs, and rounding error.

Multifamily Gas AP RRs for Steam Trap and Air Sealing Measures Report

Guidehouse conducted an impact evaluation of the non-EMS portion of Con Edison's Multifamily gas program for the 2020 program year. As part of the evaluation tasks, Guidehouse assessed whether or not the process changes to steam traps and air sealing were significant and quantifiable. Then, for those that were quantifiable, Guidehouse calculated an AP RR.

As a result of this analysis, the Multifamily gas non-EMS portion of the program now has the following AP RRs:

- Gas MMBtu: 86 percent
- Peak Gas MMBtu: 62 percent

The Company implemented process changes allowing for the use of these AP RRs as of Q4 2021, and the AP RRs are effective from Q4 2021 through Q1 2023 or until completion of the next Gross Savings Analysis.

Guidehouse also offered the following recommendations for future evaluations:

- Careful documentation of the baseline condition for both measures will likely reduce evaluation uncertainty and would improve the accuracy of the evaluation process.
- The next air sealing measure evaluation should be more rigorous, isolating air sealing into its own stratum and potentially including on-site verification work.

Commercial Water Heaters PY2020-21 Impact Evaluation Final Report

The Con Edison Midstream Water and Space Heating Program (formerly Commercial Water Heaters) incentivizes high efficiency water and space heating equipment by engaging with distributors of natural gas heating equipment to increase the stocking and sales of high-efficiency models. Guidehouse conducted a Gross Savings Analysis to determine initial realization rates for the program. The evaluation period analyzed acquired savings from May 2020 to May 2021. The final evaluation report identified the following VGS RRs which will be applied retrospectively from Q1 2020 to Q4 2021:

- MMBtu: 62 percent
- Peak MMBtu: 74 percent

Some key findings were:

- Gallons per day ("GPD") assumptions from the TRM did not reflect actual characteristics as found at 22 sites. For projects with multiple water heaters, the GPD demand by building type was not normalized to reflect per water heater but was applied as demand for each water heater.
- Building types were reclassified for 11 projects based on site verification efforts.
- No equipment was found for two projects (one water heating and one boiler).

The evaluation report identified the following recommendations based on the findings outlined above:

- For multifamily high-rise buildings, distributors should try to collect the actual number of residential units or use 2,898 GPD instead of the default 4,600 GPD.
- For hospitals, distributors should confirm if the building is a smaller type of facility and/or collect the square footage.
- In-service rate of 98 percent should be used to reflect situations where a midstream offering can lead to missing or misappropriated equipment.
- Large buildings should trigger extra review efforts to confirm the actual building characteristics.

The evaluation report also recommends that the New York TRM update the commercial storage tank water heater measure to include annual savings due to reduced standby losses with the installation of a higher efficient storage tank model. Standby losses are reflected in the New York TRM for demand savings and should also be applied for annual savings.

District Steam and Delivered Fuel RRs in Con Edison Efficiency Programs Report

Guidehouse is currently engaged with Con Edison in conducting an impact evaluation of Con Edison's 2021 C&I program. As of 2021 Con Edison is also pursuing projects that save district steam and/or delivered fuels, both as part of the C&I program and across other programs in Con Edison's energy efficiency portfolio. To inform current and future evaluation activities, Con Edison asked Guidehouse to review historic C&I projects, prior evaluation findings, and current program offerings to determine:

1. Whether and under what conditions existing C&I program RRs could be used for district steam projects; and
2. To what extent findings from the C&I program review could be more broadly extrapolated to inform RRs for additional fuels and/or energy efficiency programs.

Based on their analysis, Guidehouse determined that the current C&I RRs will not be impacted by the addition of district steam. Guidehouse also determined that, for non-fuel switching projects where there are district steam savings, such as the for the "Secondary Steam" projects acquired by the C&I program in 2021, the historic gas RR could be used for these district steam savings even if gas savings and district steam savings are reported separately. The addition of district steam measures to the C&I program would not introduce a significant change as long as the corresponding measures are not significantly different.

Guidehouse additionally developed guidance around how these findings can be extrapolated to inform RRs for additional fuels and/or energy efficiency programs, but noted that each additional fuel and energy efficiency program should be assessed individually in conjunction with a thirdparty independent

evaluators before RRs are extrapolated.

Q2 2022: Con Edison filed 1 GSA Report in Q2 2022

Evaluation Report-AP RRs for Lighting and Strip Curtains in Con Ed SMB Program

Guidehouse conducted an evaluation to assess whether the programmatic changes adopted by Con Edison's SMB program, AP RRs, were properly applied to SMB projects during the program period of study, October 2020 through November 2021. The evaluation-recommended adopted programmatic changes were:

- Lighting: A change in baseline wattage assumptions for lighting projects to mitigate the risk of baseline misidentification.
- Non-Lighting Electric: The removal of strip curtains from the program as these measures were repeatedly found to be not installed, cut away, or peeled and taped back, disabling the measure.

This evaluation also determined the RRs to apply when the AP RRs expire after 18 months of the implementation of these evaluation-recommended programmatic changes. As a result of this impact evaluation, the SMB program has new VGS RRs (93 percent for Lighting MWh, 89 percent for Lighting MW, 92 percent for Lighting Lifetime MWh, 99 percent for Non-Lighting Electric MWh, 115 percent for Non-Lighting Electric MW, 98 percent for Non-Lighting Electric Lifetime MWh) to be applied prospectively, effective April 16, 2022, until completion of the next Gross Savings Analysis.

During the evaluation, the Company s found that there had been a miscommunication to Guidehouse regarding how the lighting measures were being mapped and that there had been a mapping protocol change that became effective on all lighting measures surveyed after December 17, 2020. After discovering these lighting baseline bucket protocol differences, Guidehouse assessed the differences, determined that changes to historic AP RRs were not required, and recalculated the Lighting measure category RR based on current practices employed by the implementer for prospective use.

Based on these findings, the evaluation recommends developing a standardized process of communicating and documenting program changes. The EM&V team has been working to develop internal department-wide control points, such as during business planning processes and financial meetings, to assess whether proposed programmatic changes may be significant and have evaluation implications. In addition, the EM&V team worked with Guidehouse to develop a framework document which translates guidelines for evaluation under VGS Guidance, including providing more clarity on when a new study is warranted, what constitutes a significant program change, and how changes in measure mix should be assessed.

Q3 2022: Con Edison filed 0 GSA Reports in Q3 2022

Activities and Expenditures

The following EM&V activities and expenditures lay out what is currently planned based on existing guidance and programs.

Table 5A: Planned Activity Descriptions (Electric and Gas)

EM&V Activity	Activity Description
Commercial & Industrial - QA/QC	On-site/virtual program inspections and documentation reviews conducted by an independent third-party to verify consistency with program guidelines, accuracy of reported savings and to identify project-level deficiencies. Company is currently undertaking activities for future growth including expanding QA/QC activities.
Midstream Water and Space Heating - QA/QC	Desk reviews conducted by an independent third-party for consistency with program guidelines and verifying accuracy of reported savings. Design and implementation of QA controls to support process improvements.
Multifamily - QA/QC	On-site/virtual inspections conducted by an independent third-party to verify program compliance and to identify project-level deficiencies.
Small-Medium Business - QA/QC	On-site/virtual inspections conducted by an independent third-party to verify program compliance and to identify project-level deficiencies. Documentation reviews conducted by an independent third-party by sampling HVAC/custom projects from IC's invoice for verification of consistency with program guidelines, accuracy of reported savings and for compliance.
Commercial Kitchen - QAQC	Desk reviews conducted by an independent third-party for consistency with program guidelines and verifying accuracy of reported savings. Design and implementation of QA controls to support process improvements.
Retail Lighting - QA/QC	On-site inspections and desk reviews conducted by an independent third-party to verify program compliance and to identify project-level deficiencies.
Commercial & Industrial - 2021 Impact Evaluation	Estimate verified gross energy and demand savings for electricity and natural gas.
Multifamily - 2020 AP RR Impact Evaluation (Gas)	Verify implementation of AP RR assumptions and estimate verified gross energy and demand savings for natural gas.
Multifamily - 2021 Impact Evaluation (Non-Lighting Electric)	Estimate verified gross energy and demand savings for electric measures not covered by existing Multifamily realization rates (evaluation will include NPS programs, such as NYCHA and WCHA).
Midstream Water and Space Heating - 2022 Impact Evaluation	Estimate verified gross energy and demand savings for electricity and natural gas.
Instant Lighting - 2021 AP RR Impact Evaluation	Verify implementation of AP RR assumptions and estimate verified gross energy and demand savings for electricity.
Smart Kids - 2021 AP RR Impact Evaluation	Verify implementation of AP RR assumptions and estimate verified gross energy and demand savings for electricity and natural gas.
Residential Weatherization -	Estimate verified gross energy and demand savings for electricity and natural gas.

2022 Impact Evaluation	
Oil-to-Electric Pilot - Impact Evaluation	Estimate gross energy and demand savings for electricity and natural gas.
Future Pilot Impact Evaluations	Estimate verified gross energy and demand savings for electricity and natural gas. This is a spot for future Pilots evaluation work as new pilots are developed and assessed.
Commercial & Industrial - M&V	Measure and verify energy savings and peak demand reduction for large and complex projects, and new technologies. Perform M&V work to support evaluation activities, and to provide early insights on new or uncharacterized technologies.
Multifamily - M&V	Measure and verify energy savings and peak demand reduction for large and complex projects, and new technologies. Perform M&V work to support evaluation activities, and to provide early insights on new or uncharacterized technologies.
Residential - M&V	Measure and verify energy savings and peak demand reduction for large and complex projects, and new technologies. Perform M&V work to support evaluation activities, and to provide early insights on new or uncharacterized technologies.
Small-Medium Business - M&V	Measure and verify energy savings and peak demand reduction for large and complex projects, and new technologies. Perform M&V work to support evaluation activities, and to provide early insights on new or uncharacterized technologies.
Pilots - M&V	Assess efficiency and savings performance of new technologies and new measures at a site level for program integration.
NPS Commercial & Industrial - M&V	Measure and verify energy savings and peak demand reduction for projects with emphasis on gas savings. These activities include primarily heat pump technologies and other winter peak reducing technologies.
NPS Residential - M&V	Measure and verify energy savings and peak demand reduction for projects with emphasis on gas savings. These activities include primarily heat pump technologies and other winter peak reducing technologies.
NPS Multifamily - M&V	Measure and verify energy savings and peak demand reduction for projects with emphasis on gas savings. These activities include primarily heat pump technologies and other winter peak reducing technologies.
NPS Small-Medium Business - M&V	Measure and verify energy savings and peak demand reduction for projects with emphasis on gas savings. These activities include primarily heat pump technologies and other winter peak reducing technologies.
VGS Support	Additional evaluation work to verify impact of program changes that impact an existing VGS RR. While not assigned to specific programs, the Company anticipates work over the next few years as programs change. Includes regulatory support for implementing and adhering to VGS.
Net-to-Gross Study	Studying the net-to-gross factor for our portfolio, including free-ridership, spillover and market effects.

Unallocated: Measure-Specific Evaluations	Evaluations of new technologies as they enter programs. These technology-specific evaluations will estimate the verified gross energy and demand savings for electricity and natural gas.
Unallocated: New Programs/ Changed Programs	Evaluations of new programs as they develop to estimate verified gross energy and demand savings for electricity and natural gas.
Unallocated: EM&V 2024 and 2025	EM&V activities that will be required in 2024 and 2025.

Table 5B: 2019 - 2025 EM&V Activity Schedule (Electric and Gas)

EM&V Activity	Expected Plan Submission Date	Expected Start Date	Expected Completion Date	Cycle Year Informed	Completion Status
Commercial & Industrial - QA/QC	N/A	Q1 2020	Q4 2023	2020-2023	In Progress
Midstream Water and Space Heating - QA/QC	N/A	Q3 2021	Q4 2023	2021-2023	In Progress
Multifamily - QA/QC	N/A	Q1 2020	Q4 2023	2020-2023	In Progress
Small-Medium Business - QA/QC	N/A	Q1 2020	Q4 2023	2020-2023	In Progress
Commercial Kitchen - QAQC	N/A	Q4 2022	Q4 2023	2022-2023	Delayed
Retail Lighting - QA/QC	N/A	Q2 2021	Q4 2022	2021-2022	In Progress
Commercial & Industrial - 2021 Impact Evaluation	Q1 2022	Q4 2021	Q2 2023	2021	Delayed
Multifamily - 2020 AP RR Impact Evaluation (Gas)	Q4 2022	Q4 2022	Q1 2023	2020	Upcoming
Multifamily - 2021 Impact Evaluation (Non-Lighting Electric)	Q1 2023	Q3 2022	Q4 2023	2021	Delayed
Midstream Water and Space Heating - 2022 Impact Evaluation	Q2 2023	Q2 2023	Q4 2024	2022	Upcoming
Instant Lighting - 2021 AP RR Impact Evaluation	Q2 2022	Q1 2022	Q4 2022	2021	In Progress

Smart Kids - 2021 AP RR Impact Evaluation	Q2 2022	Q1 2022	Q4 2022	2021	In Progress
Residential Weatherization - 2022 Impact Evaluation	Q2 2023	Q2 2023	Q4 2024	2022	Upcoming
Oil-to-Electric Pilot - Impact Evaluation	Q4 2021	Q2 2021	Q3 2023	2021	Delayed
Future Pilot Impact Evaluations	N/A	N/A	N/A	N/A	Upcoming
Commercial & Industrial - M&V	N/A	Q1 2020	Q4 2023	2020-2023	In Progress
Multifamily - M&V	N/A	Q1 2020	Q4 2023	2020-2023	In Progress
Residential - M&V	N/A	Q1 2020	Q4 2023	2020-2023	In Progress
Small-Medium Business - M&V	N/A	Q1 2020	Q4 2023	2020-2023	In Progress
Pilots - M&V	N/A	Q1 2020	Q4 2023	2020-2023	In Progress
NPS Commercial & Industrial - M&V	N/A	Q1 2020	Q4 2023	2020-2023	In Progress
NPS Residential - M&V	N/A	Q1 2020	Q4 2023	2020-2023	In Progress
NPS Multifamily - M&V	N/A	Q1 2020	Q4 2023	2020-2023	In Progress
NPS Small-Medium Business - M&V	N/A	Q1 2020	Q4 2023	2020-2023	In Progress
VGS Support	N/A	Q1 2020	Q4 2023	2020-2023	In Progress
Net-to-Gross Study	Q2 2022	Q1 2022	Q4 2023	2020-2023	In Progress
Unallocated: Measure-Specific Evaluations	N/A	Q1 2020	Q4 2023	2020-2023	Upcoming
Unallocated: New Programs/ Changed Programs	N/A	Q1 2020	Q4 2023	2020-2023	Upcoming
Unallocated: EM&V 2024 and 2025	N/A	N/A	N/A	N/A	Upcoming

Table 6A: EM&V Activity Budgeted Expenditures (Electric)

NE:NY Electric EE	Actual Year 2019	Actual Year 2020	Actual Year 2021	Planned Year 2022	Planned Year 2023	Planned Year 2024	Planned Year 2025
Commercial & Industrial - QA/QC	$673,165	$160,298	$144,478	$626,252	$698,090	$0	$0
Midstream Water and Space Heating - QA/QC	$0	$0	$0	$0	$0	$0	$0
Multifamily - QA/QC	$328,134	$236,485	$137,979	$245,944	$274,157	$0	$0
Small-Medium Business - QA/QC	$626,420	$870,555	$870,975	$683,699	$762,127	$0	$0
Commercial Kitchen - QAQC	$0	$0	$0	$60,000	$60,000	$0	$0
Retail Lighting - QA/QC	$0	$0	$39,906	$135,634	$0	$0	$0
Commercial & Industrial - 2021 Impact Evaluation	$0	$0	$26,765	$534,800	$75,800	$0	$0
Multifamily - 2020 AP RR Impact Evaluation (Gas)	$0	$0	$0	$0	$0	$0	$0
Multifamily - 2021 Impact Evaluation (Non-Lighting Electric)	$0	$0	$0	$24,600	$174,700	$0	$0
Midstream Water and Space Heating - 2022 Impact Evaluation	$0	$0	$0	$0	$0	$0	$0
Instant Lighting - 2021 AP RR Impact Evaluation	$0	$0	$0	$60,769	$0	$0	$0
Smart Kids - 2021 AP RR Impact Evaluation	$0	$0	$31,850	$19,510	$0	$0	$0
Residential Weatherization - 2022 Impact Evaluation	$0	$0	$0	$0	$5,000	$5,000	$0
Oil-to-Electric Pilot - Impact Evaluation	$0	$0	$27,302	$8,775	$118,800	$0	$0
Future Pilot Impact Evaluations	$0	$0	$0	$50,000	$75,000	$0	$0

Commercial & Industrial - M&V	$145,615	$174,493	$194,398	$328,000	$295,200	$0	$0
Multifamily - M&V	$255,849	$75,449	$223,574	$203,000	$182,700	$0	$0
Residential - M&V	$0	$1,347	$0	$9,524	$8,572	$0	$0
Small-Medium Business - M&V	$229,077	$2,507	$29,892	$89,100	$80,190	$0	$0
Pilots - M&V	$0	$22,221	$127,983	$43,000	$43,000	$0	$0
NPS Commercial & Industrial - M&V	$0	$0	$0	$0	$0	$0	$0
NPS Residential - M&V	$0	$19,165	$0	$0	$0	$0	$0
NPS Multifamily - M&V	$6,997	$9,868	$0	$0	$0	$0	$0
NPS Small-Medium Business - M&V	$0	$0	$0	$0	$0	$0	$0
VGS Support	$73,591	$52,700	$5,265	$61,875	$63,750	$0	$0
Net-to-Gross Study	$0	$0	$0	$95,100	$283,100	$0	$0
Unallocated: Measure-Specific Evaluations	$0	$0	$0	$0	$100,000	$0	$0
Unallocated: New Programs/ Changed Programs	$0	$0	$0	$225,000	$480,725	$0	$0
Unallocated: EM&V 2024 and 2025	$0	$0	$0	$0	$0	$5,334,750	$6,275,788
Total	**$2,338,848**	**$1,625,086**	**$1,860,367**	**$3,504,582**	**$3,780,911**	**$5,339,750**	**$6,275,788**

Table 6B: EM&V Activity Budgeted Expenditures (Gas)

NE:NY Gas EE	Actual Year 2019	Actual Year 2020	Actual Year 2021	Planned Year 2022	Planned Year 2023	Planned Year 2024	Planned Year 2025
Commercial & Industrial - QA/QC	$24,597	$89,396	$96,319	$114,622	$134,055	$0	$0
Midstream Water amd Space Heating - QA/QC	$0	$0	$36,696	$24,282	$28,399	$0	$0
Multifamily - QA/QC	$45,755	$142,294	$183,972	$100,033	$116,993	$0	$0
Small-Medium Business - QA/QC	$302	$8,715	$26,937	$5,758	$6,735	$0	$0
Commercial Kitchen - QAQC	$0	$2,750	$0	$20,000	$20,000	$0	$0
Retail Lighting - QA/QC	$0	$0	$0	$0	$0	$0	$0

Commercial & Industrial - 2021 Impact Evaluation	$0	$0	$17,844	$275,500	$39,100	$0	$0
Multifamily - 2020 AP RR Impact Evaluation (Gas)	$0	$0	$317,309	$199,500	$0	$0	$0
Multifamily - 2021 Impact Evaluation (Non-Lighting Electric)	$0	$0	$0	$0	$0	$0	$0
Midstream Water and Space Heating - 2022 Impact Evaluation	$0	$0	$0	$28,700	$85,400	$85,400	$0
Instant Lighting - 2021 AP RR Impact Evaluation	$0	$0	$0	$0	$0	$0	$0
Smart Kids - 2021 AP RR Impact Evaluation	$0	$0	$13,650	$19,510	$0	$0	$0
Residential Weatherization - 2022 Impact Evaluation	$0	$0	$0	$0	$100,000	$100,000	$0
Oil-to-Electric Pilot - Impact Evaluation	$0	$0	$10,098	$2,925	$39,600	$0	$0
Future Pilot Impact Evaluations	$0	$0	$0	$50,000	$25,000	$0	$0
Commercial & Industrial - M&V	$7,184	$85,982	$129,599	$72,000	$64,800	$0	$0
Multifamily - M&V	$100,895	$38,320	$297,378	$147,000	$132,300	$0	$0
Residential - M&V	$0	$791	$0	$6,349	$5,714	$0	$0
Small-Medium Business - M&V	$2,669	$25	$768	$900	$810	$0	$0
Pilots - M&V	$0	$7,100	$56,452	$57,000	$57,000	$0	$0
NPS Commercial & Industrial - M&V	$0	$0	$0	$140,000	$140,000	$0	$0
NPS Residential - M&V	$0	$0	$0	$140,000	$140,000	$0	$0
NPS Multifamily - M&V	$69,384	$0	$0	$140,000	$140,000	$0	$0
NPS Small-Medium Business - M&V	$0	$0	$0	$73,000	$73,000	$0	$0
VGS Support	$14,065	$0	$1,458	$20,625	$21,250	$0	$0
Net-to-Gross Study	$0	$0	$0	$26,400	$78,400	$0	$0

Unallocated: Measure-Specific Evaluations	$0	$0	$0	$0	$100,000	$0	$0
Unallocated: New Programs/ Changed Programs	$0	$0	$0	$75,000	$175,000	$0	$0
Unallocated: EM&V 2024 and 2025	$0	$0	$0	$0	$0	$2,131,889	$2,568,458
Total	**$264,851**	**$375,373**	**$1,188,479**	**$1,739,104**	**$1,723,556**	**$2,317,289**	**$2,568,458**

Benefit-Cost Analysis

The benefits and costs for the Company's individual electric portfolio programs, including heat pumps but excluding LMI programs, are based on the current metrics are detailed in Table 7A. Table 7B includes benefits and costs for the Company's individual natural gas portfolio programs, excluding LMI programs. The overall BCAs for electric and gas portfolios are summarized in Tables 8A and 8B. The BCAs for NWS are filed separately pursuant to Commission directive in the Company's rate case dockets.[43]

Table 7A: Electric and NYS Clean Heat Portfolio Program Benefits and Costs[44]

PORTFOLIO (NE:NY Electric EE including NYS Clean Heat)	2020	2021	2022	2023	2024	2025
Commercial & Industrial (C&I) Sector						
Commercial & Industrial						
Benefits	$104,387,812	$90,647,350	$146,266,808	$145,002,089	$132,481,252	$96,413,442
Costs	$33,030,873	$35,725,370	$35,650,386	$30,157,241	$30,489,775	$21,518,320
Benefit Cost Ratio	**3.16**	**2.54**	**4.10**	**4.81**	**4.35**	**4.48**
Instant Lighting						
Benefits	$43,106,546	$20,356,422	$48,062,492	$36,544,569	$23,126,132	$16,910,419
Costs	$11,318,490	$5,071,672	$6,161,341	$5,555,249	$3,423,350	$2,422,510
Benefit	**3.81**	**4.01**	7.80	6.58	**6.76**	**6.98**

[43] *See*, *e.g.*, 2019 Rate Case Proceeding, Jan 2020 Rate Case Order.
[44] Benefits and costs values represented in 2022 dollars

Cost Ratio						
Small-Medium Business						
Benefits	$106,695,262	$107,528,404	$96,313,663	$103,243,031	$65,260,348	$47,634,557
Costs	$50,025,296	$30,440,715	$34,231,786	$34,365,840	$21,060,789	$14,858,417
Benefit Cost Ratio	**2.13**	**3.53**	**2.81**	**3.00**	**3.10**	**3.21**
Commercial Kitchen						
Benefits	$0	$2,964,136	$3,221,283	$3,246,580	$2,052,223	$1,498,722
Costs	$0	$501, 718	$851,150	$842,592	$517,511	$365,546
Benefit Cost Ratio	**n/a**	**5.91**	**3.78**	**3.85**	**3.97**	**4.10**
Residential Sector						
Marketplace						
Benefits	$11,289,265	$8,198,415	$2,639,150	$1,890,815	$1,188,510	$862,466
Costs	$4,919,119	$1,692,623	$737,570	$640,302	$393,794	$278,363
Benefit Cost Ratio	**2.29**	**4.84**	**3.58**	**2.95**	**3.02**	**3.10**
Pilots						
Benefits	$0	$0	$0	$0	$0	$0
Costs	$68	$469,068	$614,378	$687,865	$645,217	$605,212
Benefit Cost Ratio	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Residential						
Benefits	$5,560,747	$24,347	$0	$0	$0	$0

Costs	$6,069,395	$276,935	$0	$0	$0	$0
Benefit Cost Ratio	**0.92**	**0.09**	**n/a**	**n/a**	**n/a**	**n/a**
Residential Weatherization						
Benefits	$254,786	$227,441	$2,460,262	$4,798,716	$9,343,005	$18,198,293
Costs	$432,396	$371	$95,680	$186,270	$354,309	$669,754
Benefit Cost Ratio	**0.59**	**613.25**	**25.71**	**25.76**	**26.37**	**27.17**
Residential Home Energy Reports						
Benefits	$5,598,187	$11,524,420	$11,330,773	$11,148,528	$6,967,887	$5,295,830
Costs	$2,794,672	$1,273,411	$2,322,162	$2,574,715	$1,662,395	$1,205,663
Benefit Cost Ratio	**2.00**	**9.05**	**4.88**	**4.33**	**4.19**	**4.39**
Retail Lighting						
Benefits	$281,322,014	$308,118,487	$225,621,121	$65,628,763	$41,312,289	$30,024,679
Costs	$19,149,267	$20,741,387	$13,083,395	$9,217,638	$5,725,288	$4,068,869
Benefit Cost Ratio	**14.69**	**14.86**	**17.24**	**7.12**	**7.22**	**7.38**
Retailer Incentive						
Benefits	$624,267	$34,361	$0	$0	$0	$0
Costs	$3,531,499	$242,887	$0	$0	$0	$0
Benefit Cost Ratio	**0.18**	**0.14**	**n/a**	**n/a**	**n/a**	**n/a**

Smart Kids						
Benefits	$1,139,720	$4,603,699	$7,062,117	$2,053,312	$1,292,107	$938,705
Costs	$1,753,754	$2,081,280	$2,394,133	$2,160,270	$1,324,678	$933,401
Benefit Cost Ratio	**0.65**	**2.21**	**2.95**	**0.95**	**0.98**	**1.01**
Multifamily Sector						
Multifamily						
Benefits	$10,144,097	$15,800,861	$12,991,133	$12,890,414	$8,137,342	$5,931,463
Costs	$11,156,935	$7,315,535	$9,391,221	$7,589,636	$4,643,165	$3,272,622
Benefit Cost Ratio	**0.91**	**2.16**	**1.38**	**1.70**	**1.75**	**1.81**
Heat Pumps						
Clean Heat						
Benefits	$26,259,704	$117,839,637	$342,509,228	$262,660,247	$178,621,029	$158,160,002
Costs	$19,652,090	$104,033,042	$539,797,874	$297,242,521	$192,671,692	$156,380,648
Benefit Cost Ratio	1.34	1.13	0.63	0.88	0.93	1.01
Total Electric Portfolio						
Benefits	$597,052,931	$688,912,417	$899,336,742	$649,959,121	$470,320,001	$382,260,647
Costs	$164,571,327	$210,349,988	$645,962,614	$391,727,958	$263,218,876	$206,795,645
Benefit Cost Ratio	3.63	3.28	1.39	1.66	1.79	1.85

Table 7B: Natural Gas Portfolio Program Benefits and Cost[45]

PORTFOLIO (NE:NY Gas)	2020	2021	2022	2023	2024	2025
Commercial & Industrial (C&I) Sector						
Commercial & Industrial						
Benefits	$21,683,417	$19,533,091	$41,517,860	$50,066,906	$48,496,050	$11,876,096
Costs	$13,385,755	$23,919,780	$38,833,427	$51,673,762	$50,854,533	$12,060,524
Benefit Cost Ratio	1.62	0.82	1.07	0.97	0.95	0.98
Commercial Kitchen						
Benefits	$972,492	$990,110	$1,120,998	$1,637,133	$1,587,664	$389,394
Costs	$649,997	$758,015	$791,886	$1,113,906	$1,082,421	$256,506
Benefit Cost Ratio	1.50	1.31	1.42	1.47	1.47	1.52
Midstream Water and Space Heating						
Benefits	$2,033,748	$3,287,607	$6,913,086	$6,991,971	$6,774,846	$1,659,448
Costs	$906,321	$1,669,938	$5,222,169	$5,098,383	$4,968,598	$1,177,991
Benefit Cost Ratio	2.24	1.97	1.32	1.37	1.36	1.41
Small-						

[45] Benefits and costs values represented in 2022 dollars

Medium Business						
Benefits	$150,817	$1,179,743	$4,358,755	$5,060,367	$4,893,546	$1,196,797
Costs	$52,298	$760,799	$1,547,464	$1,737,038	$1,700,248	$402,948
Benefit Cost Ratio	2.88	1.55	2.82	2.91	2.88	2.97
Residential Sector						
Marketplace						
Benefits	$1,448,923	$1,575,464	$1,298,763	$1,352,489	$1,310,920	$321,152
Costs	$653,593	$2,205,389	$779,685	$782,373	$764,615	$181,163
Benefit Cost Ratio	2.22	0.71	1.67	1.73	1.71	1.77
Pilots						
Benefits	$0	$0	$0	$0	$0	$0
Costs	$245,028	$1,269	$279,600	$437,733	$418,804	$0
Benefit Cost Ratio	**0**	**n/a**	**0**	**0**	**0**	**n/a**
Residential						
Benefits	$2,502,243	$1,454,130	$1,187,437	$1,193,766	$1,154,565	$282,394
Costs	$3,173,556	$1,357,152	$1,191,560	$1,160,057	$1,136,600	$269,600
Benefit Cost Ratio	0.79	1.07	1.00	1.03	1.02	1.05
Residential Weatherization						
Benefits	$756,978	$650,100	$2,336,117	$4,516,818	$4,365,179	$1,067,048
Costs	$228,204	$597,781	$814,650	$1,524,726	$1,481,434	$351,158

Benefit Cost Ratio	3.32	1.09	2.87	2.96	2.95	3.04
Residential Home Energy Reports						
Benefits	$611,761	$780,421	$745,633	$724,251	$702,549	$172,628
Costs	$909,201	$983,448	$1,378,082	$1,283,367	$1,213,373	$286,891
Benefit Cost Ratio	0.67	0.79	0.54	0.56	0.58	0.60
Smart Kids						
Benefits	$748,269	$1,288,957	$2,047,284	$1,765,190	$1,712,648	$419,917
Costs	$202,600	$723,961	$1,054,709	$873,841	$852,291	$201,807
Benefit Cost Ratio	3.69	1.78	1.94	2.02	2.01	2.08
Multifamily Sector						
Multifamily						
Benefits	$20,177,567	$24,560,159	$30,501,367	$47,213,346	$45,653,699	$11,169,652
Costs	$8,214,281	$9,461,624	$15,348,203	$25,590,323	$25,001,261	$5,926,690
Benefit Cost Ratio	2.46	2.60	1.99	1.84	1.83	1.88
Total Gas Portfolio						
Benefits	$51,086,215	$55,299,782	$92,027,300	$120,522,237	$116,651,666	$28,554,526
Costs	$28,620,835	$42,439,157	$67,241,436	$91,275,509	$89,474,176	$21,115,276
Portfolio Benefit Cost Ratio	1.78	1.30	1.37	1.32	1.30	1.35

Table 8A: Electric and NYS Clean Heat Portfolio BCA Results

Total Electric Portfolio Scores	2020	2021	2022	2023	2024	2025
SCT	3.63	3.28	1.39	1.66	1.79	1.85
UCT	3.14	2.69	1.27	1.79	1.96	1.91
RIM	1.24	1.27	0.86	0.97	1.06	1.07

Table 8B: Gas Portfolio BCA Results

Total Natural Gas Portfolio Scores	2020	2021	2022	2023	2024	2025
SCT	1.78	1.30	1.37	1.32	1.30	1.35
UCT	1.64	1.23	1.27	1.22	1.21	1.25
RIM	0.55	0.50	0.50	0.50	0.50	0.51

Appendices

Appendix A: Program Names and Statuses

The Company is working to align program names and report on program statuses across its SEEP, Scorecard, and EM&V filings. The following table lists the Company's active and inactive programs along with notes on former program names and status.

Active Programs

Portfolio	Program Name	Other Program Names
Commercial	Commercial & Industrial	Formerly referred to as the Commercial and Industrial Energy Efficiency Program
Commercial	Instant Lighting	Also referred to as the Instant Lighting Incentive Program ("ILIP")
Commercial	Commercial Kitchen	
Commercial	Midstream Water and Space Heating	Formerly referred to as Commercial Upstream Water Heating and Commercial Water Heaters Program
Commercial	Small-Medium Business	Formerly referred to as the Commercial Direct Install Program and Small Business Direct Install Program
Residential	Residential	Includes HVAC Tuneups and HVAC Gas Programs
Residential	Smart Kids	
Residential	Marketplace	
Residential	Residential Home Energy Reports	
Residential	Retail Lighting	
Residential	Residential Weatherization	Formerly referred to as Sealed
Multifamily	Multifamily	Also referred to as Multifamily Energy Efficiency Program (MFEEP)

Inactive Programs

Portfolio	Program Name	Year of Program Closure
Commercial	C&I Self-Direct	2019
Commercial	Commercial Behavioral	2019
Commercial	Demand Management Program	2019
Commercial	C&I Auction	2018
Residential	Old Post Road	2021
Residential	Efficiency Starter Program	2020
Residential	Retailer Incentive	2020
Residential	Residential Upstream HVAC	2019