DRAFT FOR PUBLIC COMMENT

New Jersey's Clean Energy Program
Fiscal Year 2020 Summary of Proposed New Initiatives and Program Changes

For FY20, Board Staff is proposing: (1) implementing details regarding several programs whose broad outlines were set forth in the FY19 Compliance Filings and some of whose implementations will occur during FY20, and (2) changes to several existing programs that are proposed to continue FY20. The proposals are summarized below. Note that special incentives are being proposed in many programs for buildings in Urban Enterprise Zones (UEZs), in Opportunity Zones (OZs), occupied by Low- and Moderate Income (LMI) residents, and/or owned or operated by municipal entities (Munis) or K-12 Public Schools; those incentives are summarized together towards the end of this Summary. Note also the Clarification Regarding Eligibility for Incentives for Fuel Switching at the end of this Summary.

1. New Initiatives

In order to meet the ambitious goals of the Clean Energy Act, Board Staff is proposing the following new initiatives under the Clean Energy Program.

1.1 Community Energy Grants

- The Community Energy Grants Program concept was approved by the Board in Fiscal Year (FY) 19 and will launch Phase One in FY20.
- The BPU is looking to help communities leverage the existing programs as well as encourage other energy saving behavior modifications, with the goal of reducing energy usage as a whole. The creation of Community Energy Planning Grant is the first step in having communities, municipalities and counties identify their own needs, benchmark energy usage and emissions and create their own community energy plan to hit goals that are in line with Governor Murphy's goals to fight climate change.
- The Program will be managed by BPU Staff. The grants will be for the creation of a Community Energy Plan. The maximum grant award would be determined by the size of the community applying for the grant but will not exceed $25,000 per grant. Community size will be based on the population of the municipality or county applying.

1.2 Clean Energy Conference

- The Division of Clean Energy is planning to host a Clean Energy Conference in FY20 that will continue to improve the visibility and exposure of New Jersey's Clean Energy Program and advance the state's clean energy goals.
- The Conference will help educate the public about the benefits derived from the Clean Energy Program and the opportunities available through the program. The conference will deliver a

platform that will inform industry stakeholders about upcoming changes and enhancements to New Jersey's clean energy initiatives, increasing New Jersey's National Recognition as a leader in clean energy.

1.3 NJ WIND

- New Jersey is committed to developing offshore wind and building this industry in our state. Governor Murphy has laid out the path to attain 100% clean power by 2050, and this includes the development of 3,500 MW of wind off the coast of New Jersey. In addition, the NJ Wind Innovation and New Development (WIND) Institute was announced as part of the Governor's State of Innovation 2018 report. The Clean Energy Program has supported offshore wind related research for the past decade, and through the development of NJ WIND, the Clean Energy Program will continue to partner with state agencies to advance this industry.

1.4 Clean Energy Innovation

- Achieving the goal of 100% clean energy by 2050 will require the use of new technology. BPU through its Supplier Diversity Development Council (SDDC) has a history of supporting diverse businesses entering the procurement space of our utilities. The establishment of a clean venture capital fund in conjunction with our partner agencies will allow for the early support of new, innovative clean tech.

1.5 R&D Energy Tech Hub

- Building on our innovation ecosystem, the Clean Energy Program will sponsor research and development of cutting edge clean energy technology. This will allow for home grown solutions to be developed to combat climate change and advance clean energy.

1.6 Workforce Development

- As the clean energy economy continues to grow in New Jersey, we recognize that workforce development and training are key components of realizing our efficiency and generation goals. To that end, the Clean Energy Program will continue our outreach to contractors and trade allies for continuing education. Additionally, the BPU will work with the Department of Labor & Workforce Development on partnerships in emerging fields such as offshore wind.

1.7 Curriculum

- The Clean Energy Program, in conjunction with partner agencies and stakeholders, will develop curricula around energy savings for elementary, middle school and high school students. In addition, career pathways and mobility options, such as electric cars, will be designed to showcase for high school students the emerging technologies available to them.

1.8 Smart Tech

- The FY20 budget will include incentives for smart technology devices that allow ratepayers to reduce their energy consumption with items like smart thermostats.

1.9 Community Solar

- The FY20 budget includes funding for new programs to support the development of low- and moderate-income community solar projects, with a particular emphasis on low-income inclusion. Details on program requirements will be subsequently reviewed and approved by the Board.

1.10 Storage

- In FY 20, the BPU will initiate a proceeding to establish a process and mechanism for achieving the State's goals of 600 MW of energy storage by 2021 and 2,000 MW of energy storage by 2030. Details on program requirements and applications will be subsequently reviewed and approved by the Board.

2. Residential Energy Efficiency (EE) Programs

For FY20, Board Staff is proposing changes to several existing Residential EE programs summarized below.

2.1 Residential New Construction (RNC)

Proposed Program Changes

- Add a $1,200/unit rater incentive for ZERH projects to better encourage builders and raters to spend the additional time and money necessary for designing, building, and certifying these highly efficient homes.
- During FY20, there will be a transition for multifamily projects involving five or dwelling units from the RNC Program to the new Multifamily Program.

2.2 Home Performance with ENERGY STAR Program (HPwES)

Proposed Program Changes

- Discontinue the "residential direct install" pilot because of its low participation rate and because it is more cost-efficient to encourage efficient residential lighting through the re-launched Energy Efficient Products Program than through the pilot.
- This Program will be merged into the new Existing Homes Program. Until that merger is complete, some of its eligibility requirements and incentives will be revised as described in the Existing Homes Program section below.

2.3 Residential HVAC: *WARM*Advantage and *COOL*Advantage

Proposed Program Changes

- This Program will be merged into the new Existing Homes Program.
- Until that merger is complete, certain of its eligibility requirements and incentives will be revised as described in the Existing Homes Program section below.

2.4 Existing Homes

Proposed Details of New Program

- The HPwES Program, including its air sealing and insulation pilot, and the Residential HVAC Program will merge into this single "umbrella" program that will more effectively and flexibly allow participants to implement energy efficiency projects. It will do so by, among other things, addressing gaps in current offerings with the new bundled measures path, simplifying the application process, (e.g., by deleting the requirement to submit Manuals J, which requirement would now be duplicative of a building/energy code requirement), and providing more and better opportunities for participating contractors to grow their clean energy businesses. The implementation of the new program will occur during a to-be-announced transition during FY20. The requirements and incentives for the Single Measure Pathway and Comprehensive Pathway in the new program would be similar to those in the FY19 HPwES and Residential HVAC Programs, except that the Program would:
    - Increase incentives for heat pumps as follows:
        - Heat Pump Water Heaters – From $500 to $750.
        - Central Air Source Heat Pump- Tier 1 (SEER ≥ 16 EER ≥ 13 & HSPF ≥ 10) – From $300 to $600.
        - Central Air Source Heat Pump- Tier 2 (SEER ≥ 18 EER ≥ 13 & HSPF ≥ 10) – From $500 to $1,000.
        - Cold Climate Mini-Split Heat Pump - Single ductless indoor unit (SEER ≥ 20 EER ≥ 12 & HSPF ≥ 12) – From $500 to $1,000.
    - Cold Climate Mini-Split Heat Pump – Multi- and ducted indoor units (SEER ≥ 20 EER ≥ 12 & HSPF ≥ 10) – From $500 + $200/additional indoor unit to $2,000 per system.

  Among other things, this would support the shift from fossil fuels towards clean energy (see, e.g., E.O. 28).
    - In the Single Measure Pathway:
        - Delete the requirement that Cold Climate Mini-Split Heat Pumps be approved by NEEP because it is more cost-effective for the Program Manager itself to directly set the subject technical requirements.
        - Add as newly eligible equipment Air-to-Water Heat Pumps with Integrated Domestic Hot Water, with the same efficiency and same incentive amount as Cold Climate Mini-Split Heat Pump – Multi- and ducted indoor units.
        - Increase the required minimum efficiency for Gas Tankless On-demand Water Heaters from 0.81 to 0.90 UEF, following the U.S. Department of Energy's (DOE's) recent increase of the baseline UEF for these units to 0.81 UEF.
        - Add as newly eligible measures duct sealing and duct insulation with an incentive of $300 for each measure.

- In the Comprehensive Pathway:
  - Currently there is a loan program in which customers are eligible for a $10,001-$15,000 loan at 4.99%. Decrease the interest rate for a $15,000 Program-subsidized loan from 4.99% to 0.99% (0% financing up to $10,000 will remain).
  - Launch a new pilot program offering incentives to homeowners who are planning home renovations and additions. The savings baseline for the existing portion of the home would be the initial conditions and for the addition would be the current energy code.

2.5 Energy Efficient Products

2.5.1 Energy Efficient Products: Retail Lighting

Proposed Program Changes

- A lighting sub-component will provide selected eligible lighting products to food banks, non-profits, social service agencies and similar organizations serving the economically disadvantaged for distribution to their patrons, all at no cost to the organizations or their patrons. The initial effort will be a staged approach, launched with existing creative outreach partners, to implement a statewide sub-component through food banks in early FY20. An RFP process will be used to solicit partners to implement a sustained sub-component later in FY20. The foregoing should increase electrical energy savings in this market segment.

2.5.2 Energy Efficient Products: Appliances and Consumer Electronics

Proposed Program Changes

- Add rebates for air purifiers ($50), dehumidifiers ($25), and room air conditioners ($15). These items are currently eligible for our recycling efforts and this will aid in adoption of new, efficient appliances.

2.6 Comfort Partners

- Income eligibility guidelines are increasing from 225% of Federal Poverty Guidelines to 250% of Federal Poverty Guidelines

3. Commercial and Industrial (C&I) EE Programs

3.1 Local Government Energy Audit (LGEA)

Proposed Program Changes

- The $100,000 FY cap could, with the approval of Board Staff, be increased to $300,000 for 501(c)(3) hospitals. This would help to increase participation among these entities, which tend to

have large complex facilities requiring more time-consuming audits and providing substantial potential for energy savings.

3.2 Direct Install (DI)

Proposed Program Changes

- The Program eligibility requirements would be revised to clarify that a potential participant with multiple facilities sharing a common gas utility account would be eligible to participate in the Program so long as the average kW demand of the facilities sharing that account ≤ 200kW. This should increase Program participation and energy savings among such potential participants.

3.3 C&I New Construction and Retrofit (SmartStart)

Proposed Program Changes

- Delete the requirement that applications for < $100,000 for Prescriptive Lighting, Performance Lighting, and Lighting Controls receive approval through the Program prior to installation of the subject equipment. This should ease the application process and thereby increase participation and energy savings.
- Make the following Incentive revisions/additions in response to changing market conditions and to expand the Program's offerings and related energy savings:
    - Add the following new measures and incentives:
        - Low Flow Faucet Aerators - $2 - $4 per unit.
        - Low Flow Showerheads - $10 - $15 per unit.
        - Domestic Hot Water Pipe Wrap Insulation - $1 - $2 per linear foot.
        - Refrigeration Floating Head and Suction Controls - $50 - $75 per ton.
    - Increase the following incentives as these lamp types represent a greater savings opportunity and carry commensurately higher costs than their standard-size counterparts:
        - Increase the incentive for the following lamp types from $1/lamp to $2/lamp: R14, R16, G16.5, G25, PAR16, PAR20, R20, BR20.
        - Increase the level for the following lamp types from $1/lamp to $3/lamp: G30, G40, PAR30, PAR40, R30, BR30, BR40.
    - Add new incentives for Accent Light Line Voltage ($15), Linear strip ($10) and Under-cabinet ($10) LED fixtures.
    - Delete all incentives for LED Decorative Candle, LED Decorative, and LED Inseparable SSL because those items are no longer listed by ENERGY STAR.
    - Increase the incentive for the following types of light fixtures to better encourage the use of these lights that can provide relatively high energy savings:
        - LED Wall-wash lights – Increase from $30/fixture to $55/fixture.

        - LED Stairwell and Passageway Luminaires – Increase from $40/fixture to $45/fixture.
        - LED Architectural Flood and Spot Luminaires – Increase from $50/fixture to $75/fixture.
    - Delete all incentives for LED shelf-mounted display and task lights because those items are no longer listed by DLC.
    - Revise the incentives for lighting controls so that only controls for LEDs would be eligible and would substantially lower the load requirements for same because of the lower loads related to LEDs as compared to other types of lighting:
        - OSR (Occupancy Sensor Remote) – Reduced from 180W controlled to >60W controlled.
        - DDC (Daylight Dimming Controls) - Connected load reduced from 240W controlled to >120W controlled.
        - OHLC (Occupancy Based Hi-Low Dimming Control) - Connected load reduced from 240W controlled to >60W controlled.
        - OSRH (Occupancy Sensor Remote Hi-Bay) - Connected load reduced from 180W controlled to >90W controlled.
    - Add locations such as atriums, stairwells, and hallways to the places eligible for lighting controls incentives. This would better align the Program with building codes that allow controls in these locations.
- This Program will be merged into the new C&I Buildings Program.

3.4 Large Energy Users (LEU)

Proposed Program Changes

- This Program will be merged into the new C&I Buildings Program.

3.5 Pay for Performance: Existing Buildings Program (P4P EB)

Proposed Program Changes

- This Program will be merged into the new C&I Buildings Program.

3.6 Pay for Performance: New Construction (P4P NC)

Proposed Program Changes

- Increase the bonus incentive for pre-design energy efficiency planning from $0.02/conditioned square foot to $0.04/conditioned square foot. This should encourage more participants to perform such planning, which should lower the cost of achieving such efficiency, increase the incorporation of such efficiency into new projects, and thereby increase energy savings.

- Remove the incremental cost caps because experience has shown that the calculation of the cap is often inherently arbitrary and that the caps seldom have any practical effect, i.e., only approximately 12% of applications have their incentives limited by these caps.
- Add the ability to meet the energy savings requirement on a "source energy" basis (e.g., kBtu/sf) in addition to the existing "energy cost" basis. This should help projects that might otherwise be negatively impacted by falling or otherwise unusual energy costs, but that are nonetheless saving substantial amounts of source energy, to qualify for incentives for which they might not otherwise qualify, thereby increasing participation and overall energy savings.
- This Program will be merged into the new C&I Buildings Program.

3.7 Customer Tailored Energy Efficient Pilot (CTEEP)

Proposed Program Changes

- This Program will be merged into the new C&I Buildings Program.

3.8 C&I Buildings

Proposed Details of New Program

- The SmartStart, LEUP, P4P EB, P4P NC, and CTEEP programs will merge into this single program that will more effectively and flexibly allow participants to implement energy efficiency projects. The new program will include a Building and Systems Evaluation Program (BASE) component that will offer NJCEP-subsidized building-specific technical assistance to participants. The new program's improvements will be achieved by, among other ways, addressing gaps in current offerings with the new multi-measure pathway, simplifying the application process, increasing outreach, expanding the options regarding post-installation Measurement and Verification (M&V), and providing more and better opportunities for participating contractors and raters to grow their clean energy businesses. It would also adjust the incentives Large Energy Users are eligible to receive for projects with non-custom lighting equipment representing >50% of the overall projects' total annual energy savings. For those projects, the non-custom lighting savings would receive only the standard incentive applicable to all other customers.

3.9 High Performance Building Competition Component

Proposed Action

- This component would consist of an annual competition that would award lucrative incentives to especially high-performing buildings (including possibly residential buildings), such as those achieving net-zero energy usage and/or exceeding the ASHRAE 90.1-2016 energy code by 5% or more. More detailed criteria would be developed during FY20.

4. MULTIFAMILY EE PROGRAM

4.1 Multifamily

Proposed Program Changes

Path A Single Measure:

- In the interest of streamlining, the program will delete equipment categories unlikely to exist in multifamily properties, including refrigeration equipment, food service equipment, and occupancy-controlled thermostats.
- In the interest of increasing participation and energy savings, it will add new equipment relevant to multifamily and included in other NJCEP programs, including through-the-wall room air conditioners, pipe-wrap insulation, low-flow plumbing fixtures, and the types of lighting proposed to be added in other NJCEP programs.
- Adjust incentives for several equipment categories to make them more consistent with other NJCEP programs' incentives, including furnaces, boilers, hot water heaters, and electric HVAC.
- Incorporate updates and revisions to requirements and incentives that are parallel to those elsewhere reported in this Summary.
- Make various clarifications and updates, including:
- Simplifying ENERGY STAR lighting categories/types, deleting portable lighting categories, updating hi-low/bi-level lighting controls requirements, and clarifying that lighting for new construction will be handled as a custom measure.
- Removing a redundant reference to an ENERGY STAR requirement for Furnaces.
- Removing the now-obsolete "EF" criteria for water heaters, increasing the required UEF for storage water heaters over 55 gallon from 0.81 to 0.85, increasing the required tankless water heater UEF from 0.81 to 0.90, and adding the requirement that in-unit water heaters must be power-vented.

Path B Multi-Measure:

- Add a requirement that mechanical ventilation must be addressed if the applicant is performing air-sealing. This will help to ensure that the NJCEP project will not negatively impact the flow of fresh air through the building.

Path C Whole Building:

- Revise the New Construction incentive table to reflect the new ENERGY STAR Multifamily New Construction program.

Bulk Recycling:

- Remove Packaged Terminal Air Conditioners (PTACs) from the list of equipment the Program will recycle. This is because PTACs are more complex, larger systems that are typically

integrated into the building and therefore are too difficult and expensive to include in this program.

Reader-friendliness:

- Reformat and reorganize materials, especially incentive tables, to increase their reader-friendliness.

5. DISTRIBUTED ENERGY RESOURCES (DER) PROGRAMS

Combined Heat and Power – Fuel Cells (CHP-FC)

5.1 Proposed Program Changes

- For Incentive #3, which is based on post-installation M&V, replace the current requirement that the actual kWh produced be ≥80% of those set forth in the approved application with a requirement that the actual kWh produced be ≥50% of those set forth in the approved application, coupled with a sliding scale incentive that provides a proportionately reduced incentive if the actual kWh produced are between 50% and 80%. This should increase participation, and therefore energy savings, by reducing the risk of not receiving Incentive #3; it should also increase the amount of M&V data submitted to the Program, which data can then be used to better hone program design. There have been FYs in which approximately 20% of applicants have failed to meet the 80% threshold and therefore failed to earn Incentive #3.
- Increase from 10% to 25% the bonus for critical facilities that incorporate blackstart/islanding capability to better encourage the incorporation of that capability.
- Program eligibility is expanded to include Fuel Cells without Heat Recovery (FCwoHR). All Fuel Cells (FCs) will receive Program incentives on the same terms and conditions and in the same amount as provided for CHP projects, except that:
    - All FCs, both with heat recovery (FCHR) and without heat recovery (FCwoHR), would need to be ≥40% efficient, as compared to the ≥60% efficiency required of CHPs. FCs' efficiency would be calculated as follows: Net Useful Electric Power plus Net Useful Thermal Production divided by the Total Fuel Input based on HHV. Note that the 40% threshold is less than the 45% required in a previous NJCEP Fuel Cell program.
    - FCwoHR would be subject to a Project Cap of $1,000,000, as compared to the $2,000,000 - $3,000,000 caps applied to CHPs and FCHR.
    - For all FCs, both with heat recovery (FCHR) and without heat recovery (FCwoHR), no more than 30% of the New Funding portion of the NJCEP Budget for FC may be used to fund projects involving equipment from any single FC manufacturer.

  The foregoing is intended to promote clean, distributed energy generation in a cost-effective manner and to encourage participation by, and competition among, various manufacturers.

6. Other

6.1 Appeals

Proposed Program Change

- Require that appeals and disputes be presented to the Program Administrator within 45 days of the Program Manager's determination regarding the subject of the appeal or dispute. This should encourage more timely submissions that should allow more current and therefore more accurate information to be considered in determining the appeal/dispute and should also lead to quicker final determinations that should allow for better forecasting and budgeting.

6.2 Low and Moderate Income / Environmental Justice

Proposed Action

- In addition to the below-described bonus incentives being proposed for FY20, TRC and Board Staff intend to work together to identify, analyze, and ultimately implement additional ways to better provide the benefits of clean energy to those of low and moderate income.

7. Urban Enterprise Zones (UEZs)/ Opportunity Zone (OZs) / Low- and Moderate Income (LMI) / Municipal Entities (Munis) and K-12 Public Schools

7.1 UEZs / OZs / LMI / Munis / K-12 Public Schools

Proposed Program Changes

- To increase program participation in and energy savings from these zones in which the State and/or national governments are especially encouraging economic development, by those of LMI, and by schools and munis, more attractive incentives be offered as summarized in the table below.
- UEZs and OZs are specific geographic zones identified by the State and/or national government in databases that are available to the public.
- Low income is 250% of the Federal Poverty Level and moderate income is 80% of median income, all according to national databases that are available to the public and specified in the Compliance Filing.

	Additional Incentive Amount	**Higher Cap**

	Additional Incentive Amount	Higher Cap
RESIDENTIAL PROJECTS (IN UEZS OR OCCUPIED BY THOSE OF LMI)		
RNC		
• *Single/Multi-Single Homes*	$500	
HPwES	$500 - $1,000	80% (v50%) of cost
Residential HVAC	$200/measure	
FY20 Existing Homes		
• *Single Measure*	$200/measure	
• *Multi-measure*	Note	
• *Comprehensive*	$500 - $1,000	80% (v 50%) of cost
C&I PROJECTS (IN UEZS, IN OZS, OR OWNED OR OPERATED BY MUNIS OR K-12 PUBLIC SCHOOLS)		
DI	80% (v 70%) of Measure Cost	$250k (v $125k) Project; $4M (v $250k/$500k) FY Entity
C&I Buildings (Existing Building [EB] only)		
• *Single Measure*	100%	
• *Multi-measure/Custom*		
○ *Multi-measure*	Note	
○ *Custom*	100%	80% (v 50%) of cost
• *Comprehensive*	100%	80% (v 50%) of cost
SmartStart (EB only; Prescriptive Only)	100%	

	Additional Incentive Amount	Higher Cap
P4P-EB	100%	80% (v 30%) of cost
MULTIFAMILY PROJECTS (IN UEZS, LMI, OR OWNED OR OPERATED BY MUNIS)		
• *MF(in P4P-EB)*	100%	80% (v 30%) of cost
MF (EB only)		
• *Single Measure*	100%	2x
• *Multi-measure/Custom*		
○ *Multi-measure*	Note	2x
○ *Custom*	100%	80% (v 50%) of total project cost
• *Comprehensive*	100%	2x Verification Cap. Also, if receiving this UEZ/OZ/LMI/Muni enhanced incentive, overall cap at 80% of project cost (Verification and Consultant Incentives do not count towards this 80%).

Note: The multi-measure incentives themselves will not be increased. However, UEZ/OZ/LMI/Muni/K-12 Public School (Enhanced) participants will be eligible to receive the benefit of the Enhanced incentives for each measure in the bundle and will also be eligible for the same multi-measure incentive any other participant would receive. For the avoidance of doubt, if an incentive is not identified in the table above, there is no Enhancement for the unidentified incentive. For example, there is no enhanced Incentive for any new construction other than single and multi-single RNC.

8. CLARIFICATION REGARDING ELIGIBILITY FOR INCENTIVES FOR FUEL SWITCHING

8.1 Clarification Regarding Eligibility for Incentives for Fuel Switching

Proposed Program Changes

- Any NJCEP applicant, other than one applying through the C&I Buildings Program's Whole Building Path, P4P EB or Comfort Partners Program, switching from oil, propane, or electric-resistance space or water heating will be eligible for HVAC-related incentives only for switching to a high-efficiency electric heat pump that is otherwise eligible for an NJCEP incentive.