Agenda Date: 12/18/18
Agenda Item: 8F

STATE OF NEW JERSEY

Board of Public Utilities
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CLEAN ENERGY

IN THE MATTER OF THE CLEAN ENERGY PROGRAMS AN BUDGETS FOR FISCAL YEAR 2019	)	ORDER APPROVING THE MULTIFAMILY PROGRAM
IN THE MATTER OF THE MULTIFAMILY PROGRAM COMPLIANCE FILING	)	DOCKET NO. QO18040393 DOCKET NO. QO18070685

Parties of Record:

Michael Ambrosio, TRC Energy Solutions
Stefanie A. Brand, Esq., Director, Division of Rate Counsel

BY THE BOARD:

This Order memorializes action taken by the Board of Public Utilities ("Board" or "BPU") at its December 18, 2018 public meeting, where the Board considered the approval of a new Multifamily Program, and its associated Fiscal Year 2019 ("FY19") budget, within New Jersey's Clean Energy Program ("NJCEP").[1]

BACKGROUND & PROCEDURAL HISTORY

On February 9, 1999, the Electric Discount and Energy Competition Act ("EDECA" or "the Act") was signed into law, creating the societal benefits charge ("SBC") to fund programs for the advancement of energy efficiency ("EE") and renewable energy ("RE") in New Jersey. The Act also provided for the Board to initiate proceedings and undertake a comprehensive resource analysis ("CRA") of EE and RE programs in New Jersey every four years. The CRA would then be used to determine the appropriate level of funding over the next four years for the EE and Class I RE programs, which are part of what is now known as NJCEP. Accordingly, the Board has issued numerous Orders setting the funding levels, related programs, and program budgets for the years 2004 –FY19.[2]

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[1] The budgets approved in this Order are subject to State appropriations law.
[2] Historically, the budgets and programs were based on calendar years, but, in 2012, the Board determined to begin basing the budgets and programs on fiscal years in order to align with the overall State budget cycle.

In its Order setting NJCEP programs and budgets for FY19, the Board approved, among other things, certain proposed changes to NJCEP programs, which would require further development before implementation, with such development entailing "further opportunities for public and stakeholder input and comment as details are developed and further review and approval by the [Board]." I/M/O the Clean Energy Programs and Budgets for Fiscal Year 2019, Docket No. QO18040393 p.7 (June 22, 2018), ("Order"). The subject "proposed changes" were described in Volume 2 of the FY19 Compliance Filing for programs administered by the Program Administrator, TRC Energy Solutions ("TRC"), and included a new Multifamily Program that would pull into a single point of entry projects that would otherwise have been potentially eligible for eight (8) other NJCEP programs and program pathways, none of which at present are tailored specifically for the unique features of multifamily buildings. Id. at 8. The Order also approved a FY19 overall budget of $6,000,000 for the Multifamily Program and contemplated the adoption of a detailed Program budget (i.e., one allocated among cost categories) simultaneous to the adoption of the Program. Id. at 9, 21.

Prior to the entry of the Order, Board Staff and TRC conducted several rounds of drafts, comments, and discussions with Program stakeholders and the public, regarding the potential Multifamily Program, including, among other things, at meetings of the EE Committee held on March 27, April 10, and May 2, 2018.

Additionally, after the entry of the Order, on September 26, 2018, a notice was distributed to the EE listserv and posted on the NJCEP website; the notice included the proposed, fully-detailed Multifamily Program described below in the present Order ("Proposal"), and it invited the submission of comments to Board Staff by October 10, 2018. The proposed Multifamily Program was also presented to and discussed at an EE Committee meeting held after the entry of the Order, on September 27, 2018.

The Proposal is summarized below.

SUMMARY OF PROPOSED MULTIFAMILY PROGRAM

The Proposal would pull into a single point of entry all projects of five (5) or more residential units that would otherwise have been potentially eligible for eight (8) other NJCEP programs and program pathways. Both existing buildings and planned new construction projects will be eligible through this Multifamily Program. The single point of entry is expected to, among other things, reduce the administrative burdens and costs applicants previously faced when trying to decide among eight (8) potential programs and pathways, increase NJCEP's flexibility in meeting its participants' individual needs, encourage participants to implement ever more comprehensive projects, and streamline the administration of the Program. The Proposal includes three (3) different major pathways for participation:

1. A prescriptive, single-measure pathway through which a participant can receive a rebate in a fixed amount in exchange for installing an energy efficient measure (e.g., $300 for installing an energy-efficient air conditioner).

2. A bundled, multi-measure pathway through which a participant who bundles together several single measures can receive a 10% bonus in addition to the fixed amounts it can receive for each of those measures.

3. A comprehensive, whole-building pathway through which a participant can receive performance-based incentives whose amounts vary with the savings the participant's project achieves. In this pathway, a participant can also receive optional incentives if, after installation, it verifies its projects' savings and its consultant can also receive a separate, additional incentive for successfully completed projects.

The eligibility requirements for and base incentives available through the Proposal are substantially similar to those in the eight (8) existing programs from which the proposed new Multifamily Program would pull its participants.

The proposed new Program would require that participating contractors and consultants have increasing levels of expertise as they move up from the single-measure pathway to the comprehensive, whole-building pathway with its modeling and other sophisticated requirements. Outreach Account Managers would work with potential participants to draw them towards the Program and to help them maximize their benefits and energy savings through it.

The proposed new Multifamily Program's FY19 detailed budget, along with the commensurately adjusted budgets for programs administered by TRC, would be as set forth in the table below:

FY 2019 TRC Budget							
Program/Budget Line	*Total Budget*	*Administration*	*Sales, Marketing, Website*	*Training*	*Rebates, Grants and Other Direct Incentives*	*Rebate Processing and QA*	*Evaluation*
TRC Total							
EE Programs	$236,945,000.00	$13,202,101.74	$491,718.93	$733,500.00	$212,289,431.53	$10,228,247.80	$0.00
Res EE Programs	$75,700,000.00	$5,227,697.71	$156,504.09	$460,500.00	$63,089,333.19	$6,765,965.01	$0.00
Existing Homes	$34,700,000.00	$2,824,202.36	$78,252.07	$421,000.00	$28,792,131.99	$2,584,413.58	$0.00
RNC	$23,000,000.00	$1,403,871.91	$39,126.01	$39,500.00	$20,830,860.68	$686,641.40	$0.00
EE Products	$18,000,000.00	$999,623.44	$39,126.01	$0.00	$13,466,340.52	$3,494,910.03	$0.00
C&I EE Programs	$155,245,000.00	$7,396,888.99	$313,008.18	$207,000.00	$143,937,375.35	$3,390,727.48	$0.00
C&I Buildings	$112,445,000.00	$5,567,708.41	$234,756.16	$145,500.00	$103,675,044.81	$2,821,990.62	$0.00
LGEA	$3,800,000.00	$882,487.12	$39,126.01	$49,000.00	$2,459,928.17	$369,458.70	$0.00
DI	$39,000,000.00	$946,693.46	$39,126.01	$12,500.00	$37,802,402.37	$199,278.16	$0.00
Multifamily EE	$6,000,000.00	$577,515.04	$22,206.66	$66,000.00	$5,262,722.99	$71,555.31	$0.00
Multifamily	$6,000,000.00	$577,515.04	$22,206.66	$66,000.00	$5,262,722.99	$71,555.31	$0.00
Distributed Energy Resources	$31,200,000.00	$738,955.04	$78,252.02	$12,500.00	$30,043,456.14	$326,836.80	$0.00
CHP - RE Storage	$31,200,000.00	$738,955.04	$78,252.02	$12,500.00	$30,043,456.14	$326,836.80	$0.00
RE Programs	$2,150,000.00	$725,301.90	$39,126.01	$18,000.00	$0.00	$1,318,172.09	$49,400.00
SREC Registration	$2,150,000.00	$725,301.90	$39,126.01	$18,000.00	$0.00	$1,318,172.09	$49,400.00
Planning and Administration	$4,250,000.00	$0.00	$4,250,000.00	$0.00	$0.00	$0.00	$0.00
Outreach and Education	$4,250,000.00	$0.00	$4,250,000.00	$0.00	$0.00	$0.00	$0.00
Outreach, Website, Other **	$4,250,000.00	$0.00	$4,250,000.00	$0.00	$0.00	$0.00	$0.00

**Note: Board Staff previously modified the total budget for "Outreach, Website, Other," reducing the TRC portion of that budget by $750,000. The modification also reduced the FY 2019 TRC Budget total."

SUMMARY OF COMMENTS FROM PUBLIC STAKEHOLDERS

Written comments regarding the Proposal were submitted by BrightPower, the Division of Rate Counsel ("Rate Counsel"), Energy Analysis Group ("EAG"), ReVireo, MaGrann Associates, and TrickleStar. Set forth below is a summary of the comments and Board Staff's responses to them.

Comment: TrickleStar recommended that Tier 1 Advanced Power Strips ("APSs"), which are currently eligible for rebates pursuant to NJCEP's Energy Efficient Products ("EEP") Program, also be deemed eligible for rebate/incentives through the Multifamily Program's Path A Appliance Rebates. It cites, among other things, a recent Energy Trust of Oregon study that found APSs to save 77 kwH.

Response: Although Board Staff considers APSs to be cost-effective energy efficiency devices and the provision of upstream incentives to be a cost-effective way to encourage energy efficiency on the part of those end users who purchase the devices, it is concerned that the relatively high non-usage, non-install rates that occur with such devices when they are purchased by a third party, such as Multifamily Building owner, and given to the end user at no cost to the user would render them cost-**in**effective in the Multifamily Program. It accordingly has not added them to the Multifamily Program's Path A Appliance Rebates. That said, Board Staff is working with its Program Administrator to explore the possibility of upstream incentives for APSs in the near future.

Comment: BrightPower asked whether specific software applications would be required for the modeling in the Multifamily Program's Path B Custom Measures and Path C.

Response: The Multifamily Program requirements for modeling software projects would be consistent with existing program requirements. The program does not endorse or require use of any specific brand of modeling software. For Multifamily buildings above three (3) stories, the software must be compliant with ASHRAE 90.1 Section 11 or Appendix G. Examples of software that meet these requirements include, among others, eQUEST, HAP, EnergyPlus, Trane Trace, and DOE 2.1. For buildings of three (3) stories or less or that choose to participate in certain federal programs, such as ENERGY STAR, the Multifamily Program and/or the federal program generally requires the software be approved by an approved verification organization, such as a Verification Oversight Organization ("VOO").

Comment: BrightPower asked whether the Path C Incentive Cap limited the per unit incentive to $1,500/unit even if project realizes well above 20% savings, for example, into the 30-40% savings ranges.

Response: Board Staff agrees that the cap as proposed is too low and will not incentivize applicants to achieve higher savings rates, which can range up to approximately 40%. Indeed, Board Staff has concluded that no numeric cap is needed or appropriate for the Path C incentives because they are tightly linked to savings and are self-limited to reasonable amounts. For example, an upgrade of an existing building that achieves 40% savings, which is an extraordinarily high percentage, would receive an incentive of $3,500/Dwelling Unit. Further, the Path A and Path B caps are in part designed to incent applicants to implement more comprehensive measures through Path C, while, there is, of course, no reason to incent applicants to do anything more comprehensive than Path C, which Path is by definition

comprehensive. Because all the above applies equally to both Existing Buildings and New Construction, Board Staff is now recommending the elimination of the numeric caps for both.

Comment: BrightPower asked whether, as to Multifamily Program projects, the Prevailing Wage Law ("PWL) would apply: (a) only to homes of more than four (4) stories; and (b) only to "energy-related" trades.

Response: The Board does not interpret or enforce the Prevailing Wage Law. The commenter is encouraged to seek guidance from the Department of Labor and Workforce Development.

Comment: BrightPower and EAG requested clarification as to the interaction of the Multifamily Program with the Home Performance with ENERGY STAR ("HPwES") (aka Residential Existing Homes Program") in light of the Proposal's statement in Section A-3:

> Multifamily properties that are three (3) stories or less that wish to comply with Home Performance with ENERGY STAR may do so by meeting additional inspection and Health and Safety requirements. Utility data must be available at the unit or building level.

EAG specifically asked how a site with a single boiler plant would be handled.

Response: If and when the pending Residential Existing Homes Program is approved and both that Program and the Multifamily Program are fully implemented, Multifamily Buildings less than or equal to three (≤ 3) stories will be directed to one or the other program, depending on the number of units in the buildings, with buildings containing less than or equal to four (≤ 4) **units** being directed to Residential Existing Homes and buildings containing greater than four (> 4) **units** being directed to Multifamily. In the interim, buildings will be directed in those general directions while also ensuring that stakeholders and the market have an adequate opportunity to adjust. The presence or absence of a single boiler plant providing heat to several separate buildings would be irrelevant if and when both new programs are fully implemented.

Comment: BrightPower, EAG, and MaGrann questioned the degree to which tenant utility data would be required to participate in all or some of the Multifamily Program, with at least one of the commenters noting that it is notoriously difficult to collect utility data in a multifamily building in which the tenants have their own meters. They each suggested that some type of assumptions or defaults should be accepted in at least some cases, with BrightPower suggesting those assumptions/defaults should be accepted in at least those cases in which the HPwES currently accepts them.

Response: Board Staff recognizes that collecting utility data for individually-metered Multifamily units can be difficult. Accordingly, tenant utility bills are encouraged, but not required, as part of the base application for most Multifamily Paths and Incentives. Further, even as to the optional, Add-On Savings Verification in Path C, the Compliance Filing would be revised to clarify that the new Multifamily Program would allow verified savings to be established through the use of models/assumptions/defaults on substantially the same terms and conditions as the Pay for Performance ("P4P") Program currently allows their use, as reflected in, for example, its Program Guidelines and Technical Tips. This allowance would apply not only to those projects currently eligible for P4P but to all Multifamily projects, including, for example, those types of projects that are currently eligible for HPwES, which currently does not provide a verification incentive. (For the avoidance of doubt, the allowance would **not** apply to projects actually **participating** in the current HPwES program.)

Comment: EAG asked whether the Verification Incentive is dependent on the savings actually achieved, for instance, what would happen if the savings were modeled to be 20% but only 18% savings were actually verified.

Response: The Verification Incentive, which is a separate and optional incentive that is available on top of the Table 16 Whole Building Incentive, is indeed dependent on the savings actually achieved. For example, if the actual savings were to be only 4%, the Verification Incentive would be $0. As to EAG's example, assuming it was meant to posit a Table 16 Whole Building Incentive based on 20% modeled savings, but the verification process demonstrated only 18% actual savings, the Verification Incentive would be calculated using 18%, i.e., $187.50 per Dwelling Unit [(75 + (11 x 7.50) + (2 x 15)]. However, the Table 16 Whole Building Incentive, which is based strictly on modeled savings, would **not** be clawed back or reduced to reflect the difference between the modeled 20% and the actual 18%. Board Staff believes the above-mentioned strikes the right balance between paying for actual performance and maintaining market confidence.

Comment: EAG asked how long an applicant must wait between applications so that the applicant will not be deemed to have violated the Program rule against intending to enroll in Path C at the time it applies in Path A and/or against participating simultaneously in Path C and Paths A or B. It specifically asked whether an applicant who had installed a boiler prior to making any NJCEP application could participate (using Path A) to receive an incentive for the boiler and then go through Path C.

Response: There need not be any waiting time between the subject applications. Board Staff proposes to clarify and revise the applicable requirements to: (a) remove the somewhat unclear language regarding "intention to enroll"; (b) remove the language preventing projects from participating simultaneously in Paths A and Path C; (c) replacing that with language encouraging applicants to consider the potential impact of a Path A application on a potential future Path C application; and (d) reinforcing the rule that only one NJCEP or Board-approved utility program incentive will be paid for the implementation of any one measure, i.e., "no double-dipping." However, to avoid unnecessary administrative burdens and to encourage participation in Path C, Board Staff also proposes to maintain the rule that an applicant may not simultaneously participate in Path B and Path C.

As to EAG's specific example, the applicant could receive a Path A incentive for its boiler and then apply for Path C without receiving any savings credits for that boiler.

Comment: EAG asked about certain aspects of the following requirement: "Projects require pre-approval prior to installation." Specifically, it asked whether the project scope needs to be specified prior to site inspection (as in P4P) and commented that such a requirement would be an impediment if part of a project is needed ASAP, e.g., because of equipment failure. Even more specifically, EAG asked whether a piece of equipment that qualifies for Path A could be included in Path C even though it was installed eleven (11) months prior to the Path C application.

Response: To ensure efficient and reliable administration, projects are required to be approved before inspection resources are expended on them. That said, in appropriate, unavoidable emergency circumstances, the Program Administrator will consider granting an exception that would allow a pre-inspection to be conducted prior to project approval.

As to EAG's specific example, the equipment could be included in Path A, but not Path C; Path C will not provide savings credits for any equipment installed prior to the approval of its inclusion in a Path C plan.

Comment: EAG asked for clarification as to what types of buildings would be eligible/ineligible for the Multifamily Program, for example, assisted living.

Response: For the following reasons, neither assisted living nor similar institutional facilities would be eligible for the Multifamily Program. Pursuant to the New Jersey Uniform Construction Code, most assisted living facilities, i.e., those housing more than 16 persons, are classified as Institutional, not Residential. See N.J.A.C. 5:23-3.14 (incorporating the 2015 International Building Code, including its Section 308.3 (Institutional Group I-1)). Further, assisted living will not be eligible for the pending USEPA-sponsored multifamily ENERGY STAR Certified Apartments program, which is expected to become a major means through which to qualify for NJCEP Multifamily Program incentives. (See the below comment from MaGrann, and response thereto, for a further discussion of the pending Apartments program.) Board Staff notes, however, that assisted living facilities are eligible to participate in NJCEP's various C&I programs, which provide similar incentives on similar terms and conditions as the Multifamily Program would.

Comment: EAG asked whether water heater insulation installed in accordance with the following could be included in Path C energy savings: "All proposed equipment must meet or exceed [ASHRAE 90.1-2013]."

Response: Yes, the subject insulation could be included in Path C energy savings. Board Staff has proposed Compliance Filing language clarifying this result.

Comment: EAG asked whether any single project can participate in both the Multifamily Program and the NJCEP Comfort Partners Program.

Response: An applicant may not be paid an incentive for the same measure in both subject programs. That said, it may be theoretically possible for a "project" to include multiple measures, some of which receive an incentive from one program and others of which receive an incentive from the other program.

Comment: EAG asked whether the availability or award of federal tax credits would affect any Multifamily Incentive Amounts.

Response: No, it would not. As indicated above, the statement about incentives from other sources is now limited to those from NJCEP and/or from Board-approved utility programs. The impact of federal tax credits was already considered in setting the Proposal's Incentive Amounts.

Comment: EAG commented on the following proposed requirement:

Water Heating:

- To qualify for incentive existing buildings must meet or exceed minimum piping insulation thickness for heating and hot water systems as outlined in ASHRAE 90.1-2103. New Construction must exceed these requirements.

EAG asks why the requirement is included, suggests it requires more than other rebates and can cost more than the related rebate, and asks whether it will require custom calculations.

Response: Board Staff has revised the document to clarify its intention that this requirement applies only to those installing piping insulation as a Path B or C measure; it does not, for example, require that an applicant installing a hot water heater through Path A insulate the piping associated with the heater. The requirement, as clarified, is included because one of NJCEP's core policies is to pay incentives only for measures that meet or exceed the efficiency of what the market (e.g., code compliance) would otherwise cause to be installed. Accordingly, the requirement is similar to the requirements of most other NJCEP rebates, virtually all of which do not cover the entire cost of the measure. The amount of the rebate will be calculated by entering certain readily available data into a relatively simple spreadsheet included in the Program application.

Comment: EAG asked how one should interpret the phrase "Up to" in Table 3, Lighting Incentives.

Response: The amount following "Up to" is the amount that will be paid unless and until a change in the market or in NJCEP's funding causes the amount to be reduced, which reduction would be announced prior to its implementation.

Comment: EAG asked whether common areas should be included in calculating the size of SRO Units.

Response: No, common areas should not be included. Board Staff is recommending the Board approve clarifying revisions to the Compliance Filing section that explains how SRO Units' size would be calculated.

Comment: EAG asked whether energy-efficient windows can be included in a Path C application.

Response: Yes, the energy savings resulting from the installation of energy efficient windows can be included in the incentive calculation, but, similar to Path B, the applicant would have to bear the burden of establishing the amount of energy saved as compared to the existing windows (existing building) or code-compliant windows (new construction).

Comment: Rate Counsel commented that the Proposal does not adequately address how NJCEP's Multifamily Program would be coordinated with utility programs, such as PSE&G's Multifamily Program. More specifically, it suggests the Board should address whether a particular project could participate in both programs, whether the two programs will compete with each other, and whether the existence of both will confuse customers and/or create free riders.

Response: The Multifamily Program provides that an applicant may not be paid an incentive for the same measure in more than one program, i.e., measure-by-measure double-dipping among NJCEP and Board-approved utility programs is prohibited (recognizing there are measures that may support the payment of a cash incentive through the NJCEP Multifamily Program and also support the provision of a **financing** incentive, such as on-bill financing, through a utility). The Program Administrator, supervised by Board Staff, is developing appropriate processes to implement this and will endeavor to coordinate with PSE&G on this point and more broadly.

Board Staff will continue to re-evaluate the relationship between NJCEP and utility programs. Specifically, as part of its review of the requirements of the Clean Energy Act, Board Staff intends to explore the best ways to deliver consistent statewide programs that minimize duplicative administrative structures.

Comment: Rate Counsel commented that the Multifamily Family Program's budget seems not to include amounts for items other than incentives, that its cost-effectiveness should be calculated and published, and that the available data re TRC and PACT suggest it is not cost-effective.

Response: The final Multifamily Program budget included in this Order includes amounts for all items for which expenses are expected, for example, Administration. Those amounts allocate the previously approved $6,000,000 Program-wide budget across the appropriate cost categories.

As Rate Counsel noted, Appendix G of the FY19 TRC Compliance Filing included the results of the cost-effectiveness tests of the proposed Multifamily Program. Staff notes that the TRC test shows benefits only marginally below costs (0.9), which is not unusual given that new programs typically have higher administrative/start-up costs that will diminish over time, and thereby lead to greater cost-effectiveness, as programs mature. PACT shows that, despite Rate Counsel's contrary suggestion, the Multifamily Program's benefits actually exceed its costs (1.4). Staff finally notes that the results of the Societal Cost Test (SCT), which, among other things, accounts for non-energy benefits, shows that benefits exceed costs. Staff believes that the Board should strive to maximize the cost-effectiveness of all programs and will continue to identify opportunities to increase the cost-effectiveness of the Multifamily Program as it implements the Program.

Comment: Rate Counsel suggests that Board Staff investigate and study possible alternatives, and/or additions, to on-bill financing, especially those that would be targeted towards affordable housing and/or that would not rely as heavily on ratepayer subsidies.

Response: Board Staff will continue to consider potential financing options for NJCEP programs and welcomes any suggestions that Rate Counsel has to that end.

Comment: Rate Counsel asked for clarity regarding the technical assistance offered by the Multifamily Program.

Response: The technical assistance noted in the program description refers to the role of NJCEP staff members. Staff members working on the Multifamily Program have specific knowledge of the multifamily market and effective energy efficiency measures. These staff will be available for technical and programmatic support, particularly as applicants consider what Path and/or measures are most appropriate for them.

Comment: Rate Counsel also asked for clarity regarding the audit process and level of detail required for each Path.

Response: An audit is only required for Path C; the audit process and specific requirements will be made clear in the program guide.

Comment: ReVireo commented that the proposed Consultant Incentive should be de-coupled from successful project completion. It suggests that most consultants will require that payment

of their consulting fees shortly after their deliverables are delivered, which could be years prior to the completion of the project, and that therefore the goal of incentivizing applicants to engage consultants early in the development of the project would be significantly undercut. It further suggests that the Multifamily Program consider utilizing the structure used for the Pre-Design Bonus in the P4P - New Construction Program and/or other structures that would not make payment dependent on project completion. (Board Staff notes that, in P4P, the Pre-Design Bonus is paid upon approval of the P4P application, but prior to the approval of the Energy Reduction Plan ("ERP"). If the Bonus is paid, but the project is not constructed/installed, and the applicant instead submits another P4P application for the same facility, the applicant is not paid another Bonus).

Response: Board Staff disagrees with this comment for several reasons. First, it believes that many consultants will be willing to make all or part of their payment contingent upon successful project installation in order to obtain or retain clients. Further, even if most consultants are not willing to take the risk and insist on being paid upon completion of their consulting work, the Staff-proposed structure would still encourage the client to commission only that work that it was serious about pursuing and to pursue that work through to completion, which are the results Board Staff intends the incentive structure to achieve. Board Staff also notes that the HPwES has had some success with its production incentive, which is paid only upon satisfactory project completion.

Comment: MaGrann suggested that every opportunity should be taken to streamline the Path C process which can be drawn-out by multiple rounds of reviews of ERPs, models, and applications. It suggests, among other things, regular conference calls between applicants and the Program Manager, as well as eliminating the requirement that the contractor invoices applicants must submit be broken down between materials and labor.

Response: Board Staff agrees that every streamlining opportunity should be taken. It has directed the Program Administrator to engage with MaGrann and other participants to attempt to identify where and when regular conference calls or meetings would be cost-effective and to eliminate the requirement that invoices separately identify materials and labor, with the caveat that the Program Administrator may and will continue to require the level of detail necessary to allow it to verify the legitimacy and accuracy of invoices, which, in most cases, will require that the invoice at least reflect the pricing related to each separate measure for which an incentive is to be paid.

Comment: MaGrann commented that effective January 1, 2019 USEPA will be issuing new checklists and a new reference home specific to its unified multifamily ENERGY STAR Certified Apartments program, which will bring its Certified Homes (HERS based) and Multifamily High Rise (ASHRAE 90.1 based) approaches under one umbrella. Because MaGrann expects to begin work for clients under the new unified Apartments program as of the anticipated effective date of that program, MaGrann requested and recommended that NJCEP recognize ENERGY STAR certification using the new Apartments program as of the same date the new Apartments program's certification becomes available.

Response: The expectation is that this Multifamily Program will not be fully implemented until sometime after March 2019. Accordingly, Board Staff will have several months to analyze the impact of the new USEPA Apartments program on this Multifamily Program and to then propose to the Board any adjustments the analysis may indicate to be appropriate. As to the existing NJCEP Residential New Construction Program, Board Staff similarly will analyze the new USEPA Apartments program when it is issued and then make any appropriate

recommendations to the Board. Accordingly, MaGrann might be prudent to await further NJCEP guidance or action before it proceeds to perform substantial work based on the new USEPA Apartments program.

Comment: MaGrann commented that the Multifamily Program Manager should not duplicate the oversight and QA of the EPA-sanctioned MRO (Multifamily Review Organization) with regards to the new Multifamily Program. MaGrann further commented that doing so will only add time and confusion and will create additional participation barriers to an already lengthy and comprehensive independent approval protocol

Response: Board Staff agrees. The Multifamily Program Manager will not "duplicate" the MRO's oversight and QA processes vis a vis the raters who participate in NJCEP. To avoid any ambiguity in that regard, Board Staff has deleted the italicized phrase from the following sentence: "Multifamily High-Rise projects typically submit documentation to MFHR Review Organization (MRO), *but may also submit directly to the Program for compliance review.*"

BOARD STAFF RECOMMENDATIONS

In light of the above, Board Staff recommends the approval of the Proposal with the following minor, technical clarifications: (a) to the description of eligible buildings, including that condominium and cooperative associations are included (as informally suggested by a stakeholder) but assisted living, nursing homes, and similar institutional facilities are excluded, (b) (i) removing the somewhat unclear language regarding "intention to enroll," (ii) removing the language preventing projects from participating simultaneously in Paths A and C; (iii) replacing the original language with language encouraging applicants to consider the potential impact of a Path A/B application on a potential future Path C application, and (iv) reinforcing the rule that only one NJCEP or Board-approved utility program incentive will be paid for the implementation of any one measure, i.e., "no double-dipping"; (c) deleting the inadvertently included incentive for oil furnaces for which there are no SEP funds available in FY19, (d) expressly including the previously implicitly included C&I New Construction and Retrofit Programs' clarifications regarding certain lighting requirements; (e) detailing how measures that appear in two bundles will be accounted for; (f) detailing how the reduction for SRO Units would be calculated, (g) the new Multifamily Program would continue to allow verified savings to be established through the use of models/assumptions/defaults on substantially the same terms and conditions as the P4P Program currently allows their use; (h) deleting the numeric caps on Path C incentives and clarifying certain details regarding the calculation of other Incentive Caps; and (i) deleting potentially confusing language regarding which entity should review certain technical documentation.

The Proposal, with the revisions described above in this Board Staff Recommendations section, has been incorporated into a revised Multifamily Section of the TRC Compliance Filing ("Revised Section") that has been submitted to Board Staff. Board Staff recommends the approval of the revised Proposal and the Revised Section (collectively, the "Revised Proposal").

DISCUSSION AND FINDINGS

Consistent with the Board's contract with TRC, Board Staff coordinated with TRC and its subcontractors/partners (collectively, "the TRC Team") regarding the Proposal, and the comments received on the same. Further, Board Staff, in conjunction with the TRC Team, discussed the Proposal at public meetings of the EE Committee to receive comments and input. Finally, the Proposal was circulated to the EE listservs and posted on the NJCEP web site, and

written comments regarding the Proposal were solicited from the public and considered by Board Staff and the Board. Accordingly, the Board **HEREBY FINDS** the processes utilized in developing the Proposal were appropriate and provided stakeholders and interested members of the public adequate notice and opportunity to comment on them.

The Board has reviewed the Proposal, and Board Staff's recommendations regarding same.

The Board **HEREBY FINDS** the Revised Proposal will benefit customers and is consistent with the NJCEP objectives. Further, the Revised Proposal will provide environmental benefits beyond those provided by other existing programs and is otherwise reasonable and appropriate. Therefore, the Board **HEREBY APPROVES** the Revised Proposal.

The Board **HEREBY DIRECTS** the Program Administrator, in consultation and coordination with Board Staff, to update relevant program documents (i.e. applications, program manuals, etc.), and take the necessary steps to implement the programs and changes ordered herein, including, without limit, the provision of adequate notice of such changes. Finally, the Board **HEREBY DIRECTS** Staff to post this Order on the Board's website.

This Order shall be effective on December 28, 2018.

DATED: 12/18/18

BOARD OF PUBLIC UTILITIES
BY:

JOSEPH L. FIORDALISO
PRESIDENT

MARY-ANNA HOLDEN
COMMISSIONER

DIANNE SOLOMON
COMMISSIONER

UPENDRA J. CHIVUKULA
COMMISSIONER

ROBERT M. GORDON
COMMISSIONER

ATTEST:

AIDA CAMACHO-WELCH
SECRETARY

I HEREBY CERTIFY that the within document is a true copy of the original in the files of the Board of Public Utilities.

Docket No. QO18040393 – In the Matter of the Clean Energy Programs and Budgets for Fiscal Year 2019; and

Docket QO18070685 – In the Matter of the Multifamily Program Compliance Filing

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REVISED DRAFT

Multifamily Sections of Updated TRC Compliance Filing, Volume 2

Contents

Table References

Multifamily Program

Program Purpose and Strategy Overview

Historically, New Jersey's Clean Energy Program ("NJCEP") has provided energy efficiency incentives to multifamily projects through a variety of Residential and Commercial and Industrial ("C&I") programs, with the choice of program being dependent on the size, utility meter configuration, and construction details of the multifamily housing in question, as well as on the energy efficiency opportunities present. While this approach has resulted in energy efficiency improvements for many multifamily properties, the complex criteria required to choose the "right" program often create some confusion for applicants, as a result there are missed savings opportunities.

Therefore, a new Multifamily ("MF") Program will be introduced to advance the following objectives:

- Simplify participation by consolidating the multiple energy efficiency programs offered to multifamily properties into a single program, with a streamlined entry point and multiple program paths.
- Provide dedicated multifamily technical outreach and assistance.
- Improve access for segments of multifamily housing that have been unable to participate in NJCEP because current multifamily offerings have not been a good fit.
- Streamline program administration.
- Increase participation and maximize savings for incentive dollars spent.

Program Description

The Multifamily Program will include multiple program paths based on the needs and scope of each project. The multi-path approach will reward projects that take a more comprehensive approach to achieving energy savings, but will also provide a simpler, prescriptive path to make participation possible for projects that are not able or willing to make a larger commitment. The program will strive to engage with prescriptive-level participants so that they see NJCEP as a resource for future projects and to urge them to think of energy efficiency as an ongoing process rather than a one-time project. Outreach Account Managers, in collaboration with the Program Manager and their staff, will make sure that applicants understand each program path and help determine which path is most appropriate for applicants' respective project(s).

1) Path A: Single-measure Prescriptive: Single-measure prescriptive is the appropriate path for properties looking to improve on one or a few energy end-use elements. This path includes fixed value rebates for popular energy efficiency measures, including lighting, HVAC, water heating, and appliances.

2) Path B: Multi-measure Prescriptive and Custom Measures: The multi-measure prescriptive and custom measures path is appropriate for properties planning beyond basic improvements but cannot commit to a whole-building/comprehensive plan. This path includes fixed value rebates for bundled improvements at a single project site, as

well as incentives for technologies that fall outside of the prescriptive rebate list (e.g. VRF systems, HVAC controls, etc.).

3) Path C: Whole-Building: The whole-building path maximizes energy savings and incentives. Properties in this path will work with pre-approved contractors to complete a comprehensive energy audit, or, in the case of new construction, a thorough review of project plans, and ultimately install multiple energy efficiency measures aimed at addressing whole building efficiency and meeting minimum scope of work requirements, as defined in the program. Projects in this path may also seek to obtain applicable certifications (e.g., ENERGY STAR®). Additional conditions apply to projects in the Whole-Building Path:

    a. Participants will be required to work with a pre-approved contractor.

    b. Projects will be required to demonstrate that they can meet program requirements by demonstrating savings projections through energy modeling, prior to project installation/construction.

    c. Savings, both projected and achieved, will be calculated on a whole-building basis (total combined energy for units and common areas/systems), and incentives will increase with higher savings projections.

    d. Incentives will be paid on a per residential unit (e.g., per individual apartment) basis so that the potential incentive is immediately transparent to the owner/developer.

4) Add-On: Optional Savings Verification: Projects going through Path C, will have the option to garner additional incentives by verifying whole-building energy savings. For existing buildings, this is generally accomplished by comparing weather-normalized utility bills pre-retrofit to those for the first post-retrofit year, adjusted for any impacts such as occupancy levels, to demonstrate actual project energy savings. For new construction, this is accomplished by achieving ENERGY STAR Certification through EPA's Portfolio Manager Program. This allows the program to collect verified savings, as well as demonstrate a project's persistence of savings and/or excellence in building operations. This additional incentive is only available for the first year of performance verification, but the program does encourage customers to continue measuring building performance each following year.

5) Bulk Appliance Recycling: The existing Energy Efficient Products' Appliance Recycling program will be expanded to include bulk recycling pick-up from any building eligible to participate in the Multifamily Program. Multifamily properties will be able to schedule no-cost pickup and responsible recycling of old, inefficient appliances. Eligible equipment includes: refrigerators, freezers, room air-conditioners, packaged terminal air-conditioners, and dehumidifiers. Being able to pick up a large volume of appliances at a single multifamily building location will offer the program cost savings while expanding program benefits to the multifamily sector.

Additional components of the Multifamily Program include the following:

- Building owners are responsible for complying with all federal, state and local applicable laws and regulations and for assuring occupant health and safety. For low-rise buildings, new construction, and any buildings participating under federal programs, specific health and safety requirements—such as mechanical ventilation— may continue to be required.
- EPA and DOE Federal Program recognition (for Path C):
    - New construction buildings participating in the Multifamily Program that achieve applicable program certification (i.e. ENERGY STAR, ZERH, MFHR) will continue to follow steps to meet the EPA or DOE requirements and standards to meet the proper certificate/label.
    - Existing low-rise building projects meeting all Home Performance with ENERGY STAR requirements will be counted towards national DOE's HPwES participation levels and their contractors will be eligible for consideration for EPA's Century Awards.

The Board will continue to analyze and consider the possibility of adding a program component that would consist of subsidized financing for the participant's share of the cost of the measures eligible for this program.

Target Market

- The Board will define eligible multifamily buildings as having five (5) or more Dwelling Units[1] and a single owner or management entity (e.g., building owner, developer, management company, homeowners' association, condominium association, cooperative housing corporation or association).
    - The applicant will be the single owner or management entity of the multifamily building. Individual residents of multifamily buildings will be **in**eligible for the Multifamily Program but will be directed instead to any applicable Residential Programs.
    - Residential buildings of one to four Dwelling Units, and townhomes designed as single-family homes will be **in**eligible for the Multifamily Program and will be directed to applicable Residential Programs.
- The Board will also define eligible multifamily buildings to include certain types of multifamily housing, such as shelters, dormitories, and independent living facilities,[2] that resemble single-room occupancy buildings (SROs) and that also meet the five (5) units per building and single owner or management entity criteria. The SROs will earn reduced per-unit incentives that are scaled to the considerably smaller living area typical of SRO-

[1] In this Compliance Filing, "Dwelling Unit" means a single unit providing complete, independent living facilities for one or more persons living as a single housekeeping unit, including permanent provisions for living, sleeping, eating, cooking, and sanitation. See N.J.A.C. 5:23-3.14 (adopting 2015 International Building Code, Sec. 202, but revising it to add "living as a single housekeeping unit."). See also N.J.A.C. 5:28-1.2 (similar definition).

[2] For the avoidance of doubt, the Multifamily Program would not be available to assisted living, nursing home, and other similar institutional facilities. Instead, the various C&I Programs are available to those facilities.

type housing as compared to that of conventional apartments. In this Compliance Filing, the individual living units in an SRO are called "SRO Units," and Dwelling Units and SRO Units are sometimes collectively called "Individual Units."

- The Board will consider energy efficiency measures both in-unit and within associated common areas, regardless of whether there are residential and/or commercial utility accounts, so long as existing or future (for new construction) utility accounts contribute to the Societal Benefits Charge (SBC).
- Properties eligible for the Multifamily Program will no longer be eligible for incentives under NJCEP's other residential or commercial programs but will instead participate in equivalent program paths within the Multifamily Program. There will be an appropriate, probably approximately three- to six-month, transition period between the old programs and the new Multifamily Program.
    - *Exceptions:* Multifamily projects interested in combined heat and power (CHP), renewable energy storage, SRECs, or other renewable energy initiatives will still be eligible for these programs. These technologies will not be integrated into the Multifamily Program at this time. Additionally, public housing meeting eligibility of the Local Government Energy Audit program (LGEA) will continue to be eligible for no-cost energy audits through that program.

Program Offerings and Incentives

The new Multifamily Program will include several program paths and associated incentive levels. Incentives will include fixed, per unit of equipment, rebate/incentive amounts for Prescriptive technologies, as well as savings-based incentives, such as $/kWh, $/MMBtu, $/sq. ft., or $/therm, for custom technologies, and $/multifamily unit (e.g., apartment unit) incentives for whole-building improvements. Fixed, per-unit-of-equipment rebate amounts for measures being installed at the building level will follow the incentive structure set forth under "BUILDING LEVEL REBATES" in Appendix A herein. Fixed, per unit of equipment rebate amounts for measures being installed at the Individual Unit level will follow the incentive structure set forth under "INDIVIDUAL UNIT LEVEL REBATES" in Appendix A herein.

BUILDING LEVEL REBATES are available for equipment that serves common space and multiple independent Individual Units (2 or more) and includes such measures as chillers, boilers, and exterior pole mounted lighting. INDIVIDUAL UNIT LEVEL REBATES are available for equipment that is installed to serve only an Individual Unit, such as all the equipment listed under INDIVIDUAL UNIT LEVEL REBATES in Appendix A herein.

APPLIANCE REBATES are available for appliances installed and serving anywhere in a Multifamily building, including, for example, in and serving Individual Units and/or in common space or serving multiple Individual Units.

Program Delivery

The program will be delivered by an integrated team of NJCEP program management staff, outreach staff, and trade allies with the goal of providing the multifamily market with a streamlined, single point of entry into the program:

- NJCEP Outreach Account Managers will work to build relationships with stakeholders within the multifamily market through proactive engagement with large multifamily owners and management organizations, contractors working within the multifamily market, as well as applicable associations and membership organizations. Particular attention will be paid to affordable-rate housing to facilitate and promote participation and better understand how to increase access to NJCEP for the affordable housing sector. Trained outreach staff will identify potential participants for this program, as well as offer high-level walk-through assessments to get a sense of the potential scale of the savings opportunity, provide the owner with an understanding of the potential benefits and costs to participate, and help identify the program path most-suited to the owner's level of interest. Outreach staff will assist participants with applying for a program path (see further below), connecting them with contractors from the trade ally network, as well as facilitating introductions to program management staff where additional support is needed.
- Program Management staff will manage projects from application receipt through close out. They will work with participants and their designated contractors to ensure program compliance and successful receipt of incentives.
- The program will utilize a trade ally network of pre-approved energy services companies, contractors, raters, and builders to deliver energy efficiency improvements to the multifamily sector. These companies will be able to provide more in-depth energy analysis, including ASHRAE Level II audits[3], and facilitate customer program participation. Companies from the existing lists of Home Performance with ENERGY STAR contractors, Residential New Construction raters and builders, and Pay for Performance partners will have an opportunity to qualify for this trade ally network, as well as new companies that meet the necessary qualifications. Path C requires the use of one of the pre-approved energy services companies, while Paths A & B do not require that these specific contractors be utilized.

Program offerings and incentives may be subject to change pending the results of the ongoing Multifamily Baseline Study.

[3] Level II audits assist customers in completing an in-depth evaluation of the energy performance of their buildings, including envelope; lighting; heating, ventilating, and air-conditioning systems; domestic water systems; central plant and process equipment (if applicable); and other energy-using systems. See ASHRAE, *Procedures for Commercial Building Energy Audits* (2d ed. 2011).

Appendix A: Multifamily Incentives and General Rules

Extension Policies

Many NJCEP programs include deadlines for submittal of information. For example, some programs require the submittal of a final application within six (6) months or one (1) year from the date of the letter approving the initial application. NJCEP provides for extensions of deadlines provided certain conditions are met. Program Managers in general are authorized to approve first and, in some cases, second, extensions. Additional standards/guidelines for approving extensions and/or reinstatements are set out in the FY19 Compliance Filings and in the Guidelines established for each program. The Program Administrator, with the approval of NJBPU's Office of Clean Energy Staff, may approve up to two (2) extensions beyond the extensions the Program Managers are authorized to approve.

Multifamily Program Incentive Structure

Section A-1: Path A - Single Measure Prescriptive Equipment Rebates

General Requirements:

- Applicants can apply for a single measure at a single property, or a single measure at multiple properties, multiple measures at a single property, or multiple measures across multiple properties as best suited to meet applicants' needs. The program can accommodate progress payments as sites are completed. If pursuing multiple measures, please review Path B (Section A-2) to determine if project qualifies for a bonus.
- Applicants are, prior to submitting a Path A application, strongly encouraged to consider instead including the subject equipment/measure as part of a Path C application because once a Path A incentive is paid for a certain piece of equipment/measure, that piece of equipment/measurement cannot later be included in a Path C application and the energy savings from that measure cannot be counted towards the whole-building savings achieved in Path C.
- All rebates below may be applied for within twelve (12) months of equipment purchase. Pre-approval of applications is available for customers seeking confirmation that their equipment is compliant with program requirements prior to equipment purchase and installation.
- Incentives are available for equipment installed to serve Dwelling Units, SRO Units, and common areas, as well as outdoor lighting so long as the lighting is on the building owner's/manager's or tenant's meter and the owner/manager/tenant is contributing, or will be contributing as soon as the applicable building or unit is occupied, to the SBC through its utility bill(s).
- All equipment must be new and permanently installed (i.e. will not be removed by tenant).
- Multifamily Program incentives are available only for measures implemented by applicants to the Multifamily Program, i.e., the owner or manager of the entire

Multifamily building as described in more detail in the "Target Market" subsection of the "Multifamily Program" section of this Compliance Filing.

- Incentives are available for both existing buildings and new construction, except where explicitly stated otherwise. In general, equipment in new construction projects must exceed IECC 2015/ASHRAE 90.1-2013 to qualify for incentives.
- Equipment must be listed by UL or other Occupational Safety and Health Administration (OSHA) approved Nationally Recognized Testing Laboratory (NRTL) in accordance with applicable U.S. standards, where applicable.
- Incentives/rebates are not available for equipment that previously received incentives through other NJCEP and/or SBC funded programs.

Lighting:

- All LED lighting must be either qualified by DesignLights Consortium® (DLC®)[4] or ENERGY STAR[5] and appear on their most current product list.
- Incentives for LED measures are available for replacements of existing HID, incandescent/halogen or fluorescent lighting only.
- All new lighting must maintain minimum light levels are required by applicable codes.

Lighting Controls:

- Incentives are only available for common areas.
- Incentives are only available for existing building/retrofits. New Construction will be considered if controls exceed current code requirements (evidence must be documented).
- Lighting controls are for interior spaces only and must control energy efficient lighting fixtures.
- Both wireless and hard-wired controls qualify.
- Occupancy sensors may not have manual override "ON" position.
- Incentives for daylight dimming control systems will be paid only for eligible control systems designed in accordance with Illuminating Engineering Society of North America (IESNA) practice as delineated in "IESNA Recommended Practice of Daylighting."
- There is no incentive available for occupancy sensors installed in a space where they are prohibited by state or local building or safety code.

Appliances:

- All appliances must be qualified by ENERGY STAR and appear on their most current product list[6].

Heating Ventilation and Air-Conditioning (HVAC) and Water Heaters:

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[4] www.designlights.org/QPL

[5] https://www.energystar.gov/productfinder/product/certified-light-bulbs/results; https://www.energystar.gov/productfinder/product/certified-light-fixtures/results

[6] https://www.energystar.gov/products/appliances

- Efficiency requirements comply with ASHRAE 90.1-2013. New construction project equipment efficiency must exceed ASHRAE 90.1-2013 code requirements.
- Equipment capacity is determined by AHRI Certified Net Capacity and Rating at operating conditions.
- For Split Systems, both indoor and outdoor components must be replaced/installed to qualify for an incentive.
- If more than one efficiency qualification is present (e.g.: EER & IEER), equipment specification must meet or exceed both ratings.
- Open loop Ground Source Heat Pump equipment are not eligible for incentives.
- **For existing buildings,** constant speed chillers (Path A) must meet or exceed the ASHRAE Standard 90.1-2013 IPLV efficiency to qualify for the incentive program and will receive an incentive based on meeting or exceeding the Program Incentive Minimum full load efficiency. Variable speed chillers (Path B) must meet or exceed the ASHRAE Standard 90.1-2013 full load efficiency to qualify for the program and will receive an incentive based on meeting or exceeding the Program Incentive Minimum IPLV efficiency.
- **For new construction projects,** proposed equipment must exceed minimum program efficiency requirements for Path A (constant speed) IPLV and Path B (variable speed) Full Load.
- Units are eligible for the Base $/ton incentive by meeting both the incentive program minimum and qualifying efficiency levels listed in the table below. for Path A (constant speed chillers) or Path B (variable speed chillers). An additional $/ton Performance incentive applies for each 0.1 EER above the Incentive Minimum EER or for each 0.01 kW/ton below the Incentive Minimum kW/ton
- All capacities are determined at AHRI conditions.
- Chiller full and part-load efficiencies are determined in accordance with AHRI Standard 550/590/2003.
- Chillers > 400 tons must be two-stage in order to qualify.
- Regenerative Desiccant Units are eligible when matched with core gas or electric cooling equipment.
- A/C Economizing Controls: Incentive is offered for fuel use economizers that control consumption for the A/C unit by optimizing compressor cycles. This incentive is not intended for air-side economizers.
- Incentive is available for both retrofits and new units without a current economizing control installed.

Variable Frequency Drives:

- Eligible VFD applications include: Constant Volume HVAC systems, VAV HVAC systems (new VFDs only), Cooling Tower Fan, Chilled Water Pump, Boiler Feedwater Pump, Boiler Fan Motor, Air-Compressors, and Kitchen Hood.
- The controlled horsepower (HP) is the cumulative motor HP controlled by each VFD.
- If the controlled HP falls in between sizes listed in the incentive table, the incentive will be based on the lower HP listed.

- For all VFD measures except air compressors, the maximum controlled size threshold is 50 HP.

INDIVIDUAL UNIT LEVEL REBATES [7]

Table 1: Incentives for HVAC and Water Heaters

Equipment	Minimum Efficiency	FY19 Incentive Amount
Central A/C- Tier 1	SEER ≥ 16 EER ≥ 13	$300
Central A/C- Tier 2	SEER ≥ 18 EER ≥ 13	$500
Central Air Source Heat Pump – Tier 1	SEER ≥ 16 EER ≥ 13 & HSPF ≥ 10	$300
Central Air Source Heat Pump – Tier 2	SEER ≥ 18 EER ≥ 13 & HSPF ≥ 10	$500
Mini-Split A/C:	SEER ≥ 20 EER ≥ 12.5	$500
Mini-Split Heat Pump:	SEER ≥ 20 EER ≥ 12.5 & HSPF ≥ 10	$500
Gas Furnace – Tier 1	≥ 95% AFUE	$250
Gas Furnace – Tier 2	≥ 97% AFUE	$500
Gas Boiler	≥ 90% AFUE	$300
Boiler & DHW Combination	Qualifying Boiler (see Minimum Efficiency for Boilers noted above) and water heating as noted below: • Integrated water heating and boiler unit (Combi Boilers) • OR a qualifying standalone water heater (see Minimum Efficiency for water heaters below) • OR an indirect water heater attached to the qualifying boiler	$700
Gas Storage Tank Water Heater, power vented	≤55 gallons 0.64 Uniform Energy Factor (UEF) >55 gallons 0.85 UEF	$300
Gas Tankless On-demand Water Heater	<2 gallons 081 UEF	$300
Heat Pump Water Heater	2.0 UEF	$500

[7] From AHRI directory, ENERGY STAR listing, or manufacturer's specifications.

APPLIANCE REBATES

Table 2: Appliance Rebates

Equipment	Incentive Tiers	Performance Criteria[8]	FY19 Rebate
Clothes Washer	Tier 1 (Aligned with ENERGY STAR V8.0)	Front Load - IMEF ≥ 2.75, IWF ≤ 3.7 Top Load - IMEF ≥ 2.06, IWF ≤ 4.3	$50
	Tier 2 (Aligned with CEE Tier 2)	IMEF ≥ 2.92, IWF ≤ 3.2	$75
Clothes Dryer	Tier 1 (Aligned with ENERGY STAR V1.1 Gas)	CEF ≥ 3.48	$100
	Tier 1 (Aligned with ENERGY STAR V1.1 Electric)	CEF ≥ 3.93	
	Tier 2 (Aligned with ENERGY STAR Most Efficient)	CEF ≥ 4.30 for Standard Electric CEF ≥ 3.80 for Gas	$300
Refrigerator	Tier 1 (Aligned with ENERGY STAR V5.0 =>7.75 cu ft.)	Baseline ENERGY STAR	$50
	Tier 2 (Aligned with CEE Tier 2 =>7.75 cu ft.)	15% over the measured Federal Minimum Efficiency Standard	$75

[8] Subject to change based on ENERGY STAR and CEE specifications

BUILDING LEVEL REBATES

Table 3: Lighting Incentives

- Fixture or lamp must be listed by UL or other OSHA approved Nationally Recognized Testing Laboratory (NRTL) in accordance with applicable US standards. Incentives will be paid as a Prescriptive Measure based on specific eligibility requirements.
- For incentive eligibility, LED equipment must be listed on the current ENERGY STAR or Design Lights Consortium qualified products list. Incentives will not be provided for:
  - LEDs replacing existing LED lamps/fixtures;
  - Installation of otherwise eligible screw-in/plug-in lighting measures that are (a) not hard-wired or not permanent (example - refrigerator, oven, floor/desk lamps) or (b) retail display lighting.

Technology Classification	Incentive Amount
LED Lamp (Integral/Screw-In)	Up to $1/lamp for all ENERGY STAR lamps
LED 4-Pin-G24q-and GX24q-base Lamp	Up to $5 per lamp when replacing a 4-Pin CFL with a 4-Pin LED
LED Refrigerated Case Lighting	Up to $30 per 4' LED Fixture Up to $42 per 5' LED fixture Up to $65 per 6' LED fixture
LED Display Case Lighting	Up to $30 per display case
LED Shelf-mounted display and task lights	Up to $15 per foot
LED Portable Desk Lamps	Up to $5 per fixture
LED Wall-wash Lights	Up to $30 per fixture
LED Stairwell and Passageway Luminaires	Up to $40 per fixture
LED Outdoor Pole/Arm-Mounted Area and Roadway Luminaires	Up to $100 per fixture; new and retrofit
LED Outdoor Pole/Arm-Mounted Decorative Luminaires	Up to $50 per fixture; new and retrofit
LED Outdoor Wall-Mounted Area Luminaires	Up to $100 per fixture
LED Parking Garage Luminaires	Up to $100 per fixture

Technology Classification	Incentive Amount
LED Track or Mono-point Directional Lighting Fixtures	Up to $30 per fixture
Large Outdoor Pole/Arm-Mounted Area and Roadway Retrofit	Up to $150 per fixture
LED high-bay and Low-bay fixtures for C&I Buildings	Incentive based on new LED fixture wattage ≤125W: Up to $50 per fixture >125W to ≤250W: Up to $75 per fixture >250W: Up to $150 per fixture
LED High-bay Aisle Lighting	Incentive based on new LED fixture wattage ≤125W: Up to $50 per fixture >125W to ≤250W: Up to $75 per fixture >250W: Up to $150 per fixture
LED Mogul (E39) Screw-Base Replacements for HID Lamps	Incentive based on new LED lamp wattage ≤125W: Up to $50 per lamp >125W to ≤250W: Up to $75 per lamp >250W: Up to $150 per lamp
LED Bollard Fixtures	Up to $50 per fixture
LED Linear Panels (Luminaires for Ambient Lighting of Interior Spaces)	Up to $15 per fixture for 1x4, 2x2 (new and retrofit) Up to $25 per fixture for 2x4 (new and retrofit)
LED Fuel Pump Canopy	Up to $100 per fixture
LED Architectural Flood and Spot Luminaries	Up to $50 per fixture
LED Linear Ambient Luminaires (Indirect, Indirect/Direct, Direct/Indirect, Direct)	Up to $20 per 2' fixture Up to $30 per 3' fixture Up to $45 per 4' fixture Up to $60 per 6' fixture Up to $75 per 8' fixture

Technology Classification	Incentive Amount
Retrofit Kit for LED Linear Ambient Luminaires (Indirect, Indirect/Direct, Direct/Indirect, Direct)	Up to $15 per 2' fixture Up to $15 per 4' fixture Up to $25 per 8' fixture
LED Linear Lamps	Up to $3 per 2' lamp Up to $5 per 3', 4' linear and U-bend lamp Up to $10 per 8' lamp
LED Bath Vanity	Up to $5/fixture
LED Cove Mount	Up to $5/fixture
LED Decorative Candle: Other	Up to $5/fixture
LED Decorative: Other	Up to $5/fixture
LED Downlight Pendant	Up to $5/fixture
LED Bath Vanity	Up to $5/fixture
LED Downlight Solid State Retrofit	Up to $5/fixture
LED Downlight Surface Mount	Up to $5/fixture
LED ENERGY STAR: Other	Up to $5/fixture
LED Outdoor Porch Wall Mount	Up to $5/fixture
LED ENERGY STAR Outdoor Post-Mount	Up to $5/fixture
LED Porch (wall mounted)	Up to $5/fixture
LED Torchiere	Up to $5/fixture
LED Ceiling Mount	Up to $5/fixture
LED Close to Ceiling Mount	Up to $5/fixture
LED Decorative Pendant	Up to $5/fixture
LED Inseparable SSL - Other	Up to $5/fixture
LED ENERGY STAR Security	Up to $5/fixture
LED ENERGY STAR Wall Sconces	Up to $5/fixture
LED Wrapped Lens	Up to $5/fixture
LED categories and products qualified by ENERGY STAR or Design Lights Consortium not identified	

Technology Classification	Incentive Amount
above as prescriptive will be considered for incentives through the Path B - Custom.	

Table 4: Lighting Controls Incentives

Technology Classification	FY19 Incentive
Lighting Controls	Wireless and Hard-Wired Only
Occupancy Sensors (e.g., ceiling) Wall Mounted Remote Mounted	 Up to $20 per control Up to $35 per control
Day Lighting Dimmers – All facilities Fluorescent, HID or LED Fixtures	For both fluorescent fixtures, HID or Fluorescent Hi-Bay, and LED controls - $45 per fixture controlled. New construction projects not eligible unless exceeding code requirement under ASHRAE 90.1-2013
Hi-Low Controls - All facilities: Fluorescent, HID or LED Fixtures	For all Hi-Low Controls, $35 per fixture controlled New construction projects not eligible unless exceeding code requirement under ASHRAE 90.1-2013
Advanced Lighting Control Systems (ALCS)	Incentives will be provided through Path B – Multi-Measure and Custom. To be eligible, ALCS must be listed on the current Design Lights Consortium qualified products list.

Table 5:Chiller Incentives

Electric Chillers: FY19 Electric Chiller Efficiency and Incentive Structure

Note A - The manufacturer's published chiller efficiency must be determined using the Air-Conditioning, Heating and Refrigeration Institute (AHRI) 550/590 test procedures and at the AHRI standard evaporator and condenser temperatures. If an applicant has a water cooled centrifugal chiller that is designed to operate at other than the AHRI standard conditions the procedure in Standard 90.1-2013, Section 6.4.1.2.1 may be used by the applicant to adjust the manufacturer's published efficiency at non-AHRI conditions to the efficiency at AHRI standard conditions. The applicant will need to provide the manufacturer's non-AHRI ratings as well as the calculations for the chiller efficiency at AHRI conditions.

Constant speed chillers will have to meet or exceed IPLV efficiency to qualify for the incentive program while the incentive will be based on the chillers performance relative to the full load efficiency. Conversely, variable speed chillers will have to meet or exceed the full load efficiency to qualify for the incentive program while the incentive will be based on the chillers performance relative to the IPLV efficiency.

Electrically operated comfort cooling air-cooled and water-cooled chillers are eligible for incentives under the prescriptive path. Chillers for process cooling (e.g. manufacturing, data center, food storage or processing, et cetera) loads may apply for an incentive under the custom path.

Capacity	Path A		Path B		Path A		Path B	
	Incentive Minimum Full Load kW/ton	Qualifying IPLV kW/ton	Qualifying Full Load kW/ton	Incentive Minimum IPLV kW/ton	Incentive Minimum Full Load EER	Qualifying IPLV EER	Qualifying Full Load EER	Incentive Minimum IPLV EER
Air Cooled								
tons < 150					10.30	13.70	9.70	16.12
tons > 150					10.30	14.00	9.70	16.42
Water Cooled Positive Displacement								
tons < 75	0.735	0.600	0.780	0.490				
75 < tons <	0.706	0.560	0.750	0.480				
150 < tons <	0.647	0.540	0.680	0.431				
300 < tons <	0.598	0.520	0.625	0.402				
tons > 600	0.549	0.500	0.585	0.372				
Water Cooled Centrifugal								
tons < 150	0.598	0.550	0.695	0.431				
150 < tons <	0.598	0.550	0.635	0.392				
300 < tons <	0.549	0.520	0.595	0.382				
400 < tons <	0.549	0.500	0.585	0.372				
tons ≥ 600	0.549	0.500	0.585	0.372				

Type	Capacity	Existing Building				New Construction			
		Constant Speed		Variable Speed		Constant Speed		Variable Speed	
		Base $/ton	Perf $/ton	Base $/ton	Perf $/ton	Base $/ton	Perf $/ton	Base $/ton	Perf $/ton
AC	tons < 150	$20.00	$3.50	$90.00	$4.00	$10.00	$3.50	$45.00	$4.00
AC	tons ≥ 150	$20.00	$2.75	$92.00	$4.00	$10.00	$2.75	$46.00	$4.00
WC positive disp	tons < 75	$13.00	$2.25	$40.00	$2.50	$6.50	$2.25	$20.00	$2.50
WC positive disp	75 ≤ tons < 150	$20.00	$2.00	$43.00	$2.00	$10.00	$2.00	$21.50	$2.00
WC positive disp	150 ≤ tons < 300	$17.00	$2.00	$43.00	$2.00	$8.50	$2.00	$21.50	$2.00
WC positive disp	300 ≤ tons < 600	$15.00	$2.25	$37.00	$2.00	$7.50	$2.25	$18.50	$2.00
WC positive disp	tons ≥ 600	$30.00	$2.00	$44.00	$2.00	$15.00	$2.00	$22.00	$2.00
WC centrifugal	tons < 150	$24.00	$2.25	***$24.00***	***$2.75***	$12.00	$2.25	$12.00	$2.75
WC centrifugal	150 ≤ tons < 300	$10.00	$2.00	$30.00	$2.50	$5.00	$2.00	$15.00	$2.50
WC centrifugal	300 ≤ tons < 400	$8.00	$2.00	$20.00	$2.00	$4.00	$2.00	$10.00	$2.00
WC centrifugal	400 ≤ tons < 600	$8.00	$2.00	$25.00	$2.00	$4.00	$2.00	$12.50	$2.00
WC centrifugal	tons ≥ 600	$8.00	$2.00	$25.00	$2.00	$4.00	$2.00	$12.50	$2.00

Performance Incentives apply for each 0.1 EER above the Incentive Minimum EER or for each 0.01 kW/ton below the Incentive Minimum kW/ton.

Performance Incentives apply for each 0.1 EER above the Incentive Minimum EER or for each 0.01 kW/ton below the Incentive Minimum kW/ton.

For new construction projects operating under ASHRAE 90.1-2013 code, proposed equipment must exceed minimum program efficiency requirements for Path A (constant speed) IPLV and Path B (variable speed) Full Load.

Technology Classification	FY19 Incentive
Water Cooled Chillers	Incentive table reflects New Construction and Existing Buildings separately shown above.
Air Cooled Chillers	Incentive table reflects New Construction and Existing Buildings separately shown above.
Natural Gas Chillers: For gas chillers, full load efficiencies are determined in accordance with A.H.R.I. 560, however, part load efficiencies are not rated.	
Gas Absorption Chillers	≥1.1 full load or part load Coefficient of Performance (COP)
< 100 tons	Up to $450 per ton
100 to 400 tons	Up to $230 per ton
> 400 tons	Up to $185 per ton
Gas Engine Driven Chillers	Treated under Path B: Multi-Measure / Custom (≥1.1 full or part load COP)
Desiccant Systems	Up to $1.00 per cfm (gas or electric)

Table 6: Electric HVAC Incentives

Technology Classification	FY19 Incentive
HVAC Systems	Please refer to tables below for HVAC minimum efficiency standards and incentives

SmartStart Equipment Type	Cooling Capacity (btuh)	Tier	Existing Building Replacement		New Construction			Incentive ($/unit)
			SEER	IEER	SEER	IEER	COP	
Unitary HVAC Split System	< 5.4	1	14.0					$92
Unitary HVAC Split System	< 5.4	2	16.0					$105
Unitary HVAC Single Package	< 5.4	1	14.3					$92
Unitary HVAC Single Package	< 5.4	2	16.0					$103
Unitary HVAC Single Package or	≥ 5.4 and < 11.25	1			11.5	13.0		$73
Unitary HVAC Single Package or	≥ 5.4 and < 11.25	2			12.5	14.0		$79
Unitary HVAC Single Package or	≥ 11.25 and < 20	1			11.5	12.4		$79
Unitary HVAC Single Package or	≥ 11.25 and < 20	2			12.0	14.0		$89
Central DX AC	≥ 20 and < 63	1			10.5	11.6		$79
Central DX AC	≥ 20 and < 63	2			11.0	12.5		$85
Central DX AC	≥ 63	1			9.7	11.2		$72
Central DX AC	≥ 63	2			10.0	12.0		$77
Air Source HP Split System	< 5.4	1	14.3	8.4				$92
Air Source HP Split System	< 5.4	2	15.5	8.5				$100
Air Source HP Single Package	< 5.4	1	14.3	8.2				$92
Air Source HP Single Package	< 5.4	2	15.5	8.5				$100
Air Source HP Single Package or	≥ 5.4 and < 11.25	1			11.5	12.2	3.4	$73
Air Source HP Single Package or	≥ 5.4 and < 11.25	2			12.1	12.8	3.5	$77
Air Source HP Single Package or	≥ 11.25 and < 20	1			11.5	11.6	3.3	$79
Air Source HP Single Package or	≥ 11.25 and < 20	2			11.7	15.0	3.3	$82
Air Source HP Single Package or	≥ 20	1			9.5	10.5	3.2	$79
Air Source HP Single Package or	≥ 20	2			9.7	12.0	3.2	$82

SmartStart Equipment Type	Cooling Capacity (btuh)	Tier	Existing Building Replacement		Incentive ($/unit)	New Construction		Incentive ($/unit)
			EER	COP		EER	COP	
PTAC	< 7,000	1	12.0		$40	12.0		$20
PTAC	≥ 7,000	1	12.0		$40	12.0		$20
PTAC	≥ 8,000	1	11.7		$40	11.7		$20
PTAC	≥ 9,000	1	11.4		$40	11.4		$20
PTAC	≥ 10,000	1	11.1		$40	11.1		$20
PTAC	≥ 11,000	1	10.8		$40	10.8		$20
PTAC	≥ 12,000	1	10.5		$40	10.5		$20
PTAC	≥ 13,000	1	10.2		$40	10.2		$20
PTAC	≥ 14,000	1	9.9		$40	9.9		$20
PTAC	≥ 15,000	1	9.6		$40	9.6		$20
PTHP	< 7,000	1	12.0	3.4	$40	12.0	3.4	$20
PTHP	≥ 7,000	1	12.0	3.4	$40	12.0	3.4	$20
PTHP	≥ 8,000	1	11.7	3.3	$40	11.7	3.3	$20
PTHP	≥ 9,000	1	11.4	3.3	$40	11.4	3.3	$20
PTHP	≥ 10,000	1	11.1	3.2	$40	11.1	3.2	$20
PTHP	≥ 11,000	1	10.8	3.2	$40	10.8	3.2	$20
PTHP	≥ 12,000	1	10.5	3.1	$40	10.5	3.1	$20
PTHP	≥ 13,000	1	10.2	3.1	$40	10.2	3.1	$20
PTHP	≥ 14,000	1	9.9	3.0	$40	9.9	3.0	$20
PTHP	≥ 15,000	1	9.6	3.0	$40	9.6	3.0	$20

SmartStart Equipment Type	Cooling Capacity Tons	Incentive Tier	Existing Building			New Construction		
			Minimum Qualifying Efficiency		Incentive $/ton	Minimum Qualifying Efficiency		Incentive $/ton
			EER	COP		EER	COP	
Water Source Heat Pump	< 1.4	1	12.4	4.3	$40	12.4	4.3	$20
Water Source Heat Pump	< 1.4	2	14.0	4.8	$45	14.0	4.8	$23
Water Source Heat Pump	≥ 1.4 and < 5.4	1	13.3	4.3	$60	13.3	4.3	$30
Water Source Heat Pump	≥ 1.4 and < 5.4	2	15.0	4.5	$68	15.0	4.5	$34
Water Source Heat Pump	≥ 5.4 and < 11.25	1	13.3	4.3	$80	13.3	4.3	$40
Water Source Heat Pump	≥ 5.4 and < 11.25	2	15.0	4.5	$90	15.0	4.5	$45
SPVAC	< 5.4	1	10.2		$45	10.2		$10
SPVAC	< 5.4	2	10.7		$47	10.7		$12
SPVAC	≥ 5.4 and < 11.25	1	10.2		$45	10.2		$10
SPVAC	≥ 5.4 and < 11.25	2	10.7		$47	10.7		$12
SPVAC	≥ 11.25 and < 20	1	10.2		$45	10.2		$10
SPVAC	≥ 11.25 and < 20	2	10.7		$47	10.7		$12
SPVHP	< 5.4	1	10.2	3.1	$45	10.2	3.1	$10
SPVHP	< 5.4	2	10.7	3.2	$47	10.7	3.2	$12
SPVHP	≥ 5.4 and < 11.25	1	10.2	3.1	$45	10.2	3.1	$10
SPVHP	≥ 5.4 and < 11.25	2	10.7	3.2	$47	10.7	3.2	$12
SPVHP	≥ 11.25 and < 20	1	10.2	3.1	$45	10.2	3.1	$10
SPVHP	≥ 11.25 and < 20	2	10.7	3.2	$47	10.7	3.2	$12

SmartStart Equipment Type	Cooling Capacity Tons	Incentive Tier	Existing Building			New Construction		
			Minimum Qualifying Efficiency		Incentive $/ton	Minimum Qualifying Efficiency		Incentive $/ton
			EER	COP		EER	COP	
Groundwater Source Heat Pump	< 11.25	1	18.4	3.7	$80	18.4	3.7	$40
Groundwater Source Heat Pump	< 11.25	2	22.0	3.9	$96	22.0	3.9	$48
Ground Source Heat Pump	< 11.25	1	14.4	3.2	$80	14.4	3.2	$40
Ground Source Heat Pump	< 11.25	2	18.0	3.6	$100	18.0	3.6	$50

Occupancy Controlled Thermostats for Hospitality / Institutional Facilities	Up to $75/per occupancy-controlled thermostat
A/C Economizing Control	≤5 tons - $85 >5 tons - $170

Table 7:Gas HVAC Incentives

Technology Classification	FY19 Incentive

Gas Fired Boilers: FY19 Efficiency Levels

Boiler Type	Size Category (MBh input)	Non-Condensing	Condensing Tier 1	Condensing Tier 2
Hot Water	< 300	85% AFUE	88% AFUE	93% AFUE
Hot Water	≥ 300 and ≤ 2,500	85% Et	88% Et	91% Et
Hot Water	> 2,500	85% Ec	88% Ec	93% Ec
Steam	< 300	82% AFUE	NA	NA
Steam, all except natural draft	≥ 300 and ≤ 2,500	81% Et	NA	NA
Steam, all except natural draft	> 2,500	81% Et	NA	NA
Steam, natural draft	≥ 300 and ≤ 2,500	79% Et	NA	NA
Steam, natural draft	> 2,500	79% Et	NA	NA

< 300 MBH	Hot Water Non-Condensing - $0.95/MBH; Min $400 Hot Water Condensing – Tier 1 - $1.35/MBH, Tier 2 - $2.00/MBH ; Min $1,000 Steam Natural Draft - $1.40/MBH; Min $300 Steam Power Ventilation - $1.40/MBH; Min $400 Efficiency level defined by above table
≥300 MBH - 1500 MBH	Hot Water Non-Condensing - $1.75/MBH Hot Water Condensing – Tier 1 - $2.00/MBH, Tier 2 - $2.20/MBH ; Min $1,000 Steam Natural Draft - $1.00/MBH Steam Power Ventilation - $1.20/MBH Efficiency level defined by above table

Technology Classification	FY19 Incentive
> 1500 MBH - 2500 MBH	Hot Water Non-Condensing - $1.50/MBH Hot Water Condensing – Tier 1 $1.85/MBH, Tier 2 - $2.20/MBH Steam Natural Draft - $0.90/MBH Steam Power Ventilation - $1.20/MBH Efficiency level defined by above table
> 2500 MBH – 4000 MBH	Hot Water Non-Condensing - $1.30/MBH Hot Water Condensing – Tier 1 - $1.55, Tier 2 - $2.00/MBH Steam Natural Draft - $0.70/MBH Steam Power Ventilation - $1.00/MBH Efficiency level defined by above table
> 4000 MBH	Treated under Custom Measure Path
Boiler Economizer Controls	BTU - Incentive ≤800,000 - $1,200 >800,000 - <1.6mil - $1,500 ≥1.6mil - <3mil- $1,800 ≥3mil - <3.5mil - $2,100 ≥3.5mil - <4mil - $2,400 ≥4mil - $2,700
Gas Furnaces	
AFUE to ≥ 95% ≥ 2.0% Fan Efficiency, ENERGY STAR qualified	Incentive up to $400 per furnace
Gas Infrared Heating	Low Intensity Infrared Heater with Reflectors ≤100,000 btu/hr. - $500 per unit >100,000 btu/hr. - $300 per unit Indoor Only

Table 8: Gas Water Heating Incentives

Technology Classification	FY19 Incentive			
Gas Fired Water Heating:	Gas Water Heater Type and Capacity		Minimum Efficiency	Incentive Rate
	Gas-fired, Storage	≤ 75,000 Btu/h (consumer)	≥ 0.67 EF or ≥ 0.64 UEF	$1.75/MBH
			≥ 0.87 EF or ≥ 0.81 UEF	$3.50/MBH
		>75,000 Btu/h and ≤ 105,000 Btu/h (residential duty commercial)	≥ 82% Et or ≥ 0.64 UEF	$1.75/MBH
			≥ 90% Et or ≥ 0.85 UEF	$3.50/MBH
		>105,000 Btu/h (commercial)	≥ 82% Et	$1.75/MBH
			≥ 92% Et	$3.50/MBH
	Gas-fired, instant (tankless)	< 200,000 Btu/h (consumer)	≥ 90% Et or ≥ 0.82 EF or ≥ 0.81 UEF	$300/tankless water heater
		≥ 200,000 Btu/h (commercial)	≥ 90% Et	$300/tankless water heater
Gas Fired Water Booster Heaters:				
≤ 100 MBH	Up to $17 per MBH			
> 100 MBH	Up to $35 per MBH			

Table 9: Variable Frequency Drives

Variable Frequency Drives

VAV - Variable Air Volume HVAC System:	5 HP ≤ 50 HP
CV - Constant Volume HVAC System:	0.5 HP ≤ 50 HP
T - Cooling Tower:	10 HP ≤ 50 HP
P - Chilled Water Pump:	20 HP ≤ 50 HP
A - Air Compressor:	25 HP ≤ 200 HP
BP - Boiler Feed Water Pump:	5 HP ≤ 50 HP
BF - Boiler Fan Motor:	5 HP ≤ 50 HP
K- Kitchen Hood:	0.5 HP ≤ 50 HP

- Controlled HP is the cumulative motor HP controlled by each VFD.
- Controlled HP less than the listed eligible values are ineligible for incentives.
- Controlled HP more than the listed eligible values should use the C&I Custom program.
- If the controlled HP falls in between the HP listed on the VFD incentive table, the incentive is based on the lower controlled HP listed.
- For all VFD measure except air compressors, the maximum controlled threshold is 50HP. VFDs controlling more than 50HP, except related to air compressors, will be reviewed through the Custom Measure path.
- For new air compressors with VFDs, prescriptive incentives will be provided for units up to 200HP. VFDs controlling air compressor motors exceeding 200HP will be reviewed through the Custom Measure path.

Motor Size (HP)	Incentive ($)
0.5	$50
1	$75
2	$100
3	$200
4	$300
5	$900
7.5	$1,000
10	$1,100
15	$1,200
20	$1,300
25	$1,400
30	$1,500
40	$2,500
50	$3,000
60	$3,500
75	$4,000
100	$5,000
200	$7,000

Table 10: Premium Efficiency Motors

Technology Classification	FY19 Incentive
Premium Efficiency Motors:	
Fractional (< 1 HP) Electronic Commutated Motors (ECM)	Up to $40 per ECM for replacement of existing shaded-pole motor in refrigerated/freezer cases New construction projects not eligible.

Table 11: Food Service Incentives

Technology Classification	FY19 Incentive
Refrigeration Controls:	
Door Heater Control	$50 per control
Electric Defrost Control	$50 per control
Novelty Cooler Shutoff	$50 per control
Evaporator Fan Control	$75 per control
Refrigeration Doors/Covers:	
Energy-Efficient Doors for open Refrigerated Doors/Covers	$100 per door
Aluminum Night Curtains for Open Refrigerated Cases	$3.50 per linear foot
Commercial Dishwashers: Equipment must be qualified by the current version* of ENERGY STAR or CEEP[9]	
Under Counter	$400 per unit
Door Type	$700 per unit
Single Tank Conveyor	$1,000 per unit
Multiple Tank Conveyor	$1,500 per unit

[9] Version in place at time of application submittal.

Commercial Combination Oven/Steamer (Electric): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below.

- ASTM Criteria:
  - Must meet the idle energy rate requirements in the Electric Combination Oven/Steamer Table, utilizing American Society for Testing and Materials (ASTM) F2861.
  - Must have a cooking energy efficiency of 50 percent or greater in steam mode and 70 percent cooking energy efficiency or greater in convection mode, utilizing (ASTM) F2861.
  - Combination oven/steamer pan capacity based on the maximum capacity of full-size 2 1/2-inch deep hotel pans. This must be consistent with the number of pans used to meet the energy-efficiency qualifications per ASTM F2861.

Pan Capacity	
Less than 15 pans 15-28 pans Greater than 28 pans	$1,000 per oven

Commercial Combination Oven/Steamer (Gas): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below.

- ASTM Criteria:
  - Must have a cooking energy efficiency of 38 percent or greater in steam mode and 44 percent or greater in convection mode, utilizing ASTM F2861.
  - Must meet the idle energy rate requirements in the Gas Commercial Combination Oven/Steamer Table, utilizing ASTM F2861.
  - Combination oven/steamer pan capacity on based on the maximum capacity of full-size 2 1/2-inch deep hotel pans. This must be consistent with the number of pans used to meet the energy-efficiency qualifications per ASTM F2861.

Pan Capacity	
Less than 15 pans 15-28 pans Greater than 28 pans	$750 per oven

Commercial Convection Oven (Electric): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below.

- ASTM Criteria:
  - Must have a tested heavy load (potato) cooking energy efficiency of 70 percent or more, utilizing ASTM F1496.
  - Full-size electric ovens must have a tested idle energy rate of 1.6 kW or less, utilizing ASTM F1496.
  - Half-size electric ovens must have a tested idle energy rate of 1.0 kW or less, utilizing ASTM F1496.

Commercial Convection Oven (Electric)	$350 per oven

Commercial Convection Oven (Gas): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below.

- ASTM Criteria:
  - Must have a tested heavy load (potato) cooking energy efficiency of 44 percent or greater and an idle energy rate of 13,000 Btu/h or less, utilizing ASTM F1496.

Commercial Convection Oven (Gas)	$500 per oven

Commercial Rack Oven (Gas): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below.

- ASTM Criteria:
  - Must have a tested baking energy efficiency of 50 percent or greater, utilizing ASTM F2093.

Commercial Rack Oven Single (Gas)	$1,000 per single oven
Commercial Rack Oven Double (Gas)	$2,000 per double oven

Commercial Conveyor Oven (Gas): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below.

- ASTM Criteria:
  - Must have a tested baking energy efficiency of 42 percent or greater, utilizing ASTM F1817.
  - Small conveyor ovens with total conveyor width 25 inches or less must have a tested idle energy rate that is 29,000 Btu/h or less, utilizing ASTM F1817.
  - Large conveyor ovens with total conveyor width greater than 25 inches must have a tested idle energy rate that is 57,000 Btu/h or less, utilizing ASTM F1817.
  - Multiple-deck oven configurations are paid per qualifying oven deck.

Commercial Conveyor Oven – Small (Conveyor width 25in. or less, Gas)	$500 per deck
Commercial Conveyor Oven – Large (Conveyor width greater than 25in., Gas)	$750 per deck

Commercial Fryer (Electric): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below.

- ASTM Criteria:
  - Must have a tested heavy load cooking energy efficiency of 80 percent or greater and an idle energy rate of 1.0 kW or less, utilizing ASTM F1361.
  - Multiple vat configurations are paid per qualifying vat.

Commercial Fryer (Electric)	$200 per vat

Commercial Fryer (Gas): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below.

- ASTM Criteria:
  - Must meet a tested heavy load cooking energy efficiency of 50 percent or greater and an idle energy rate of 9,000 Btu/h or less, utilizing ASTM F1361.
  - Multiple vat configurations are paid per qualifying vat.

Commercial Fryer (Gas)	$749 per vat

Commercial Large Vat Fryer (Electric): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below.

- ASTM Criteria:
  - Must have a tested heavy load (French fry) cooking energy efficiency of 80 percent or greater, utilizing ASTM F2144.
  - Multiple vat configurations are paid per qualifying vat.

Commercial Large Vat Fryer (Electric)	$200 per vat

Commercial Large Vat Fryer (Gas): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below.

- ASTM Criteria:
  - Must have a tested heavy load (French fry) cooking energy efficiency of 50 percent or greater, utilizing ASTM F2144.
  - Multiple vat configurations are paid per qualifying vat.

Commercial Large Vat Fryer (Gas)	$500 per vat

Commercial Griddle (Electric): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below.

- ASTM Criteria:
  - Must have a tested heavy load cooking energy efficiency of 70 percent or greater and an idle energy rate of 355 watts per square foot of cooking surface or less, utilizing ASTM F1275.

Commercial Griddle (Electric)	$300 per griddle

Commercial Griddle (Gas): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below.

- ASTM Criteria:
  - Must have a tested heavy load cooking energy efficiency of 38 percent or greater and an idle energy rate of 2,650 Btu/h per square foot of cooking surface or less, utilizing ASTM F1275.

Commercial Griddle (Gas)	$125 per griddle

Commercial Steam Cooker (Electric): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below. o ASTM Criteria: o Must have a tested heavy load (potato) cooking energy efficiency of 50 percent or greater, utilizing ASTM F1484.	
Commercial Steam Cooker (Electric)	$1,250 per steamer
Commercial Steam Cooker (Gas): Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined below. o ASTM Criteria: o Must have a tested heavy load (potato) cooking energy efficiency of 38 percent or greater, utilizing ASTM F1484.	
Commercial Steam Cooker (Gas)	$2,000 per steamer
Insulated Holding Cabinets: o Must meet CEE Tier II specification. o Does not include cook and hold equipment. o All measures must be electric hot food holding cabinets that are fully insulated and have solid doors.	
Insulated Holding Cabinet, Full Size	$300 per unit
Insulated Holding Cabinet, ¾ Size	$250 per unit
Insulated Holding Cabinets, ½ Size	$200 per unit

Table 12: Refrigeration Incentives

Commercial Glass Door Refrigerators: o The refrigeration system must be built-in (packaged). o Cases with remote refrigeration systems do not qualify. o Must meet ENERGY STAR Version 2.0 specification.	
ENERGY STAR Glass Door Refrigerators – Internal volume <15 ft^3	$75 per unit
ENERGY STAR Glass Door Refrigerators – Internal volume 15 ft^3–29.9 ft^3	$100 per unit
ENERGY STAR Glass Door Refrigerators – Internal volume 30 ft^3–49.9 ft^3	$125 per unit
ENERGY STAR Glass Door Refrigerators – Internal volume ≥ 50 ft^3	$150 per unit
Commercial Solid Door Refrigerators: o The refrigeration system must be built-in (packaged). o Cases with remote refrigeration systems do not qualify. o ENERGY STAR specification Version 1.0 refrigerators do not qualify. o Must meet ENERGY STAR Version 2.0 specification.	
ENERGY STAR Solid Door Refrigerators – Internal volume <15 ft^3	$50 per unit
ENERGY STAR Solid Door Refrigerators – Internal volume 15 ft^3–29.9 ft^3	$75 per unit
ENERGY STAR Solid Door Refrigerators – Internal volume 30 ft^3–49.9 ft^3	$125 per unit
ENERGY STAR Solid Door Refrigerators – Internal volume ≥ 50 ft^3	$200 per unit
Commercial Glass Door Freezers: o The refrigeration system must be built-in (packaged). o Cases with remote refrigeration systems do not qualify. o Must meet ENERGY STAR Version 2.0 specification.	
ENERGY STAR Glass Door Freezers – Internal volume <15 ft^3	$200 per unit
ENERGY STAR Glass Door Freezers – Internal volume 15 ft^3–29.9 ft^3	$250 per unit
ENERGY STAR Glass Door Freezers – Internal volume 30 ft^3–49.9 ft^3	$500 per unit
ENERGY STAR Glass Door Freezers – Internal volume ≥ 50 ft^3	$1,000 per unit

Commercial Solid Door Freezers:

- The refrigeration system must be built-in (packaged).
- Cases with remote refrigeration systems do not qualify.
- ENERGY STAR specification Version 1.0 freezers do not qualify.
- Must meet ENERGY STAR Version 2.0 specification.

ENERGY STAR Solid Door Freezers – Internal volume <15 ft^3	$100 per unit
ENERGY STAR Solid Door Freezers – Internal volume 15 ft^3–29.9 ft^3	$150 per unit
ENERGY STAR Solid Door Freezers – Internal volume 30 ft^3–49.9 ft^3	$300 per unit
ENERGY STAR Solid Door Freezers – Internal volume ≥ 50 ft^3	$600 per unit

Commercial Ice Machines:

- Ice machines must be tested in accordance with the Air Conditioning and Refrigeration Institute (ARI) Standard 810.
- Includes machines generating ice cubes that are 60 grams (2 oz.) or lighter. It also includes flaked, crushed and fragmented ice makers.
- Only air-cooled machines (self-contained, ice making heads, or remote condensing) qualify.
- The entire ARI tested ice making system must be purchased.
- Remote machines must be purchased with qualifying remote condenser or remote condenser/compressor unit.
- The efficiency specifications for the two qualifying tiers are equivalent to ENERGY STAR or Super-Efficient.

ENERGY STAR Ice Machine (101–200 lbs./day)	$50 per unit
ENERGY STAR Ice Machine (201–300 lbs./day)	$50 per unit
ENERGY STAR Ice Machine (301–400 lbs./day)	$75 per unit
ENERGY STAR Ice Machine (401–500 lbs./day)	$75 per unit
ENERGY STAR Ice Machine (501–1000 lbs./day)	$125 per unit
ENERGY STAR Ice Machine (1001–1500 lbs./day)	$200 per unit
ENERGY STAR Ice Machine (greater than 1500 lbs./day)	$250 per unit
Super-Efficient Ice Machine (101–200 lbs./day)	$100 per unit
Super-Efficient Ice Machine (201–300 lbs./day)	$100 per unit
Super-Efficient Ice Machine (301–400 lbs./day)	$150 per unit

Super-Efficient Ice Machine (401–500 lbs./day)	$150 per unit
Super-Efficient Ice Machine (501–1000 lbs./day)	$250 per unit
Super-Efficient Ice Machine (1001–1500 lbs./day)	$400 per unit
Super-Efficient Ice Machine (greater than 1500 lbs./day)	$500 per unit

Section A-2: Path B – Multi-Measure and Custom Measure Incentives

General Requirements:

- Path B is targeted for participants interested in multiple measure upgrades but for one reason or another cannot commit to Path C (Whole Building/Comprehensive). Multi-measure incentives may not be applied for if a project is enrolled in Path C (Comprehensive/Whole Building, see Section A-3). Further, prior to submitting a Path B Multi-Measure application, applicants are strongly encouraged to instead consider including the subject equipment/measure as part of a Path C application. This is because an application for Path C (Comprehensive/Whole-Building) incentives will not be accepted if the project is the subject of a Path B Multi-measure application at the time of the Path C application.
- Properties can apply for multiple-measures at a single property, or multiple properties. Program can accommodate progress payments as sites are completed.
- Custom Measure technologies require pre-approval prior to installation. Remaining equipment (designated as Prescriptive in Section A-1) may apply for rebates within 12 months of equipment purchase. Pre-approval of applications is available for customers seeking confirmation that their equipment is compliant with program requirements prior to equipment purchase and installation.
- Incentives are available for equipment installed to serve Dwelling Units, SRO Units, and common areas, as well as outdoor lighting so long as the lighting is on the building owner's/manager's or tenant's meter and the owner/manager/tenant is contributing, or will be contributing as soon as the applicable building or unit is occupied, to the SBC through its utility bill(s).
- All equipment must be new and permanently installed (i.e. will not be removed by tenant).
- Multifamily Program incentives are available only for measures implemented by applicants to the Multifamily Program, i.e., the owner or manager of the entire Multifamily building as described in more detail in the "Target Market" subsection of the "Multifamily Program" section of this Compliance Filing.
- Incentives are available for both existing buildings and new construction, except where explicitly stated otherwise. In general, equipment in new construction projects must exceed IECC 2015/ASHRAE 90.1-2013 to qualify for incentives.
- Equipment must be listed by UL or other OSHA approved Nationally Recognized Testing Laboratory (NRTL) in accordance with applicable US standards, where applicable.
- All equipment-specific rules outlined in Section A-1 apply.
- Incentives/rebates are not available for equipment that previously received incentives through other NJCEP and/or SBC funded programs.

Custom Measure Requirements:

- For measures not covered by the above prescriptive incentive tables, a project may be eligible for a custom measure incentive (e.g. envelope upgrades such as insulation, air-sealing, window replacement, etc.; advanced lighting controls; variable refrigerant flow HVAC; HVAC controls).
- Custom Measure applications require energy savings calculations and must be pre-approved by Program Manager prior to installation.
- For retrofit projects, the energy baseline will be determined by existing condition. Proposed project must at least meet or exceed code. For new construction, the energy baseline will be determined by code and project must exceed code.

Table 13: Custom Measure Incentives

	Incentive Rate
Custom Incentive	$0.15/kWh
	$1.50/therm

Multi-Measure Requirements:

- Participants can select any "bundle" listed below. **Participants that successfully implement a bundled project will, upon project completion, be eligible for a bonus equivalent to 10% of the total base incentive for all the measures included in the bundle.** Larger scopes of work should follow Path C, or pursue additional measures through Path A.
- Eligible measures in each bundle are listed in Path A (Section A-1) (other than as noted below) and must meet all the requirements listed there.
- New construction bundles are assumed to apply to the whole building.

Table 14: Bundles for Existing Buildings

Bundle Name	Measure Options	Requirements
Lighting Bundle	• In-unit fixtures • Common area fixtures • Exterior fixtures (attached to building) *Required:* Lighting Controls	Complete at least <u>two</u> improvements from options at left, <u>plus</u> associated lighting controls.
Unit Turnover Bundle	• In-unit lighting fixtures • In-unit Appliances • In-unit DHW low-flow fixtures • In-unit HVAC • In-unit Domestic Hot Water Heater	Complete at least <u>three</u> improvements in each unit from options at left. Note the low-flow fixtures measure must be submitted as a Custom Measure.
DHW Bundle	• Domestic Hot Water Heater • DHW pipe insulation • In-unit DHW low-flow fixtures	Complete <u>all three</u> improvements at left. Note the insulation and low-flow fixtures measures must be submitted as Custom Measure. For existing buildings, the insulation must meet or exceed minimum piping insulation thickness as outlined in ASHRAE 90.1-2103; for new construction, it must exceed these requirements.
HVAC Bundle	• Heating equipment • Cooling equipment *Required:* VFDs or HVAC Controls	Complete at least <u>one</u> improvement from options at left, <u>plus</u> either associated VFDs or HVAC controls.
Envelope Bundle	• Attic/ceiling insulation • Air-sealing • Windows (single-pane replacement only)	Complete at least <u>two</u> upgrades at left. Attic insulation requires air-sealing attic plane. Note these upgrades must be submitted as Custom Measures.

Bundle Name	Measure Options	Requirements
Custom Bundle	Choose at least <u>three</u> measures from the above Measure Options. May include a Custom Measure as one of the options. If a measure from the Lighting Bundle or the HVAC Bundle is chosen, the applicant must also include the associated "Required" feature and that feature will not be counted towards the required three measures. For example, an applicant proposing to implement in-unit lighting fixtures and In-unit HVAC would also be required to install lighting controls and would only qualify for a Custom Bundle Bonus if it also implemented a third measure, such as heating equipment.	

Note: Although a Measure Option may be form part of more than one bundle, only one base incentive will be paid for that Measure Option.

Table 15: Bundles for New Construction

Bundle Name	Measure Options	Requirements
Lighting & Appliance Bundle	• High efficiency in-unit and common area lighting • Common area lighting controls • Exterior lighting (attached to building) • Appliances	Complete <u>all</u> improvements at left. Note these items must be submitted in accordance with Path A (Appliances) or as Custom Measures (the lighting measures). Note the insulation and fixtures measures must be submitted as Custom Measure. For existing buildings, the insulation must meet or exceed minimum piping insulation thickness as outlined in ASHRAE 90.1-2103; for new construction, it must exceed these requirements.
DHW Bundle	• Domestic Hot Water Heater • In-unit DHW low-flow fixtures • Pipe insulation	Complete <u>all</u> improvements at left. Note the insulation and low-flow fixtures measures must be submitted as Custom Measures. For existing buildings, the insulation must meet or exceed minimum piping insulation thickness as outlined in ASHRAE 90.1-2103; for new construction, it must exceed these requirements.
HVAC Bundle	• Heating equipment • Cooling equipment *Required:* VFDs or HVAC Controls[10]	Complete at least <u>one</u> improvement from options at left, <u>plus</u> either associated VFDs or HVAC controls.
Envelope Bundle	• High performance envelope • Windows	Complete <u>all</u> improvements at left. Note these upgrades must be submitted as Custom Measures.
Custom Bundle	Choose at least <u>three</u> measures from the above Measure Options. May include a Custom Measure as one of the options. If a measure from the HVAC Bundle is chosen, the applicant must also include the associated "Required" feature and that feature will not be counted towards the required three measures. For example, an applicant proposing to implement common area lighting controls and heating equipment would also be required to install associated VFDs or HVAC Controls and would only qualify for a Custom Bundle Bonus if it also implemented a third measure, such as appliances.	

[10] The HVAC Controls are identified in the Electric HVAC Incentives Table above; they may also be submitted as Custom Measures if they are controls that are not listed in the Electric HVAC Incentives Table above.

Section A-3: Path C - Comprehensive, Whole-Building Incentives

General Requirements:

- An application for Path C (Comprehensive/Whole-Building) incentives will not be approved if the subject project is already enrolled in Path B (Custom and Multi-Measure) at the time of the Path C application.
- Incentives are available for equipment installed to serve Dwelling Units, SRO Units, and common areas, as well as outdoor lighting so long as the lighting is on the building owner's/manager's or tenant's meter and the owner/manager/tenant is contributing, or will be contributing as soon as the applicable building or unit is occupied, to the SBC through its utility bill(s)
- Certain incentives and incentive caps in this Section A-3 are stated in terms of Dwelling Units. However, multifamily SROs are also eligible for these incentives, even though they consist of SRO Units, not Dwelling Units. For multifamily SROs, multifamily unit-based incentives will be calculated by dividing the average square footage (sf) of the SRO Units in a multifamily SRO building by 1,000 and multiplying that percentage by the stated Dwelling Unit incentive amount. By way of example only, if an existing market-rate multifamily SRO building had one 500 sq. ft. unit, one 300 sq. ft. unit, and one 400 sq. ft. unit, each of which achieved 5% savings: (a) its Path C incentive would total $600 (0.4 x 500 x 3 = 600) and (b) the project's Consultant would be paid an additional total of $120 (0.4 x 100 x 3 = 120).
- Scope of work must be comprehensive (i.e. more than one measure) and (a) assesses the cost-effectiveness of installing energy conservation measures in each of the following areas: (i) heating systems, (ii) cooling systems, (iii) ventilation systems, (iv) domestic hot water systems, (v) building envelopes, and (vi) lighting and (b) implements all cost-effective energy conservation measures identified through the foregoing assessment or, as to any such measures not implemented, explains why such implementation would not be practicable.
- Multifamily Program incentives are available only for measures implemented by applicants to the Multifamily Program, i.e., the owner or manager of the entire multifamily building as described in more detail in the "Target Market" subsection of the "Multifamily Program" section of this Compliance Filing.
- Customers must work with pre-approved consultants/contractors to submit projects through this path.
- All equipment must be new and permanently installed (i.e. will not be removed by tenants).
- Equipment must be listed by UL or other OSHA approved Nationally Recognized Testing Laboratory (NRTL) in accordance with applicable US standards, where applicable.
- Incentives/rebates are not available for equipment that previously received incentives through other NJCEP and/or SBC funded programs.

Existing Buildings:

- Projects require pre-approval prior to installation. Installation may occur earlier at applicant's own risk so long as a successful pre-installation inspection is completed by the Program Manager.
- All proposed equipment must meet or exceed minimum efficiencies outlined in Section A-1. For equipment not listed, minimum efficiencies must meet or exceed ASHRAE 90.1-2013 for multifamily buildings over 3 stories high, and IECC 2015 for low rise multifamily buildings. Equipment not regulated by these codes must be more efficient than industry standard. Requirements may be waived or modified by Program Manager on a case by case basis due to limited market availability of equipment.
- Multifamily properties that are three (3) stories or less that wish to comply with Home Performance with ENERGY STAR® may do so by meeting additional inspection and Health and Safety requirements. Utility data must be available at the unit or building level.

Table 16: Comprehensive, Whole-Building Incentives (Path C) for Existing Buildings

Total Source Energy Reduction	Incentive per Dwelling Unit
Minimum 5% Savings	$500
For every additional full % savings <16% Total Savings	$50
For every additional full % savings ≥ 16% Total Savings	$100[11]

An additional incentive will be paid to the pre-approved consultant to offset the cost of developing the project, including fees for ASHRAE Level II & III energy audit, energy modeling, and project oversight through project installation/construction. This incentive is paid upon successful project completion and providing satisfactory invoices to Program Manager.

Table 17: Consultant Incentives for Existing Buildings in Path C

Consultant Incentive	Market Rate Housing Incentive per Dwelling Unit	Eligible Affordable Housing Incentive per Dwelling Unit
	$100	$200

[11] For example, if a project estimates 18% energy savings, using the above incentive structure the final incentive per unit would be $1,300 = [$500 + (10 percentage points x $50) + (3 percentage points x $100)].

New Construction:

- Procurement of equipment/components of the proposed design scope of work cannot occur prior to project enrollment. This is done at applicant's own risk until the project is approved.
- All proposed equipment must exceed minimum efficiencies outlined in ASHRAE 90.1-2013 for multifamily buildings over 3 stories high, and IECC 2015 for low rise multifamily buildings. Equipment not regulated by these codes must be more efficient than industry standard. Requirements may be waived or modified by Program Manager on a case by case basis due to limited market availability of equipment.
- The below incentive rates are based on compliance with *ENERGY STAR Certified Homes, ENERGY STAR Multifamily High-Rise*, and *DOE Zero Energy Ready Home*. Multifamily High-Rise projects typically submit documentation to an USEPA-recognized MFHR Review Organization (MRO), but may also submit directly to the Program for compliance review.
- The $30/MMBTU is based on site savings as measured from code compliant baseline not including any savings from Renewable Energy.

Table 18: Comprehensive, Whole-Building Incentives (Path C) for New Construction

Compliance Level	ENERGY STAR Certified Homes[12] (Per Dwelling Unit)	ENERGY STAR Multifamily High Rise (Per Dwelling Unit)[13]
ENERGY STAR	$500 + $30/ MMBtu	$500 + $30/ MMBtu
ZERO ENERGY READY homes (ZERH)	$1,500 + $30/ MMBtu	N/A
ZERH + Photovoltaic Solar (PV)	$1,500 + $30/MMBtu + $750	N/A

An additional incentive will be paid to the pre-approved consultant to offset the cost of developing the project, including fees early design intervention, net zero analysis, energy modeling, and project oversight through project installation/construction. This incentive is paid upon successful project completion and providing satisfactory invoices to Program Manager.

[12] As defined in accordance with the Decision Tree at Figure 3 of this Compliance Filing (ENERGY STAR Multifamily Guidelines Version 1.3).

[13] As defined in accordance with the Decision Tree at Figure 3 of this Compliance Filing (ENERGY STAR Multifamily Guidelines Version 1.3).

- For projects enrolled in ENERGY STAR Certified Homes, the below incentive will be paid to the RESNET Certified Rater.

Table 19: Consultant Incentives for New Construction in Path C

Consultant Incentive	Market Rate Housing Incentive per Dwelling Unit	Eligible Affordable Housing Incentive per Dwelling Unit
	$100	$200

Section A-4: Add-On - Savings Verification/Performance Incentive for Path C

General Requirements:

- This is an optional path open to projects pursuing Path C.
- Intent to apply for savings verification incentive must be indicated during initial project submittal.
- For Existing Buildings, at least 12 months of pre-retrofit utility bills is required for all fuels on site. This will be compared to 12 months of post-retrofit utility bills to establish actual energy savings (adjusted for any facility changes outside the scope of work).
- For New Construction, at least 12 months of post-retrofit utility bills is required for all fuels on site and must be entered into Portfolio Manager. Project will be eligible for incentive upon proof of receiving ENERGY STAR Certification (requires score of 75 or higher).
- In appropriate situations, instead of submitting tenants' utility bills, an applicant may establish actual savings by using certain models/assumptions/defaults on substantially the same terms and conditions and in the same situations as the Pay for Performance (P4P) Program currently allows, as reflected in, for example, the Pay for Performance (P4P) Program Guidelines and Technical Tips.

Table 20: Add-On – Savings Verification for Existing Buildings in Path C

Actual Total Source Energy Reduction	Incentive per Dwelling Unit
Minimum 5% Savings	$75
For every additional full % savings <16% Total Savings	$7.50
For every additional full % savings ≥ 16% Total Savings	$15[14]

Table 21: Add-On – Savings Verification for New Construction in Path C

Performance	Incentive per Dwelling Unit
ENERGY STAR Portfolio Manager Certification	$150

[14] For example, if a project estimates 18% energy savings, using the above incentive structure the final incentive per unit would be $195 = [$75 + (10 percentage points x $7.50) + (3 percentage points x $15)].

Section A-5: Bulk Appliance Recycling

Bulk Appliance Recycling will be available as a feature of the Energy Efficient Products' Appliance Recycling Program. Multifamily properties will be able to schedule no-cost pickup and responsible recycling of old, inefficient appliances. Eligible equipment includes: refrigerators, freezers, room air-conditioners, packaged terminal air-conditioners (PTAC), and dehumidifiers. All air-conditioners must be removed from windows or walls, and dehumidifiers drained of water. Participation in Appliance Recycling is **not** contingent on participating in any of the program Paths detailed above.

Table 22: Incentives for Bulk Appliance Recycling

Product Type	Incentive per Appliance
Refrigerator, Freezer	$50
Room Air Conditioner (RAC), Packaged Terminal Air-Conditioner (PTAC), Dehumidifier	$25

Section A-6: Incentive Caps

Incentive caps have been established to ensure that there is equitable access to the Multifamily Program for all qualifying customers and are proportional relative to the level of effort of the program Path.

Table 23: Incentive Caps

	Existing Buildings	New Construction
Path A, total incentive per project shall not exceed:	$800 per Dwelling Unit[15]	$400 per Dwelling Unit
Path B, total incentive per project shall not exceed:	$1,000 per Dwelling Unit	$600 per Dwelling Unit
Additionally, Custom Measure incentive shall not exceed: (Counts towards Path B cap)[16]	50% of total project cost	50% of total project incremental cost
Path C	No numeric cap; self-limiting	No numeric cap; self-limiting
Consultant Incentive shall not exceed: (Does not count towards above Path C cap)	Total invoice to participant	Total invoice to participant
Add On - Savings Verification, total incentive per project shall not exceed: (Does not count towards above Path C cap)	$225 per Dwelling Unit	$150 per Dwelling Unit

In addition to the specific caps outlined above, no project shall receive incentives from one or more NJCEP programs and/or Board-approved utility programs in an amount that exceeds the total cost[17] of measures installed or performed.

[15] In this Table, "Dwelling Unit" refers only to those Dwelling Units benefitting from measures included in the subject application, i.e., measures performed in those Dwelling Units or that benefit those Dwelling Units. For example, a new furnace installed in a common space and heating 10 Dwelling Units will result in those 10 Dwelling Units being included in the calculation of the cap but the other 5 Dwelling Units in the building, for which Units no measures were performed, would be excluded.

[16] For example, if there is a bundle at an Existing Building consisting of performing the following in each Dwelling Unit: insulation that cost $1000 per unit to install (.5 x $1,000 = $500), plus a mini-split A/C ($500), plus 6 LED Bath Vanities (6 x $5 = $30), the final capped incentive would be $1,000, not $1,030. For a further example, if there is a bundle at an Existing Building consisting of performing the following in each Dwelling Unit: insulation that cost $1000 per unit to install (.5 x $1,000 = $500), plus a Tier 1 gas furnace ($250), plus 6 LED bath vanities (6 x $5 = $30), the final incentive paid would be $785.

[17] Total cost is usually determined by reference to a sales invoice. It is not, for example, impacted by federal tax credits that will become available to the applicant on its next tax return or grants from sources other than NJCEP or Board-approved utility programs.

If an entity brings more than one project through NJCEP in any given Fiscal Year, it will be held to an Entity Cap of $4,000,000 (Entity Cap) for that Fiscal Year, in addition to the other incentive caps described above. Each Program's and/or Path's milestones for determining when incentives count towards an Entity Cap for a given Fiscal Year are as follows:

- Application approvals issued in the Fiscal Year – Commercial & Industrial Retrofit and New Construction, Combined Heat and Power, Multifamily Paths A & B.
- Energy Reduction Plan / Proposed Energy Reduction Plan approval / Scope of Work Approval issued in the Fiscal Year- Pay for Performance, Pay for Performance New Construction, Multifamily Path C.
- Final Energy Efficiency Plan approvals issued in the Fiscal Year - Large Energy Users.
- Fully executed Scopes of Work achieved in the Fiscal Year - Direct Install.

Incentives under all NJCEP Commercial & Industrial, Distributed Energy Resources, and Multifamily Programs, except the Local Government Energy Audit Program, count toward the Entity Cap. A Fiscal Year is a fiscal 12-month period from July 1 – June 30. Once the Entity Cap in a given Fiscal Year has been reached, the earliest an entity may apply for subsequent incentive funding is July 1 of the next Fiscal Year. For example, if an entity reaches its Entity Cap on March 15, 2019, it must wait until at least July 1, 2019 to apply.

Appendix B: Fiscal Year 2019 Budget[18]

FY 2019 TRC Budget		Cost Category Budgets					
Program/Budget Line	Total Budget	Administration	Sales, Marketing, Website	Training	Rebates, Grants and Other Direct Incentives	Rebate Processing and QA	Evaluation
TRC Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
EE Programs	$236,945,000.00	$13,202,101.74	$491,718.93	$733,500.00	$212,289,431.53	$10,228,247.80	$0.00
Res EE Programs	$75,700,000.00	$5,227,697.71	$156,504.09	$460,500.00	$63,089,333.19	$6,765,965.01	$0.00
Existing Homes	$34,700,000.00	$2,824,202.36	$78,252.07	$421,000.00	$28,792,131.99	$2,584,413.58	$0.00
RNC	$23,000,000.00	$1,403,871.91	$39,126.01	$39,500.00	$20,830,860.68	$686,641.40	$0.00
EE Products	$18,000,000.00	$999,623.44	$39,126.01	$0.00	$13,466,340.52	$3,494,910.03	$0.00
C&I EE Programs	$155,245,000.00	$7,396,888.99	$313,008.18	$207,000.00	$143,937,375.35	$3,390,727.48	$0.00
C&I Buildings	$112,445,000.00	$5,567,708.41	$234,756.16	$145,500.00	$103,675,044.81	$2,821,990.62	$0.00
LGEA	$3,800,000.00	$882,487.12	$39,126.01	$49,000.00	$2,459,928.17	$369,458.70	$0.00
DI	$39,000,000.00	$946,693.46	$39,126.01	$12,500.00	$37,802,402.37	$199,278.16	$0.00
Multifamily EE	$6,000,000.00	$577,515.04	$22,206.66	$66,000.00	$5,262,722.99	$71,555.31	$0.00
Multifamily	$6,000,000.00	$577,515.04	$22,206.66	$66,000.00	$5,262,722.99	$71,555.31	$0.00
Distributed Energy Resources	$31,200,000.00	$738,955.04	$78,252.02	$12,500.00	$30,043,456.14	$326,836.80	$0.00
CHP - RE Storage	$31,200,000.00	$738,955.04	$78,252.02	$12,500.00	$30,043,456.14	$326,836.80	$0.00
RE Programs	$2,150,000.00	$725,301.90	$39,126.01	$18,000.00	$0.00	$1,318,172.09	$49,400.00
SREC Registration	$2,150,000.00	$725,301.90	$39,126.01	$18,000.00	$0.00	$1,318,172.09	$49,400.00
Planning and Administration	$4,250,000.00	$0.00	$4,250,000.00	$0.00	$0.00	$0.00	$0.00
Outreach and Education	$4,250,000.00	$0.00	$4,250,000.00	$0.00	$0.00	$0.00	$0.00
Outreach, Website, Other **	$4,250,000.00	$0.00	$4,250,000.00	$0.00	$0.00	$0.00	$0.00

** Note: The Board approved a larger total budget for "Outreach, Website, Other;" the budget shown above represents only TRC's portion of the total budget for this item.

[18] This budget updates and supersedes the budget at Appendix E of the June 22, 2018 TRC FY19 Compliance Filing, Volume 1.