New York State Affordable Multifamily Energy Efficiency Program

Program Manual

Version 4.0

January 15, 2025

The rates and conditions found in this program manual are effective for completed application packages submitted on or after January 15, 2025. These rates and conditions will remain in effect until a new version is published. Submitted applications will be eligible for the rates and conditions in effect on the date of application to the program.

Current Version Description of Revisions

This table reflects the changes made to Version 4.0 of the Affordable Multifamily Energy Efficiency Program (AMEEP) Program Manual, which have been published and made effective on January 15, 2025. For complete record of changes between all versions, see Section 13.4: Version History and Description of Revisions.

Date Updated	Version	Topic	Description of Change	Section
1/15/2025	4.0	Acceptable Documentation for Affordable Housing Eligibility Table	Added affordable housing eligibility proxy for NYC homeless services agencies	2
1/15/2025	4.0	Large Projects	Clarified Con Edison considers large projects to be 500+ units	2
1/15/2025	4.0	Technical Requirements	Added language that comprehensive projects with a qualifying audit may be able to waive the pre-inspection requirement as determined by the project Program Administrator	3
1/15/2025	4.0	Non-Comprehensive Pathway Requirements	Provided additional detail for defining custom projects and methodologies for custom measure calculations	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Lowered downstate lighting incentive rates for LED lighting, exterior new fixtures, and lighting controls	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Lowered downstate non-comprehensive electric custom incentive rate	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Adjusted the measures highlighted in the electric HVAC Measures table to display most commonly installed measures	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Clarified that EMS projects in buildings with 250+ units or buildings with condensing boilers may apply for custom incentive rate	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Roof Insulation was renamed to Attic Insulation	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Added two new above deck roof insulation measures: Spray Polyurethane Foam (SPF) and Rigid Board Foam	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Lowered Con Edison Window Replacement incentive from $240 per MMBtu to $180 per MMBtu	3
1/15/2025	4.0	Limited Time Offer (LTO)	Removed non-comprehensive and comprehensive Limited Time Offer (LTO) details from the Program Manual. LTO details can now be found in separate LTO documents on the AMEEP resource page.	N/A
1/15/2025	4.0	Comprehensive and Non-Comprehensive Pathway Process	Added a National Grid-only requirement of submitting a W-9 for the utility account holder for all AMEEP projects	4

Date Updated	Version	Topic	Description of Change	Section
1/15/2025	4.0	Comprehensive Pathway Process	Added requirement for post-inspection flags or fails to be cured within 30 days of notification, including consequences if timeline is not met	4
1/15/2025	4.0	Non-Comprehensive Pathway Process	Clarified language on the Notice to Proceed and added requirement for post-inspection flags or fails to be cured within 30 days of notification, including consequences if timeline is not met	4
1/15/2025	4.0	Quality Assurance and Quality Control (QAQC)	Added new QAQC section outlining potential for additional QAQC activities on projects	4
1/15/2025	4.0	Eligible Measures and Technical Requirements	Common Area Lighting – Added footnote archiving eligibility of existing Energy Star rated lighting and associated equipment	7
1/15/2025	4.0	Eligible Measures and Technical Requirements	Specified Stove Appliance measure as Induction Cooktop measure; added specific technical requirements	7
1/15/2025	4.0	Eligible Measures and Technical Requirements	Renamed Blower Fan with Electronically Commuted (EC) Motor Furnace Distribution measure to EC Motors measure	7
1/15/2025	4.0	Eligible Measures and Technical Requirements	Updated documentation, equipment and/or installation requirements for the following measures: Variable Frequency Drive (VFD), Energy Management System (EMS), Master Air Venting, Orifice Place, Thermostatic Radiator Valve (TRV), Smart Thermostatic Radiator Enclosure (Smart TREs), Faucet Aerators and Low-Flow Showerheads, Attic Insulation (formally roof), and Wall Insulation	7
1/15/2025	4.0	Eligible Measures and Technical Requirements	Added technical requirements for new Above Deck Roof Insulation measures	7
1/15/2025	4.0	Comprehensive Projects – Minimum Installation Requirements	Updated minimum installation requirements for Air Sealing. Added minimum installation requirements for Smart Thermostats, Orifice Plates, and Smart TREs	13

Date Updated	Version	Topic	Description of Change	Section
1/15/2025	4.0	Inspection Guidelines by Measure	Updated inspection guidelines for the following measures: Air Handling Units; Air Sealing; Boiler/Furnace Clean & Tune; Boiler Controls/EMS; Boiler/Furnace Replacement; Air Conditioner – CAC; Chiller Replacement; Common Area Lighting; Elevator Modernization; Heating and Hot Water Pipe Insulation; Motors, Pumps, and Drives; Orifice Plates; Roof/Attic Insulation; TRVs; Window Replacement	13

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1 Program Overview

The New York State Affordable Multifamily Energy Efficiency Program ("Program") offers incentives for installing energy-efficient equipment and technologies. The upgrades can help affordable multifamily buildings reduce both energy use and costs while increasing operating efficiency and tenant comfort. Energy-efficient buildings also release fewer carbon emissions, making them an important tool in achieving New York State's climate goals.

The Program is a joint effort between a coalition of New York State utilities and the New York State Energy Research and Development Authority (NYSERDA). The utilities administering this Program are: Central Hudson Gas & Electric, Con Edison, National Grid, National Fuel Gas, New York State Electric & Gas (NYSEG), Rochester Gas & Electric (RG&E), and Orange & Rockland (O&R). These utilities shall be referred to as the "Program Administrators."

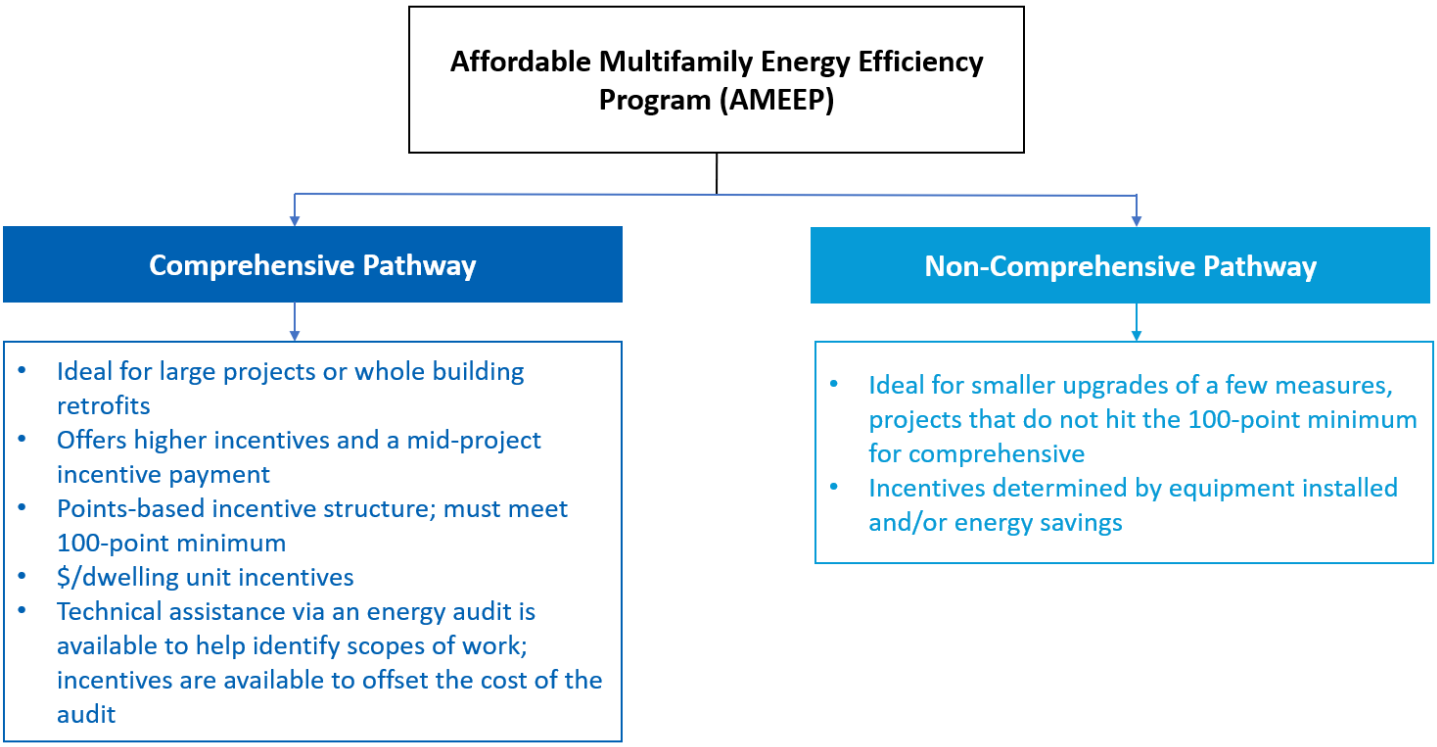
There are two pathways for customers to participate in the Program: the comprehensive pathway and the non-comprehensive pathway. The comprehensive pathway is for customers who undertake comprehensive retrofits, such as whole-building retrofits that address multiple building system categories (e.g., heating and cooling, insulation, lighting, etc.). Incentives are applied based on a system of accumulated points. A minimum of 100 points needs to be met to be classified as a comprehensive project. To help customers identify energy efficiency opportunities and develop comprehensive scopes of work, technical assistance is available via NYSERDA's FlexTech program. Comprehensive projects are eligible for higher incentive amounts than non-comprehensive projects, an optional mid-project incentive payment and technical assistance in the form of a cost share for activities like energy audits and retrofit scope development.

The non-comprehensive pathway is available for customers interested in smaller upgrades and customers who have projects that do not meet the 100-point minimum for the comprehensive pathway. For buildings located in the service territories of Central Hudson, NYSEG, RG&E, or upstate National Grid, free, high-level assessments are available from the Program Administrators to generate a scope of work. Incentives for projects based on the non-comprehensive pathway are determined by each Program Administrator. These incentives are based on equipment installed and/or energy savings and are overall lower than incentives under the comprehensive pathway.

Buildings that are not maintained or operated as affordable housing may be eligible for their Program Administrator's market rate multifamily offerings. Please refer to each Program Administrator's respective websites for more information.

This Program and Program Manual are only applicable to customers of the Program Administrators.

Figure 1.1 Affordable Multifamily Energy Efficiency Program Pathways



2 Program Eligibility

2.1 Customer Eligibility

Customers who are property owners or managers of existing affordable multifamily buildings with five (5) or more residential units are eligible to participate.

- **Utility Customer:** Customer must be a utility customer that receives gas and/or electric delivery service from one of the following Program Administrators: Central Hudson Gas & Electric, Con Edison, National Grid, National Fuel Gas, New York State Electric & Gas (NYSEG), Rochester Gas & Electric (RG&E), and Orange & Rockland. All buildings with utility electric service are eligible. For gas projects, all customers with a firm gas heating account are eligible. Some interruptible accounts may be eligible for gas projects; please contact your Program Administrator for more information.
- **Building Characteristics:** The project must be an existing multifamily, residential building(s) with five (5) or more units. Projects larger than 150 units or multiple projects comprised of a campus larger than 150 units require pre-approval from the Program Administrator. See Section 2.2 for more details about large projects, and Section 2.3 for more details about campus-style projects.
- **Affordable Housing Requirements:** Only affordable multifamily housing properties are eligible for this Program. Affordable housing is defined as projects in which at least 25% of the units are, or are expected to be, occupied by households earning not more than 80% of the area or State median income, whichever is higher. Affordable housing documentation must be submitted with the application package. There are two ways to qualify a project for affordable housing incentives:

  - Proxy: The Program allows certain proxies to represent compliance with the definition previously mentioned. The “Acceptable Documentation for Affordable Housing Eligibility” table (Table 2.1) lists eligible proxies and supporting documentation.
  - Rent Roll: This type of qualification may be used by projects that do not meet the proxy requirements. Twenty-five percent of the units must have a calculated household income no more than 80% of the State or area median income, whichever is higher, based on the assumption that 30% of household income is applied to housing costs (i.e., rent). Applicants must submit the annual rent, size, and occupancy for each apartment in the property. A calculation spreadsheet tool is available on the AMEEP resource page for determining Rent Roll income eligibility.
- **Measure Eligibility:** Customer must not have applied for or received an incentive for the same eligible measure from NYSERDA or any other utility. Customer can apply for or receive incentives from both the Program and the Weatherization Assistance Program, but the sum of incentives received from both programs cannot exceed 100% of the project cost. Please refer to the Section 7 for measure eligibility requirements.
- **Installation Timeline:** Equipment **cannot be installed** before the customer receives the Notice to Proceed.
- **Construction Type:** Project must be an existing building(s). New construction is not eligible for this program.
- **Extent of Renovation:** The Program will accept renovations to existing structures defined as changes, additions, or deletions to any system or process that impacts an existing building’s energy consumption and/or cost not defined as new construction. Gut rehabs, defined as a renovation that removes material down to structural load-bearing beams, are eligible for the Program. Exceptions to this are:
  - Change of use of occupancy (e.g., from commercial to multifamily)
  - Reconstruction of a vacant structure or space within (e.g., vacant properties being retrofitted to become multifamily)
- **Intended Use:** The intended use of the building must be for residential purposes. Commercial facilities, such as motels/hotels, group homes, dormitories, shelters, monasteries, nunneries, assisted living facilities, and nursing homes are typically not eligible for the Program. Supportive housing, single room occupancy (SRO) facilities, and senior living residences that do not include nursing or hospitalization amenities are typically eligible for the Program. Supportive housing is defined as residences that are owned and operated by nonprofit organizations. Tenants are individuals and families who require affordable permanent housing and support services, have lease agreements, pay rent (often a percentage of their income), and abide by the terms of their lease. This group includes people who have been homeless, have histories of substance abuse, are coping with mental illness, have chronic physical illness, are young adults aging out of foster care, are homeless veterans, or are grandparents raising grandchildren.
- **Project Pathway Limits:** Applicants are not permitted to apply for both comprehensive and non-comprehensive projects at the same time for the same building. If a comprehensive project is active and a building wants to include a new measure, the new measure may only be added to the existing comprehensive project scope. If a building has completed a comprehensive project, it

cannot submit a new application for a non-comprehensive project until 6 months after the comprehensive project incentive is disbursed.

Table 2.1: Acceptable Documentation for Affordable Housing Eligibility

Eligibility Proxy	Details	Documentation Required
US HUD, USDA-RD, and other Federally Regulated Affordable Housing	Properties receiving one of the following subsidies from HUD or USDA-RD (e.g., Public Housing Authorities, etc.) • Section 8 Contract • Sections 202, 236, 811	Copy of the HUD contract or contract award notice
NYSDHCR-Regulated Affordable Housing	Buildings with subsidized mortgages or contracts that place them under the regulatory control of NYSDHCR	Copy of NYSDHCR contract or contract award notice
Low Income Housing Tax Credits	Properties that receive low-income housing tax credits for at least 50% of their units	Copy of tax credit award notice from NYSDHCR or NYCHPD
NYCHPD-Regulated Affordable Housing (or other local housing agency)	Properties with loans, mortgages, or deeds of purchase (HDFC incorporation) from NYCHPD or other local housing agencies	Documentation of current mortgage, loan closing, HDFC incorporation or deeds
SONYMA mortgage insurance	Properties subsidized for low- to moderate-income multi-family residents with SONYMA subsidized financing through the HFA	Copy of loan closing/mortgage insurance award documents
Weatherization Assistance Program	Properties that have fulfilled the eligibility requirements for the Weatherization Assistance Program	Copy of the letter from the Weatherization Agency confirming the project's income eligibility
HFA 80/20 Program	Properties that have been accepted into the Housing Finance Agency's 80/20 Program	Copy of the award letter or HFA contract documents
NYCHDC 80/20 or Mixed Income Programs	Properties that have been accepted into the NYC Housing Development Corporation's 80/20 Program or Mixed Income Program	Copy of the award letter or HDC contract documents
Mitchell-Lama Buildings	Properties that are currently NYS or NYC supervised Mitchell-Lama buildings	Copy of NYSHCR or NYCHPD contract or recent annual report confirming active Mitchell-Lama status
NYC Department of Homeless Services (or other local homeless service agency)	Properties that serve as transitional housing facilities where a non-for-profit organization is the owner of the property	Copy of the NYC Department of Homeless Services (or other local homeless service agency) contract AND proof of ownership

2.2 Large Projects

Projects over 150 units require pre-approval from the Program Administrator before applying to the Program. Con Edison projects are an exception to this, as Con Edison considers large projects to be those over 500 units. Pre-approval will not be necessary for Con Edison projects 500 units or less. Joint projects in Con Edison and National Grid territory will be considered a large project if they are over 150 units. Customers considering large projects should send an email to their Program Administrator's Implementation Contractor ("IC") (see Section 12 for contact information) containing the following information:

- Project Name
- Project address or utility territory
- Number of buildings
- Number of units
- Affordability proxy or rent roll

The Program Administrator/IC will review the information and determine potentially available funding based on the size of the project. The Program Administrator/IC will then contact the customer regarding how to move forward. Additional requirements, such as Measurement & Verification (M&V), may need to be met for projects over 500 units. Depending on the project scope, the project cost and any other implications of the project, the Program Administrator may offer an adjusted incentive. This will be determined on a case-by-case basis.

2.3 Campus-Style Projects

When multiple buildings are on the same site, they may be categorized as campus-style. Projects may be considered campus-style projects when:

1. Buildings are under the same management;
2. Buildings are on the same, or adjacent, blocks;
3. Buildings on the site may be similar in typology, age, size, and have similar envelope and mechanical systems; and
4. The site contains a sum total of 5 or more dwelling units across buildings

When there is a campus-style project, the project has the option to apply as a single large project.

Buildings that have shared equipment across multiple buildings (e.g., shared boiler, shared heating distribution system) are automatically considered campus-style and must apply as a single large project.

Campus-style projects will be reviewed on a case-by-case basis. Please consult your Program Administrator or IC for further clarification.

3 Program Pathways

3.1 Comprehensive Pathway Requirements

Featuring both greater incentives and dramatically improved energy efficiency, the comprehensive pathway is for whole building retrofit projects. The pathway utilizes a point system to determine eligibility of a comprehensive project and the incentive amount that is offered.

3.1.1 Project Eligibility

Eligible electric and gas measures for a comprehensive project are assigned points per measure that range from 5 to 40. The table below illustrates the point allocations for common measures. For an expanded list of eligible measures and their respective point allocations, please reference Table 13.1 in the Appendix. For measures not listed in Table 13.1, please contact the Program Administrator or Implementation Contractor.

To be eligible as a comprehensive project, a project must meet a 100-point minimum. Multiple measures can be combined to meet this requirement.

Eligibility for projects with new or existing Cogeneration or Combined Heat and Power (CHP) Plants is subject to pre-approval by your Program Administrator. Please contact your Implementation Contractor for more information.

Table 3.1: Comprehensive Pathway Point Allocation per Measure

Common measures shown below. For more measures, see Table 13.1 in the Appendix

40 Points Per Measure	30 Points Per Measure	20 Points Per Measure	10 Points Per Measure	5 Points Per Measure
• Window replacement • Insulation (roof/wall) • Boiler replacement	• Domestic hot water heater replacements	• Central cooling • Elevators • Ventilation such as energy recovery ventilators	• Air sealing • Steam traps • HVAC electric controls (BMS, thermostats) • Motors and drives • Energy management system (EMS) • Hot water and steam pipe insulation	• Boiler clean & tune • Common area lighting • In-unit direct install measures such as faucet aerators, showerheads, LEDs • Appliances (induction stoves, refrigerators, washer/dryers, dishwashers) • Orifice plates • Thermostatic Radiator Valves (TRVs)

Direct install measures, such as in-unit faucet aerators and LEDs, contribute points to comprehensive projects. They are optional measures that customers can choose to install or not, similar to any other measure. Direct install measures are provided free of charge to the project and are supplemental to the project incentive earned outlined in Table 3.2. These measures must be installed by subcontractors, which will be provided by the

Program Administrators. Please refer to the Section 7 for more information on direct install measures requirements, as well as other eligible measures.

3.1.2 Incentive Structure

The comprehensive pathway offers incentives that are calculated on a per dwelling unit basis, at a rate that depends on a project's accumulated points (as described above) and location. As shown in Table 3.2, projects that reach 100-149 points are in Tier 1; projects that reach at least 150 points are in Tier 2. To calculate the total incentive amount expected from a project, the customer can add up the points from their proposed project, determine which tier level their project is in, and multiply the incentive rate for that tier and the number of dwelling units in the project's building. See Table 3.3 for examples of project scopes, point allocations, and total incentives.

To account for regional differences, the incentive rates differ across Downstate and Upstate Program Administrators. The Downstate Program Administrators are Con Edison and National Grid in the New York City and Long Island Regions. The Upstate Program Administrators are National Fuel Gas, NYSEG, RG&E, National Grid in the Niagara Mohawk region, Central Hudson, and Orange & Rockland.

Table 3.2: Comprehensive Pathway Incentive Rates

Comprehensive Pathway Incentive			
Tier	**Minimum Points**	**Downstate Incentive ($/Dwelling Unit)**	**Upstate Incentive ($/Dwelling Unit)**
1	100	$1,500	$900
2	150	$2,000	$1,200

Table 3.3: Comprehensive Pathway Project Examples

Program Pathway Examples						
Building	**# Dwelling Units**	**Scope of Work (Points)**	**Total points**	**Pathway**	**Tier**	**Total Incentives**
1	125	Boiler replacement (40) Ventilation overhaul (20) EMS (10) Pipe insulation (10) Air sealing (10) Common area lighting (5) In-unit lighting (5)	100	Comprehensive	1	Downstate: $187,500 Upstate: $112,500
2	200	Window replacement (40) Roof insulation (40) Domestic hot water heater replacement (30) Steam traps (10) Pipe insulation (10) Air sealing (10) Common area lighting (5) In-unit lighting (5)	150	Comprehensive	2	Downstate: $400,000 Upstate: $240,000
3	25	EMS (10) Air sealing (10) Common area lighting (5) In-unit lighting (5)	30	Non-Comprehensive	N/A	Varies by downstate and upstate NY, refer to website/ factsheets

Building 1's scope of work achieves 100 points and is therefore eligible for Tier 1 incentives. If it were in downstate NY, the total incentive would be calculated as 125 dwelling units x $1,500 per dwelling unit = $187,500. If it were in upstate NY, the total incentive would be 125 dwelling units x $900 per dwelling unit = $112,500.

Building 2's scope of work achieves 150 points and is therefore eligible for Tier 2 incentives. If it were in downstate NY, the total incentive would be calculated as 200 dwelling units x $2,000 per dwelling unit = $400,000. If it were in upstate NY, the total incentive would be 200 dwelling units x $1,200 per dwelling unit = $240,000.

Building 3's scope of work achieves 30 points which is below the 100-point minimum that is required to qualify as a comprehensive project. Therefore, this is a non-comprehensive project that is eligible for non-comprehensive incentives offered by the Program Administrator. Refer to each Program Administrator's website/fact sheets.

Any work started prior to receiving a Notice to Proceed will be excluded from the program scope of work and cannot earn points towards Tier 1 or Tier 2 incentives.

Incentive rates will be guaranteed if a project's Scope of Work is completed two years from when the Notice to Proceed is issued. If an extension is required, please see Section 3.1.5 on multi-year commitments.

Program Administrators may offer additional comprehensive incentives to qualifying projects on a limited basis. Details of offers are available on the AMEEP resource page.

3.1.3 Incentive Cap

Comprehensive project incentives will be capped at a maximum incentive of up to 70% of the total project cost for eligible measures or at $500,000, whichever is lower. An exception exists for Con Edison-only comprehensive projects, which will be capped at 85% of the total project cost for eligible measures or at one million dollars, whichever is lower. Material and labor costs submitted are subject to review by the Program Administrators and may be capped for incentive calculations at their discretion. Unless otherwise specified, project cost is limited to the equipment cost and labor cost. Other costs such as taxes, internal labor costs, shipping, training, admin costs, or similar costs will not be included with total project cost when calculating incentive caps.

3.1.4 Point Allocation for Multiple-to-1 or 1-to-Multiple Replacement Measures

In cases where multiple equipment is replaced by a single equipment or a single equipment is replaced by multiple equipment, points will be awarded based on the number of energy efficiency measures that are fulfilled by the SOW. Energy efficiency measures are based on the end use application of the proposed and baseline equipment. Multiple equipment that serves a single end-use application only receive points for the measure once. The proposed equipment specifications must meet or exceed code (ECCCNYS or any other applicable local code).

Example 1: If a SOW involves replacing a boiler plant that provide space heating and DHW with a more efficient boiler that does not provide DHW and a separate, more efficient DHW heater, that project receives points for both Boiler Replacement (40) and Domestic Hot Water Heater Replacement (30).

Example 2: If a SOW involves replacing a boiler plant that provides space heating and a chiller plant that provides space cooling with an absorption chiller that provides both more efficient space heating and more efficient space cooling, that project receives points for both Boiler Replacement (40) and Chiller Replacement (20).

Example 3: If a SOW involves replacing a boiler plant with 5 Boilers to 5 more efficient Boilers or 1 larger, more efficient Boiler will only receive 40 points.

Projects with multiple-to-1 or 1-to-multiple SOWs will be reviewed on case-by-case basis. Please consult your Program Administrator or IC for further clarifications.

3.1.5 Multi-Year Commitments

The Program Administrators understand that due to the nature of comprehensive projects, installations and project completions may extend beyond the two years from when the project was initially committed (i.e., when the Notice to Proceed was issued). Therefore, the Program will allow for multi-year commitments extending past two years so long as the customer provides a project installation plan. The Program Administrator and its IC will determine the specific components of the plan required which may vary depending on measure types and other factors. In general, the plan should include a timeline with scheduled installation dates for each measure and/or each category of measures. Acceptance or rejection of an extension request will be determined by the Program Administrator. Extensions will not be granted for installations beyond 2025. The customer and contractors must demonstrate a good faith effort to complete the project as was originally committed.

3.1.6 Mid-Project Incentive Payment Requirements

Incentives for comprehensive projects are paid when the project is completed. However, the Program Administrators acknowledge that these projects may take a longer time to complete than non-comprehensive projects. To help allay upfront investments in equipment and other costs borne by the customer, the customer may request a one-time mid-project incentive payment.

The mid-project incentive is based upon points associated with the scope of work. The customer may request a mid-project incentive payment once measures that make up at least 60% of the points have been installed. The full measure must be installed for that measure's points to count towards 60% of a scope's points installed. The Program Administrators will review and may approve the request for a mid-project incentive payment and conduct a post-inspection. After passing a post-inspection, the Program will pay a mid-project incentive, which is 40% of the total project incentive. Only one mid-project payment shall be allowed. After the mid-project payment is received, the customer must complete the remainder of the project under the comprehensive pathway to receive the remaining comprehensive incentive. If the scope is reduced after the mid-project payment and the sum of the points is less than 100, the project will not be eligible for incentives under the comprehensive pathway and will receive adjusted incentives based on the lower non-comprehensive incentives for completed measures. See Section 3.1.7 for additional scope change details.

Mid-Project Incentive Payment Submission Requirements

The Applicant must submit the following completion paperwork to begin the process of a post inspection for the measures that were completed for the mid-project payment:

- Signed Mid-Project Statement of Completion (SOC) outlining measures that are completed
- Final project invoices and/or receipts for scope of work (SOW) that is complete
- Photo documentation for engineering review if completing virtual inspection (see Section 5.2)
- An installation schedule for the measures that comprise the remainder of the scope work

3.1.7 Scope Changes

Customers will not be eligible to receive incentives from the comprehensive pathway if the project does not install enough measures to comply with at minimum the Tier 1 point requirement in effect when the Preliminary Incentive Offer Letter was signed. If a customer reduces the scope of work and the new scope is found to be below the Tier 1 minimum point requirement, then the project will be directed to the non-comprehensive pathway and incentives will be adjusted to non-comprehensive rates. Rules and guidelines for the non-comprehensive pathway must be followed. The Program Administrators may also issue a revised Preliminary Incentive Offer Letter (PIOL) if project scopes change. Additionally, a revised PIOL will be issued if the scope changes after the project's pre-inspection and/or engineering review is completed. If a measure results in zero savings or if a measure does not meet the program's minimum installation requirements, it will be removed from the project scope and a revised scope will be required.

If the scope is reduced after the mid-project payment is approved and received, the points achieved must be within Tier 1 or Tier 2 for the customer to receive comprehensive incentives for the rest of the measures. That is, the total sum of the points achieved by the measures in the final, completed scope of work must be equal to or greater than 100 points for Tier 1 and greater than 150 points for Tier 2 to be eligible for incentives. If the sum of the points is less than 100, the project will not be eligible for incentives under the comprehensive pathway and

will receive adjusted incentives based on the lower non-comprehensive incentives for completed measures. If the total incentive for non-comprehensive is less than the comprehensive mid-project payment, the applicant shall reimburse the Program Administrator or come to an agreement on the difference in incentive.

A Scope of Work Change form will need to be submitted if a project scope changes after the Notice to Proceed is issued.

3.1.8 Technical Assistance

PCs and Implementation Contractors can discuss initial comprehensive scopes with customers, but if a customer wants more in-depth assistance on understanding energy efficiency upgrade opportunities and developing a full project scope, subsidized technical assistance is available. Technical assistance, which includes an energy audit (also known as an energy assessment), is available for projects through NYSERDA's FlexTech program. Energy audits are conducted by approved Energy Service Providers before a project begins and can help customers identify energy efficiency opportunities and determine an initial scope of work and capital planning. The FlexTech program provides a 75% cost share when the audit is completed as an incentive to reduce the cost of energy audits to the customer.

The audits completed by the Energy Service Providers should meet the FlexTech program requirements. For questions about the FlexTech program and support offered by NYSERDA, please contact NYSERDA at flextech@nyserda.ny.gov.

Projects with FlexTech energy audits conducted within the past year may be able to waive the AMEEP pre-inspection requirement if the audit reports contain sufficient detail on existing conditions that would meet the AMEEP minimum installation requirements (for comprehensive projects only) and the AMEEP pre-inspection requirements. Please refer to Section 13.2 on the minimum installation requirements and Section 13.3 on pre-inspection requirements for the information that would be expected in the audit reports. The Program Administrators and their ICs will accept the audit reports in lieu of a pre-inspection on a case-by-case basis.

3.1.9 Energy Savings Calculations and Modeling Requirements

For Comprehensive projects, contractors are required to submit savings calculations that account for interactive effects or an energy model.

Downstate Comprehensive projects are able to use the Comprehensive Downstate Savings Calculator for savings for a selection of common measures. The latest calculator can be found on the AMEEP resource page or can be provided by the Implementation Contractor. The calculator requires inputs for existing and proposed conditions to properly calculate estimated savings. This calculator is optional – PCs and customers can submit Excel-based calculations that account for interactive effects or energy models.

Whole-building energy models must follow the method described in this section:

For projects that use an energy model, one of the following whole-building energy modeling software programs must be used: EA-Quip, eQUEST, EnergyPlus, Hourly Analysis Program (HAP), Trane TRACE 700, Trane TRACE 3D Plus, TREAT (Multifamily Edition), or OpenStudio. An Excel based energy model can be accepted if it follows the following calculation methodologies: 8760 hourly analysis or Temperature Bin weather analysis.

Prescriptive calculations from the NYS TRM will only be accepted if interactive effects between the measures are well accounted for and will be assessed by the Implementation Contractors. If a Participating Contractors has another type of modeling software they would like to use, they should contact the Implementation Contractor for approval.

The following information for the baseline and proposed design must be provided:

- Monthly energy end-use summary
- Overall annual building energy consumption including all fuels and meters
- Energy cost summary
- Information on hours when space/system loads are not met
- System design parameters report including HVAC, DHW, Envelope, Lighting Plug Loads, Areas, and Spaces

The following should be used as a general approach to creating a whole-building energy model:

- Inputs of pre- and post-retrofit simulations must be the same unless the related component is specifically addressed by proposed measures.
- The same operating condition assumptions shall be used in the energy reduction measure as in the existing building, unless a change in operating conditions is specifically included as part of the measure
- The difference between the annual modeled use and the actual consumption for heating, cooling, and base load must differ by no more than -10% to 0%. The model should not show more energy consumption than the bills. The energy consumption of systems, equipment, and controls that are not directly supported by the software used for the project should be calculated outside of the simulation tool. External calculations may not be used to replace functions that are supported by the software tool. The results of external calculations may be used to inform modeling inputs or to adjust modeling results. The external calculation methodology must be documented and is subject to program review. Original spreadsheets must be included in the submittals where applicable.

The following documents should be provided for review for energy models: inputs, outputs, and run files.

3.1.10 Comprehensive Project Installation Requirements

The intent of the comprehensive pathway is to support projects where measures are installed throughout the building. All measures, including shell and in-unit measures, need to be installed throughout the entire building to a reasonable extent to receive the points for the measure. The Program Administrators have developed minimum installation requirements for measure categories. Please refer to Section 13.2 for the requirements. The Implementation Contractor will review work scopes for comprehensiveness before confirming the project meets the requirements of a comprehensive project.

3.1.11 Campus-Style Project Requirements

Campus-style projects (see Section 2.3) that are applying as a single large project in the comprehensive pathway must meet the minimum installation requirements, as mentioned in Section 3.1.9.

Buildings that have shared equipment across multiple buildings (e.g., shared boiler, shared heating distribution system) are automatically considered campus-style and must apply as a single large project.

Campus-style projects will be reviewed on a case-by-case basis. Please consult your Program Administrator or IC for further clarification.

Example 1: There are 3 buildings with a connected domestic water system. The SOW includes replacing the booster pumps that serve all 3 buildings, but only 2 out of the 3 buildings physically house the pumps. This falls under the campus-style project category.

Example 2: There are 4 buildings in adjacent block under the same management. The 2 north buildings share a boiler plant, and the 2 south buildings share another boiler plant. The SOW includes replacing both boiler plants. This falls under the campus-style project category as 2 separate applications.

Example 3: There are 2 buildings under the same management with similar units, building construction, and age, and share a boiler plant. The SOW includes a roof insulation measure for one building only, although both could benefit from additional insulation. This project falls under the campus style project category, but the roof insulation measure in the SOW does not qualify for points. Per the minimum installation requirements, “100% of the roof must be insulated”, which would require both buildings to undergo roof insulation.

3.2 Non-Comprehensive Pathway Requirements

The non-comprehensive pathway is available for customers interested in smaller upgrades and customers who have projects that do not meet the 100-point minimum for the comprehensive pathway. Customers can pursue non-comprehensive projects with prescriptive, custom, and/or direct install measures. Incentives are determined by the equipment being installed and/or energy savings. Incentive levels may vary based on the Program Administrator. There is no minimum points threshold per project. For buildings located in the service territories of Central Hudson, NYSEG, RG&E, or upstate National Grid, free, high-level assessments are available from the Program Administrators to generate a scope of work.

- Prescriptive measures are those listed in the New York State Technical Resource Manual (TRM) and have set incentive rates from the Program Administrator.
- Custom measures are eligible measures that are not listed in the TRM or are a TRM measure with a calculation method that differs from the TRM. These are often unique and complex technologies or processes and each Program Administrator may have different calculation methodologies and savings caps. A detailed, custom calculation is usually required to calculate energy savings and incentives are offered based on the site-specific expected energy savings and costs. This category also covers infrequently implemented measures or applications that are not listed in an existing prescriptive program.
- In-unit direct install measures are available for free in residents’ dwelling units. These are typically quick and easy-to-install measures, such as LED lights, low-flow showerheads, and faucet aerators. The Program Administrator will provide a contractor to perform the direct install for in-unit work.
    - In upstate NY, with the exception of O&R, all non-LED interior lighting (common area and In-Unit) are considered direct install.

Please reference Section 7 for current information on eligible measures and requirements.

3.2.1 Project Eligibility

All non-comprehensive projects must be completed (all documents received, and project is ready for post-inspection) within 12 months of the Notice to Proceed. Prior approval from the Program Administrator is required for extension.

3.2.2 Incentive Structure

The following tables describe the prescriptive incentives levels offered for a wide spectrum of efficiency improvements. From time to time, an individual Program Administrator or group of Program Administrator may elect to offer enhanced incentives to further stimulate program participation. Check with the Implementation Contractor or Program Administrator for any current offers. Details of offers are available on the AMEEP resource page

Table 3.2.2.A: Electric Incentives

Common Area Lighting			
Installed Measure	**Incentive Detail**	**Downstate Incentive $**	**Upstate Incentive $**
LED Lighting	Tube Lamps	$8 per lamp	See Direct Install section
	Screw-in Lamps	$5 per lamp	See Direct Install section
	Interior Fixtures	$45 per fixture	$56 per fixture or 70% of installed cost, whichever is higher**
	LED Exit Signs	$8 per sign	See Direct Install section
Exterior New Fixture	HID Less than or equal to 100 W	$80 per fixture	$94 per fixture or 70% of installed cost, whichever is higher**
	HID Over 100 W	$150 per fixture	$131 per fixture or 70% of installed cost, whichever is higher**
	Non-HID Fixture Replacing Screw-in/Pin Based Lamp	$60 per fixture	$68 per fixture or 70% of installed cost, whichever is higher**
Lighting Controls	Bi-Level fixtures - Stairwell, corridor, parking garage	$70 per fixture	$86 per fixture or 70% of installed cost, whichever is higher**
	Bi-level fixtures - parking lot	$60 per fixture	$68 per fixture or 70% of installed cost, whichever is higher**
	Occupancy sensors	$10 per sensor	See Direct Install section
Miscellaneous	Relamp and reballasting, retrofit kits	50% of fixture replacement incentive	See Direct Install section

Non-Lighting Measures – Custom Measures			
Installed Measure	**Incentive Detail**	**Downstate Incentive $**	**Upstate Incentive $**
Unitary Controls	Any non-central building system control projects (e.g., Wi-Fi thermostats connected to an in-unit PTAC or PTHP) may be submitted as a custom project	$0.18 per kWh	$0.14 per kWh
Custom Other	Other non-lighting efficiency upgrades not listed in this document may be eligible for performance-based custom incentive	$0.50 per kWh	$0.49 per kWh

HVAC Measures		
Installed Measure	**Downstate Incentive $**	**Upstate Incentive $**
Booster Pumps	$0.50 per kWh	$0.49 per kWh
Custom VFD Applications	$0.50 per kWh	$0.49 per kWh
Prescriptive VFD Applications	$0.29 per kWh	$0.22 per kWh
EC Motors	$0.50 per kWh	$0.49 per kWh
Elevator Modernization	$0.35 per kWh	$0.26 per kWh
Rooftop Exhaust Fan Motor Replacement	$0.50 per kWh	$0.49 per kWh

Direct Install		
Installed Measure	**Downstate Incentive $**	**Upstate Incentive $**
LEDs A Lamps (in-unit)	Free	Free
Tube Lamps	See Common Area lighting section	Free or $11 per lamp*
Screw-in Lamps	See Common Area lighting section	Free or $6 per lamp*
LED Exit Signs	See Common Area lighting section	Free or $11 per sign*
Relamp, Reballasting Retrofit	See Common Area lighting section	Free or $21 per fixture*
Common Area Room Occupancy Sensor	See Common Area lighting section	Free or $18 per fixture*

* For Upstate utilities, with the exception of O&R, these measures are provided for free if the customer uses a direct install contractor provided by the Implementation Contractor. If a customer chooses a contractor that is not provided by the Implementation Contractor, they will receive the incentive outlined above, instead of receiving the measure for free. O&R customers are only eligible for the upstate incentive amount.
** For Upstate utilities, except for O&R, these measures are provided at 70% of installed cost. O&R customers are eligible for the stated per-fixture Upstate incentive amount. “Installed cost” is the price used by the Implementation Contractor for direct install program projects.

Table 3.2.2.B: Gas Incentives

Common Area				
Installed Measure	**Incentive Detail**		**Downstate Incentive $**	**Upstate Incentive $**
Hot Water Boilers			$6 per MBH	$6 per MBH
Condensing Boilers			$12 per MBH	$12 per MBH
Steam Boilers			$5 per MBH	$6 per MBH
Storage Tank Water Heaters			$6,000 per tank	$10 per gallon
Furnaces			See Custom Measures section[1]	$6 per MBH
Energy Management Systems	Boiler control system with multiple temperature sensors for steam or water lines, flue gas, and indoor air, and remote system monitoring capability (Buildings with 250+ units or buildings with condensing boilers may apply for the custom incentive rate)	# of Units		
		10-19	$2,250	$2,250
		20-40	$3,750	$3,750
		41-99	$7,500	$7,500
		100-249	$11,250	$11,250
		250+	$4 per therm	$3 per therm
Linear Pipe Insulation	< 2” pipe diameter		$5 per linear ft	$5 per linear ft
	≥ 2” pipe diameter		$9 per linear ft	$9 per linear ft
Building Envelope[2]	Attic Insulation		$3 per sq ft	$2 per sq ft
	Above Deck Roof Insulation - Spray Polyurethane Foam (SPF) Application		*Con Edison*: Reach out to IC for more information *National Grid*: $3 per sq ft	$2 per sq ft
	Above Deck Roof Insulation - Rigid Board Foam/VIP Application		*Con Edison*: Reach out to IC for more information *National Grid*: $3 per sq ft	$2 per sq ft
	Wall Insulation		$180 per MMBtu	$180 per MMBtu
	Window Replacement		$180 per MMBtu	$180 per MMBtu

[1] Non-comprehensive incentives for furnaces in Downstate NY will continue to use the ‘non-simple controls and other’ custom gas incentive.
[2] Please see Section 3.2.3 Incentive Caps for non-comprehensive projects, for Program Administrator-specific project caps.

Common Area			
Installed Measure	**Incentive Detail**	**Downstate Incentive $**	**Upstate Incentive $**
Steam Traps	Covers the repair or replacement of steam traps in low pressure heating systems (<15 psig) Incentive includes credit towards completing the program required survey Projects that are replacing 1000 or more traps will receive the custom incentive rate	Common areas - $300 per failed trap All other radiators - $100 per failed trap	Common areas - $225 per failed trap All other radiators - $75 per failed trap
Boiler Clean and Tune	This measure covers an advanced clean & tune procedure performed on a steam or hot water boiler for space heating purposes (routine seasonal boiler tune-ups will not be incentivized)	$560 for 1st unit $400 for each additional boiler	$560 for 1st unit $400 for each additional boiler
Furnace Clean and Tune	This measure covers an advanced clean & tune procedure performed on a furnace (routine seasonal furnace tune-ups will not be incentivized)	N/A	$560 for 1st unit $400 for each additional furnace

Packaged Measures			
Installed Measure	**Incentive Detail**	**Downstate Incentive $**	**Upstate Incentive $**
Air Sealing[3]	This package will include repair and weather sealing of louver vents, exterior doors, common area windows, and the general perimeter of the basement. For Upstate NY projects (with the exception of O&R), this will also include caulking around in-unit windows and baseboards that are drafty and providing outlet and switch insulated covers, as well as foam sealant or caulking between penetrations in the unit to unconditioned spaces.	$5 per therm	$5 per therm

[3] Air sealing that applies for the $5/therm incentive must exclude air sealing already required with corresponding envelope measures. For National Grid, air sealing for windows is excluded when windows are being replaced.

2-Pipe Steam Retro-Commissioning	Treats heating imbalance issues by designing and installing: a) Air vents on all main pipes (atmospheric systems) b) Thermostatic radiator valves and orifice plates on every radiator c) Clean and tune up of boiler and burner, including firing rate, draft adjustment, water cleaning, electronic pressure control, and combustion testing d) Steam trap repair throughout common areas To qualify for this incentive package, all 5 measures must be in the scope of work to be completed. M&V may be required for 2-Pipe Steam projects that do not include all 5 measures.	$4 per therm	$3 per therm

Custom Measures			
Installed Measure	**Incentive Detail**	**Downstate Incentive $**	**Upstate Incentive $**
Unitary Controls	Simple control equipment installations that do not allow for multiple data inputs (i.e. decision made on a single data point, is manually programmed/operated/or scheduled, or does not allow for real-time monitoring and control through a software package or building communications protocol). This includes Wi-Fi thermostats, thermostatic radiator valves, building management systems, and ventilation controls.	$1 per therm	$0.75 per therm
Non-Simple Controls and Other	Other energy efficiency upgrades not listed in this document may be eligible for custom incentives. Final custom measure eligibility, savings and incentives are determined at the sole discretion of the Program Administrator. Custom projects include but are not limited to: boiler economizers, linkageless burner controls, and heat pump boiler pre-heaters.	$4 per therm	$3 per therm

Direct Install		
Installed Measure	**Downstate Incentive $**	**Upstate Incentive $**
Faucet Aerators (in-unit)	Free	Free
Showerheads (in-unit)	Free	Free
DHW Pipe Insulation (½" or ¾" diameter)	N/A	Free*

* This measure is not eligible for direct install for O&R customers.

3.2.3 Incentive Cap

Incentives for non-comprehensive projects will be capped at 85% of the total project cost for eligible measure(s) or at one million dollars, whichever is lower and shall not exceed 100% of each measure cost. In other words, the incentive provided for each measure cannot exceed the cost of the measure. Additionally, the incentive provided after any measure incentive caps cannot exceed 85% of the total project cost. See Table 3.2.3 for an illustration of how these caps determine the final incentive amount. Material and labor costs submitted are subject to review by the Program Administrators and may be capped for incentive calculations at their discretion. Unless otherwise specified, project cost is limited to the equipment cost and labor cost. Other costs such as taxes, internal labor costs, shipping, training, admin costs, or similar costs will not be included with total project cost when calculating incentive caps.

Notwithstanding any incentive levels indicated elsewhere in this Program Manual, in National Grid's downstate New York territory for program years 2024 and 2025, there will be a per project incentive cap for non-comprehensive roof/attic insulation projects as follows:

- Attic and attic cavity insulation project incentives will be capped at $15,000 per gas account.
- Roof insulation project incentives will be capped at $30,000 per gas account.

Incentive caps for non-comprehensive attic/attic cavity insulation projects and roof insulation projects are applicable to costs incurred for completed projects per gas account through December 31, 2025. If an Applicant intends to implement an insulation project in phases, the project would be considered complete only when all phases of the project are completed. The costs of the project would be based on the cumulative costs of completing all phases of the project at that gas account.

Table 3.2.3: Incentive Cap Example

Incentive Cap Project Examples			
Project	**Cost**	**Incentive (before caps)**	**Final Incentive Provided**
Project 1 Measure cap scenario	Measure A: $100 Measure B: $100 Total Project Cost: $200	Measure A: $20 Measure B: $120 Total Incentive (before caps): $140	**Measure A:** No measure cap since the incentive ($20) is lower than the measure cost ($100). Customer can receive the full $20 incentive **Measure B:** Cap since the incentive ($120) is higher than the measure cost ($100). Customer can receive $100 **Total Incentive Provided:** $120 (Measure A: $20 + Measure B: $100). There is no project cap since the total incentive ($120) is 60% of the total project cost
Project 2 Project cap scenario	Measure A: $100 Measure B: $100 Total Project Cost: $200	Measure A: $90 Measure B: $95 Total Incentive (before caps): $185	**Measure A:** No measure cap since the incentive ($90) is lower than the measure cost ($100). Customer can receive the full amount **Measure B:** No measure cap since the incentive ($95) is lower than the measure cost ($100). Customer can receive the full amount **Total Incentive Provided:** There is a project cap since the total incentive amount is $185, which is 92.5% of the total project cost. The final incentive provided will have to be brought down to 85% of the project cost, which makes the final incentive amount $170

4 Program Process

To get started, determine the project's eligibility and pathway, complete a short application, and speak with the Program Administrator's Implementation Contractor (IC). Once the project is approved and completed, the incentive is sent to the customer, or directly to the Participating Contractor (PC), with customer approval.

Some buildings in New York State have separate Program Administrators for electric and gas service. If a project has both electric and gas measures and the electric and gas services are provided by separate Program Administrators, the electric utility will act as the Program Administrator and its IC will manage all aspects of the project, even the component related to gas savings, and will coordinate with the customer's gas utility on behalf of the customer. All communication from the customer and/or contractor will be handled through the Program Administrator's IC.

If a customer has electric service from a utility that is not a Program Administrator, the customer should contact the gas utility. For example, National Grid's IC will lead projects for customers who have PSEG LI/LIPA (not a Program Administrator) electric service and National Grid (a Program Administrator) gas service in the Long Island region.

4.1 Comprehensive Pathway Process

1. **Check Eligibility**
   To be eligible for this program, at a minimum, customers must be the property owner or manager of an affordable multifamily building with five (5) or more residential units. See Section 2 for full eligibility requirements.

2. **Choose a Contractor**
   Choose a contractor who will develop a scope of work, support in the installation of equipment or upgrades, and provide overall project management of the comprehensive project. The IC can provide a list of Participating Contractors (PCs) that can work on comprehensive projects. Customers are not required to choose a PC to perform work on the project, however, PCs are the only entities that may accept incentive payments on behalf of customers. The program can onboard contractors into the Participating Contractor network at any time.

   If applicants would like technical assistance in the form of an energy audit to help identify energy efficiency opportunities and develop a scope of work, funding for technical assistance is available as cost sharing through NYSERDA's FlexTech program.

3. **Submit an Application Package**
   The customer or the approved Participating Contractor who applies to the program ("Applicant") may fill out the application, including the optional Technical Assistance section (see Section 3.1.8) to apply for support for an energy audit.

   A complete application package must include the items listed below:
   - Completed program application

- IRS Form W-9 for the incentive recipient. The IRS Form W-9 submitted must exactly match the name of the payee as indicated on the program application
    - *National Grid only:* an additional IRS Form W-9 for the utility account holder is required[4]
- Affordable housing documentation
- Scope of work
- Project installation timeline
- Downstate: submit completed Comprehensive Tool Excel template, which will be provided by Willdan, the downstate IC. This will ask for building information and estimates for initial savings, cost, and timeline
- Upstate: submit savings calculation tool, custom analysis, or energy savings model

Applicants must email the application package to the Program Administrator or their IC (see Section 12) with a subject line "New Multifamily Application – [Applicant Name]." The IRS Form W-9 submitted must exactly match the name of the payee as indicated on the Program application.

Customers of buildings that have separate utilities for electric and natural gas service should submit application packages to their electric utility's IC. The electric utility will act as the Program Administrator (contact information is listed in Section 12).

The IC will review the scope of work to confirm it qualifies as a comprehensive project. All installed equipment must meet or exceed the program requirements described in this document (see Section 7).

If applying for FlexTech, the IC will approve the application first and then will relay the application to NYSERDA to assist the customer/provider in the FlexTech application process.

4. **Receive a Preliminary Incentive Offer Letter ("PIOL")**
After the scope of work is reviewed by the IC, a Preliminary Incentive Offer Letter will be provided. The PIOL includes an incentive offer and date for which the offer letter is eligible. The PIOL must be signed by the customer and returned to the Program Administrator's IC within 30 days (contact information listed in Section 12).

After the signed PIOL is returned to the IC, customers will have 90 days to work with the IC to take action necessary to ensure the customers receive the Notice to Proceed, including scheduling project pre-inspection, curing any flags or fails, and submitting final savings calculations and cut sheets. The PIOL will not be valid after 90 days of the date of signature. Requests for exceptions or extensions must be made in writing for consideration by the respective Utility.

[4] National Grid also requires the IRS Form W-9 for the utility account holder, regardless of who is receiving the incentive. DNY customers can refer to the Downstate AMEEP Comprehensive Project Submission Guide at the AMEEP Resource Page

5. **Finalize New System Specifications, Cut Sheets, and Savings Calculations**
   After executing the PIOL, the customer can work with their contractor to finalize proposed equipment specifications and cut sheets.

   Customers can hire installation contractors to install the equipment upgrades. The IC can be consulted for a list of Participating Contractors (PC) that install specific equipment or measures.

   Once project details are finalized, savings calculations will need to be submitted. Refer to Section 3.1.8 for more details on savings calculations requirements. Additionally, a package of cut sheets and technical support details as specified in the technical requirements of this manual must be provided for each product installed. At a minimum, the cut sheet must show the manufacturer, model number, and any relevant energy rating information. The specific model installed must be clearly marked on the cut sheet. Where applicable, Air-Conditioning, Heating, and Refrigeration Institute (AHRI) certificates must be provided along with cut sheets.

6. **Pre-Inspection & Initial Engineering Review**
   The Program Administrators will inspect the existing condition of the site prior to the start of the project.

   Your project may be required to go under additional measurement and verification (M&V) based on the scope and size.

7. **Receive a Notice to Proceed**
   After the pre-inspection, the project will be reviewed by the Program Administrators and a Notice to Proceed will be provided to the customer, as a notification that installation may begin.

   To be eligible for incentives, work may not begin until the PIOL is returned and signed, the pre-inspection has been completed, and the Notice to Proceed is issued.

   A revised PIOL will be issued if the scope changes after the project's pre-inspection and/or engineering review is completed. If a measure results in zero savings or if a measure does not meet the program's minimum installation requirements, it will be removed from the project scope and a revised scope will be required.

   A Scope of Work Change form will need to be submitted if a project scope changes after the Notice to Proceed is issued.

8. **Install Equipment**
   Comprehensive projects have two years to complete the project and submit completion paperwork from the time the Notice to Proceed is issued. All installed equipment must meet or exceed the program requirements described in Section 7. If the applicant needs to request an extension on the date of completion a signed letter should be emailed to the Program Administrators explaining why they need an extension. If approved, the Applicant will receive an updated PIOL and Notice to Proceed with the revised date of completion.

9. **Receive Mid-Project Incentive Payment (Optional)**
   The customer may request a mid-project incentive payment once measures that make up at least 60% of the points have been installed. A project will be eligible for only one mid-project incentive payment. The Applicant must submit the following completion paperwork in order to begin the process of a post inspection for the measures that were completed for the mid-project payment:
   - Signed Mid-Project Statement of Completion (SOC) outlining measures that are completed
   - Final project invoices and/or receipts for SOW that is complete
   - Photo documentation for engineering review if completing virtual inspection (see Section 5.2)
   - An installation schedule for the measures that comprise the remainder of the scope work

   See Section 3.1.6 for more details.

10. **Submit Completion Paperwork**
    Make sure to submit completion paperwork as soon as the entire project is completed. Completion paperwork should only be submitted after 100% of incentivized measures are installed and operational. The completion paperwork includes:
    - Signed Statement of Completion (SOC) for the entire project. Only costs directly related to incentivized measures should be included on the completion form.
    - Final project invoices and/or receipts (see Section 10)
    - Photo documentation for engineering review if completing virtual inspection (see Section 5.2)

    If a mid-project payment was received, then only additional invoices and/or receipts and photo documentation for engineering review are required.

11. **Post Inspection & Final Engineering Review**
    The Program Administrators will inspect the site after completion of the project. Projects that have flags or fails from the post-inspection must cure those flags or fails within 30 days of being notified by the IC of those issues. If a measure is not fully cured within 30 days of notification, that measure will be removed from the project scope and the project's total points will be lowered accordingly. If a project's total points fall from Tier 2 to Tier 1, the incentive will be offered at Tier 1 rates. If the project falls out of Tier 1, the Program Administrators may offer a reduced incentive after reviewing the project scope and savings. See Section 5 for more details on inspection requirements.

    If for any reason a project cannot be cured within the 30-day timeline, please notify the IC and Program Administrators before the 30-day deadline. Extensions will be granted on a case-by-case basis based on time and explanation.

    A final engineering review will verify the installed scope and confirm the final incentives. If the installation completed does not match the scope of work, the incentive amount will be reevaluated.

12. **Receive Incentive Payment**
    After the Construction Complete Post Inspection has been approved, the incentive payment will be initiated by the Program Administrators.

4.2 Non-Comprehensive Pathway Process

1. **Check Eligibility**
   To be eligible for this program, at a minimum, customers must be the property owner or manager of an affordable multifamily building with five (5) or more residential units. See Section 2.1 for full eligibility requirements.

2. **Choose a Contractor**
   Choose a contractor who will install the equipment or upgrades.

   Please refer to the list of PCs provided by the Program. Customers are not required to choose a PC to perform work on the project; however, PCs are the only entities that may accept incentive payments on behalf of customers.

3. **Submit Application Package**
   An application package must include the items listed below:
   - Completed program application
   - Savings calculation tool, custom analysis, or energy savings model
   - Cut sheets or technical support details as specified
   - IRS Form W-9s for the incentive recipient. The IRS Form W-9 submitted must exactly match the name of the payee as indicated on the program application
   - *National Grid only:* IRS Form W-9 for the utility account holder[5]
   - Customer Proposal/Statement of Work (applicable to Custom Projects)[6]

   A cut sheet must be provided for each product installed as part of the scope of work. At a minimum, the cut sheet must show the manufacturer, model number, and any relevant energy rating information. The specific model installed must be clearly marked on the cut sheet.

   All installed equipment must meet or exceed program requirements described in Section 7.

   Email applications to the Program Administrator or their IC (see Section 12) with a subject line "New Multifamily Application – [Applicant Name]."

   Customers of buildings that have separate utilities for electric and natural gas service should submit application packages to their electric utility's IC (contact information is listed in Section 12). The electric utility will act as the Program Administrator.

[5] National Grid also requires the IRS Form W-9 for the utility account holder, regardless of who is receiving the incentive.
[6] For Non-Comprehensive Custom Projects under Con Edison, this document is also known as a Custom Report. A specific format will be provided in the Custom Tool.

4. **Pre-Inspection & Initial Engineering Review**
   The Program Administrators will inspect the existing condition of the site prior to completion of the project. To be eligible for incentives, work may not begin until this pre-inspection has been completed and the Program Administrators have issued a Notice to Proceed.

   Your project may be required to go under additional measurement and verification (M&V) based on the scope and size.

5. **Notice to Proceed / Preliminary Incentive Offer Letter**
   After the pre-inspection, the project will be reviewed by the Program Administrators, and a Notice to Proceed will be issued. The Notice to Proceed will outline the estimated project savings, incentives, and installation deadline for the project. Installation may not begin until the Notice to Proceed is received.

   a. **Prescriptive and Direct Install projects** – The Program Administrators will provide a Notice to Proceed, outlining estimated project savings and incentives. Installation may begin after receiving the Notice to Proceed and must adhere to the deadlines outlined. Extensions and exceptions must be communicated to the Program Administrators prior to deadline.

   b. **Custom projects** – The Program Administrators will provide a Preliminary Incentive Offer Letter, which includes an updated incentive offer. The Preliminary Incentive Offer Letter must be signed by the customer and returned to the Program Administrator's IC within 30 days (contact information is listed in Section 12). Once this Preliminary Incentive Offer Letter is received by the IC, the IC will issue a Notice to Proceed, indicating that project installation may begin.

6. **Install Equipment**
   The Notice to Proceed allows 12 months to complete the project and submit completion paperwork. Contact the Program Administrator's IC if the project will require more than 12 months to complete. The Program Administrators must be notified in writing to approve the extension.

7. **Submit Completion Paperwork**
   Submit the completion paperwork as soon as the project is completed. Completion paperwork should only be submitted after 100% of incentivized measures are installed. The completion paperwork includes:
   - Signed Statement of Completion (SOC). Only costs directly related to incentivized measures should be included on the completion form
   - Final project invoices and/or receipts for custom projects (prescriptive projects require invoices only upon request). See Section 10 for invoicing requirements
   - Photo documentation for engineering review if completing virtual inspection (see Section 5.2)

8. **Post Inspection & Final Engineering Review**
   The Program Administrators will inspect the condition of the site after completion of the project. Projects that have flags or fails from the post-inspection must cure those flags or fails within 30 days of being notified by the IC of those issues. If ongoing performance in curing post-inspections is poor,

the contractor could be at risk of participating in the Program.

If for any reason a project cannot be cured within the 30-day timeline, please notify the IC and Program Administrators before the 30-day deadline. Extensions will be granted on a case-by-case basis.

If a project line item is not cured within the 30-day timeline, the IC reserves the right to remove the items from the scope of work which may result in a lower incentive amount.

The final engineering review will verify the installed scope, associated savings, and incentives. If the installation completed does not match the scope of work or post-inspection data does not substantiate savings, the savings and incentives will be adjusted.

9. **Receive Incentive Payment**
   Once energy savings are reviewed and the completion paperwork has been approved, an incentive payment will be initiated by the Program Administrators.

4.3 Measurement & Verification (M&V)

Measurement and Verification (M&V) may be required for projects in which a project or measure has a high degree of savings uncertainty, is an unknown or unique application, or is comprised of a complex group of measures. The overall intent of M&V is to mitigate risk to the program by reporting more accurate savings through metering and data collection. It involves a more robust approach to measuring the energy conservation measure and its application. Project-specific M&V may be triggered when a project meets any one of the following criteria:

- Projects with high incentives (e.g., if a building has more than 500 units)
- Projects proposing to install new technologies
- Unique, complex, or risky applications as determined by the Program Administrator

Calculation methodology of final savings will likely be modified from the applicant provided savings. Projects selected for M&V will utilize various methods to obtain insights into energy conservation measures (ECMs), assess their application as well as their impact on savings. The International Performance Measurement and Verification Protocol (IPMVP) provide options for assessment of the M&V projects:

- **Option A, Retrofit-Isolation: Key Parameter Measurement**
  - Direct metering of a single key parameter that defines the energy consumption in both baseline (pre-install) and proposed (post-install) cases.
- **Option B, Retrofit-Isolation: All Parameter Measurement**
  - Direct metering of multiple parameters that define the energy consumption in both baseline (pre-install) and proposed (post-install) cases.
- **Option C, Whole Facility**
  - Utility level measurement of whole facility consumption and demand. Typically requires 1 year of post-installation utility meter data after EEM is installed.
- **Option D, Calibrated Simulation**
  - Simulation of energy consumption and demand with utility billing data. Requires 1 year of post-installation utility meter data after EEM is installed.

If a project has been selected for M&V, the M&V Plan must be reviewed, signed, and returned to the Program Administrator at the same time as the PIOL. This is to ensure understanding of how savings will be calculated, and cooperation with the M&V process. The M&V plan may be revised as additional information comes to light in subsequent project phases. The revised M&V plans must once again be reviewed and signed. The standard M&V process entails a minimum of 3 different reviews that take place throughout a project's lifecycle including:

M&V Plan: This M&V plan outlines the necessary steps to perform the M&V on a project and includes a timeline for all milestones, additional requirements from the PC or customer, the equipment necessary to acquire all data, a contingency plan if data is incorrect or unavailable, and other project specific material.

Pre-Installation M&V Report: The purpose of the Pre-Installation Site Visit and Pre-Installation M&V Report is to verify the existing conditions of the site, conduct interviews with site personnel on equipment and schedules, and determine what metering or measuring equipment will be necessary to capture all relevant energy data. In cases where logging and metering equipment have been deployed to determine the project baseline, a second site visit at the end of the baseline measuring period may be needed to remove the equipment. To adequately verify baseline conditions, project construction must not begin until after the associated M&V pre-installation site visit and data collection are completed.

Post-Installation Final M&V Report: Once the proposed equipment is installed, Program Administrators will perform a post-installation site visit to verify equipment installation, ensure all phases of the project are complete and active, and collect any energy use data for the site. In certain cases, logging and metering equipment may be deployed to capture the post- installation energy use data. If metering is deployed, a second site visit will be performed at the end of the post-installation measuring period to remove the metering equipment.

Additional reviews may be required by Program Administrators depending on project phasing, install timelines, or other measure or install specific items that may occur during the review or install period.

4.4 Quality Assurance and Quality Control (QAQC)

Some projects may be selected for QAQC activities, such as a secondary inspection or an additional engineering review. The goal of QAQC is to protect the Program from fraud and provide actionable insights for program improvement and efficiency. QAQC is performed by a third-party contractor on behalf of the Program Administrator. Projects may be selected at random or based on other criteria including size, savings, or incentives. QAQC activities are not optional, and the participant is expected to cooperate fully with any effort by the Program Administrator or its contractors and subcontractors to make follow-up visits to customer facilities, provide supporting documentation, and other requests in support of this effort. Examples of QAQC activities can include the following:

- Pre-Inspection QAQC: Can be on-site or virtual and are completed prior to any project installation. The goal of a secondary pre-inspection is to verify existing conditions are consistent with the program application, existing conditions adhere to program guidelines, and no work has been completed. Additional data points may be collected depending on the proposed measure(s).
- Post-Inspection QAQC: Can be on-site or virtual and completed after an installation is completed. The goal of a secondary post-inspection is to verify all work is installed in

accordance with the proposed scope of work and all installation procedures adhere to program guidelines. Additional data points may be collected depending on the installed measure(s).

- Final Technical Review QAQC: Completed virtually and after an installation is completed. This is a more intensive review that verifies all requirements of the post-inspection and confirms energy savings calculations/proposed incentives are accurate.

Additionally, Participating Contractors may be subject to utility-specific reviews and/or assessments to verify Program measure implementation and acquisition. Please note that all discrepancies found from a QA/QC activity must be resolved. If not resolved, the program reserves the right to withhold payment for a project that does not comply with QA/QC requirement. Contractors with concerns about the QAQC process should reach out to the Program Administrator.

5 Inspection Guidelines

5.1 Inspection requirements

All comprehensive and non-comprehensive projects require pre- and post-inspections.

Reference the Inspection Guidelines by Measure (Section 13.3) for measure-specific inspection criteria.

The Program Administrator and/or its IC must have reasonable access to the customer's facility for pre- and post-inspection of the installed energy-efficient measures. Pre-inspections must be completed before starting any installations to be eligible for incentives. In the case of a failed inspection, issues must be remedied by the contractor within a timeframe that is agreed upon by the contractor and the Program Administrator.

5.2 On-site & Virtual Inspections

Each Program Administrator will determine whether inspections are conducted on-site or virtually. In general, virtual pre- and post-inspections are acceptable for both comprehensive and non-comprehensive projects. Acceptable forms of a virtual inspection are as follows:

- Live video call walkthrough with the contractors and the inspector; inspector takes screenshots and/or notes to document findings
- Date and time-stamped pictures and/or video recordings that clearly existing equipment to be replaced (in case of pre-inspection) or the new energy efficient equipment (in case of post-inspection)

Refer to Inspection Checklist for the virtual inspection checklist.

It is the responsibility of the customer and their contractors to confirm inspection requirements with the Program Administrator and its IC.

6 Provider and Contractor Eligibility

6.1 Participating Contractors

Contractors who wish to participate in the Affordable Multifamily Energy Efficiency Program can apply to become approved Participating Contractors. PCs must meet the following eligibility requirements:

- Complete a Participating Contractor application
- Complete the Participating Contractor agreement
- Provide an updated IRS Form W-9 and Certificate of Insurance policy (minimum $1M General Liability) with the Participating Contractor application
- Complete at least one (1) project in the Program annually
- Adhere to the Participating Contractor participation requirements
- Adhere to program requirements

Only PCs in good standing, consistent with the PC participation requirements, will be allowed to accept incentive payments on behalf of the customer.

7 Eligible Measures and Technical Requirements

The following guidelines outline the requirements for energy efficiency measures available through the non-comprehensive and comprehensive pathways. All energy efficiency measures shall comply with these requirements where applicable.

System and system components must be installed in accordance with manufacturer specifications and installation requirements, and in compliance with all applicable laws, regulations, codes, licensing and permit requirements including, but not limited to, the New York State Environmental Quality Review, the Statewide Uniform Fire Prevention and Building Code and State Energy Conservation Construction Code, the National Electric Code, Fire Codes, and all applicable State, city, town ordinances or permit requirements. All references to ECCC NYS are for the most recent version of the Energy Conservation Construction Code of New York State.

Measures not listed in these guidelines may still be eligible for incentives. Customers should submit these measures to the IC for evaluation. These measures may be subject to additional review and additional implementation requirements. Documentation submission requirements in Tables 7.1-7.9 list documentation that must be submitted prior to the pre-inspection and cut sheets must be submitted for all measures.

7.1 Common Area Lighting

Table 7.1: Eligible Measures and Technical Requirements - Lighting

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Submission Requirements**	**Proposed Equipment and Installation Requirements**
Lamps and Fixtures	• No existing LEDs ○ Eligible existing fixtures include incandescent and fluorescent luminaires ○ Interior existing HID fixtures are not eligible ○ Existing fixtures with missing lamps will not be incentivized which includes but not limited to Linear, Non-Linear fixtures and lamps	• An inventory of existing fixtures must be provided, including: ○ Documentation of existing fixture wattages supported by documentation, or program protocol values ○ Total hours of operation for the building and each area, as applicable	• **LED Lamps, including all lamps covered by ENERGY STAR[7] and/or DLC (i.e., A, PAR, MR, PL, Globe, and Candelabra Type Lamps)** ○ Must be permanently mounted or hardwired ○ Minimum 3-year warranty ○ LED fixtures and lamps listed under DLC must meet the Technical Requirements of the latest version of the Qualified Product List

[7] All screw-in or pin-based lamps, fixtures, and retrofit kits that are or have been ENERGY STAR® listed, including those that have been archived.

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Submission Requirements**	**Proposed Equipment and Installation Requirements**
			• **LED Tubes, Including T8 Type Lamps that Are 'Plug-and-Play' or 'Remote Driver' Only** ○ ENERGY STAR® or DLC-certified ○ Must comply with all UL 1598C retrofitted fixture standards if installing using a "remote driver" or "ballast bypass" type lamp ○ Must have a minimum L70 rating of 50,000 hrs. ○ Installation of a "Ballast bypass" or "remote driver" type lamps must be performed by a licensed electrician and the ballast must be removed and disposed of ○ All Type-B/ballast bypass lamps should be installed per the manufacturer's guidelines and comply with NYC Local Law requirements ○ Must be permanently mounted or hardwired ○ Minimum 3-year warranty
			• **LED Fixtures and Retrofit Kits** ○ ENERGY STAR® or DLC - certified and UL-labeled ○ New fixtures consist of a full housing and lamp module that replaces existing luminaire; retrofit kits consist of partial housing and lamp module that inserts into existing luminaire ○ Interior fixtures and retrofits cover Linear Troffers, Recessed Downlights, Circular Surface Mounts, Wall Sconces, etc. ○ Exterior fixtures and retrofits cover Wall Packs, Flood Lights, Canopy, Garage, Pole-Tops, etc. ○ Must be permanently mounted or hardwired ○ Minimum 3-year warranty

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Submission Requirements**	**Proposed Equipment and Installation Requirements**

Exit Signs	• No existing LEDs
	  ○ Eligible existing fixtures include incandescent or CFL exit sign
		• An inventory of existing fixtures must be provided, including:
		  ○ Documentation of existing fixture wattages supported by documentation, or program protocol value
			• **LED Exit Signs**
			  ○ UL- listed
			  ○ Must be less than 5 watts per sign
			  ○ Must be permanently mounted or hardwired

Re-Lamp Reballast	• No existing LEDs
	  ○ Eligible existing fixtures include incandescent and fluorescent luminaires
	  ○ Existing HID fixtures are not eligible
		• An inventory of existing fixtures must be provided, including:
		  ○ Documentation of existing fixture wattages supported by documentation, or program protocol value
		• Total hours of operation for the building and each area, as applicable
			• **Re-Lamp Reballast**
			  ○ New ballast must be electronic; new remote drivers can be used in place of a new ballast
			  ○ New lamps must be LED technology that conforms with all LED lamp measure requirements
			  ○ Includes conversions to tandem linear LED fixtures
			  ○ Must be done on a permanently mounted or hardwired fixture
			  ○ All interior and exterior fixture types are eligible except for Circular Surface-Mounts, Recessed Downlights, and Wall Sconces
			  ○ Care should be exercised to ensure that lamp and ballast/driver are compatible as per manufacturer

7.2 Lighting Controls

Table 7.2: Eligible Measures and Technical Requirements – Lighting Controls

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
Lighting Controls	• No existing automated lighting controls • For Bi-Level Lighting Controls: Eligible fixture types are LEDs only	• An inventory of existing fixtures must be provided, including: ○ Documentation of existing fixture wattages supported by documentation, or program protocol value ○ Total hours of operation for the building and each area, as applicable	• **Occupancy Sensor Control** ○ UL-listed sensor ○ Must be from a manufacturer whose components are listed on the DLC Network Lighting Controls QPL ○ Technologies accepted include, but are not limited to, passive infrared, ultrasonic, and/or high frequency ○ Controlled fixtures must use programmable start ballasts ○ Cannot be installed in highly trafficked areas (e.g., lobbies, corridors, and stairwells) ○ Must be permanently mounted or hardwired ○ Fixtures plus controls must be installed (controls only will not be eligible)
			• **Bi-Level Lighting Control** ○ Must be a complete (lamp + ballast) system as designed by the manufacturer ○ Must be from a manufacturer whose components are listed as DLC Network Lighting Controls QPL ○ Must have UL label ○ Ballasts must be electronic and programmable start type if lamp(s) are being on/off controlled ○ Fixture cannot exceed 30% of full wattage during unoccupied periods ○ Must be code compliant with fail-safe features ○ Must be permanently mounted or hardwired ○ Work must comply with all applicable codes and regulations ○ Bi-Level Lighting is only authorized in stairwells and corridors of the common areas, and parking garages (any location in the basement is prohibited except areas used for ingress/egress or frequently visited by occupants)

7.3 Appliances

Table 7.3: Eligible Measures and Technical Requirements – Appliances

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
Refrigerators	• This measure does not apply to refrigerator-freezers with a total refrigerated volume exceeding 39 ft^3 or freezers with a total refrigerated volume exceeding 30 ft^3.	• Photo of ENERGY STAR label or cutsheet showing each product is ENERGY STAR labeled • Documentation showing how many of each type of appliance was installed	• Appliances shall be ENERGY STAR® labeled • Appliances shall be one-for-one replacements with regards to capacity • Refrigerators must be removed and decommissioned in compliance with EPA Clean Air Act and other relevant NY State regulations
Washers	• This measure addresses installation of top and front-loading residential clothes washers with capacities greater than 1.6 ft^3 and less than 8.0 ft^3.	• Photo of ENERGY STAR label or cutsheet showing each product is ENERGY STAR labeled • Documentation showing how many of each type of appliance was installed	• Appliances shall be ENERGY STAR® labeled • Appliances shall be one-for-one replacements with regards to capacity
Dryers	The baseline condition is a standard efficiency, residential grade clothes dryer with operating specifications as defined in the Key Variables Lookup Table in the latest NYS TRM.	• Photo of ENERGY STAR label or cutsheet showing each product is ENERGY STAR labeled • Documentation showing how many of each type of appliance was installed	• Appliances shall be ENERGY STAR® labeled • Appliances shall be one-for-one replacements with regards to capacity
Dishwashers	This measure only applies to standard and compact residential grade equipment, as defined below. ○ **Standard Dishwasher** – A dishwasher that has a capacity equal to or greater than eight place settings plus six serving pieces as specified in ANSI/AHAM ○ **Compact Dishwasher** – A dishwasher that has a capacity of less than eight place settings plus six serving pieces as specified in ANSI/AHAM DW-1-2010.	• Photo of ENERGY STAR label or cutsheet showing each product is ENERGY STAR labeled • Documentation showing how many of each type of appliance was installed	• Appliances shall be ENERGY STAR® labeled • Appliances shall be one-for-one replacements with regards to capacity

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
Induction Cooktop	The baseline equipment must be a fossil fuel or electric resistance fired cooktop or range.	• Documentation showing how many of each type of appliance was installed	• Proposed equipment must be an induction cooktop or range with and induction cooktop • Rated Annual Energy Consumption ≤ 195 kWh/year

7.4 Electric HVAC Measures

Table 7.4: Eligible Measures and Technical Requirements – Electric HVAC Measures

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
Variable Frequency Drive (VFD)	• No existing VFD	• Facility operation hours, facility type, and description of existing load profile must be provided • Description of what each proposed VFD will serve	• Must be tied to the control system and operate at variable frequencies as determined by the control system • Prescriptive VFD applications include exhaust fan, make-up air fan, return fan, supply fan, water loop heat pump circulating pump, and boiler feed water pump • Other VFD applications will need to be submitted as a custom project. Custom VFD applications may include but are not limited to booster pumps, cooling towers, chilled water and condensate water pumps, heating hot water pumps • Savings on Custom VFD projects will be subjected to savings caps of <10% of building consumption from the main building's common area account and <80% savings on relative to baseline energy consumption. If a project is believed to exceed these caps, robust data on the system must be provided to substantiate exceeded savings • The following applications are ineligible: ○ New VFD replacing existing VFD ○ VFDs installed in fixed - speed applications ○ Installs that include entire pumping or ventilation system upgrades or replacements

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
EC Motors	• Existing unit of lower efficiency	• Facility operation hours, facility type, and description of existing load profile must be provided • Projects including savings from a decrease in hours of operation (e.g., via new controls) must use a custom calculation. • Con Edison only: Projects with motors operating 24/7 in both the baseline and proposed cases should reach out to Con Edison on available tools and additional instructions on submitting EC Motor projects	• Retrofit of direct-drive Permanent Split Capacitor (PSC) motors with the installation of Electronically Commutated (EC) motors
Pumps	• Existing unit of lower efficiency than proposed equipment	• Facility operation hours, facility type, and description of existing load profile and AHRI certificate must be provided • Projects including savings from a decrease in hours of operation (e.g., via new controls) must use a custom calculation. • Con Edison only: Projects with motors operating 24/7 in both the baseline and proposed cases should reach out to Con Edison on available tools and additional instructions on submitting EC Motor projects	• Replacement equipment efficiency must exceed baseline efficiency compared to existing equipment and Energy Conservation Construction Code of New York State (ECCCNYS) to qualify for eligibility • Pump end use can be categorized as Hydronic Distribution (For space heating and space cooling applications) and Domestic Water Usage (Including hot and cold water applications)

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
Rooftop Exhaust Fan Motor Replacement	• Existing motor efficiency must be less than proposed motor efficiency	• Facility operation hours, facility type, and description of existing load profile must be provided. • Proposed quantity to be replaced • Description of what each fan serves • Applicable fan timer schedules for baseline and proposed conditions. • Projects including savings from a decrease in hours of operation (e.g., via new controls) must use a custom calculation. • Con Edison only: Projects with motors operating 24/7 in both the baseline and proposed cases should reach out to Con Edison on available tools and additional instructions on submitting EC Motor projects	• Proposed motor must be higher than applicable minimum motor efficiency as stated in the latest ECCCNYS • Proposed motor must not reduce total airflow unless ventilation calculations are provided indicating local code compliance

7.5 Elevator Modernization

Table 7.5: Eligible Measures and Technical Requirements – Elevator Modernization

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
Elevator Modernization	• Retrofit of existing elevators only • Existing Unit of lower efficiency	• Motor Nameplate and ID number • Generator nameplate (if part of M-G set) • Motor transmission system (geared or gearless) • Motor drive make and model • Regenerative braking drive and/or braking resistors • Elevator nameplate (make, model, serial number, car capacity, rated top velocity, counterbalance weight) • Elevator number/ID • Elevator schedule	• Elevator drive must be upgraded from lower efficiency to higher efficiency. Elevator drives are listed below from lowest efficiency to highest efficiency: ○ Motor-Generator (M-G) Set ○ Silicon Controlled Rectifier (SCR) 6 ○ Silicon Controlled Rectifier (SCR) 12 ○ Pulse Width Modulation (PWM) Drives ○ Variable Voltage Variable Frequency (VVVF) drives • The drives may either be regenerative or non-regenerative

7.6 Common Area Gas Measures

Table 7.6: Eligible Measures and Technical Requirements – Common Area Gas Measures

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**

Boiler/Furnace Replacement	• Existing unit of lower efficiency	• Facility operation hours and facility type
		• Oil to Gas (OTG) conversions:
		  ○ Submit Application with utility electric account
		  ○ Provide utility confirmation for gas conversion (e.g., new gas account #)
		  ○ Provide one year of fuel (oil) bills
		  ○ Provide cut-sheets of new boiler(s)
		  ○ Provide photos of existing boiler(s)
		  ○ Provide proposed installation date
		  ○ Conversion from Fuel Oil No. 2 and 4 only
		
		• Affordable Housing buildings often have older and less-efficient equipment. An existing baseline approach will be employed where possible.
		  ○ Existing Baseline Efficiency: Nameplate Efficiency with Degradation – maintenance records required for a minimum of 3 years.
		  ○ Nameplate to include a picture of nameplate with efficiency or a submittal/email from the manufacturer stating the efficiency
		  ○ NYC ECC –If legacy data is unavailable the year of the make/model and/or installation can be used to determine the minimal code compliant value from that year to use as the baseline
			• Hydronic boiler Minimum Boiler Efficiency: Et or AFUE of 85%
			• Condensing boiler Minimum Boiler Efficiency: Et or AFUE of 90% for boilers ≤ 2,500 kBtu/h or 93% Ec for boilers > 2,500 kBtu/h
			• Steam boiler Minimum Boiler Efficiency: Et or AFUE 82%
			• Annual Fuel Utilization Efficiency (AFUE) and thermal efficiency (Et) ratings must be sourced from the AHRI directory; if data is not available, only then may the manufacturer's rating may be used
			• Projects with multiple boilers in a lead lag configuration will be incentivized for one boiler replacement. (Lead lag boiler is defined where the secondary boilers operate only to meet the demand during peak heating season. Multiple boilers with cyclic operation or simultaneous operations at a low firing rate will be considered as a lead lag operation)

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
Domestic Hot Water Heater Replacement	• Existing Water Heater that is less efficient than the proposed equipment	• AHRI Certificate, if applicable • Facility operation hours and facility type	• Proposed equipment must be more efficient than existing equipment • Proposed water heater must comply with applicable Energy Star requirements • Proposed Storage Tank Water Heaters must meet the requirements of tank volume equal to or greater than 40 gallons and Et > 90%
Energy Management Systems (EMS)	• No existing EMS • Existing Boiler Controls with **NO** internet connection capability • Not applicable for buildings with PTAC units or any in-unit thermostat control • Buildings with condensing boilers are only eligible for custom gas incentives	• Provide documentation to confirm building unit count (for non-comprehensive projects) • Provide photos of boiler name plate	• Meets "EMS Controls" definition: ○ Autonomous or rule-based decision making (i.e., not a user-entered program or schedule) ○ Multiple data inputs (i.e., does not make decisions off a single data point) ○ Real-time digital data ○ Real-time monitoring and control through a software package or by providing data through a building protocol (e.g., IP/BACnet/Modbus/Zigbee) • Must allow remote access or web-based monitoring (monitoring service agreement is not required) • Install minimum of 25% apartment sensors, on a variety of floors, and including one in the apartment at the end of each branch line • Must include temperature sensors for the stack, domestic hot water supply, outdoor weather, heating water supply or return or condensate (steam) • Must provide system training and manual to building operating staff • Must provide a screen shot showing all control components in good operation • Must allow multiple boiler systems to have staging capability • Provide verification of multiple boilers run times, (i.e., lead/lag) • Product certification from an OSHA approved Nationally Recognized Testing Laboratory (NRTL) (e.g., UL, ETL, CSA, IAPMO) • Projects with multiple boilers in a lead lag configuration will be incentivized for an EMS system on the primary boiler only. (Lead lag boiler is defined where the secondary boilers operate only to meet the demand during peak heating season. Multiple

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
			boilers with cyclic operation or simultaneous operations at a low firing rate will be considered as a lead lag operation)
Pipe Insulation	• Existing pipe must be bare (the replacement of existing pipe insulation with new pipe insulation is ineligible) • Existing pipe must be located in an unconditioned space • Measure is intended for pipe insulation in common areas	• Boiler and /or water heater nameplate(s) and performance datasheets. Other heating/cooling equipment datasheets as relevant to the conditioned fluid flows • Pipe Insulation Survey must cover 100% of the heating distribution pipes (supply and return) in the common areas	• All piping in mechanical room and accessible piping in unconditioned spaces shall be insulated • Must meet minimum thickness requirements specified in the most recent version of the ECCCNYS • Measure covers the installation of fiberglass, rigid foam, or cellular glass pipe insulation on uninsulated copper or steel piping within hot water or steam space heating distributions systems and DHW distribution systems • The following applications must go through the custom process for non-comprehensive projects: ○ Insulating jackets for boilers, tanks, fittings, or other equipment ○ Pipe insulation on risers that go through tenant apartments ○ Any pipes over 8 inches diameter
Steam Traps	• Existing failed open steam traps in low pressure heating systems (< 15 psig)	• Survey involving collecting basic information on the steam boiler plant and steam traps; in addition to using an ultrasonic meter to confirm whether each trap is working, failed open, or failed closed ○ Must perform a baseline survey of the steam traps that are intended to be repaired when the traps are in use for confirmation of proper function ○ Survey must be performed when the heat is on ○ Contractor surveyor must place a numbered tag on each common area trap they test and document this number in the Program Administrator provided steam trap survey tool. The tags must remain in place until the project close-out. ○ Common Area and Apartment steam trap testing will rely on a 90% confidence, 10% margin of error formula to derive a	• All failed open and failed closed common area traps must be repaired or replaced. • If sampling is implemented for common area or apartment traps, all untested traps must be repaired or replaced. • Implementation contractors can have the option to test all traps to identify all failed traps. • Repaired traps must include a new cap to indicate work was done on the trap. • Upon completion of all trap repairs and/or replacements, the contractor must submit an updated copy of the survey tool with any pertinent scope changes and comments • Upon receipt of all completion documents, the repaired steam traps will be inspected by the IC to confirm proper installation of the measure. • Common area trap incentive amounts will be granted in accordance with the number of traps found to behave failed in the pre-installation inspection AND found to be operational in the post-installation inspection. Incentives will not be granted for traps that are repaired but inoperable regardless of the failure cause.

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
		statistically significant sample size for testing based on the steam trap quantities for common areas and apartments. To calculate the sample size needed for testing, please use the Program Administrator –provided steam trap survey tool. ○ Plugged traps are not incentivized and do not have energy savings. Plugged traps are recommended to be replaced but should not be counted toward the failure rate (Note: while it is recommended that all steam traps of any failure status are replaced, only traps in an open position will be incentivized). ○ For apartment radiators, provide apartment number, room description, and location in the Program Administrator-provided survey tool. Trap location information will be used by the IC to perform apartment trap testing.	• Apartment trap incentives will be granted based on the failure rate within the pre-installation inspection sample, multiplied across the entire apartment trap population. Incentives will be further reduced in the same fashion should failures persist in the post-installation inspection regardless of the cause of failure. • Comprehensive projects must replace all common area and in-unit steam traps
Boiler Clean and Tune	• Hot water or steam boiler	• Facility operation hours, facility type • A picture of nameplate with efficiency or a submittal/email from the manufacturer stating the efficiency ○ Pre and post combustion test results must be submitted along with completion documents	• Boiler Clean and Tune measure must be performed on each heating boiler within the central plant by a contractor with a master plumbers license and work experience in burner service • This measure only covers an advanced clean and tune procedure performed on a steam or hot water boiler ○ Routine seasonal boiler tune-ups will not be incentivized • Program may send out an inspector to observe the work • The advanced boiler clean and tune procedure involves the following items: ○ Perform a 'pre' steady state combustion test first ○ Open the boiler's water chamber, skim oil and debris from the water surface, pour in detergent solution, complete full drain, and refill along with chemical treatment ○ Tune burner to manufacturer's specifications to maximize its turndown ratio measure and adjust the gas supply pressure to reduce the low firing ratio the manufacturer's specified minimum and increase the high firing rate to the peak heating load level for the building

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
			○ Install a high-fire limit potentiometer and ensure burner mode switch is left in AUTO. Buildings with an EMS present are exempt from this requirement • Perform a 'post' steady state combustion test
Furnace Clean and Tune	• Warm air furnace	• Facility operation hours, facility type • A picture of nameplate with efficiency or a submittal/email from the manufacturer stating the efficiency ○ Pre and post combustion test results must be submitted along with completion documents • Must submit notification of the scheduled service date and time no less than three (3) days in advance	• Furnace Clean and Tune measure must be performed by a licensed contractor who is experienced in burner service • This measure only covers an advanced clean and tune procedure performed on a furnace • Routine seasonal tune-ups will not be incentivized • Program may send out an inspector to observe the work • The advanced furnace clean and tune procedure involves the following items: ○ Perform a 'pre' steady state combustion test first ○ Replace air filters and eliminate any dust, dirt, or debris in the system ○ Tune burner to manufacturer's specifications ○ Clean pans and drains, and check piping for corrosion and leaks ○ Inspect air ducts for leaks and damaged/missing insulation ○ Evaluate thermostats and other controls for proper settings and operation • Perform a 'post' steady state combustion test
Master Air Venting	• This measure applies to one-pipe steam distribution systems. For two-pipe steam distribution systems, refer to the 2-Pipe Steam Retro-Commissioning custom package • Co- or Pre-requisite measures: Pipe Insulation and Boiler Clean and Tune must be installed in addition to this measure in order to qualify for the program	• Must perform a baseline survey of the steam heating distribution system ○ Survey involves collecting basic information on the steam boiler plant and steam supply mains and risers, including any existing air vents • Surveyor must prepare a layout sketch of the steam supply mains in the basement, including mark-offs for the new air vents to be installed • Upon completion of all air vent installations, must submit completed survey with information on upgrades for master air venting	• Installer must remove any existing air vents that are either broken, incorrectly sized, or in the wrong location and cap the hole • Air vents must be installed in the vertical direction and at least 15" away from any elbows; trees should be used whenever installing multiple vents in the same location • For proper distribution balancing air vents should be sized and installed at the ends of 100% of the steam supply mains and risers • If riser tops are inaccessible the appropriate air vent should either be installed on the riser within the 2nd-to-top floor apartment or on the nearest radiator on its inlet side

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
	○ Can show proof of Boiler Clean and Tune through combustion analysis print out; • Boiler Clean and Tune must be completed within the last year with sufficient documentation to satisfy the co-requisite • Any exposed pipe in unconditioned common areas must be insulated as part of the scope. If all pipe is already insulated prior to submission of the project, the co-requisite is satisfied		
Orifice Plate	• This measure applies to all radiators within a 2-pipe steam distribution system • Co- or Pre-requisite measure: Boiler Clean and Tune and TRVs must be installed in addition to this measure in order to qualify for the program • Boiler Clean and Tune must be completed within the last year with sufficient documentation to satisfy the co-requisite	• Must perform a baseline survey of the steam heating distribution system • Survey involves collecting basic information on the steam boiler plant and a detailed "heat-load vs. radiator EDR" analysis on a sample of apartments; the apartment sample must minimally include one (1) apartment per each building line	• Heat-Load vs. Radiator EDR analysis should cover all the rooms and radiators in the apartment being sampled • Orifice plates must be sized for each size of radiator; the reduced heat output of any radiator must not fall below 100% of the heat load of the room it serves • Orifice plates must be installed for at least 70% of all apartment and 100% common-area radiators, not including those on the top floor (top floor radiators cannot be restricted from venting air through the distribution system) • Upon completion of installations, must submit for review a checklist showing all radiators in the building and the orifice plates installed • M&V may be required for projects with this measure depending on size
Thermostatic Radiator Valves (TRVs)	• This measure applies to all radiators within a 2-pipe steam distribution system • Co- or Pre-requisite measure: Boiler Clean and Tune and Orifice Plates must be installed in addition to this measure in	• Must perform a baseline survey of the steam heating distribution system • Survey involves collecting basic information on the steam boiler plant and a detailed “heat-load vs. radiator EDR” analysis on a sample of apartments; the apartment sample must minimally include one (1) apartment per each building line	• TRVs must be installed for at least 70% of all apartment radiators and 100% of all common-area radiators • Use a remote temperature sensing TRV on any enclosed radiators • Upon completion of installations, must submit a checklist showing all radiators in the building and the orifice plate and TRV that was installed

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
	order to qualify for the program • Boiler Clean and Tune must be completed within the last year with sufficient documentation to satisfy the co-requisite		• M&V may be required for projects with this measure depending on size
Domestic Hot Water Controls	• Central DHW recirculation system running in continuous operation at constant temperature and flow rate	• Facility operation hours, facility type, and description of existing load profile must be provided	• Central DHW recirculation controls that regulate the circulator pump(s) operation based on demand, temperature or both.
Smart Thermostat	• Non-Wi-Fi communicating programmable thermostat or older less granularly controllable thermostat that controls a HVAC system(s) using fossil fuel and/or electricity to provide space heating and/or cooling.	• Facility operation hours, facility type, and description of existing load profile must be provided	• Wi-Fi communicating thermostat with/without behavioral learning capability that controls a HVAC system(s) using fossil fuel and/or electricity to provide space heating and/or cooling. • For decentralized space conditioning applications only.
Smart Thermostatic Radiator Enclosure (Smart TREs)	• Exposed radiators in a one or two-pipe space heating steam system	• Facility operation hours, facility type, description of existing load profile, boiler plant type, MBH input, and efficiency must be provided • Existing heating conditions such as documentation of overheating through surveys of tenants, and measuring in-unit temperatures during the heating season. • Smart TRE surveys should collect information for all radiators in the whole building • Survey information should minimally include building name, site address, floor number, apartment unit name, space name (living room, bedroom, etc.), radiator type, and the presence of any existing radiator controls including type, make, and model	• Radiator are retrofitted with Smart TREs, radiator covers with integrated temperature controls and sensors. • The Smart TREs are connected to the central boiler to optimize gas consumption. • At least 60% of all radiators in the building regardless of type must have TREs installed. Radiators receiving TREs to reach these requirements must be reflected in the scope of work/ cost proposal documents.

7.7 In-Unit Measures

Table 7.7: Eligible Measures and Technical Requirements – In-Unit Measures

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
LEDs	• No existing LEDs	• An inventory of existing fixtures must be provided, including: ○ Documentation of existing fixture wattages supported by documentation, or program protocol values	Downstate • **LED A** LAMPS ○ ENERGY STAR® ○ Minimum 3-year warranty ○ Must be permanently mounted or hardwired ○ All in-unit LEDs must be installed by subcontractors, and they are required to remove the old equipment for an inspection (bag and tag required for downstate). a. For Comprehensive projects, pre- and post-inspection replace the bag and tag process. Upstate • **LED** LAMPS ○ ENERGY STAR® ○ Minimum 3-year warranty ○ All in-unit LEDs must be installed by subcontractors, and they are required to remove the old equipment
Faucet Aerators	• Existing faucet aerators must be rated at a minimum flow rate of 2.2 GPM kitchen, 1.5 GPM bathroom.	• Existing faucet aerators must be "bagged and tagged" for inspection • For Comprehensive projects, pre- and post-inspection replace the bag and tag process.	• Up to four per unit • <=1.5 GPM installed in kitchen • <=1 GPM installed in bathroom • New bathroom aerators must be certified as EPA WaterSense
Low-Flow Showerhead	• Existing showerhead must be rated at a minimum flow rate of 2.0 GPM	• Existing showerhead must be "bagged and tagged" for inspection • For Comprehensive projects, pre- and post-inspection replace the bag and tag process.	• Swivel- or wand-type showerhead • New showerhead must have a flow rate < 2.0 GPM • New showerhead must be certified as EPA WaterSense

7.8 Building Envelope Measures

Table 7.8: Eligible Measures and Technical Requirements – Building Envelope Measures*

*Building envelope measures must be associated with electric or gas savings

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**

Attic Insulation	• Pre-requisite: attic floor/top floor ceiling must be air sealed before attic/roof insulation is added
	• Con Ed only pre-requisite: No existing insulation
		• Plans for and proof of addressing thermal bypasses in roofs (only applicable for metal frame roofs) and articulated in scopes of work and final invoicing
		• Plans for and proof of addressing thermal bridging at the following points: slab edges, bulkheads, rim joists, and roof-to-wall connections, and articulated in scopes of work and final invoicing.
		• Any area with existing insulation must be documented
		• Must submit HVAC equipment datasheets and nameplate photos
		• Must submit building plans/layout detailing areas to be retrofitted
		• Must submit photos of the existing conditions and of the completed work that clearly shows the depth of insulation installed
		• Photos showing that the attic floor/top floor ceiling was airsealed before roof/attic insulation was installed
		• Customer invoice required
		• Measurements related to dimensions of the roof must be provided. This should be supported by floor plans, architectural elevation drawings, pre-inspection etc. Roof areas to be incentivized must exclude parapet walls, vents and penetrations, stairwells, and other areas unable to be insulated.
			• Must meet ECCCNYS code minimums and must comply with applicable local code requirements regarding insulation and vapor retardants
			• Minimum R value required by ECCCNYS code or applicable local code requirements, whichever is higher
			• Cavity insulation must be installed without compression or slumping
			• Photo and/or video documentation of any areas to be enclosed should be submitted supplemental to the post-inspection
			  ○ Photos and/or video documentation of above roof should show measurements of parapet heights at multiple areas of roof to document existing roof height without insulation, and post documentation should show parapet height after foam and roof are applied. Inspections should make efforts to capture pre and posts at the same perspective and same view of portion of roof for ease of review.
			  ○ Photos and/or video documentation of roof cavity/attic projects should include probes to document the attic cavity depth, existing cavity insulation, and roof thickness above cavity.
			• Attic insulation savings will be capped by Program Administrators. Please check with the IC for further details.
			  ○ Con Ed caps attic insulation savings at 15% of annual gas consumption.

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
		• Must submit pre-installation photos of empty roof • Must submit photos and/or probes of the completed work • Any area with existing insulation must be documented	• All precautions must be taken by the installer to assess the risk of and mitigate moisture. Where applicable, proper ventilation techniques must be used alongside the insulation installation • Addressing air sealing, thermal bypasses, and thermal bridging, must be documented with photos, video, or other media to show it was installed before the insulation.
Above Deck Roof Insulation	• Con Ed only pre-requisite: No existing insulation • Attic floor/top floor ceiling must be air sealed before attic/roof insulation is added • New construction and gut rehabilitation work are not eligible • Only applicable to roof insulation separating conditioned spaces from the exterior of the building	• Plans for and proof of addressing thermal bypasses in roofs (if applicable). • Plans for and proof of addressing thermal bridging at the following points: slab edges, bulkheads, rim joists, and roof-to-wall connections. • Documentation of any or lack of existing insulation in any part of the project area • Must submit HVAC equipment datasheets and nameplate photos • Must submit building plans/layout detailing areas to be retrofitted • Must submit photos of the existing conditions and of the completed work that clearly shows the depth of insulation installed • Photos showing that the attic floor/top floor ceiling was air sealed before roof/attic insulation was installed • Customer invoice required • Design drawings or cutsheets must include applicable R-value of the existing envelope. If unavailable, use the roof/ceiling insulation R-value from the NYSTRM Appendix A based on the applicable building type. • Cutsheets for the proposed roof insulation being installed, including the applicable R-value.	• Must meet ECCCNYS code minimums and must comply with applicable local code requirements regarding insulation and vapor retardants • Minimum R value required by ECCCNYS code or applicable local code requirements, whichever is higher. • Cavity insulation must be installed without compression or slumping • An interim inspection (prior to area being enclosed) is required when insulated area will be inaccessible after completion • Roof insulation saving will be capped by Program Administrators. Please check with the IC for further details • Con Ed caps roof insulation savings at 15% of annual gas consumption • All precautions must be taken by the installer to assess the risk of and mitigate moisture. Where applicable, proper ventilation techniques must be used alongside the insulation installation. • Installation must not negatively impact the code compliance of adjacent roofing elements – e.g.: per NYCBC Section 27-334, parapet walls be at least 42” high. Adding new above deck roof insulation may not affect conformance with the building code.

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
		• Existing HVAC cooling and heating system capacities and efficiencies, supported by manufacturer equipment datasheets, industry standard performance test results, or as-built design drawings. If unavailable, vintage versions of ASHRAE Standard 90.1 will be used based on the equipment's installation year. If equipment's installation year cannot be determined, code minimum efficiencies for the existing equipment type installed shall be used. • Measurements related to dimensions of the roof must be provided. This should be supported by floor plans, architectural elevation drawings, pre-inspection etc. • Roof areas to be incentivized must exclude parapet walls, vents and penetrations, stairwells, and other areas unable to be insulated.	
Wall Insulation	• Con Ed only pre-requisite: No existing insulation • Only exterior walls are eligible to receive incentives	• Plans for and proof of addressing thermal bypasses • Plans for and proof of addressing thermal bridging at the following points: slab edges, rim joists, and roof-to-wall connections. • Any area with existing insulation must be documented • Must submit HVAC equipment datasheets and nameplate photos • Must submit building plans/layout detailing areas to be retrofitted • Must submit photos of the existing conditions and of the completed work that clearly shows the depth of insulation installed • Customer invoice required	• Must meet ECCCNYS code minimums and must comply with applicable local code requirements regarding insulation and vapor retardants • Minimum R value required by ECCCNYS code or applicable local code requirements, whichever is higher. • Cavity insulation must be installed without compression or slumping • Photo and/or video documentation of any areas to be enclosed should be submitted supplemental to the post-inspection • Wall insulation savings cap will be determined during the engineering review • All precautions must be taken by the installer to assess the risk of and mitigate moisture. Where applicable, proper ventilation techniques must be used alongside the insulation installation

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
Window Replacement	• This measure is only applicable to windows that serve as a barrier between conditioned spaces and outside air. • Pre-requisite: window cavities must be air sealed before windows are installed	• HVAC equipment datasheets and nameplate photos • Building plans/layout detailing areas to be retrofitted • Survey of quantities, sizes, and locations of the existing and proposed windows. • Energy performance specifications (window type, frame type, U-value, gas fill, SHGC, low-e type, and location) for proposed windows. • NFRC or other relevant rating agency's label(s).	• In all instances, new equipment must perform better than existing and must comply with or exceed ECCCNYS C402.4. • For NYC: New equipment must perform better than existing and must comply with or exceed NYCECC C402.4. ○ For Low-Rise (up to 3 floors) buildings, specified windows shall be ENERGY STAR® labeled. ○ If ENERGY STAR® labeled windows are not available, the specified windows must meet or exceed the ENERGY STAR® requirements for the building's location for U-value and Solar Heat Gain Coefficient (SHGC). ○ For High-Rise (over 3 floors) buildings, windows shall meet the code requirements of the applicable territory as described above.
Air Sealing	• Buildings with broken mechanical louvers or missing exterior doors and windows are ineligible. The eligible existing conditions are cracked and missing window/door frame caulk, missing/poor condition weatherstripping, holes in building exterior from electrical/plumbing penetrations, leakage at roof/wall intersections, roof hatch. • Air sealing surveys, at a minimum, must inspect the following common area building components. ○ Stairwells ○ Exterior walls	• Air sealing surveys must document all air leakage opportunities throughout all common areas. • A building survey with recorded measure specification (exterior door or windows) noting location, quantity, qualitative assessment, and size/length • Photographic evidence showing current condition of non-compliance and compliance conditions for at least top of building, common areas and basement • Scope of work will detail how to remediate non-compliance by using visual inspection and photographic evidence • Building project scopes or audits in which only door issues are detected will not be considered an acceptable air sealing project	• Downstate only: PCs must be pre-approved to install this measure. Contact the IC for more information. • The exterior envelope, as well as interior walls/partitions between conditioned and unconditioned spaces should be inspected and all gaps sealed. At a minimum, the following items shall be inspected, and sealing measures may be implemented based upon inspection results: • Caulk and weather strip doors and windows that leak air. • Repair doors leading from conditioned to unconditioned space. • Seal air leaks between unconditioned (including unconditioned basement and attics) and conditioned spaces, to include, but not limited to, plumbing, ducting, electrical wiring, wall top plates, chimneys, flues, and dropped soffits.

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
	○ Common area windows and skylights ○ Basement locations, including basement, ceilings, exterior basement walls, and doors ○ Repeatable penetrations – including but not limited to, ventilation penetrations, intercoms, dryer exhaust penetrations, garbage chutes, and plumbing penetrations of exterior walls ○ For projects except those in Con Edison and O&R territories: in-unit windows, baseboards, outlets and switches along exterior walls, and penetrations between the unit and any unconditioned space		• Use foam sealant on larger gaps around windows, baseboards, and other places where air leakage, either infiltration or exfiltration may occur. Confirm that all air sealing materials used are appropriately adhered to the envelope surface and no visible air gaps remain. Excess material should be trimmed and discarded. • Includes partial sealing of fixed louvers with annealed glass in accordance with code • Includes exterior door weatherstripping, sweep, and threshold, or full replacement if needed • Includes repair of common area inoperable windows • Includes basement compartmentalization sealing as follows: ○ Install gaskets around trash shoot doors and other interior shaft access panels ○ Caulk around all pipe and electrical penetrations through the exterior wall and ceiling or penetrating from an unconditioned interior space into a conditioned space a. Chimneys, flues, and dropped soffits. b. Rooftop venting, electrical, plumbing and mechanical equipment penetrations • Larger openings should either be sealed with expandable low VOC spray foam or foam board • Projects, with the exception of Con Edison and O&R, include caulking around in-unit windows and baseboards and any penetration between the unit and unconditioned spaces and outlet and switch insulated covers.

7.9 Custom Measures

Table 7.9: Eligible Measures and Technical Requirements – Custom Measures

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
Custom Measures: **Other energy-efficiency upgrades not listed in this document may be eligible for performance-based custom incentives at the rates listed in Section 3.2.2 for the non-comprehensive pathway. For the comprehensive pathway, reference Table 13.1 in the Appendix for a more detailed list of measures and their points, or reach out to the IC with any questions.**	• Case by case per measure	• Facility operation hours, facility type • Utility usage data for past 12 months • All applicable information and supporting documents needed to calculate the savings of the custom energy efficiency measure	• New equipment must be more efficient than existing and must meet any applicable ECCCNYS requirements
Custom Measure: Insulation	• Insulation that encompasses non-linear piping, including insulating jackets for boilers, tanks, fittings (elbows, tees, valves), or other equipment • Uninsulated copper or steel piping with a nominal diameter greater than 8.00” in hot water and steam space heating and domestic hot water (DHW) distribution systems in unconditioned spaces	• Boiler and/or water heater nameplate(s) and performance datasheets. Other heating/cooling equipment datasheets as relevant to the conditioned fluid flows • Pipe Insulation Survey must cover 100% of the heating distribution pipes (supply and return) in the common areas	• New insulation must meet minimum thickness requirements specified in the most recent version of the • ECCCNYS Minimum thermal resistance of R-3. • Permitted insulation types are fiberglass, rigid foam, or cellular glass pipe insulation. • Insulation must be installed on uninsulated copper or steel piping within hot water or steam space heating distributions systems and DHW distribution systems • Materials must be certified and rated in accordance with all pertinent ASTM thermal insulation standards may be installed under this measure • Boiler jackets are not allowed as a standalone measure

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
Custom Measure: Motor Replacement	• Existing motor efficiency must be less than proposed motor efficiency	• Facility operation hours, facility type, and description of existing load profile must be provided • Proposed quantity to be replaced • Description of motor application • Applicable motor schedules for baseline and proposed conditions • Projects including savings from a decrease in hours of operation (e.g., via new controls) must use a custom calculation. • Con Edison only: Projects with motors operating 24/7 in both the baseline and proposed cases should reach out to Con Edison on available tools and additional instructions on submitting EC Motor projects	• Proposed motor must be higher than applicable minimum motor efficiency as stated in the latest ECCCNYS
Custom Measure: Air Conditioner – Central Unit Replacement (CAC)	• Existing unit of lower efficiency than proposed equipment	• Facility operation hours, facility type, description of existing load profile, and AHRI certificate must be provided	• Replacement equipment efficiency must exceed baseline efficiency compared to existing equipment and Energy Conservation Construction Code of New York State (ECCCNYS) to qualify for eligibility • Replacements shall be one-for-one regarding capacity, with a tolerance of ±10%
Custom Measure: Air Handling Unit (AHU)	• Existing unit of lower efficiency than proposed equipment	• Facility operation hours, facility type, description of existing load profile,	• Replacement equipment efficiency must exceed baseline efficiency compared to existing equipment and ECCCNYS to qualify for eligibility
Custom Measure: Packaged Terminal Air Conditioner (PTAC)	• Existing unit of lower efficiency than proposed equipment	• Facility operation hours, facility type, description of existing load profile, and AHRI certificate (if applicable) must be provided	• Replacement equipment efficiency must exceed ECCCNYS minimum efficiency by 10% or more • Replacements shall be one-for-one regarding capacity, with a tolerance of ±10%

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
Custom Measure: Cooling Tower Replacement	• Existing unit must be past its effective useful life as per the latest version of the NYS TRM • Existing cooling tower must not have VFDs	• Facility operation hours, facility type, and description of existing load profile must be provided	• Cooling tower approach temperature of 6F under standard rating conditions. • VFD installation for cooling tower fans/pumps are required by code and ineligible for incentives
Custom Measure: Chiller Replacement	• Existing unit of lower efficiency than proposed equipment	• Facility operation hours, facility type, and description of existing load profile must be provided	• Replacement equipment efficiency must exceed baseline efficiency compared to existing equipment and Energy Conservation Construction Code of New York State (ECCCNYS) to qualify for eligibility
Custom Measure: Ventilation Overhaul	• Co- or Pre-requisite measures: Rooftop exhaust fans to be replaced. No existing Constant airflow regulators (CARs) installed within the registers • Existing motor efficiency for exhaust fans must be based off motor nameplate • For motors with no nameplate efficiency, baseline efficiency based off the motor year installed can be used	• Facility operation hours, facility type, and description of existing load profile must be provided. • Proposed quantity to be replaced • Description of what each fan serves • Applicable fan timer schedules for baseline and proposed conditions. • CFM measures and Aeroseal reports for the ductwork and shafts should include the existing and proposed conditions • A total count of the kitchen and bathroom registers	• Proposed motor must be higher than applicable minimum motor efficiency as stated in the latest ECCCNYS • CARs must be installed in 70% of apartment exhaust grills and 100% of the common area supply and exhaust grills. • Kitchens and bathrooms shall be continuously ventilated to a minimum of 25 CFM and 20 CFM or intermittently ventilated to a minimum of 100 CFM and 50 CFM respectively as stated in the latest version of the NYC Mechanical code Note: Savings associated with shafts being cleaned and sealed should not be included
Custom Measure: Burner Replacement	• Existing unit of lower efficiency than proposed equipment	• Facility operation hours, facility type, and description of existing load profile must be provided • Hours of operation must be allocated appropriately for each stage of modulating burners	• Replacement equipment efficiency must exceed baseline efficiency • New burners must be correctly tuned for optimum operational conditions

Technical Measure Guidelines - (Applies to both Comprehensive and Non-Comprehensive Projects)			
Measure	**Existing Equipment**	**Documentation Requirements**	**Proposed Equipment and Installation Requirements**
Custom Measure: Linkage-less Burner Control	• Linkage-based controlled burners • Measure cannot be combined with boiler replacement	• Facility operation hours, facility type • A picture of burner nameplate • Pre and post combustion test results must be submitted along with completion documents	• All linkage-based controls are replaced with automatically controlled servo motors
Custom Measure: Energy or Heat Recovery Ventilators (ERVs or HRVs)	• Building with ASHRAE 62.2-compliant exhaust fan system with no heat or energy recovery	• Facility operation hours, facility type, description of existing load profile, and AHRI certificate must be provided • Nameplate photos for existing central heating and cooling systems	• ASHRAE 62.2-compliant exhaust fan system equipped with AHRI certified ERV or HRV components

7.9.1 Existing Conditions Baseline Guidance

The default approach in determining existing conditions is reviewing documentation such as a customer-provided name plate or spec sheet information. If the customer is unable to provide this information, then an alternative option is to provide the age of the equipment (e.g., equipment vintage to the building) and the ICs will use the code pertinent at time of equipment installation. If the customer cannot submit information for either option, then the ICs will resort to the current energy code to determine the baseline.

Acceptable proof of existing efficiencies include:

1. Combustion Test Record – combustion efficiency will be accepted for measures that require thermal efficiency in the savings calculation; this will require a NYC DOB/DEP official record dated within the last two years
2. Nameplate Efficiency with Degradation – maintenance records required for a minimum of three years.
3. Nameplate to include a picture of nameplate with efficiency or a submittal/email from the manufacturer stating the efficiency
4. NYC ECC –If legacy data is unavailable the year of the make/model and/or installation can be used to determine the minimal code compliant value from that year to use as the baseline

For projects undertaking a custom review or requiring measurement & verification ("M&V") the most accurate data source identified will be used. In any case that nameplate efficiency or combustion efficiency cannot be verified, code baseline will be used.

Additional savings calculations must be submitted with the application package if, for example, the applicant is looking to apply degradation factors, modify operating hours or equivalent full load hours (EFLH).

If the applicant can provide annual professional maintenance information on the equipment a degradation factor as outlined below should be followed. The degradation factor cutoff will be at 10%.

EFF baseline, degraded = (EFF baseline) * (1-M) ^age, where age is the equipment age, in years. M = 1% degradation for AC units and 0.5% for heating equipment.

> Source: NREL: Building America Performance Analysis Procedures for Existing Homes https://www.nrel.gov/docs/fy06osti/38238.pdf

7.9.2 New Technology

Submission of projects deemed as new technology must provide a full custom analysis and additionally provide the following:

- Manufacturer-claimed savings as a percentage range
- Information on adoption by other utility energy efficiency programs (provide links or resources to verify)
- Reliable third-party studies on energy savings potential
- Product literature such as diagrams or videos showing how the product works
- Baseline metered or trended data
- Any additional information requested by the Program Administrators

Projects are accepted based on a review by the Program Administrators of the technology and may be approved, rejected, or requested to participate in additional M&V before being offered incentives. The approval of savings and incentives for new technologies is at the discretion of the Program Administrators and may be changed at any time.

7.9.3 Secondary Steam and Oil – Custom (Con Edison Only)

Con Edison offers incentives to projects that reduce both electricity and district steam provided by Con Edison or oil. Such projects may receive incentives for the reduction of Secondary Steam or Oil. Secondary Steam or oil savings are defined as secondary savings achieved by a measure that also reduces electric energy use.

To qualify for Secondary Steam or Oil incentives, a project must:

1. Have an eligible Con Edison electric account
2. Have active Con Edison steam service for projects looking to claim secondary steam savings or provide annual oil (Fuel Oil No. 2 and 4 only) usage and proof of purchase for buildings looking to claim oil savings
3. Install one of the eligible measures. Measure must save both Con Edison electric energy and Con Edison steam energy or oil
4. Building with interruptible gas service is not eligible

The following measure/project types do not qualify for incentives:

1. Measures that save only Con Edison steam are not eligible for this program
2. Projects must not include installation of space heating and domestic hot water equipment fueled by gas, steam, or other delivered fuel

The following measures are eligible for secondary steam incentives:

1. Envelope upgrades to existing buildings that reduce the building cooling and heating loads.
2. Building Automation Systems (BAS) that reduce both Con Edison electricity and Con Edison steam consumption.

All Secondary Steam and Oil projects will be reviewed on a case-by-case basis to undergo M&V.

Secondary Steam and Oil Incentives

Secondary Steam and Oil Incentives - Custom		
Installed Measure	**Secondary Steam Incentive $**	**Secondary Oil Incentive $**
Building Envelope	$120/Mlbs	$3.50/gal
Building Automation System - Controls	$80/Mlbs	$3.50/gal

Secondary Steam and Oil incentives are capped at 85% of the customer's project costs or at one million dollars, whichever is lower.

7.9.4 Fuel Switching – Custom (Con Edison Only)

Con Edison offers incentives to HVAC upgrades that electrify existing district steam, oil, or natural gas equipment. Fuel switching is defined as any measure that converts existing district steam, oil, or natural gas HVAC equipment to electricity. Measures converting from electric to gas/steam/oil are not eligible for incentives.

To qualify for Fuel Switching incentives, a project must:

1. Have an eligible Con Edison electric account
2. Have active Con Edison steam service or provide annual oil (Fuel Oil No. 2 and 4 only) usage and proof of purchase
3. Have not received incentives through the Demand Management Program (DMP) for the existing steam or natural gas consuming equipment and associated controls, being proposed for electrification
4. Not located in a Non-Wires Solutions (NWS) area. Refer to the Con Edison Multifamily Energy Efficiency Program (MFEEP) Program Manual, Section 2.5.2 for NWS eligibility
5. Be an existing facility, including gut renovation

Example fuel switch measures include but are not limited to:

Proposed Replacement Technology	
Existing Equipment	**Proposed Replacement Technology**
Steam absorption chiller Steam turbine chiller Gas-engine-drive chiller Gas-fired boiler Steam-driven boiler Oil-fired boiler	Electric chiller Electric boiler

Measures not eligible for fuel switching incentives include:

1. Heat pumps, heat pump chillers, heat recovery chillers for space heating/cooling or hot water
2. Electrification of non-HVAC equipment, such as stoves, washers, and dryers
3. Conversion to electric resistance heating
4. Removal of Cogeneration or Combined Heat and Power (CHP) Plants
5. Addition of new Cogeneration or Combined Heat and Power (CHP) Plants

Fuel Switch Incentive

Incentive	
Measure	**Incentive**
Fuel Switch – HVAC	$70 per MMBtu

Required Project Documentation

All projects must provide a detailed description of the fuel switching measure being proposed, including energy savings and calculation methodology that accurately quantifies the proposed savings.

A. Savings shall be calculated as the difference in energy consumption between baseline equipment and new energy efficient technology
B. Savings shall be expressed in MMBtu
C. Savings baselines are dependent on measure application type as follows:

	Savings Baseline	
Measure Application Type	**Baseline Utilized for Calculation**	**Proposed**
Normal Replacement	Code or Industry Standard Efficiencies (Gas/Steam Fuel Equipment)	Electric Fuel Equipment
Special Circumstance – Extended Life or Early Replacement	Existing Equipment Efficiency (Gas/Steam Fuel Equipment)[1]	Electric Fuel Equipment

[1]Existing equipment efficiency must be backed up with supporting documentation submitted by the customer or PC as per the Extended Life or Early Replacement technical guidance in the Con Edison Multifamily Energy Efficiency Program (MFEEP) Program Manual.

D. Savings approach may include but are not limited to:
   - Computer Energy Modeling Software
   - Bin Analysis
   - Modified TRM measures

E. Con Edison Master Case ID (Provided by Con Edison Energy Services)

All Fuel Switching projects will be reviewed on a case-by-case basis to undergo M&V.

8 Incentive Payments

See Section 4.1 for details of when incentive payments will be issued as part of the program process for the comprehensive pathway, and Section 4.2 for the non-comprehensive pathway. See additional invoicing requirements in Section 10 of this manual. The IRS Form W-9 submitted must exactly match the name of the payee as indicated on the program application. Participating Contractors (PCs) on probation may not be allowed to accept incentive payments on behalf of the customer. PCs in good standing with the program will be allowed to accept incentive payments on behalf of the customer with prior written approval by the customer.

9 Tax Liability

Incentives may be taxable for most taxpayers. If the incentive is $600 or more, it will be reported to the IRS and the customer will be provided with an IRS Form 1099, unless the customer has submitted documentation that they are a tax-exempt entity as defined by the IRS. The Program is not responsible for any tax liability that may be imposed on any customer as a result of the payment of program incentives. All customers must supply their Federal Employer Identification Number (i.e., federal tax identification number) to the Program to receive a program incentive. Please consult with a tax professional for information on the tax treatment of the incentives.

10 Project Costs and Invoicing Requirements

When submitting invoices with completion certificates, customers must provide the Program Administrators with detailed invoices identifying the following:

- References to the project, including the project address, and related items listed in the scope of work that were approved by the program. Changes to the approved scope of work must be submitted to the Program Administrator and its IC for approval.

- Equipment installed (Make/Model Number): This is required to verify the equipment installed qualifies for Program incentives.
- Quantity, purchase, and delivery date of equipment installed: This is used to verify the quantity of equipment installed aligns with the Program application. (This is optional, unless requested by the Program Administrators.)
- Itemized labor and material costs for all installed equipment: This is required to verify individual costs.
- The final invoice provided to the Program Administrators must be the same invoice the customer is receiving and match the Certificate of Completion.
- Each line item must include a brief description. For example, include the equipment tag for an air handler as “AHU 13B”, as well as the make and model number.
- If a PC is receiving incentives on behalf of a customer, a line item stating “Program credit” with an invoice credit must be documented on the invoice. The invoice credit must reflect the same incentive amount the customer would receive had they completed the submission themselves for the same project.
- In the event a custom project submitted for incentives is a portion of a larger scope that includes non-energy efficiency line items, the customer will must provide invoice(s) that clearly outline the specific project description and cost that is being applied to the project in the program.

11 Terms and Conditions

These Terms and Conditions are applicable to a Customer (as defined below) (including by those duly authorized to act on behalf of a Customer) participating in the NYS Affordable Multifamily Energy Efficiency Program (the "Program") and when a Customer's utility is: Consolidated Edison Company of New York, Inc.; KeySpan Gas East Corporation d/b/a National Grid; The Brooklyn Union Gas Company d/b/a National Grid NY; Niagara Mohawk Power Corporation d/b/a National Grid; New York State Electric and Gas Corporation and Rochester Gas and Electric Corporation; National Fuel Gas Distribution Corporation; Central Hudson Gas & Electric Corporation; and Orange & Rockland Utilities, Inc. The foregoing utilities shall in the singular be referred to herein as a "Utility" and together as the "Utilities" and reference to a Utility or to the Utilities shall without further mention be presumed to be references to an individual Customer's Utility or Utilities unless the context speaks to the collective action of the Utilities.

1. **ELIGIBILITY:** The Program offers financial incentives for energy efficiency measures to eligible customers ("Customers") who are property owners or managers of affordable multifamily residences with five or more dwelling units. A multifamily building is considered "affordable" if it was developed and is being maintained as affordable housing. Supporting documentation must be provided to prove that the building meets the criteria of an affordable multifamily residence. Examples of acceptable documentation include regulatory agreements or mortgages from housing agencies (e.g., the United States Department of Housing and Urban Development, the New York City Department of Housing Preservation and Development, etc.). A building can also meet affordability requirements through its rent roll, where at least 25% of the units in the building are occupied by a household that has a calculated household income of no more than 80% of the Area or State Median Income, whichever is higher. Applicants must submit the annual rent, size, and occupancy for each apartment in the building.

   The Utilities will not offer financial incentives and/or rebates for the same eligible measure to those Customers who have received financial incentives or rebates from the New York State Energy Research and Development Authority (NYSERDA) and/or from another electric or gas utility company. Customers applying for technical assistance must do so consistent with the requirements provided for by the *New York State Affordable Multifamily Energy Efficiency Program, Program Manual* (the "Program Manual"), and as the Program Manual may be updated and amended from time to time.

2. **PROGRAM MANAGEMENT**: The Program may at times be implemented and managed by an implementation contractor under contract with a Utility. Accordingly, all program undertakings or obligations of a Utility may be undertakings or obligations of either a Utility or an implementation contractor (including at times by and through subcontractors), whether or not expressly stated herein, and any express statement of an undertaking or obligation by a Utility or implementation contractor or any change thereto shall be without impact to a Customer's obligations hereunder.

3. **QUALIFYING PROJECTS AND MEASURES:** Qualifying projects include energy-efficiency measures identified as eligible for incentives in accordance with the rules of the Program and based on an energy survey of the building. Unless otherwise provided for by a Utility with respect to a Customer, qualifying projects will not include any energy-efficiency measures or energy-efficiency equipment or services purchased, contracted for, or installed prior to the project start date. If a Customer has electric and gas service by more than one utility, then, whenever possible, the Utility providing electric service will manage the project and distribute the incentive payments.

4. **PROGRAM APPLICATION/PARTICIPATION AGREEMENT:** By signing the Program Application above of which these Terms and Conditions form a part, a Customer authorizes building entry for purposes of accomplishing the objectives of the Program, including: conducting an energy survey of the building's common area and individual units, installing measures in individual units, installing any energy-efficiency measures subsequently agreed to consistent with the rules of the Program, inspecting pre-existing conditions and installed measures, and evaluating the performance of installed measures.

5. **INCENTIVE AMOUNTS:** The amounts of the incentives for which qualifying projects are eligible are set forth as part of the Program Manual. Decisions by any of the Utilities regarding incentives will be final. WITHOUT LMITATION ,THE UTILITIES RESERVE THE RIGHT TO CHANGE THE MEASURES AND INCENTIVES AT ANY TIME THROUGHOUT THE PROGRAM WITHOUT PRIOR NOTICE. The Utilities will honor all written commitments made to Customers prior to the date of any incentive changes, provided that project installations are fully completed according to the terms of the Notice to Proceed, and also as more particularly provided for by Section 12 below of these Terms and Conditions. Incentive amounts may be impacted negatively by any failure on the part of a Customer to meet the requirements of the Program, including, with limitation, the installation requirements provided for by Section 14 of these Terms and Conditions. Failure to comply with the rules of the Program may result in incentives being withheld. The availability of incentives is contingent on the availability of funding for the Program as provided by the New York State Public Service Commission (the "PSC").

6. **CUSTOMER WORK AUTHORIZATION AND PROJECT WORK PLAN:** Individual building objectives will be discussed with Customers by or on behalf of a Utility, including to provide information on alternatives, and to discuss process and create a scope of work and schedule. One or more installation subcontractors may be proposed by or on behalf of a Utility to complete the measure-installation work, or a Customer may select one or more contractors from a proposed list of participating contractors. A Customer also has the option to choose a contractor outside of a proposed list. To be included on the proposed list of a Utility, a contractor may be required to submit contractor-qualification forms, provide documentation of required insurance, agree to follow program guidelines and protocol (including program reporting and verification requirements), resolve any outstanding disciplinary actions resulting from past program participation, and otherwise be in good standing with the Utilities.

7. **IMPLEMENTATION OF WORK, PAYMENT OF INCENTIVES, INSPECTION REQUIREMENTS:** A Customer must pay its share of the cost for each measure to be installed at a time not later than the completion of installation of that measure. For projects that are not comprehensive projects, when it is confirmed that a project is satisfactorily completed, payment of the incentive to a Customer will be arranged, or, if authorized, directly to the installation contractor for that measure. A post-installation inspection to ensure satisfactory measure installation for purposes of the payment of incentives may be conducted at the sole discretion of a Utility. Incentive checks will be sent approximately six weeks after confirmation of satisfactory installation. For comprehensive projects, a mid-project payment may be offered. The mid-project payment may be available upon request by the customer for prescriptive measures that have been fully completed and inspected. With advance notice to a Customer, following completion of the project and in order to provide the Utilities with an opportunity to review the operation of the energy-efficiency measures for program evaluation purposes, the Customer agrees to cooperate with any effort by the Utilities or their contractors and subcontractors to make or to have made follow-up visits to Customer facilities, and the Customer shall provide building energy systems data, supporting documentation, and otherwise cooperate fully in support of this effort.

8. **CUSTOMER INFORMATION AND PROGRAM APPLICATION:** Customer agrees that Customer's information, including name, electric and/or gas consumption data, project information, and electric and/or gas energy savings may be provided to the Utilities' third-party evaluation contractor for purposes of program management, incentive payment, and program evaluation purposes, subject to the Utilities entering into an agreement with the evaluation contractor to maintain such Customer information confidential, and without regard to whether or not a Customer receives electric and gas service from more than one utility. Customer information may also be provided to the New York State Public Service Commission ("PSC") or New York State Department of Public Service Staff ("DPS Staff"). Any Customer information provided to the PSC or DPS Staff will be aggregated with information about other customers and not personally identifiable. Customer agrees and authorizes the utility's sharing of the participant-customer's information and/or

project-level information with DPS and NYSERDA, including its agents or authorized representatives, consistent with NYSERDA's PSC and statutorily authorized responsibilities, including, but not limited to supporting market development initiatives, and other evaluation and measurement activities. (For clarity, the term project level includes the information based on the scope of the project, including, but not limited to, aggregated and anonymized whole building, building or subsets of the project.) Related to comprehensive projects available under the Program, Customers interested in technical assistance (related to building energy audits and other related things) will also have their customer information and application shared with NYSERDA, the administrator and provider of such technical assistance offered through the Program.

9. **TAX LIABILITY and CREDITS:** Each Customer is responsible for any taxes that may be imposed on the customer as a result of measures installed under the Program. Each Customer must provide a valid Federal Tax Identification Number.

10. **DISPUTES:** The Utilities in each case will have sole discretion to decide on the final resolution of any issues related to the Program, including but not limited to eligibility or incentives.

11. **PROGRAM CHANGES:** The Utilities reserve the right to change, modify, or terminate the Program at any time without any liability, except as expressly stated herein. The Utilities will honor all written commitments made to Customers prior to the date of any change, modification or termination of the Program, provided that project installations are fully completed within the time committed to by Customers prior to such date of change.

12. **PROGRAM EXPIRATION:** The current cycle of the Program will expire on December 31, 2025, when funds are depleted, or when the Program is terminated, whichever comes first, or as may be otherwise determined by a Utility. As also provided for by Section 5 of these Terms and Conditions, incentives listed in the Program Manual may be changed at any time at the discretion of the Utilities. For non-comprehensive projects (see Program Manual for explanations of project type parameters) , all projects must be completed (all documents received, and project ready for post inspection) 12 months after the Notice to Proceed (for prescriptive, custom, and direct install projects) is issued or according to the terms of the Notice to Proceed. For comprehensive projects, incentive rates will be guaranteed if a project's Scope of Work is completed 2 years (24 months) after the Notice to Proceed is issued or according to the terms of the Notice to Proceed. If an extension is required, then a request must be made in writing to the Program with supporting detail and information, and acceptance or rejection of any request for extension will be determined solely by the Utility in any given case.

13. **DISCLAIMER:** No representations or warranties, expressed or implied, are made to any party in connection with the Program, including, without limitation, no guarantee that implementation of energy-efficiency measures or use of the equipment purchased or installed pursuant to the Program will result in energy-cost savings. Also, all Customers are advised to engage qualified engineers or other qualified consultants to evaluate the risks and benefits, if any, of such implementation and use on energy consumption, cost savings, or operation of Customer facilities. Nothing provided for by the Utilities in connection with the Program (including, without limitation, these Terms and Conditions, the Program Application, the Program Manual, and any other document or agreement related to the Program) is intended to create a reliance on the part of any Customer or contractor participating in the Program or in any incentive program sponsored by the Utilities; nothing is intended to take the place of the knowledge, expertise and obligation of any contractor retained by a Customer to perform work in connection with incentives provided for by the Utilities. No Utility is a party to any contract with a Customer for the performance of work in connection with incentives, nor is any Utility a party to any contract with any contractor or subcontractor for the performance of any work for or on behalf of a Customer in connection with incentives.

14. **INSTALLATION REQUIREMENTS:** All work must be in full compliance with the requirements of the Program Manual, applicable laws, rules, and regulations of the State of New York and any authorities having governmental and regulatory authority in the jurisdiction. It is recommended by the Utilities that work should be performed by subcontractors or participating contractors proposed by or on behalf of the Utilities for participation in the Program. For comprehensive projects, the time frame set forth in the Notice to Proceed will provide the date of completion for a project. For projects that are not comprehensive projects, as also provided for by Section 12, work must be completed within 12 months after the Notice to Proceed is issued. In the removal of old equipment, the customer confirms that, as a requirement of the Program, the owner or any subcontractor carrying out installation of measures under the Program shall remove and dispose of any and all equipment or materials that are replaced or removed in accordance with all applicable laws, rules, and regulations.

12 Contact Information and Application Submission Process

Submit completed applications and deliverables to the IC associated with the Program Administrator below.

If a project covers both electric and gas measures, the electric utility will act as the Program Administrator and its IC will oversee coordination of the project. The Program Administrator will manage all aspects of the project, even if they involve gas upgrades, and will coordinate with the customer's gas utility on behalf of the customer. All communication from the customer and/or contractor will be handled through the Program Administrator's IC.

DOWNSTATE (NYC AND WESTCHESTER)

Con Edison
To apply: Email Multifamily@coned.com for submission instructions
Questions? Email Multifamily@coned.com or call 1-844-316-4288

National Grid (downstate)
To apply: Email NationalGridLMI@willdan.com for submission instructions
Questions? Email NationalGridLMI@willdan.com or call 1-844-316-4288

UPSTATE

Central Hudson Gas & Electric
To apply: Email CentralHudsonMultifamily@Willdan.com for submission instructions
Questions? Email CentralHudsonMultifamily@Willdan.com or call 845-632-6722

National Grid (upstate)
To apply: Submit completed application here: mfngridny.com
Questions? Email Multifamily@nationalgrid.com or call 1-800-266-9989

National Fuel Gas Distribution Corporation
National Grid electric customers: See National Grid upstate instructions
NYSEG electric customers: See NYSEG instructions

NYSEG:
Submit completed application to MFEnergySavings@RISEEngineering.com
Questions? Email MFEnergySavings@RISEEngineering.com or call 800.444.5668

RG&E:
Submit completed application to MFEnergySavings@RISEEngineering.com
Questions? Email MFEnergySavings@RISEEngineering.com or call 800.444.5668

Orange & Rockland
To apply: Email ORUMultifamily@willdan.com for submission instructions
Questions? Email ORUMultifamily@willdan.com or call 844-316-4288

13 Appendix

13.1 Comprehensive Pathway Measure Points

Table 13.1: Comprehensive Pathway Measure Points

Measure Category	Measure	Points
Appliances	Dishwashers	5
Appliances	Dryers	5
Appliances	Refrigerators	5
Appliances	Induction Stoves	5
Appliances	Washers	5
Clean and tune	Boiler clean and tune	5
Clean and tune	Furnace clean and tune	5
Common area lighting	Bi-level fixtures - parking lot*	5
Common area lighting	Bi-level fixtures - stairwell, corridor, parking garage*	5
Common area lighting	Exterior fixture HID less than or equal to 100 W*	5
Common area lighting	Exterior fixture HID over 100 W*	5
Common area lighting	Exterior fixture non-HID fixture replacing screw-in/pin-based lamp*	5
Common area lighting	Interior fixtures*	5
Common area lighting	LED exit signs*	5
Common area lighting	Occupancy sensors*	5
Common area lighting	Relamp and reballasting, retrofit kits*	5
Common area lighting	Screw-in lamps*	5
Common area lighting	Tube lamps*	5
HVAC	Master venting**	5
HVAC	Orifice plates**	5
HVAC	Thermostatic radiator valves**	5
Insulation of heat and hot water	Boiler jacket***	5
In-unit	Faucet aerators†	5
In-unit	LED lamps	5
In-unit	Low-flow showerheads†	5
Air sealing	Air sealing package: door weather stripping, door sweep, door threshold/extender, door replacement, window repair, fixed louver partial cover, seal air leaks with foam sealant	10
Motors and drives	EC Motors	10
Motors and drives	Pumps – Hydronic Space Conditioning	10
Motors and drives	Pumps - Domestic Water Usage	10
Motors and drives	Motors	10
Motors and drives	VFD	10
HVAC	Air compressors	10
HVAC	Air handlers	10
HVAC	Boiler burner replacement	10
HVAC	Exhaust fans	10
HVAC	Steam traps	10
HVAC controls	BMS	10
HVAC controls	Domestic hot water controls	10

HVAC controls	EMS	10
HVAC controls	Smart thermostats	10
HVAC controls	Smart thermostatic radiator enclosure	10
Insulation of heat and hot water	Domestic hot water pipe insulation***	10
Insulation of heat and hot water	Steam or heating hot water pipe insulation***	10
Insulation of heat and hot water	Tank insulation***	10
Building shell	Window film	20
HVAC	Central air conditioning	20
HVAC	Chiller	20
HVAC	Cooling tower	20
HVAC	Economizer - dual enthalpy air-side	20
HVAC	Energy recovery ventilators	20
HVAC	Heat recovery ventilators	20
HVAC	Ventilation overhaul	20
HVAC	Packaged terminal air conditioner	20
HVAC	VRF cooling only	20
Motors and drives	Elevator modernization	20
Domestic hot water	Domestic hot water - indirect water heater	30
Domestic hot water	Domestic hot water - instantaneous domestic water heater	30
Domestic hot water	Domestic hot water - storage tank water heater	30
Building shell	Insulation – roof**	40
Building shell	Insulation – walls	40
Building shell	Window replacement	40
HVAC	Boiler replacement - condensing	40
HVAC	Boiler replacement - hot water	40
HVAC	Boiler replacement - steam	40
HVAC	Furnace replacement	40

*A maximum of 5 points can be achieved in the common area lighting category, regardless of how many common area lighting measures are installed. Note that all non-LED common area lights must be upgraded in order to qualify for points from this measure.
**These measures have a co- or pre-requisite for achieving associated points. See Section 7 for these requirements.
*** A maximum of 10 points can be achieved under the insulation of heat and hot water category, regardless of how many of these measures are installed.
†A maximum of 5 points can be achieved for in-unit gas measures (faucet aerators and/or low-flow showerheads), regardless if only one measure type is installed or both.

13.2 Comprehensive Projects – Minimum Installation Requirements

For comprehensive projects to receive the points allocated for each measure, each measure must meet two installation requirements:

Requirement 1: Meet the Building Installation Minimum
The Building Installation Minimum is how much of a measure upgrade should be present in a building after AMEEP project completion. Measures already upgraded prior to AMEEP count towards this minimum. The measures installed through AMEEP must result in the building reaching the Building Installation Minimum.

- Example: The building installation minimum requirement for in-unit direct install is 70% of apartments. If 30% of a building's apartments already had done in-unit direct installs, then the building will need to install this measure in an additional 40% of its apartments through AMEEP.

Requirement 2: Cannot Exceed the Previous Installation Maximum
The Previous Installation Maximum is how much of a measure could have been upgraded/installed prior to applying for AMEEP.

- Example: A building has already upgraded 30% of its residential units with in-unit direct install and wants to upgrade the remaining through AMEEP. This building would be eligible to receive points through the comprehensive path for this measure because the previously installed work meets the maximum of 30%. If a building has already upgraded 35% of its units, they would surpass the maximum of 30% and would not be able to receive points for this measure through the comprehensive path.

This document serves as a guideline. Final requirements per project may be adjusted based on the Program Administrators' discretion.

Table 13.2 Minimum Installation Requirements

Minimum Installation Requirements			
Measures	**Pts**	**1. Building Installation Minimum** (how much of a measure needs to be installed in a building overall)	**2. Previous Installation Maximum** (maximum amount of work that could have been done per measure prior to AMEEP)
Appliances (Refrigerators, washer/dryer, dishwashers)	5	100% of common area appliances AND 70% of apartment appliances	30% of all appliances in the building
Boiler/Furnace Clean & Tune	5	100% for central systems; 70% if boiler/furnace is in-unit	0% for central systems; 30% if boiler/furnace is in-unit

Minimum Installation Requirements			
Measures	**Pts**	**1. Building Installation Minimum** (how much of a measure needs to be installed in a building overall)	**2. Previous Installation Maximum** (maximum amount of work that could have been done per measure prior to AMEEP)
Common Area Lighting	5	No remaining fluorescent or incandescent lamps that are on for >1hr/day in all common areas.	40% of fixtures
In-Unit Direct Install	5	70% of apartments	30% of the building's total apartments
Orifice Plates	5	See Section 7 in Program Manual	30% of the total building
Air Sealing	10	A minimum of 40% of the floors must be part of the scope of work. Full air sealing scope of work must entail more than weather-stripping doors and installing door sweeps.	30% of the building common area. If in-unit is being done, then 30% of in-unit air sealing
Boiler Controls/EMS	10	See Section 7 in Program Manual	0%
Heating and hot water pipe insulation	10	100% of pipe in mechanical room and 100% of accessible piping in unconditioned spaces must be insulated. A minimum of 1 ft * the number of dwelling units must be identified in the pipe insulation survey.	40% of the linear feet of heating and hot water piping identified by the Pipe Insulation Survey
Master Air Venting	10	See Section 7 in Program Manual	30% of the total building
Motors	10	100% of three phase motors >1hp that run more than 100 hours/year must upgraded to NEMA premium	30%
Pumps	10	100 % of all motors/pumps of the specific building system being controlled per the Scope of Work (e.g., all booster pumps in the building)	30%
Smart Thermostats	10	70% of apartments	30% of the building's total apartments
Steam Traps	10	See Section 7 in Program Manual	30% of the total building
TRVs	10	See Section 7 in Program Manual	30% of the total building
Orifice Plates	10	See Section 7 in Program Manual	30% of the total building
Smart TREs	10	See Section 7 in Program Manual	30% of the total building

Minimum Installation Requirements			
Measures	**Pts**	**1. Building Installation Minimum** (how much of a measure needs to be installed in a building overall)	**2. Previous Installation Maximum** (maximum amount of work that could have been done per measure prior to AMEEP)
VFDs/VSDs	10	100% of all motors/pumps of the specific building system being controlled per the Scope of Work (e.g., all booster pumps in the building)	30%
Central Cooling	20	The system must serve at least 50% of the conditioned space in the building or 50% of the common area space.	0%
Elevator Modernization	20	100% of elevators in the building	25%
Energy/heat recovery ventilators	20	The ERV/HRV must serve 80% of the conditioned common area space.	0%
Ventilation Overhaul	20	1. Kitchens and bathrooms shall be continuously ventilated to a minimum of 25 CFM and 20 CFM, respectively. 2. Adjustable constant airflow regulators (CARs) are required to maintain balanced operation. CARs must be installed in 70% of apartment exhaust grills and 100% of common area supply and exhaust grills. 3. Seal all central ventilation duct work (e.g. aerosolized sealant product) to meet duct leakage limit of 5 CFM50 per register + 5 CFM50/floor leakage OR a maximum leakage of 10% of total design air flow for system, whichever is lower.	0%
Window film	20	100% of common area windows AND 70% of apartment windows	40% of the total building
Water Heater Replacements	30	For central systems, 100% of the main system that serves the apartments must be updated. For unitary systems, 70% of the apartment water heaters must be updated.	0% of central systems, except for systems of more than 1 unit where the requirement will be 30% of the central system 30% of in-unit water heaters

Minimum Installation Requirements			
Measures	**Pts**	**1. Building Installation Minimum** (how much of a measure needs to be installed in a building overall)	**2. Previous Installation Maximum** (maximum amount of work that could have been done per measure prior to AMEEP)
Boiler/Furnace Replacement	40	For central systems, 100% of the boiler or furnace that serves the apartments must be updated. For unitary systems, 70% of the apartment boilers/furnaces must be updated.	0% of central systems, except for systems of more than 1 unit where the requirement will be 30% of the central system 30% of in-unit boilers/furnaces
Roof Insulation	40	100% of the roof must be insulated.	30%
Wall Insulation	40	Must retrofit at least 50% of the wall separating conditioned and outdoor space as part of the AMEEP project	
Window Replacement	40	85% of common area windows and 70% of apartment windows	40% of the total building

13.3 Inspection Guidelines by Measure

This section delineates the inspection requirements for the following measures:

- Air Handler Units
- Air Sealing
- Air Vents
- Appliances (Refrigerators, Washers/Dryers)
- Blower Fan
- Boiler/Furnace Clean & Tune
- Boiler Controls/EMS
- Boiler/Furnace Replacement
- Air Conditioner – Central Unit Replacement (CAC)
- Chiller Replacement
- Circulator Pump
- Common Area Lighting
- Controls (Electric)
- Elevator Modernization
- Energy/Heat Recovery Ventilators
- Heating and Hot Water Pipe Insulation
- In-Unit Direct Install
- Motors
- Orifice Plates
- Roof/Attic/Wall Insulation
- Steam Traps
- TRVs
- Ventilation Overhaul
- Water Heater Replacement
- Window Replacement

Inspection outcomes are the following:

- Pass: Inspection findings align with the scope of work and the project may move to the next stage.
- Flag: Discrepancies found may result in a savings shortfall, but the impact will be small and may not be measurable.
- Fail: Discrepancies will result in a measurable shortfall.

Threshold percentages for Flags/Fails are measure dependent and are outlined in their designated sections.

Utilities reserve the right to require pre-inspections.

1. Air Handling Units (AHU)

Pre-Inspection

a. Record make and model information
b. Record equipment tag names
c. Record input rating and size
d. Record location of equipment
e. Record nameplate efficiency
f. Record preexisting equipment age

Post-Inspection

a. Record make and model information
b. Record equipment tag names
c. Record input rating and size
d. Record location of equipment
e. Record nameplate efficiency

2. Air Sealing

Pre-Inspection

a. Inspect all outside standard doors, hose bib/spigot, fire stand, Siamese connection, light boxes, and public windows.
    a. Compare site conditions to submitted building survey regarding which air sealing measures are being installed and their specifications (e.g., exterior door, windows, louvers) noting location, quantity and size/length, add in any inspected item not listed in initial scope of work
b. Area of the floor (can be building area divided by # of floors)

Post-inspection

a. Record measure specification (exterior door, windows, louvers) noting location, quantity and size/length,
b. Confirm that all air sealing materials used are appropriately adhered to the envelope surface and no visible air gaps remain. Excess material should be trimmed and discarded.
    a. Note – passive louver vents at the top of a staircase or a mechanical shaft should not be fully sealed. Confirm installer's documentation that remaining air opening complies with minimum code requirements.

3. Steam-Line Air Vents

Pre-Inspection

a. Compare site conditions to submitted building surveys regarding the pipe size and length of the steam supply main lines and risers
b. Compare site conditions to submitted building surveys regarding location and count of all air vents
c. Compare site conditions to submitted building surveys regarding make, model, and size of air vents
d. Compare site conditions to submitted building surveys regarding any air vents that are broken, incorrectly sized, in the wrong location, and/or have a plugged hole

Post-Inspection

a. Record location and count of all air vents
b. Record make, model, and size of air vents
c. Verify that air vents are installed in the vertical direction and at least 15" away from any pipe elbows
d. If installing multiple vents in the same location, verify that the vents are installed on trees branching off main line

a. Note – the combined venting capacity of all air vents installed on the tree should not exceed the capacity of the tree's tapping hole in the main line.

4. Appliances (Refrigerators, Washers/Dryers)

Pre-Inspection

a. Record make, model number, and count of all appliances.
b. Record location (for example, an apartment number) and serial number for each appliance inspected.
c. Record size/capacity

Post-Inspection

a. Record make, model number, and count of all appliances.
b. Record location (for example, an apartment number) and serial number for each appliance inspected.
c. Record size/capacity
d. Verify ENERGY STAR® label
e. Verify that the provider of the appliances certifies on their invoice that the units have been removed from service and disposed of in accordance with applicable regulations.

5. Blower Fan

Pre-Inspection and Post-Inspection

a. Count of all blower fans
b. Zoomed out photo of blower fan motor,
c. Legible nameplate photo (should contain HP, efficiency, manufacturer, model #, phase)
d. Will need this for at least 3 of each type of existing-replacement motor combo or 25% of each type of existing-replacement motor combo, whichever is greater
e. Number the outside equipment of the motor and the motor nameplate with a permanent marker before taking the photos (ex: Mark "1" on exterior and motor before taking the photos)
f. Confirm motor schedule/runtimes with building staff

6. Boiler/Furnace Clean & Tune

Pre-Inspection

a. Record make, model and capacity of boiler(s)
b. Verify combustion analysis tests at low-fire and high-fire
   Exception: for boilers/ furnaces with On/Off burners
c. Verify that combustion analyzer is calibrated within the past year

Pre-Inspection Checklist	Discrepancy status
Incorrect Unit Make/Model	Flag
Incorrect Unit Capacity	Fail
Incorrect Unit Efficiency	Flag
Did not conduct Combustion test in both low-fire and high-fire	Flag
Combustion analyzer calibration certificate. Combustion analyzer was not calibrated within the past year.	Flag

Post-Inspection

a. Record make, model and capacity of unit(s)
b. Verify combustion analysis test receipts in low-fire and high-fire
   Exception: for boilers with On/Off burners
c. Verify that combustion analyzer is calibrated within the past year, must provide calibration certificate
d. Verify that a high-fire limit potentiometer was installed on the burner
   Exceptions: non-modulating burners: including atmospheric, on/off, and 3 stage
e. Verify that the burner mode switch is left on AUTO

Post-Inspection Checklist	Discrepancy status
Incorrect Unit Make/Model	Flag
Incorrect Unit Capacity	Fail
Incorrect Unit Efficiency	Flag
Did not conduct Combustion test in both low-fire and high-fire	Flag
Combustion analyzer calibration certificate. Combustion analyzer was not calibrated within the past year.	Flag
High-fire limit potentiometer is not installed and burner mode switch is left in MANUAL instead of AUTO	Fail

7. Boiler Controls/EMS

Pre-inspection

a. Verify the total number of apartments **served by the boiler**, documentation must be provided via an Oasis screenshot or an email from the customer
b. The total number of proposed apartment sensors must be 25% (or greater) of the number of apartments served
c. Boiler input (MBH) must be from boiler nameplate, if nameplate is not available then the spec sheet input (MBH) can be used
d. Existing boiler controls must not contain: apartment sensors, network capability, temperature sensors for stack, DHW supply, heating water supply/return, or condensate (steam).

Pre-inspection checks	Discrepancy action	Notes
Boiler Make/Model	Flag	Photo required
Boiler Capacity	Fail	Photo required
Number of apartments	Discrepancy > 15% Flag	Proof must be provided using NYC ZoLa snapshot or picture of the mailbox. In case of discrepancy, a customer email.
Number of apartments	Building < 10 apts. Fail	Proof must be provided via customer email or Oasis screenshot
Number of proposed sensors	If < 25% of the # of apartments, Fail	
Existing EMS	If there is an existing EMS, Fail.	Photo required
Does the new EMS allow multiple boilers for staging capability?	Flag	

Post-inspection

a. Verify minimum number of sensors (i.e. 25% of the number of apartments, on a variety of floors, and including one in the apartment at the end of each branch line) are **online** in the EMS screenshot
b. Check for the 4 auxiliary sensors
    a. Temperature sensors for the stack
    b. Domestic hot water supply
    c. Outdoor weather
    d. Heating water supply or return ***or*** condensate (steam)
c. Condensing boilers must have a return water temperature setpoint documented from the boiler control panel or commissioning report
d. Verify the total number of apartments
e. Boiler input (MBH) must be from boiler nameplate or spec sheet
f. Must provide system training to the building staff along with a manual
g. New System must allow remote access or web-based monitoring

Post-inspection checks	Discrepancy action	Notes
Boiler Make/Model	Flag	Photo required
Boiler Capacity	Fail	Photo required
	Discrepancy > 15% Flag	Proof must be provided via customer email or Oasis screenshot
	Building < 10 apts. Fail	Proof must be provided via customer email or Oasis screenshot
Number of installed sensors	If < 25% of the # of apartments, Fail	
Was training provided to staff?	Flag	Email form customer
Was a manual left behind?	Flag	Photo or email from customer
Are minimum number of sensors online on BMS screenshot?	Flag	# of sensors > 25% of the apartment quantity should be shown online
DHW supply, OA sensor, stack sensor, heating water supply/return or condensate (steam) installed?	Flag	Labeled pictures of all 4 sensors must be provided

8. Boiler/Furnace Replacement

Pre-Inspection

a. Minimum three photos submitted from the contractor: building exterior with address, boiler/furnace wide-angle view, nameplate zoom-in. Alternative is on-site verification.
b. For on-site verification:
    a. Make and Model
    b. Equipment Tag Name
    c. Equipment Input capacity (if available): Btu/hr or MBH
    d. Is the equipment new? Yes or No
    e. Equipment Serial Number
    f. Quantity of units
    g. Location of equipment (Rooftop, basement, etc.)
    h. Is equipment electrically and mechanically connected? Yes or No
    i. Is equipment operating during the post-inspection? Yes or No
    j. Is equipment generally operational? Yes or No
    k. Photo of installed equipment, equipment nameplate, and burner nameplate.
    l. Equipment efficiency: Provide certificate from AHRI directory or efficiency curve from the manufacturer

Post-Inspection

a. Make and Model
b. Equipment Tag Name
c. Equipment Input capacity (if available): Btu/hr or MBH
d. Is the equipment new? Yes or No
e. Equipment Serial Number
f. Quantity of units
g. Location of equipment (Rooftop, basement, etc.)

h. Is equipment electrically and mechanically connected? Yes or No
i. Is equipment operating during the post-inspection? Yes or No
j. Is equipment generally operational? Yes or No
k. Photo of installed equipment, equipment nameplate, and burner nameplate.
l. Equipment efficiency: Provide certificate from AHRI directory or efficiency curve from the manufacturer
m. Condensing boilers must have a return temperature sensor
n. Condensing boilers temperature difference between return and supply line should be at a minimum of 20 degrees. The maximum return temperature should be no higher than 140.

9. Air Conditioner – Central Unit Replacement (CAC)

Pre-Inspection

a. Record make and model information
b. Record equipment tag names
c. Record input rating and size
d. Record location of equipment
e. Record nameplate efficiency

Post-Inspection

a. Record make and model information
b. Record equipment tag names
c. Record input rating and size
d. Record location of equipment
e. Record nameplate efficiency

10. Chiller Replacement

Pre-Inspection

a. Record make and model information
b. Record equipment tag names
c. Record input rating and size
d. Record location of equipment
e. Record nameplate efficiency

Post-Inspection

a. Record make and model information
b. Record equipment tag names
c. Record input rating and size
d. Record location of equipment
e. Record nameplate efficiency

11. Circulator Pump

Pre-Inspection and Post-Inspection

a. Count of all motors
b. Zoomed out and photo motor,
c. Legible nameplate photo (should contain HP, efficiency, manufacturer, model #, phase)
d. Will need this for at least 3 of each type of existing-replacement motor combo or 25% of each type of existing-replacement motor combo, whichever is greater
e. Number the outside equipment of the motor and the motor nameplate with a permanent marker before taking the photos (ex: Mark “1” on exterior and motor before taking the photos)
f. Confirm motor schedule/runtimes with building staff

12. Common Area Lighting

Pre-Inspection & Post-Inspection

a. Type of fixture/lamp/ballast
b. Location identifier for each fixture/lamp
c. Quantities
d. Wattage
e. Hours of use by areas
f. Space type (heated, cooled, interior, exterior, etc.)
g. Lighting controls for each area (e.g., Occupancy sensors. See Controls (Electric) below)
h. Confirm the sector hours
i. Spec sheets with DLC/Energy Star screenshots
j. Fixture must be permanently mounted or hard-wired

Pre-Inspection checks	Discrepancy action
Quantities line by line	Fail for >15% discrepancy
Fixture type on tool must match what is observed on site, photo, or video	Fail for > 15% discrepancy in wattage
Building Address	Flag
Facility Type	Flag

Post-Inspection checks	Discrepancy action
Quantities line by line	Fail for >15% discrepancy
Fixture type on tool must match what is observed on site, photos, or video	Fail for> 15% discrepancy in wattage
Building address	Flag
Facility type	Flag
Spec sheets	Flag
DLC and ES rating	Flag

13. Controls (Electric)

Pre-Inspection

a. Record location of where control will be
b. Record if sensor is for interior or exterior
c. Record fixture to be controlled by sensor
d. Record wattage of fixture to be control by sensor

Post-Inspection

a. Record location of control
b. Record type of control
c. Record if sensor is for interior or exterior
d. Verify fixture to be controlled by sensor
e. Verify wattage of fixture to be control by sensor

14. Elevator Modernization

Pre-Inspection

a. Elevator Manufacturer and Model
b. Total number of passengers' cars/ Freight cars
c. Maximum allowable capacity (Lbs) and (Ft/min
d. Overweight Fraction (counterbalance/car capacity)
e. Number of floors served by each elevator
f. Operating hours of each elevator
g. Geared or Gearless machine
h. If Motor generator set, are timer controls present (Y/N)
i. Motor Horsepower (HP), New motor type (AC, DC)
j. Motor efficiency (%), Motor # of poles, Motor Enclosure (ODP, TEFC)
k. Elevator drive type (Motor-Generator Set, SCR-DC, VVVF-Regen, PWM-DC, etc.)
l. Drive efficiency (SCR6=0.85, SCR12=0.90, PWM=0.94, VVVF= 0.951) (%)
m. Regenerative or non-regenerative drive
n. Manufacturer, model number, and serial number of each drive
o. New motor type (AC, DC)
p. Type of elevator controls (destination dispatch, speed control, lighting control, HVAC fan shut off) or None
q. Photo of each elevator motor nameplate, each drive nameplate, each controller, and its nameplate

Post-Inspection

a. Elevator Manufacturer and Model
b. Total number of passengers' cars/ Freight cars
c. Maximum allowable capacity (Lbs) and (Ft/min
d. Overweight Fraction (counterbalance/car capacity)
e. Number of floors served by each elevator
f. Operating hours of each elevator
g. Geared or Gearless machine
h. Motor Horsepower (HP), New motor type (AC, DC)
i. Motor efficiency (%), Motor # of poles, Motor Enclosure (ODP, TEFC)
j. Elevator drive type (SCR-DC, VVVF-Regen, PWM-DC, etc.)
k. Drive efficiency (SCR6=0.85, SCR12=0.90, PWM=0.94, VVVF= 0.951) (%)
l. Regenerative or non-regenerative drive
m. Manufacturer, model number, and serial number of each drive
n. New motor type (AC, DC)
o. Type of elevator controls (destination dispatch, speed control, lighting control, HVAC fan shut off) or None
p. Photo of each elevator motor nameplate, each drive nameplate, each controller, and its nameplate

15. Energy/Heat Recovery Ventilators

Pre-Inspection

a. Confirm there is no existing ERV/HRV
b. Verify that facility operation hours, facility type, description of existing load profile, and AHRI certificate match what was submitted
c. Record entering and leaving air temperatures for both intake and exhaust air streams
d. Verify existing central heating and cooling systems match what was submitted

Post-Inspection

a. Record make and model
b. Record entering and leaving air temperatures for both intake and exhaust air streams
c. Calculate heat recovery efficiency and compare to manufacturer's rating

16. Heating and Hot Water Pipe Insulation

Pre-Inspection

a. Record make and model of heating boiler
b. Record capacity of heating boiler
c. Record heating boiler efficiency
d. For virtual inspections, make sure to include boiler's information (photos of name plate) and wide angled photo of the front of the boiler to show if DHW is heated by the space heating boiler via a heat exchanger. (Determines if water heater efficiency or boiler efficiency should be used for DWH line)
e. For virtual inspections, take photos/videos of piping along with location tags
f. Verify length of the pipes using Laser distance meter. Each pipe section must be entered as a separate line item
g. Digital caliper for confirming pipe diameter and insulation thickness
h. Take photos/videos of piping along with location tags
i. Verify the pipe application (DHW, steam, hot water)
j. Verify that existing pipe is bare and in unconditioned space

Post-Inspection

a. Record make and model of heating boiler
b. Record capacity of heating boiler
c. Record heating boiler efficiency
d. For virtual inspections, make sure to include boiler's information (photos of name plate) and wide angled photo of the front of the boiler to show if DHW is heated by the space heating boiler via a heat exchanger. (Determines if water heater efficiency or boiler efficiency should be used for DWH line)
e. For virtual inspections, take photos/videos of piping along with location tags
f. Verify length of the pipes using Laser distance meter. Each pipe section must be entered as a separate line item
g. Digital caliper for confirming pipe diameter and insulation thickness
h. Take photos/videos of piping along with location tags
i. Verify the pipe application (DHW, steam, hot water)
j. New insulation thickness must match tool and meet minimum thickness specified in NYCECC

Pre-checks	Discrepancy action	Notes
Existing pipes must be bare	Flag if insulated pipe lengths are included	Deteriorating insulation is acceptable
Existing pipe must be in an unconditioned space	Flag	
Existing insulated pipe replacement not eligible	Fail	
Check for pipe lengths. At least 10% of the insulated sections must be surveyed.	If pipe total pipe length discrepancy is >15% of observed pipe lengths; Fail	
Pipe diameter	Flag	Pipe must be less than 8 inches in diameter.
Pipe media	Flag	
Check if basic information on the boiler plant has been collected by the surveyor	Flag	
New construction projects are not eligible for pipe insulation incentives, this includes boiler replacement projects	Fail	

Post-checks	Discrepancy action	Notes
Check if all the piping included in the pre-inspection is insulated.	Flag	Total piping length in the post cannot exceed the pre inspection piping length
Insulation thickness	Flag	Must meet NYCEC minimum
At least 10% of the insulated sections must be surveyed/lengths must be verified		

17. In-Unit Direct Install (Lighting, Showerheads, Bathroom and Kitchen Aerators)

Pre-Inspection & Post-Inspection

a. Bag & Tag review + Customer/Tenant Signoff Sheet (if required by Utility)

If Utility does not require Bag & Tag review, then the following guidelines are required:

Aerators and Showerheads

Pre-Inspection

a. Record location, type, and quantity of inspected devices.
b. Record rated GPM of inspected devices.

Post-Inspection

a. Record location, type, and quantity of inspected devices.
b. Record rated GPM of inspected devices.

Lighting

Pre-Inspection

a. Record existing type of lamp

b. Record quantities, locations, types, and wattages for inspected lamps and fixtures.

Post-Inspection

a. Record make and model of lamps and fixtures
b. Record quantities, locations, types, and wattages for inspected lamps and fixtures.
c. Verify ENERGY STAR® label.

18. Motors, Pumps, and Drives

Pre-Inspection and Post-Inspection

a. Count of all motors/pumps
b. Zoomed out photo of motor/pump,
c. Legible nameplate photo (should contain HP, efficiency, manufacturer, model #, phase)
d. Will need this for at least 3 of each type of existing-replacement motor/pump combo or 25% of each type of existing-replacement motor combo, whichever is greater
e. Number the outside equipment of the motor/pump & drive and the motor/pump & drive nameplates with a permanent marker before taking the photos (ex: Mark “1” on exterior, motor/pump, and drive before taking the photos)
f. Confirm motor schedule/runtimes with building staff. Proposed motors >1 hp that run for 100+ hours/yr must meet NEMA premium efficiency.
g. Speed of operation of each motor (especially where a speed reduction or VFDs are implemented).
    a. Videos shall be taken if the speed is varying rapidly and the inspector finds it hard to capture the speed on photos.

19. Orifice Plates

Pre-Inspection

a. Radiator tags or identifier
b. Boiler nameplate pictures showing make and model
c. Boiler pressure to be documented with photograph
d. Quantity of radiators in the building
e. Confirmation of 1-pipe steam vs 2-pipe steam based on the existence of a condensate return system
f. Inspection must cover at least 10% of the apartments analyzed by the contractor.
g. Confirm that radiator size and room size matches the survey for apartment lines
h. Record apartment space temperatures (for building with an EMS – it is preferred to examine the space temperature trend log data for documenting existing overheating conditions).

Post-Inspection

a. Radiator tags or identifier
b. Boiler nameplate pictures showing make and model
c. Boiler pressure to be documented with photograph
d. Quantity of radiators in the building
e. Confirmation of 1-pipe steam vs 2-pipe steam based on the existence of a condensate return system
f. Inspection must cover at least 10% of the apartments analyzed by the contractor
g. Confirm that radiator size and room size matches the survey for apartment lines
h. Record apartment space temperatures (for building with an EMS – it is preferred to examine the space temperature trend log data for documenting the improved balanced heating conditions).
i. Bag & Tag review (optional)

20. Roof/Attic/Wall Insulation

Pre-Inspection & Post-Inspection

a. The inspector will conduct a full survey of the top floor common areas to identify any potential leaks and will also inquire the same with the super regarding leaks in the apartments
b. The inspector will check for conditions of the entrance to the roof to ensure there is no air leakage
c. Each unique roof/cavity assembly shall be inspected. For example, if unique sections of the building are constructed differently, all distinct areas must be inspected. If insulation specifications are different for different areas, each different specification shall be inspected
    a. For pre-inspection, the inspector will conduct a full survey of the roof, visually inspecting it as well as with a thermal camera. They will identify & record potential leaks, irregularities, and damage to the roof for the contractor to fix
    b. For post-inspection, the inspector will conduct a full survey of the roof, visually inspecting it as well as with a thermal camera. They verify the condition of the roof by checking for any damages that were not fixed, identifying passive insulation vents and the overall integrity of the insulation work completed
d. Sampling may be used to inspect roof/cavity assemblies that are consistent throughout large sections of the building. At each stage of the inspection process, a minimum of 20% of total cavity area must be inspected for each unique cavity type. Problems with installations found during random inspections will require an expanded sample
e. Record insulation type, thickness and, R-value for each area inspected for post-inspection
f. Photograph depth of blown insulation using tape measure or other depth measurement, minimum one photograph per inspected attic
g. Photograph roof deck/cavity insulation before it is covered
    a. For pre-inspection, the inspector will check roof cavity documentation provided by the contractor, to ensure that the roof cavity is empty aka does not have any existing insulation
    b. For post-inspection, the inspector will check roof cavity documentation provided by the PC, to ensure that the roof cavity is now insulated and verify the depth of the insulation to identify the post completion conditions on the tool
h. Cut sheet showing the manufacturer, model number, and relevant energy rating information must be provided for each installed product. The model number that was installed must be clearly marked on the cut sheet
i. Invoice showing amount of insulation purchased/installed
j. The inspector will document the building address, boiler & HVAC information

Pre-Check	Discrepancy action	Notes
Boiler type and capacity matches the scope	Flag	Update boiler capacity in the tool
HVAC SEER & EER values match the scope	Flag	Please provide documents to confirm and update the SEER & EER values on the scope. The default values for window units is 9.9 & 11.

Is the project scope for roof insulation or wall insulation?	Flag	
The building roof sq ft matches the scope of work	Flag	If not, the inspectors will update their finding in the inspection notes.
Did the inspector observe air leakage or compromised bulkheads on the top floor/	Flag	PC must fix the flags during install.
Document any cracks, deformities on roof	Flag	
Are there any leaks or irregularities on the roof?	Flag	PC must fix the flags during install.
Does the PC provide cavity documentation shows insulation?	Fail	If the building has existing insulation, the building is not eligible for incentives. In case the existing insulation is worn out substantially, the project eligibility will be determined on a per case basis

Post Check	Discrepancy actions	Notes
Did the PC fix the Air Leak issues found during Pre inspection?	Fail	PC must fix the flags for project approval
Did the PC upload Roof insulation documentation in box/Smart?	Flag	PC must provide pictures of the filled roof cavity.
Final R value matches the height of filled insulation compared to the cut sheets	Flag	Update the final R value in the tool
Did the PC fix the cracks/deformities or water leak issues found during Pre inspection?	Fail	PC must fix the flags for project approval
Are the passive vents installed and sealed?	Fail	PC must fix the flags for project approval

21. Steam Traps

Pre-Inspection

a. Steam Trap Survey
b. Steam Trap Maintenance report
c. Boiler's information (photos of nameplate)
d. Latest boiler efficiency test report result
e. Does the Steam Condensate go to a condensate tank or is it handled differently and how?
f. Does the boiler use oil and for what % of the time?
g. Photos of failed/repaired steam trap depending on the inspection type
h. Steam Trap inlet pipe diameter information
i. Steam Trap Type, Manufacturer, & Model information
j. The contractor must perform a baseline survey of the steam traps intended to be repaired/replaced.

k. Trap testing involves functionally determining the trap operating condition - working, failed-open, or plugged. This determination should be made using an ultrasonic meter and/or infrared temperature meter.
    i. Survey involves collecting basic information on the steam boiler plant, condensate return system, and steam trap testing.
    ii. Trap testing must be performed during the heating season (Oct. 1 - May 31) and when the outdoor temperature is less than 55° F.
    iii. Survey must be documented in the Con Edison Steam Trap Survey Tool. All required data fields must be filled in.
        - Common area traps - 100% of the traps covered under the project scope must be itemized and tested. A minimum of 25% of the sample tested common area traps must be inspected. Apartment traps - 100% of the traps covered under the project scope must be itemized but only 25% of the sample tested apartment traps must be inspected.
        - Surveyors must place a numbered tag on each trap they test and document this number in the Survey Tool.

Post-Inspection

a. Steam Trap Survey
b. Latest boiler efficiency test report result
c. Photos of repaired/replaced steam trap depending on the inspection type
d. Steam Trap inlet pipe diameter information

22. Smart TREs

Pre-Inspection

l. Radiator Survey
    i. Boiler’s information (photos of nameplate)
    ii. Building name
    iii. Site address
    iv. Floor number
    v. Apartment unit number
    vi. Space name (living room, bedroom, etc.)
    vii. Radiator type
        - 100% of the radiators covered under the project scope must be itemized. Common area and apartment radiator testing will rely on a 90% confidence, 10% margin of error formula to derive a statistically significant sample size for testing based on the radiator quantities by type for common areas and apartment.

Post-Inspection

e. At least one photo of each type of TRE installation to confirm installation
f. Inspection must cover at least 10% of the upgraded radiators confirming TRE installations

23. TRVs

Pre-Inspection

a. Radiator tags or identifier.
b. Boiler nameplate pictures showing make and model.
c. Boiler pressure to be documented with photograph.
d. Quantity of radiators in the building
e. Inspection must cover at least 10% of the apartments' radiators confirming there are no TRVs.

Post-Inspection

a. Radiator tags or identifier.
b. Boiler nameplate pictures showing make and model.
c. Boiler pressure to be documented with photograph.
d. Quantity of radiators in the building
e. Inspection must cover at least 10% of the apartments' radiators confirming TRV installations. Bag & Tag review (optional)

24. Ventilation Overhaul

Pre-Inspection

a. Record exhaust fan make, model and count, and what each fan serves
b. Record motor make and model
c. Record motor HP, efficiency, and speed (to be determined on a case-by-case basis by the program team if this is rated speed or actual speed)
d. Record controls and operating schedule
e. Check the air registers in a sample of apartment and common spaces to measure the baseline CFM and verify no existing Constant Airflow Regulators.

Post-Inspection

a. Record exhaust fan make, model and count
b. Record motor make and model
c. Verify motor HP, efficiency speed, and CFM.
d. Inspect a sample of the air registers in the apartments and common spaces to confirm the installation of a CAR and measure the new CFM (must exceed minimum code requirements).

25. Water Heater Replacement

Pre-Inspection

a. Minimum three photos submitted from the contractor: building exterior with address, water heater wide-angle view, nameplate zoom-in. Alternative is on-site verification.

Post-Inspection

a. Record make, model, equipment tags (if applicable) and count
b. Record water heater type
c. Record capacity and tank volume
d. Record location of equipment
e. Record efficiency (UEF or Et)

26. Window Replacement

Pre-Inspection

a. Confirm quantities and locations
b. Confirm energy performance specifications (window type, frame type, U-value, gas fill, SHGC, low-e type, and location) for inspected windows
c. The inspector will document the building address, boiler & HVAC information

Post-Inspection

a. Confirm quantities and locations of new windows inspected
b. Confirm energy performance specifications (window type, frame type, U-value, gas fill, SHGC, low-e type, and location) for inspected windows
c. Verify copies of NFRC or other relevant rating agency's label(s). For large jobs, provide certificates from NFRC or other relevant rating agency, which should be on file
d. The inspector will document the building address, boiler & HVAC information

13.4 Version History and Description of Revisions

Date Updated	Version	Topic	Description of Change	Section
1/15/2025	4.0	Acceptable Documentation for Affordable Housing Eligibility Table	Added affordable housing eligibility proxy for NYC homeless services agencies	2
1/15/2025	4.0	Large Projects	Clarified Con Edison considers large projects to be 500+ units	2
1/15/2025	4.0	Technical Requirements	Added language that comprehensive projects with a qualifying audit may be able to waive the pre-inspection requirement as determined by the project Program Administrator	3
1/15/2025	4.0	Non-Comprehensive Pathway Requirements	Provided additional detail for defining custom projects and methodologies for custom measure calculations	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Lowered downstate lighting incentive rates for LED lighting, exterior new fixtures, and lighting controls	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Lowered downstate non-comprehensive electric custom incentive rate	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Adjusted the measures highlighted in the electric HVAC Measures table to display most commonly installed measures	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Clarified that EMS projects in buildings with 250+ units or buildings with condensing boilers may apply for custom incentive rate	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Roof Insulation was renamed to Attic Insulation	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Added two new above deck roof insulation measures: Spray Polyurethane Foam (SPF) and Rigid Board Foam	3
1/15/2025	4.0	Non-Comprehensive Incentive Structure	Lowered Con Edison Window Replacement incentive from $240 per MMBtu to $180 per MMBtu	3
1/15/2025	4.0	Limited Time Offer (LTO)	Removed non-comprehensive and comprehensive Limited Time Offer (LTO) details from the Program Manual. LTO details can now be found in separate LTO documents on the AMEEP resource page.	N/A
1/15/2025	4.0	Comprehensive and Non-Comprehensive Pathway Process	Added a National Grid-only requirement of submitting a W-9 for the utility account holder for all AMEEP projects	4
1/15/2025	4.0	Comprehensive Pathway Process	Added requirement for post-inspection flags or fails to be cured within 30 days of notification, including consequences if timeline is not met	4
1/15/2025	4.0	Non-Comprehensive Pathway Process	Clarified language on the Notice to Proceed and added requirement for post-inspection flags or fails to be cured within 30 days of notification, including consequences if timeline is not met	4
1/15/2025	4.0	Quality Assurance and Quality Control (QAQC)	Added new QAQC section outlining potential for additional QAQC activities on projects	4
1/15/2025	4.0	Eligible Measures and Technical Requirements	Common Area Lighting – Added footnote archiving eligibility of existing Energy Star rated lighting and associated equipment	7
1/15/2025	4.0	Eligible Measures and Technical Requirements	Specified Stove Appliance measure as Induction Cooktop measure; added specific technical requirements	7
1/15/2025	4.0	Eligible Measures and Technical Requirements	Renamed Blower Fan with Electronically Commuted (EC) Motor Furnace Distribution measure to EC Motors measure	7
1/15/2025	4.0	Eligible Measures and Technical Requirements	Updated documentation, equipment and/or installation requirements for the following measures: Variable Frequency Drive (VFD), Energy Management System (EMS), Master Air Venting, Orifice Place, Thermostatic Radiator Valve (TRV), Smart Thermostatic Radiator Enclosure (Smart TREs), Faucet Aerators and Low-Flow Showerheads, Attic Insulation (formally roof), and Wall Insulation	7
1/15/2025	4.0	Eligible Measures and Technical Requirements	Added technical requirements for new Above Deck Roof Insulation measures	7

Date Updated	Version	Topic	Description of Change	Section
1/15/2025	4.0	Comprehensive Projects – Minimum Installation Requirements	Updated minimum installation requirements for Air Sealing. Added minimum installation requirements for Smart Thermostats, Orifice Plates, and Smart TREs	13
1/15/2025	4.0	Inspection Guidelines by Measure	Updated inspection guidelines for the following measures: Air Handling Units; Air Sealing; Boiler/Furnace Clean & Tune; Boiler Controls/EMS; Boiler/Furnace Replacement; Air Conditioner – CAC; Chiller Replacement; Common Area Lighting; Elevator Modernization; Heating and Hot Water Pipe Insulation; Motors, Pumps, and Drives; Orifice Plates; Roof/Attic Insulation; TRVs; Window Replacement	13
7/31/2024	3.3	Comprehensive Pathway Process	Added that customers have up to 90 days after signing the PIOL to receive the Notice to Proceed	4
7/31/2024	3.3	Large Projects	Lowered threshold for large projects from 500 dwelling units to 150 units	2
7/31/2024	3.3	Technical Assistance	Removed comprehensive audit requirement	3
7/31/2024	3.3	Project Eligibility	Added clarification that projects with new or existing Cogeneration and Combined Heat and Power (CHP) Plants are subject to pre-approval by the Program Administrator	3
7/31/2024	3.3	Comprehensive Incentive Structure	Added National Grid Downstate (KEDNY & KEDLI) gas limited time offer (LTO)	3
7/31/2024	3.3	Comprehensive Incentive Cap	Lowered incentive cap, with the exception of Con Edison where original incentive caps remain	3
7/31/2024	3.3	Non-Comprehensive Incentive Structure	Changed downstate air sealing measure incentives to $5/therm	3
7/31/2024	3.3	Comprehensive Pathway Process	Modified comprehensive process to reflect removal of the comprehensive audit requirement	4
7/31/2024	3.3	Building Envelope Measures	Added detail for roof and wall insulation requirements	7
7/31/2024	3.3	Building Envelope Measures	Added detail for air sealing requirements	7
7/31/2024	3.3	Eligible Measures and Technical Requirements	Added general measure installation compliance language	7
7/31/2024	3.3	Fuel Switching – Custom (Con Edison Only)	Clarified measure eligibility	7
4/30/2024	3.2	Incentive Structure	Changed DNY comprehensive LTO deadline to May 31, 2024. Removed roof insulation and early installation adder from offer. Lowered window replacement and wall insulation LTO incentive rate.	3
4/30/2024	3.2	Incentive Structure	Changed the upstate roof insulation incentive to $2/sq ft	3
4/30/2024	3.2	Incentive Caps	Added National Grid DNY project level caps for non-comprehensive roof insulation projects	3
4/30/2024	3.2	Incentive Structure	Changed downstate wall insulation incentive rate to $180 per MMBtu	3
4/30/2024	3.2	Incentive Structure	Changed National Grid DNY window replacement incentive rate to $180 per MMBtu	3
4/30/2024	3.2	Incentive Structure	Added a Con Edison only Limited Time Offer incentive rate for non-comprehensive wall insulation	3
4/30/2024	3.2	M&V	Addition of Measurement & Verification Section 3.3	3
4/30/2024	3.2	Eligible Measures and Technical Requirements	Refined requirements for steam trap survey sample size and steam trap replacements	7
4/30/2024	3.2	Inspection Guideline by Measure	Clarified steam trap survey sample size and removed metering temperature requirement of higher than 185°F	13

Date Updated	Version	Topic	Description of Change	Section
1/16/2024	3.0	Minimum Installation Requirements	Added requirements for pumps and additional requirements for pipe insulation. Sorted table by point allocation and alphabetically	13
1/16/2024	3.0	Inspection Guidelines by Measure	Refined requirements for steam trap post-inspections	13
1/16/2024	3.0	Version History	Moved full program version history table to the appendix. Current version changes are reflected at the beginning of the Program Manual	13
10/30/2023	2.3	Comprehensive Pathway Requirements	Decreased points for the following measures: boiler jacket, orifice plates, master venting, thermostatic radiator valves, EMS, smart thermostatic radiator enclosure, pipe insulation, and tank insulation	3 and 13
10/30/2023	2.3	Program Eligibility	Clarified comprehensive incentive setting for large projects	2
10/30/2023	2.3	Incentive Cap	Adjusted incentive cap so that comprehensive and non-comprehensive project incentives will be capped at 85% of the total project cost for eligible measures or at one million dollars, whichever is lower	3
10/30/2023	2.3	Incentive Structure	Clarified incentive details for EMS, steam traps, and 2-Pipe Steam Retro-Commissioning. Added incentive amount for boiler clean and tune projects with over 3 boilers for downstate; clarified incentive for boiler clean and tune and furnace clean and tune for upstate	3
10/30/2023	2.3	Technical Assistance Requirements	Clarified that the audits completed by Energy Service Providers should meet FlexTech program requirements	3
10/30/2023	2.3	Technical Requirements	Clarified requirements for EC motors, EMS, master air venting, orifice plates, TRV, and window replacement	7
10/30/2023	2.3	Secondary Steam and Oil – Con Edison Only	Added secondary steam and oil incentives for projects in Con Edison territory	7
7/10/2023	2.2	Customer Eligibility	Clarified gut rehab eligibility	2
7/10/2023	2.2	Non-Comprehensive Incentives	Added description about how enhanced non-comprehensive incentives may be offered at times by individual or a group of Program Administrators	3
7/10/2023	2.2	Upstate Non-Comprehensive Electric Incentives (excluding O&R)	Adjusted the Upstate incentives for interior and bi-level fixtures so that the incentives provided are either the rate per fixture or 70% of the installed cost, whichever is higher	3
7/10/2023	2.2	Non-Comprehensive Gas Incentives	Clarified that Boiler Clean & Tune must be performed on boilers for space heating purposes	3
7/10/2023	2.2	Technical Requirements	Clarified or added requirements for lamps and fixtures, lighting controls, PTACs, boiler/furnace replacement, domestic hot water heater replacement, EMS, roof insulation, custom insulation, and rooftop exhaust fan. Added definition for custom motor replacement	7
7/10/2023	2.2	Inspection Guidelines	Clarified that boiler inspection guidelines also apply for furnaces	13
4/1/2023	2.1	Upstate Non-Comprehensive Incentives	Changed incentive rates for exterior lighting for Upstate Non-Comprehensive incentives	3
4/1/2023	2.1	Gas Incentives	Added incentive rate for furnace clean & tune for Upstate Non-Comprehensive incentives	3
4/1/2023	2.1	Technical Requirements	Adjusted formatting for plug-in (appliance) measures; clarified definition for pumps; added definitions for domestic hot water controls, smart thermostat, smart thermostatic radiator enclosure, and furnace clean and tune	7
4/1/2023	2.1	Comprehensive Pathway Measure Points	Clarified that pumps for hydronic space conditioning and pumps for domestic water usage each get 10 points	13
4/1/2023	2.1	Comprehensive Pathway Measure Points	Remove Cool Roof as a measure	13
4/1/2023	2.1	Minimum Installation Requirements	Adjusted requirements for air sealing, VFDs, and central cooling. Removed Cool Roof requirements	13

Date Updated	Version	Topic	Description of Change	Section
4/1/2023	2.1	Inspection Guidelines	Added inspection guidelines for furnace clean & tune and furnace replacement	13
1/1/2023	2.0	Customer Eligibility	Removed requirement that AMEEP customers pay into the SBC on their electric bill in order to receive technical assistance through NYSERDA FlexTech	2
1/1/2023	2.0	Upstate Non-Comprehensive Incentives	Added a new incentive for furnaces in Upstate NY non-comprehensive projects	3
1/1/2023	2.0	Terms and Conditions	Updated terms and conditions for the 2023 program year	11
10/17/2022	1.5	Program Eligibility	Clarification that applicants are not permitted to apply for both comprehensive and non-comprehensive projects at the same time for the same building	2
10/17/2022	1.5	Large Projects	Added note that additional requirements may need to be met for projects over 500 units	2
10/17/2022	1.5	Scope Changes	Included additional requirements when project scopes change	3
10/17/2022	1.5	Upstate Non-Comprehensive Incentives	Added incentive rate for interior fixtures (previously was “N/A”)	3
10/17/2022	1.5	Downstate Non-Comprehensive Incentives	Changed incentive rates for boiler replacements, boiler clean and tune, pipe insulation, and Energy Management Systems	3
10/17/2022	1.5	Comprehensive Pathway Process	Added clarifications to Step 5 (“Finalize the Scope of Work”), Step 7 (“Design New Systems, Hire Contractors, Submit Cut Sheets and Savings Calculations”), Step 8 (“Pre-Inspection & Initial Engineering Review”), and Step 9 (“Receive a Notice to Proceed”)	4
10/17/2022	1.5	Non-Comprehensive Pathway Process	Added clarification to Step 4 (“Pre-Inspection & Initial Engineering Review”)	4
10/17/2022	1.5	Technical Requirements	Added requirements for Air Handling Units and made edits to Energy Management Systems and Roof and Wall Insulation	7
10/17/2022	1.5	Minimum Installation Requirements	Changed measure name from “Balancing Ventilation, distribution and controls” to “Ventilation Overhaul	13
10/17/2022	1.5	Inspection Guidelines by Measure	Added guidelines per measure for pre- and post-inspection	13
7/1/2022	1.4	Campus-Style Projects	Added new section on campus-style project eligibility	2
7/1/2022	1.4	Point Allocation for Multiple-to-1 or 1-to-Multiple Replacement Measures	Added new section to clarify point allocation rules for multiple-to-1 replacement measures, and vice versa	3
7/1/2022	1.4	Technical Assistance Requirements	Clarified energy savings calculations and modeling requirements, including specifying that interactive effects need to be accounted for in models or calculations.	3
7/1/2022	1.4	Campus-Style Project Requirements	Outlined requirements for campus-style projects in the comprehensive pathway	3
7/1/2022	1.4	Non-Comprehensive Gas Incentives	Added clarification that projects replacing 1000+ steam traps will receive the custom incentive rate	3
7/1/2022	1.4	Technical Requirements	Clarification on measure guidelines for the following: Lamps and Fixtures, Boiler Replacement, Water Heater Replacement and Energy Management Systems	7
7/1/2022	1.4	Technical Requirements	Created new measure guidelines for the following custom measures: Chiller Replacement, Ventilation Overhaul, Burner Replacement, Linkage-less Burner Control and Energy or Heat Recovery Ventilators	7
4/1/2022	1.3	Minimum Installation Requirements	Added minimum installation requirements per measure to qualify for the measure’s point value in the comprehensive pathway	13

Date Updated	Version	Topic	Description of Change	Section
2/15/2022	1.2	Program Eligibility	Clarified that customers can apply for or receive incentives from both AMEEP and the Weatherization Assistance Program, although the sum of incentives received from both programs cannot exceed 100% of the project cost	2
2/15/2022	1.2	Steam Traps Measure	Clarified in the incentive table for non-comprehensive projects that the steam trap incentives are available for *failed* steam traps	3
2/15/2022	1.2	Steam Traps Technical Requirements	Added more detail on steam trap survey and installation requirements	7
2/15/2022	1.2	Building Envelope Technical Requirements	Revised installation requirements for window replacements	7
2/15/2022	1.2	Comprehensive Pathway Measure Points	Added clarification on point allocation for in-unit gas measures	13
1/14/2022	1.1	Technical Assistance	Changed the point at which the additional 25% cost share for technical assistance is provided. This will be provided when the Notice to Proceed is issued	3
1/14/2022	1.1	Contact Information	Changed contact and application submission information for NYSEG RG&E	12
11/3/2021	1	N/A	N/A	N/A

Glossary of Terms

This glossary provides definitions of key terms used in this Program Manual.

Affordable Housing: Defined as projects in which at least 25% of the units are, or are expected to be, occupied by households earning not more than 80% of the Area or State Median Income, whichever is higher.

Comprehensive Pathway: Track to participate in Program for customers who undertake comprehensive retrofits, such as whole-building retrofits that address multiple building system categories (e.g., heating and cooling, insulation, lighting, etc.). Incentives are applied based on a system of accumulated points. A minimum of 100-points needs to be met to be classified as a comprehensive project. To help customers identify energy efficiency opportunities and develop comprehensive scopes of work, technical assistance is available via NYSERDA's FlexTech program. Comprehensive projects are eligible for higher incentive amounts than non-comprehensive projects, an optional mid-project incentive payment, and technical assistance in the form of a cost share for activities like energy audits and retrofit scope development.

Comprehensive Pathway Points System: Determines eligibility of a comprehensive project and the incentive amount that is offered. Eligible measures for a comprehensive project are assigned points per measure that range from 5 to 40. To be eligible as a comprehensive project, a project must meet a 100-point minimum. Multiple measures can be combined to meet this requirement.

Construction Complete Post Inspection: The Program Administrators will inspect the condition of the site after completion of the project.

Custom Project: A project that includes custom measures. Custom measures are eligible measures that are not listed in the New York State Technical Resources Manual. Custom calculations are required to determine the amount of energy savings and incentive amount.

Design Team: The team that calculates required loads and system demands, specifies the size and efficiency of equipment, and creates design and construction drawings and specifications for specific measures in retrofit construction projects. Ensures newly installed systems and equipment meet all relevant codes. Also often reviews cutsheets and change orders submitted by the installing contractor during the construction process. Typically, an engineering firm, but in some cases it may be another qualified firm or the installing contractor.

Direct Install: Direct install measures are available for free if installed by direct install contractors provided by the Implementation Contractors. In downstate NY projects, this includes in-unit measures such as LED lights, low flow showerheads, and faucet aerators. In upstate NY, with the exception of O&R, common area LED lights, exit signs, common area room occupancy sensors, and ½" and ¾" DHW pipe insulation are also considered direct install measures and are offered for free if installed by direct install contractors provided by the Implementation Contractor. If an upstate customer, with the exception of O&R, chooses a contractor that is not provided by the Implementation Contractor, they will receive the incentive outlined in Section 3.2.2, instead of receiving the measure for free.

Downstate Program Administrators: The Downstate Program Administrators are Con Edison and the Brooklyn Union Gas Company d/b/a National Grid NY (KEDNY) And Keyspan Gas East Corporation d/b/a National Grid (KEDLI), serving in the New York City and Long Island regions respectively. To account for regional differences, incentive rates differ between Downstate and Upstate Program Administrators.

Eligible Customer: Customers who are property owners or managers of existing affordable multifamily buildings with five (5) or more residential units.

Energy Efficiency Measures (EEMs): Energy-using appliance, equipment, control system, or practice whose implementation results in reduced energy use while maintaining a comparable or higher level of service. Categories of

EEMs include HVAC measures; base load measures such as lighting, process loads, plug loads, etc.; envelope measures; and non-interactive measures such as service water heating.

Energy Service Provider: Approved Energy Service Providers complete energy audits through NYSERDA's FlexTech Program before a project begins to help customers identify energy efficiency opportunities and determine an initial scope of work and capital planning.

FlexTech Program: A NYSERDA program which shares the cost of and provides additional supporting regarding an energy audit to facilitate the implementation of clean energy and/or energy efficient technologies in a building.

Implementation Contractor (IC): The Program Administrator's Implementation Contractor oversees coordination of the project. Communication from the customer and/or Participating Contractor (PC) will be facilitated through the Program Administrator's IC.

Incentive Cap: The maximum incentive an Energy Efficiency Measure or project is eligible to receive through the Affordable Multifamily Energy Efficiency Program.

In-Unit Measures: Energy Efficiency Measures installed within the primary dwelling of a resident.

Large Projects: Projects over 150 units, with an exception for Con Edison projects where large projects are considered to be those over 500 units.

Market Rate Multifamily Offering: Multifamily programs offered to non-LMI Customers.

Mid-Project Incentive Payment: A one-time, optional payment for which comprehensive pathway projects may apply. The mid-project incentive is based upon points associated with the scope of work. The customer may apply for a mid-project incentive payment once measures that make up at least 60% of the points have been installed.

Multi-Year Commitments: Installations and project completions that extend beyond the program year in which the project was initially committed. Multi-Year Commitments are generally allowed under the program, provided that the customer provides a project installation plan. The project installation plan must include a timeline with scheduled installation dates for each measure and/or each category of measures.

New York State Research and Development Authority (NYSERDA): A New York State public-benefit corporation established in 1975. NYSERDA offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels.

Non-Comprehensive Pathway: Track to participate in Program for customers who are interested in smaller upgrades, or customers who have projects that do not meet the 100-point minimum for the comprehensive pathway. Incentives for projects based on the non-comprehensive pathway are determined by each Program Administrator and are based on equipment installed and/or energy savings.

Notice to Proceed: An email outlining estimated project savings and incentives issued by the Program Administrator that triggers the start of work on a project. Any work started before the Notice to Proceed will not qualify for incentives.

On-site Inspection: A pre- or post-installation inspection that is done in-person by the Implementation Contractor or the Program Administrator.

Participating Contractor (PC): A contractor that will install Energy Efficiency Measures through the project. Participating Contractors must be approved by the Program. Participating Contractors may accept incentive payments on behalf of customers. The program can onboard contractors into the Participating Contractor network at any time.

Preliminary Incentive Offer Letter (PIOL): Issued after pre-inspection for custom projects, and after finalizing the scope of work for comprehensive projects. The PIOL includes an incentive offer and date range for which the offer is eligible. The PIOL must be signed by the customer and returned to the Program Administrator's IC within 30 days. For comprehensive projects, after the signed PIOL is returned to the IC, customers will generally have 90 days to work with the IC to take action necessary to ensure the customers receive the Notice to Proceed, including scheduling project pre-inspection, curing any flags or fails, and submitting final savings calculations and cut sheets. The PIOL will not be valid after 90 days of the date of signature, and requests for exceptions or extensions must be made in writing for consideration by the respective Utility.

Prescriptive Project: A project that includes prescriptive measures only. Prescriptive measures are those listed in the New York State Technical Resource Manual (TRM) and have set incentive rates.

Program Administrators: The utility companies administering the NYS Affordable Multifamily Energy Efficiency Program. Central Hudson Gas & Electric, Con Edison, National Grid, National Fuel Gas, New York State Electric & Gas (NYSEG), Rochester Gas & Electric (RG&E), and Orange & Rockland, respectively.

Scope of Work: A detailed explanation of work that will be performed as part of a contract or subcontract. It defines project-specific activities, deliverables, and timelines for a vendor providing services to the client.

Statement of Completion (SOC): A document that details the Energy Efficiency Measures that were installed through the project. Must be signed and submitted to the Program Administrator at project completion.

Technical Assistance: Services provided by Program Administrators and Energy Service Providers to help customers identify energy efficiency opportunities and develop comprehensive Scopes of Work. Energy audits are performed as a form of technical assistance.

Technical Resource Manual (TRM): The New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs - Residential, Multifamily, and Commercial/Industrial, known as the Technical Resource Manual (TRM), provides a standardized, fair, and transparent approach for measuring program energy savings across New York State's energy efficiency programs. To do so, the TRM provides standardized energy savings calculations and assumptions at the measure level for estimating energy and demand savings.

Tier 1 Projects: Comprehensive projects that install Energy Efficiency Measures worth 100-149 points**.**

Tier 2 Projects: Comprehensive projects that install Energy Efficiency Measures worth over 150 points**.**

Upstate Program Administrators: The Upstate Program Administrators include National Fuel Gas, New York State Electric & Gas (NYSEG), Rochester Gas & Electric (RG&E), National Grid (in the Niagara Mohawk region), Central Hudson, and Orange & Rockland. To account for regional differences, incentive rates differ between Downstate and Upstate Program Administrators.

Utilities: The utility companies administering the NYS Affordable Multifamily Energy Efficiency Program. Central Hudson Gas & Electric, Con Edison, National Grid, National Fuel Gas, New York State Electric & Gas (NYSEG), Rochester Gas & Electric (RG&E), and Orange & Rockland, respectively. They are generally referred to as the Program Administrators.

Utility Customer: Customer that receives gas and/or electric delivery service from one of the following utilities (Program Administrators): Central Hudson Gas & Electric, Con Edison, National Grid, National Fuel Gas, New York State Electric & Gas (NYSEG), Rochester Gas & Electric (RG&E), and Orange & Rockland.

Virtual Inspection: A pre- or post-installation inspection that is done virtually by the Implementation Contractor or the Program Administrator. Virtual inspections will include either: 1) a live video call walkthrough with the contractors and the inspector (inspector takes screenshots and/or notes to document findings); or 2) date and time-stamped pictures and/or

video recordings that clearly existing equipment to be replaced (in case of pre-inspection) or the new energy efficient equipment (in case of post-inspection).