STATE OF NEW JERSEY

Board of Public Utilities
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CLEAN ENERGY

IN THE MATTER OF THE CLEAN ENERGY PROGRAMS AND BUDGET FOR THE FISCAL YEAR 2018	))))	ORDER DOCKET NO. QO17050465

Parties of Record:

Janja Lupse, CLEAResult Consulting Inc.
Diane Zukas, TRC Energy Services
Michael Ambrosio, TRC Energy Services
Mark Mader, Jersey Central Power & Light
Timothy White, Atlantic City Electric
Sandra Easton-Perez, Orange & Rockland Utilities
Bruce Grossman, South Jersey Gas Company
Susan Ringhof, Public Service Electric & Gas Company
Tracey Thayer, New Jersey Natural Gas
Mary Patricia Keefe, Elizabethtown Gas Company
Stefanie A. Brand, Division of Rate Counsel

BY THE BOARD:

This Order memorializes action taken by the Board of Public Utilities (Board or BPU) at its June 30, 2017 public meeting, where the Board considered and determined fiscal year 2018 (FY18) programs and budgets for 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, in 1999, the Board

[1] The budgets approved in this Order are subject to State appropriations law.

initiated its first CRA proceeding and, in 2001, it issued an order setting funding levels, the programs to be funded, and the budgets for each those programs, all for the years 2001 through 2003. Since then, the Board has issued numerous Orders setting the funding levels, related programs, and program budgets for the years 2004 – Fiscal Year 2016 (FY16).[2]

Process Regarding Development of the Proposed FY18 Programs and Budget Filings

On December 1, 2015, the Department of Treasury awarded a Program Administrator contract (Contract) to TRC.[3] The Contract requires TRC to participate in the annual Comprehensive Resource Analysis (CRA) process, participate in the annual budget process, prepare draft annual Compliance Filings (as defined below) for NJCEP, design and implement improvements to NJCEP's programs, obtain and consider stakeholder feedback (from, without limit, the RE and EE Committees), coordinate annual NJCEP evaluations, and implement the agreed-upon recommendations flowing from those evaluations. TRC has been fulfilling these requirements as applicable and as they come due.

Program Evaluation

Rutgers University's Center for Energy, Economic and Environmental Policy (CEEEP) was engaged by the Board to manage evaluations of NJCEP. CEEEP evaluation activities have included preparation of a program cost benefit analysis, preparation of a multi-year evaluation plan, and management of other evaluation activities performed by third-party contractors. In January 2016, Energy Resource Solutions (ERS), contracted and managed through CEEEP, submitted its draft final report on the process evaluation of NJCEP Programs. While a review of the recommendations included in the ERS report remains ongoing, several of the recommendations in the benchmarking and process evaluation studies are reflected in the program changes summarized below. The ERS report will be posted after the review is completed. Evaluations of NJCEP are posted on the NJCEP web site.

Stakeholder Process

On June 6, 2017, Board Staff distributed to the EE and RE listservs a notice of the availability of the proposed FY18 Program Descriptions and Budgets (aka "Compliance Filings" and "Plan Filings") for programs managed by Board Staff, by TRC, and by the Utilities (collectively, the FY18 Compliance Filings), as well as other budgetary materials set forth in tables below in this Order (these budgetary materials, the FY18 Budget Materials). Additionally, on June 9, 2107, Board Staff supplemented the foregoing distribution with Appendices F and G to the TRC Compliance Filing. (the FY18 Budget Materials together with the FY18 Compliance Filings (as supplemented), the FY18 Compliance Filings and Budgets). Board Staff also posted the documents on the NJCEP website. The distributions and postings invited comments on the foregoing documents, with a due date of June 20, 2017. Further, a public hearing regarding the foregoing documents was held on June 16, 2017, and the foregoing documents were also discussed at the meetings of both the EE and RE Stakeholder Groups on June 13, 2017.

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[2] In the early years, 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.

[3] On January 13, 2017, TRC acquired the NJCEP Program Administrator Contract from Applied Energy Group, Inc. (AEG) and assumed AEG's rights and duties thereunder. For ease of presentation, the Program Administrator is referred to throughout this Order as "TRC" or "the Program Administrator;" TRC, together with its subcontractors is referred to as the "TRC Team."

Approval of CRA Straw Proposal

On June 30, 2017, prior to acting on the present Order, the Board reviewed and approved a Comprehensive Energy Efficiency & Renewable Energy Resource Analysis Straw Proposal," (CRA Straw Proposal), including New SBC Funding and Total FY18 Funding (the CRA Order). The proposed budgets set out below utilize and are consistent with the funding levels approved in the CRA Order.

Savings Protocols

By Order dated June 29, 2016, Docket No. QO16060525, the Board approved a document entitled *Protocols to Measure Resource Savings – Revisions to FY2016 Protocols, Release Date: May 31, 2016; Board Approval Date: June 29, 2016* (Savings Protocols), which is the most recent version of the protocols approved by the Board. The protocols are used to estimate energy savings and renewable energy generation. The Board notes that although the Savings Protocols are currently under review by a consultant, they will continue to be used unless and until the Board approves an update to them.

PROPOSED FY18 PROGRAMS AND BUDGETS

Based on the goals and strategies set forth in the Energy Master Plan and the policy objectives of the NJCEP, as well as historic spend rates, Board Staff, in close coordination with the TRC Team, developed proposed programs and budgets as described below.

Proposed FY18 Budgets for NJCEP

To calculate the Proposed FY18 budget for all of NJCEP (FY18 NJCEP Budget), Board Staff, as shown in the table immediately below:

- Carried over from the CRA Order the amounts of New SBC Funding, Other Resources for funds, and Total FY18 Funding.
- Estimated the amount of the commitments made prior to FY18 expected to be paid in or remain committed through FY18 (Commitment Backlog);
- Added the Commitment Backlog to Total FY18 Funding to arrive at a Total FY18 Budget of $493,559,260.

NJ Clean Energy Program
Proposed FY18 Budget
($000)

Budget Category		New SBC Funding		Other Resources (a)		Total FY18 Funding (b)		Commitment Backlog (c)		Total FY18 Budget
Energy Efficiency:										
Residential		49,847	$	402	$	50,249	$	16,193	$	66,442
Low Income		23,865		135		24,000		-		24,000
Commercial & Industrial		69,410		733		70,142		86,837		156,979
State Facilities		100		-		100		7,500		7,600
Energy Efficiency	$	143,221	$	1,271	$	144,492	$	110,530	$	255,022
Distributed Energy Resources		8,735		265		9,000		29,054		38,054
Renewable Energy		2,585		15		2,600		-		2,600
EDA Programs		-		108		108		5,411		5,519
NJCEP Administration		6,862		48		6,910		2,193		9,103
NJCEP Total	**$**	**161,404**	**$**	**1,706**	**$**	**163,110**	**$**	**147,188**	**$**	**310,298**
State Energy Initiatives		183,261		-		183,261		-		183,261
Grand Total	**$**	**344,665**	**$**	**1,706**	**$**	**346,371**	**$**	**147,188**	**$**	**493,559**

(a) includes loan repayments, interest, and carryforward of unspent/uncommitted balances from FY17

(b) supports new commitments, payment of incentives not previously committed, program operating expenses

(c) includes carryover of committed balances from FY17 for payment in FY18 or continued encumbrance for future payment

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Proposed FY18 Budgets for EE Programs

Based on the goals and strategies set forth in the Energy Master Plan, the policy objectives of the NJCEP, and historic spend rates, Board Staff, in close coordination with the TRC Team, developed the proposed FY18 budgets for EE programs shown in the following table, which is in turn followed by a brief description of each of the EE programs.

Category / Program		Current-year Funding Need	Commitment Backlog	Total Budget
Energy Efficiency	Residential HVAC	$ 10,700,000.00	$ -	$ 10,700,000.00
	Residential New Construction	7,718,863.41	10,948,609.00	18,667,472.41
	Energy Efficient Products	12,000,000.00	-	12,000,000.00
	Home Performance	19,830,507.31	5,244,492.69	25,075,000.00
	Subtotal Residential	**$ 50,249,370.72**	**$ 16,193,101.69**	**$ 66,442,472.41**
	Comfort Partners	**$ 24,000,000.00**	**$ -**	**$ 24,000,000.00**
	C&I New Construction	2,300,000.00	1,161,932.04	3,461,932.04
	C&I Retrofit	22,337,368.00	24,206,869.38	46,544,237.38
	Pay-for-Performance NC	5,500,000.00	13,512,655.81	19,012,655.81
	Pay-for-Performance	6,800,000.00	25,266,790.48	32,066,790.48
	Local Govt Energy Audit	2,258,785.00	1,924,215.00	4,183,000.00
	Direct Install	20,881,972.29	13,381,932.00	34,263,904.29
	Large Energy Users Program	9,064,296.71	7,236,634.51	16,300,931.22
	Customer-tailored EE Pilot	1,000,000.00	146,000.00	1,146,000.00
	Subtotal C&I	**$ 70,142,422.00**	**$ 86,837,029.22**	**$ 156,979,451.22**
	State Facility Initiatives	**$ 100,000.00**	**$ 7,500,000.00**	**$ 7,600,000.00**
	Total EE Programs	**$ 144,491,792.72**	**$ 110,530,130.91**	**$ 255,021,923.63**

- *Residential HVAC*: Provides rebates to customers who purchase high efficiency heating, ventilating, and cooling (HVAC) equipment such as furnaces and central air conditioners.
- *Residential New Construction*: Provides financial incentives to builders who construct new homes meeting the New Jersey Energy Star Homes standards, which exceed the requirements of existing energy codes.
- *Energy Efficient Products*: Provides financial incentives and support to retailers who sell energy efficient products, such as appliances or LED light bulbs.
- *Home Performance with Energy Star*: Relies on contractors who are Building Performance Institute (BPI) certified and incentivizes the installation of whole-house energy conservation measures, such as new HVAC, air sealing, insulation, etc. in existing homes.
- *Comfort Partners*: Provides for the installation of energy conservation measures at no cost to income-qualified customers.
- *C&I New Construction*: Provides rebates and other incentives to commercial and industrial (C&I) customers who design and build energy efficient buildings.
- *C&I Existing Buildings*: Provides rebates and other incentives to C&I customers who install high efficiency equipment in existing buildings.

- *Pay-for-Performance New Construction:* Provides incentives for new buildings based on the level of energy savings delivered rather than a prescribed rebate for the installation of a specific measure.
- *Pay-for-Performance Existing Buildings*: Provides incentives for existing buildings based on the level of energy savings delivered rather than a prescribed rebate for the installation of a specific measure.
- *Local Government Energy Audit*: Provides subsidized energy efficiency audits to municipalities, school districts, and non-profits.
- *Direct Install*: Provides incentives for the installation of energy efficiency measures in small commercial buildings and non-profits' buildings.
- *Large Energy Users*: Provides incentives to the State's largest energy users through a streamlined program approach.
- *Customer-Tailored Energy Efficiency Pilot Program:* Employs custom account management techniques to engage targeted customers in the mid-large energy cost category in projects through a mix of technical assistance, financial analysis, design incentives, and measure incentives.
- *State Facilities Initiatives:* Through an Energy Capital Committee, identifies and implements energy efficiency projects in State-owned facilities with the objective of producing energy savings.

<u>Proposed FY18 Budgets for DER Programs</u>

The proposed FY18 budgets for Distributed Energy Resources (DER) programs are shown in the following table, which in turn is followed by a brief description of each of the DER programs.

Category / Program		Current-year Funding Need	Commitment Backlog	Total Budget
DER	CHP/Fuel Cell	9,000,000.00	25,181,864.00	34,181,864.00
	RE Energy Storage	-	1,819,500.00	1,819,500.00
	Microgrids			
	Total DER	**$ 9,000,000.00**	**$ 29,053,844.00**	**$**

- *CHP / Fuel Cell*: Provides incentives for the installation of Combined Heat and Power (CHP), including without limit those utilizing bio-power and fuel cells with heat recovery.
- *RE Storage*: Provides incentives for renewable energy storage systems. During FY18, payments will be made only for commitments made prior to FY18, and no new commitments will be made.
- *Micgrogrids*: Provides incentives to fund feasibility studies and engineering design for potential DER microgrids in the State.

Proposed FY18 Budgets for RE Programs

The proposed FY18 budgets for Renewable Energy (RE) programs are shown in the following table, which in turn is followed by a brief description of each of the RE programs.

Category / Program		Current-year Funding Need	Commitment Backlog	Total Budget
RE	Offshore Wind	100,000.00	-	100,000.00
	SRP Registration	2,500,000.00		2,500,000.00
	Total RE Programs	**$ 2,600,000.00**	**$ -**	**$ 2,600,000.00**

- *Offshore Wind*: Provides funding for research, evaluations, and general consulting services.
- *SRP (SREC [Solar Renewable Energy Credit] Registration Program):* Registers projects that are eligible to generate and trade SRECs.

Proposed FY18 Budgets for EDA Programs

The proposed FY18 budgets for New Jersey Economic Development Authority (EDA) programs are shown in the following table, which in turn is followed by a brief description of each of the EDA programs. For each EDA Program during FY18, no new applications will be accepted, and no new grants or incentives will be awarded by EDA. Instead, EDA will manage the existing portfolio of loans and grants previously awarded through the programs.

Category / Program		Current-year Funding Need	Commitment Backlog	Total Budget
EDA	Clean Energy Mfg Fund	57,625.36	1,011,000.0	1,068,625.36
	Green Growth Fund	26,540.98	2,000,000.0	2,026,540.98
	Large CHP Solicitation			
	Total EDA Programs	**$ 108,166.34**	**$**	**$**

- *Clean Energy Manufacturing Fund:* Provides incentives to attract and expand energy efficiency and renewable energy manufacturing facilities in New Jersey.
- *Green Growth Fund*: Provides assistance in the form of loans to clean technology companies who have achieved 'proof of concept' and successful, independent beta results, and who seek funding to grow and support their technology businesses.
- *Large CHP Solicitation:* Provides assistance to certain large CHP projects.

Proposed FY18 Budgets for Planning & Administration

The proposed FY18 budgets for Planning & Administration are shown in the following table, which in turn is followed by a brief description of each budgeted item.

	Category / Program	Current-year Funding Need	Commitment Backlog	Total Budget
Planning &	BPU Program Admin	2,400,000.00	-	2,400,000.00
	Program Transition	-	672,847.22	672,847.22
	Marketing	900,000.00	-	900,000.00
	Program Evaluation &	1,000,000.00	1,042,921.8	2,042,921.81
	Outreach & Education	2,600,000.00	477,557.00	3,077,557.00
	Other			
	Total Planning & Admin	**$ 6,910,000.00**	**$**	**$**

- *BPU Program Administration:* Includes primarily Board Staff salaries and fringe benefits.
- *Program Transition*: Includes funding for the remaining balance of the transition costs related to the Program Administrator contract.
- *Interim Marketing:* Includes interim funding for marketing NJCEP, including maintaining the NJCEP website.
- *Program Evaluation & Analysis:* Includes funding for program evaluation, the results of which are used, to, among other things, set incentive levels and design programs.
- *Outreach & Education:* Includes funding for the implementation of an *Enhanced Outreach Plan* prepared by the TRC Team, a clean energy business web site, and projects with Rutgers LESS, NJIT, and Sustainable Jersey.
- *Sponsorships:* Includes funding for, among other things, membership in organizations of clean energy officials.

SUMMARY OF FY18 PROPOSED PROGRAM MODIFICATIONS

The following summarizes the key program modifications proposed in the FY18 Compliance Filings. More information is set forth in the FY18 Compliance Filings themselves.

Home Performance with ENERGY STAR Program (HPwES)

- If sufficient budgetary capacity remains later in the FY, pilot a basic, entry-level offering of prescriptive incentives for insulation contractors to perform air sealing and insulation measures, mirroring the current *WARM/COOL*Advantage programs, but with a focus on envelope measures.
- If sufficient budgetary capacity remains later in the FY, pilot a "direct install" component to the program. At the time of NJCEP quality assurance inspections, the inspectors would install, at no cost to the applicant, up to five screw-in LED bulbs, a low flow shower head, and faucet aerators. This would create additional, cost-effective energy savings.

Residential HVAC: WARMAdvantage and COOLAdvantage

- Add another incentive tier for mini-split heat pumps that would provide an incentive for units meeting the NEEP cold climate heat pump specifications. Cold climate heat pumps are a new technology providing very efficient heating at very low outdoor temperatures. The tier would include an additional, bonus incentive for the installation of cold climate mini-split heat pumps in homes with electric resistance heating, where natural gas service is not available.
- Eliminate prescriptive incentives for Geothermal Heat Pumps and Solar Hot Water due to limited participation and related cost-effectiveness concerns. However, Geothermal Heat Pumps will remain eligible for HPwES and Solar Hot Water would become eligible for HPwES, where they can be cost-effectively administered.

Residential New Construction

- Shift emphasis of program quality assurance away from final inspections and toward pre-drywall inspections to increase effective mentoring of raters, trade allies, and builder site personnel and thereby improve the quality of installations. Pre-drywall inspections are better than final inspections for determining the quality of air sealing, draft blocking, insulation, duct work, and duct sealing.

C&I New Construction / Existing Buildings

- Streamline multiple-site submission process. The multiple-site prescriptive lighting application will allow customers to input multiple facilities on a single document instead of completing one application per facility (account) where much of the information is duplicated, as is currently required.
- Incentive revisions/additions:
    - Permit T12 lighting to be replaced with LEDs. Although new T12 lighting is virtually unavailable today, it is still possible to purchase product to maintain these inefficient systems, making it worthwhile to provide an incentive to install higher efficiency lighting.
    - Provide a new incentive tier for condensing boilers that do not meet the current efficiency requirement for condensing boilers but are considerably more efficient, and generally more expensive, than incentive-eligible non-condensing units.
    - Add Design Lighting Consortium® and/or ENERGY STAR qualified LED product categories to prescriptive lighting list as appropriate (e.g., Mogul base LED products).
    - Split incentive categories for low and high bay LED lighting to allow a higher incentive to be provided for high bay than low bay considering the greater energy savings generally provided by high bay lighting as compared to low bay.
    - Exclude retail display lighting as insufficiently permanent and difficult to administer.
- Define qualifying guidelines to consider Advanced Lighting Control System (ALCS) incentives via custom/ Customer Tailored program, to encourage more applications involving same.

Local Government Energy Audit Program

- Provide several types of audits in addition to the standard ASHRAE Level II Audits currently offered:
    - ASHRAE Level I Audits
    - Add-on scope audits (e.g., a more detailed review of an existing or potential CHP or renewable energy system added on to the scope of a standard Audit).

  These audits would provide the participants with the precise information they need in a more cost-effective manner than would be provided only by a standard Level II Audit.

Direct Install Program

- Increase the FY entity cap for DI projects participating in New Jersey's Energy Savings Improvement Program (ESIP). Some ESIP projects are forced to reduce their scope due to the limitations of the current DI program FY entity cap of $250,000. The cap would be increased to $500,000 for ESIP projects.
- Authorize the Program Manager to accept and approve applications even if the applicant has 1 month in which its peak demand exceeded 200 kW if the applicant provides clear and substantial evidence that its demand in that one month was unusual and not indicative of its usual current peak demand.

Pay for Performance: Existing Buildings

- Raise Incentive #1 from $0.10/sq. ft. to $0.15/sq. ft. and raise the minimum incentive from $5,000 to $7,500. Additionally, do not reduce this incentive by 50% if the previous LGEA audit is 3 or more years old (the reduction would remain in effect if the audit were newer than that).
- Raise the ICP Incentive #1 bonus cap from $15,000 to $25,000.
- For projects for which more than 50% of the total source energy savings are made up of lighting measures, replace the existing sliding scale with requirements to (a) assess the cost-effectiveness of energy conservation measures in each of 5 areas and (b) implement all identified cost-effective measures or explain why such implementation would not be practicable.
- Revise program rules to allow payment of Incentive #3 even if based on actual savings measurements a project does not meet the 15% minimum savings threshold. In such cases, Incentive #3 would be based on a reduced $/kWh and $/therm rate for any projects with actual savings of 5% or greater, with the reduced incentive being calculated using the same scale as is currently used to increase incentives for projects that exceed 15%, but subject to a floor incentive of $10,000 (or committed amount, whichever is less). Projects with actual savings of less than 5% would not receive an Incentive #3.

Multifamily

This would be a new program in FY18, pulling into a single point of entry projects that would otherwise have been potentially eligible for eight other NJCEP programs and program pathways: (i) Home Performance with ENERGY STAR, (ii) ENERGY STAR Certified New Homes and Zero Energy Ready Homes, (iii) ENERGY STAR Multifamily High Rise, (iv) Residential HVAC (*WARM*Advantage and *COOL*Advantage), (v) Pay for Performance: Existing Buildings, (vi) Pay for Performance: New Construction, (vii) Commercial and Industrial Retrofit and New Construction (SmartStart), and (viii) Direct Install. The New Multifamily Program would include both a relatively simple prescriptive path and a more complex comprehensive/whole building path and would utilize, at least in part, pre-existing relationships with various energy services companies, e.g., Residential New Construction raters. Program eligibility and incentives would be comparable to those available under the programs from which the projects are being pulled, with some moderate enhancements to better incentivize this market. At the time program details are proposed to the Board, an associated budget would also be approved. It is expected that it will take approximately six months before the foregoing proposals are presented to Board, and, if the proposals are approved, that there would be an additional grace period of approximately three months during which multifamily projects could enroll in either the new Program or the pre-existing ones.

CHP / Fuel Cells

- For CHP systems using a Class 1 renewable fuel source:
    - Such systems would be eligible for a 30% incentive "bonus," which would be in addition to the current incentives available to all eligible CHP systems. By way of example only, a $2,500,000, 500 kW, natural-gas-fired CHP system would be eligible for $1,000,000 incentive, and a plant of the same cost and size firing a Class 1 renewable fuel source would be eligible for a $1,300,000 incentive.
        - If the fuel source is mixed, the bonus would be prorated. By way of example only, if the mix is 60% Class 1 renewable fuel, the bonus would be only 18%. (30% X 0.6 = 18%.
        - The bonus would be paid as part of Incentive #3.
    - Replace the current ten-year payback requirement with a twenty-five-year payback requirement. This is proposed considering program experience that the existing ten-year payback requirement is an impediment to worthy projects. Renewable-fueled projects often have extra equipment investments associated with them (e.g., anaerobic digesters, dryers, and scrubbers), and many of these projects are not able to meet the ten-year requirement. Further, many renewable-fueled programs do not include a cost-benefit test (e.g. California's SGIP). As a point of reference, National Renewable Energy Laboratory estimates the useful life of biogas CHP systems to be between 25 and 30 years.

- Revise system sizing limitation:
  - Instead of limiting the size of the project to that necessary to meet on-site demand, allow the project to be sized to utilize all the renewable fuel produced on-site, recognizing that any excess electric production could be sold to the grid through a means other than net metering. This would more appropriately encourage the use of the greatest amount of renewable fuel.

  Please note that the Summary of Proposed Program changes inadvertently suggested that the excess production could be sold per the net metering rules. That was not Board Staff's intent. This program does not create an exception to the net metering rules. The excess production cannot be sold pursuant to those rules and Board Staff had no intention of proposing an amendment of those rules.

- Critical Facilities
  - Replace the current ten-year payback requirement with a twenty-year payback requirement.
    - The program allows CHP systems supporting Critical Facilities a 30% reduction in the run-time requirement imposed on other CHP systems, from 5,000 hours annually to 3,500. CHP systems running less than 5,000 hours annually have a very difficult time meeting the ten-year payback requirement, while providing energy-saving and other benefits.
  - Require Blackstart capability.
    - To ensure the CHP system can be independent of the grid and will be fully operational during any emergencies, important capabilities for a Critical Facility.

Renewable Electric Storage

- During FY18, payments will be made only for commitments made prior to FY18, and no new commitments will be made.

SUMMARY OF COMMENTS FROM PUBLIC STAKEHOLDERS

Oral testimony on the FY18 Programs and Budgets was provided at the June 16, 2017 public hearing by the Division of Rate Counsel (Rate Counsel), South Jersey Gas (SJG), Lime Energy (Lime), and Environment New Jersey (Environment NJ). In addition, written comments were submitted by SJG, Wick Companies (Wick), Anthony Megaro, Peter Fonseca, St. Josapahat Ukrainian Church (St. Josaphat), St. Mary's by the Sea (St. Mary's) (multiple comments submitted by different representatives), George Geiger & Associates (Geiger), Sam Patil, the Township of Edison (Edison), Honeywell, Red Fox Engineering (Red Fox), Assemblyman Gordon Johnson, the New Jersey League of Municipalities and New Jersey School Boards Association (jointly)(NJLM/NJSBA), Green Waste Energy (Green Waste), Consolidated Energy

Design (CED), Lime, the Environmental Defense Fund (EDF), the New Jersey Air Conditioning Contractors Association (NJACCA), New Jersey Natural Gas (NJNG), Bloom Energy (Bloom), the National Fuel Cell Research Council (NFCRC), and Rate Counsel. Below is a summary of the testimony and comments as well as Board Staff's responses to them. Board Staff notes that the hearing was a joint hearing in which the Board also received comments regarding the CRA Straw Proposal. Readers of this Summary are advised to also read the Summary in the Board's CRA Order.

General

Comment: Green Waste comments that the NJCEP should be expanded to support the processing of municipal solid waste (MSW) into energy without incinerating the MSW. It points to new technologies that process the MSW into a synthetic gas that can then be combusted to produce heat and/or electricity. It claims implementation of its proposal would improve air quality, create jobs, and have other beneficial effects.

Response: Board Staff first notes that its current proposal regarding the CHP / Fuel Cells Program provides significant incentives to utilize renewable fuels, sourced from sustainable biomass, and that the program provided incentives in FY17 to at least one CHP project that will be combusting biogas. The CHP / Fuel Cell program utilizes, as an eligibility criteria, energy sources that qualify as Class I renewable energy. Class II renewable energy is not an eligible fuel source under the program. Board Staff will continue to monitor developments in this area for potential expansions or other changes to NJCEP.

Comment: Assemblyman Johnson comments that the $25,000,000 NJCEP pays to consultants and contractors is too much and that funding should be reallocated to programs that "reduce emissions and increase resiliency."

Response: The $25,000,000 amount is an estimate that includes both fixed and variable fees. This amount is not guaranteed. On an annual basis, actual fees may be less than $25,000,000, depending on program volume. The fixed fees cover program administration of all NJCEP programs, including but not limited to: ongoing program design and development; program management and client meetings; participation tracking and reporting; savings calculation; reporting; customer service; QA/AC management; and other tasks. The variable fees are billed per unit, based on program participation.

Comment: NFCRC "understands" the Board currently bases its determinations on the following: (a) an analysis of the costs and benefits to the applicant, not the system as a whole; and (b) "pre-determined assumptions" that do not reflect the actual specifics of a given project.

Response: NFCRC's characterization is inaccurate. The NJCEP considers individual project costs and portfolio-wide costs, when designing programs and approving projects. Although a few NJCEP determinations are based upon the cost to the applicant (e.g., payback period for individual CHP applications), most are directly or indirectly based in part on the costs and/or benefits to ratepayers and citizens (e.g., one of the factors consider in allocating resources among NJCEP programs is their relative costs to NJCEP per kWh saved). Further, Board Staff acknowledges that once programs are designed and are being implemented, determinations regarding the thousands of individual applications are often based upon calculations, models, and/or standardized assumptions (e.g., software used to estimate energy savings). The use of standardized decision processes is to achieve, among other things, consistent and cost-effective administration.

Comment: Rate Counsel comments that a Cost Benefit Analysis of the NJCEP Programs should have been included in the materials released for public comment, as was done in recent years.

Response: The Cost Benefit Analysis requested will be attached to the final TRC Compliance Filing.

Comment: Edison, Environment NJ, and several others comment that New Jersey is now ranked 24th among the states in energy efficiency.

Response: The comment appears to be based on the Energy Efficient Scorecard issued by the American Council for an Energy Efficient Economy (ACEEE). The methodology used by ACEEE is flawed for several reasons, most notably, it does not give weight to the accumulated lifetime energy savings of a mature program such as the NJCEP. In addition, the ranking favors programs with high incremental energy savings over New Jersey's balanced, comprehensive portfolio approach. To this end, BPU is actively engaging with ACEEE and other states to develop a mechanism that fairly measures the unique strengths of state clean energy programs.

Budgets

Comment: Several parties commented that the funding for specific programs or budget lines should be increased and/or should not be decreased as compared to FY17. Further, in addition to its budgetary comments summarized and responded to in the CRA Order, Rate Counsel stated its concern that budgets for several programs are proposed to be reduced even though design changes are being made to increase participation in them. They are also concerned about the negative impacts of reducing the funding for Marketing, Program Evaluation/Analysis, and Outreach and Education.

Response: In this response, Board Staff addresses all the comments described above. In addition, and where appropriate, Board Staff has also provided supplemental information in responses to comments regarding specific programs or program components.

The amount of funding available for the State Energy Initiative and the NJCEP is subject to appropriations and the Board is bound by such legislation. NJCEP's new funding for FY17 was approximately $222,470,000[1] while NJCEP's proposed new funding for FY18 is approximately $163,110,000. Due to increased funding allocated for State Energy Initiatives, the amount of new funding available to NJCEP in FY18 is approximately $59,360,000, or 27%, lower than FY17. If the final State FY18 budget differs from the amounts used to develop the FY18 NJCEP budget, Board Staff will recommend the necessary adjustments.

[1] The FY17 NJCEP budget (approved via order dated June 29, 2016) was subsequently impacted by a $20,000,000 increase in State Energy Initiatives included in the FY17 Appropriations Act (enacted in June 2016) plus another $50,000,000 million anticipated in a FY17 supplemental appropriation, consistent with the State Treasurer's Revenue Update testimony on May 16, 2017. In Agenda Item 8D on the June 30, 2017 Board meeting, the Board voted to approve modifications to the FY17 budget to increase the State Energy Initiatives budget by $70,000,000.

Prior to developing FY18 program budget recommendations, the Board, Board Staff, and the Program Administrator conducted a planning process with significant involvement with stakeholders and the public, including many of those commenting on the current proposals. As part of that process, NJCEP's primary and secondary objectives were identified as follows:

Primary Objective:

- Reducing the cost of energy and lower energy bills by maximizing lifetime energy savings per dollar spent (kWh and therms).

Secondary Objectives:

- Maximizing peak demand (kW) savings
- Providing equitable access to efficiency and renewable energy programs
- Promoting the development and transformation of energy efficiency and renewable energy markets
- Reducing long-term environmental impacts of energy use, and
- Minimizing lost opportunities.

In developing budget recommendations, Board Staff considered the above objectives, including the importance of avoiding the types of market disruptions caused by sudden program design or budget changes that could negatively impact the development of the relevant markets. Accordingly, among other things, it proposed budgets at a level that would maintain the continuing viability of the existing programs. For these and the reasons set forth in responses to comments regarding specific programs or program components, and while recognizing that several beneficial programs could utilize additional funding, Board Staff continues to believe its proposed budgets reflect an appropriate and reasonable balance of the objectives set out above and are otherwise set at the appropriate levels.

Certain EE Incentives

Comment: Rate Counsel believes the incentives for the following items are too generous and should be eliminated:

1. Residential HVAC: Central air conditioning and central source heat pumps with a SEER of less than 18; Oil furnaces and boilers; Tier I gas furnaces.
2. Energy Efficient Products: Tier I clothes washers, clothes dryers, and refrigerators; advanced power strips.
3. Residential New Construction: Homes with a HERS rating above 55.

Response: Board Staff's responses are as follows:

1. Board Staff believes that Rate Counsel's recommendations regarding these programs have merit and warrant further consideration. However, Board Staff does not support implementing these recommendations immediately. Instead, Board Staff recommends that a cost/benefit analysis be performed regarding these measures and that consideration be given to these recommendations as part of that analysis, after which an informed decision can be made regarding whether these measures should remain in the Program. Further evaluation of these measures is particularly important given the drop in natural gas prices that is likely to impact the cost effectiveness of gas saving measures.

2. Following the usual annual evaluation, the incentives for these items have been refined and/or reduced to a level Board Staff believes necessary and appropriate to incentivize consumers to spend the additional money necessary to purchase a higher efficiency unit. Although Board Staff recommends retaining these rebates for now, it also plans to reconsider them as part of its next evaluation.
3. Board Staff is concerned that immediately eliminating incentives for HERS levels above 55 (i.e., the less efficient structures) could have an unduly detrimental effect on the energy savings realized through this Program, especially considering other relatively aggressive initiatives NJCEP has recently launched with regards to the Program, such as requiring compliance with the new ENERGY STAR v3.1 standard a year earlier than required by USEPA. Board Staff will evaluate Rate Counsel's recommendations further as part of its evaluation and planning processes, possibly at the same time it reviews its incentive structure if and when RESNET changes are issued.

In addition, an inadvertent mistake has been identified in Table 12 of the draft TRC Compliance Filing and will be corrected in the final TRC Compliance Filing. Specifically, the incentive for Oil Furnaces should have been $250, not $500.

Residential HVAC

Comment: NJACCA supports the proposal to consider transitioning to a requirement that applications be submitted only by participating licensed contractors. However, SJG is concerned that requiring applications to be submitted only by licensed contractors could impose an unnecessary cost and/or burden on applicants and thereby reduce participation in the Program.

Response: Board Staff appreciates NJACCA's support and SJG's concern, and it will further consider both as it continues to evaluate the potential costs and benefits of imposing the requirement.

Comment: NJNG comments that due to a recent rule change, water heater manufacturers are and will be using a new U.S. Department of Energy (DOE) Uniform Energy Factor (UEF) descriptor for water heater efficiency ratings, replacing the previously used Energy Factor (EF) and Thermal Efficiency (TE) descriptors. For now, the new rating of units with UEF is based on a mathematical conversion of EF ratings to UEF ratings, with actual testing of units for UEF ratings based on the new DOE methodologies to begin in January 2018. Because NJCEP's current eligibility standards for water heaters are expressed in EF and TE, they should be revised to include a UEF.

Response: Board Staff agrees and recommends making the following revisions to the Residential HVAC standards, which revisions it has already begun to implement on a provisional basis:

Water Heater Type	Current Program minimum (as per FY17 Compliance Filing)	New Program minimum (using DOE conversion)
Storage Tank, power vented	0.67 EF 90% TE	≤55 gallons 0.67 EF/ 0.64 UEF >55 gallons 90% TE/ 0.85 UEF
Tankless On-demand	0.82 EF	0.82 EF/ 0.79 UEF

The rule change likely will also impact some C&I programs, and the C&I Program Managers are in the process of analyzing whether and how their programs should be revised in response to the change.

Comment: NJNG supports the creation of a new incentive tier for mini-split heat pumps, including a bonus incentive in cases in which natural gas service is not available. However, it suggests that the bonus should be available only where the service is not available "in the area," rather than, as stated in the proposed TRC Compliance Filing, where "the house does not have natural gas service."

Response: Board Staff appreciates the commenter's support, but its intent was broader than suggested by NJNG. That is, it did not intend to deny the incentive to a homeowner who chooses not to incur the significant costs of extending gas service from some remote location in its "area" to the homeowner's home. The Compliance Filing language will be revised to read: "there is no natural gas distribution line on the subject property."

Comment: NJACCA supports the proposed new incentive tier for cold climate heat pumps.

Response: Board Staff appreciates the commenter's support.

Comment: NJACCA comments that it is unfair to require those seeking an incentive for Geothermal Heat Pumps and Solar Hot Water to incur the added cost associated with applying to HPwES instead of the Residential HVAC program.

Response: Board Staff believes that its original proposal is appropriate given the high administrative cost associated with handling such items through Residential HVAC and the relatively low incremental cost incurred by the participant in applying through HPwES instead of Residential HVAC. It also notes that a homeowner considering Geothermal is well-advised to work with an experienced Geothermal contractor, as it requires a level of expertise to have such a system properly designed and installed to efficiently provide both heating and cooling in climates like New Jersey's.

HPwES

Comment: NJNG comments that while the proposed FY18 TRC Compliance Filing clearly states the proposed HPwES pilot programs are subject to budgetary capacity being available late in FY18, NJNG believes there are better uses of any excess NJCEP funds. It suggests that a new Elizabethtown Gas program might provide better insights than the proposed pilots.

Response: Board Staff welcomes the suggestion to coordinate with Elizabethtown Gas to gather and share useful information regarding its new pilot, as both programs offer low flow showerheads and faucet aerators. By contrast, ETG's program is limited to gas saving measures and the NJCEP pilot offers electric (i.e LED lightbulbs) and gas conservation measures. Board Staff continues to believe that it would be appropriate to conduct the proposed low cost pilots if there is remaining budgetary capacity in late FY18

Comment: Rate Counsel supports the proposed HPwES pilot and suggests it should be the recipient of committed, not conditional, funding in that Rate Counsel considers the pilot to be low-cost and high-value. NJACCA supports both the HPwES and HVAC proposed pilots.

However, as to the HPwES pilot, NJACCA suggests the direct install energy efficiency equipment be made available to all HPwES participants, not just the percentage that receive a quality assurance inspection. It is also concerned that participants may request to be inspected simply to qualify for the direct install equipment.

Response: Board Staff appreciates the commentator's support. As to widening the universe of participants eligible to receive the direct install equipment and increasing the funding the pilot receives, Board Staff continues to believe its original proposal is most appropriate. The pilot will allow program managers the opportunity to assess the costs and benefits of providing the direct install equipment using a relatively small sample; and, delaying launch of the pilot until funding is available ensures that pilot will be launched when sufficient funds are available to cover the increased expenses.

Comment: NJACCA supports the proposal to reduce paperwork submittal requirements and suggests:

1. Updating the software used to calculate energy savings,
2. Eliminating the need to submit an audit data collection form, as most of its members collect the data on their own forms,
3. Eliminating the need for a specific software-generated Completion Certificate and instead returning to requiring the use of a general form.

Response: Board Staff appreciates the commentator's support and responds to the specific suggestions as follows:

1. The Program Manager, under the supervision of Board Staff, is evaluating various options for updating and/or replacing this software. It is also preliminarily considering developing a Program option that would not require energy modeling to determine eligibility.
2. Board Staff agrees; the Program Manager is eliminating the requirement to submit this form.
3. Board Staff intends to maintain this requirement because eliminating it would significantly slow down the process for claiming and committing incentives.

Comment: NJACCA recommends the Program improve payment timelines, offer an enhanced incentive to participants who forego subsidized financing, and re-establish co-op marketing.

Response: Board Staff continuously works with the Program Administrator to improve payment timelines. Regarding co-op advertising, Board Staff will continue to explore options to restore this offering. Finally, Board Staff believes it would not be cost-effective to provide the enhanced incentive because the incentive levels are already structured to incentivize participation in the program. There is no evidence that increased incentives are necessary to maintain participation in this program.

Comfort Partners

Comment: SJG, NJNG, and Rate Counsel encourage the Board to continue the funding of the Comfort Partners Program to at least its FY17 level, i.e., $30,000,000, rather than at its proposed FY18 level of $24,000,000. They point out that the Program will spend all or virtually all of its FY17 funding in FY17, demonstrating the demand and need for the Program. They also argue that (a) this Program serves the low-income population that needs the Program's services the most, and (b) the reductions would lead to layoffs, associated unattended health and safety issues, lost economic and environmental savings, and increased pressure on the Universal Services Fund for weatherization assistance.

Response: Board Staff supports the energy savings, and health and safety benefits that this Program offers to the low-income population. However, Board Staff continues to believe that the Comfort Partners Program FY18 funding is set at the appropriate level, given the reduced funding available to NJCEP in FY18.

Direct Install (DI)

Comment: Wick, Megaro, Fonseca, St. Josaphat, St. Mary's, Geiger, Patil, Edison, and Lime urge the Board to provide additional funding, which some of them describe as at least an additional $10,000,000, for the DI Program. They cite many projects that have been completed at small businesses and charitable organizations through the DI Program and describe the DI Program as the one that best serves the needs of such entities. Lime claims that the proposed FY18 Current Year Funding of $20,881,972 for DI is substantially less than in recent years, will be insufficient to support it and the other DI contractors, and will likely result in the DI Program depleting its funds and ceasing to accept applications by November or December 2017.

Response: Board Staff submits that, under the present overall NJCEP budgetary circumstances, it has proposed significant and appropriate support for the DI Program, continuing to recognize its status as a popular program in the C&I Sector. Although the proposed funding is less than recent trends would suggest the DI Program could absorb and spend (estimated at approximately $3,000,000 / month), it is appropriate for reasons set forth above in the response under *Budgets.* Board Staff will work with the DI contractors and the Program Administrator towards minimizing any negative impacts on the contractors and the market.

Pay-for-Performance

Comment: Honeywell and Red Fox comment on the requirement, first imposed in FY16, that participating facilities have a peak demand of at least 200 kW (referred to as "the 200 kW Requirement"). The requirement is believed to be preventing and will continue to prevent many Energy Savings Improvement Program (ESIP) participants, especially school districts with several smaller facilities, from receiving sufficient incentives to undertake the type of comprehensive EE measures ESIP and P4P encourage. They say the 200 kW Requirement drives many of their ESIP clients into other Programs, such as Direct Install (DI) or Smart Start, in which they say the NJCEP incentives amount to only 25 – 35% of those available through P4P and in which there are other significant disadvantages as compared to P4P, including: (a) far fewer measures being eligible, and (b) difficulties in obtaining a guarantee from the Energy Services Company (ESCO) because the ESCO is not contracting directly with the ESIP participant. They suggest the Board should restore the feature of the P4P Program that allowed the Program Manager to issue ESIP participants a waiver from the 200 kW Requirement. Honeywell claims the 200 kW Requirement has resulted in a loss of approximately $10,000,000 of energy efficiency/infrastructure work.

Response: Board Staff continues to believe the 200 kW Requirement is appropriate to, among other things, ensure that the P4P's Program's savings are commensurate with its administrative and other costs; it also continues to believe other programs can appropriately meet the needs of Honeywell's and Red Fox's ESIP clients. Historically, a typical P4P project at a facility that did not meet the 200 kW Requirement (but received a waiver of that requirement) would have an incentive value ranging from approximately $10,000 up to $100,000 based on incentives that cover up to 50% of the cost of the efficiency measures. By comparison, DI projects are eligible for incentives that cover up to 70% of the cost of the efficiency measures, subject to a project incentive cap of $125,000. Further, the 30% of a DI project's cost that is not covered by an NJCEP incentive can be included in ESIP funding. In some cases, the scope of work can be such that SmartStart incentives can be equivalent to those available under P4P. Especially if one considers the cost of the additional effort involved in the energy modeling required for P4P participation, and the currently proposed increase in the incentive cap for ESIP projects in DI, DI or SmartStart will often be a better, more cost-effective fit for facilities that fall below the 200 kW threshold. Board Staff also note the DI program provides turn-key services and includes a variety of eligible measures, and the SmartStart program provides incentives for a variety of prescriptive measures, as well as custom measures including envelope improvements. Board Staff finally notes the Program Manager has the ability to approve projects that are within 10% of the 200 kW peak demand threshold.

Comment: CED asks whether the NJCEP has added "KW reduction incentives" to its existing kWh incentives.

Response: Although there are no NJCEP incentives expressly and directly based on kW reduction, many of NJCEP's incentives were set by considering, among other things, the relevant energy efficiency measure's contribution towards reducing peak demand. Such incentives therefore result in a kW reduction.

Pay for Performance, Investor Confidence Project (ICP) and Other C&I Programs

Comment: EDF supports the proposed, relatively moderate increases to the incentives available through ICP, and it encourages the Board to extend the use of ICP to its Customer Tailored EE Pilot and pending Multifamily Program because it submits the use of ICP will help to standardize the projects that would be eligible for those programs, which will in turn render such projects more attractive to potential investors.

Response: Board Staff appreciates the commentator's support for its proposals and, as with all NJCEP's offerings, it will continually consider whether the subject programs might benefit from the use of ICP. However, Board Staff does not recommend consideration of the proposed extension unless and until substantially more data has been collected as to the impact of ICP regarding Pay for Performance.

Multifamily

Comment: Rate Counsel supports the creation of a single Multifamily Program and encourages the Board to ensure it is properly coordinated with utility-managed multifamily programs.

Response: Board Staff appreciates the support and intends to coordinate with the relevant utilities.

CHP / Fuel Cell

Comment: Bloom submits comments in many aspects virtually identical to those it submitted in June 2016, and NFCRC submits comments in some aspects virtually identical to those it submitted in June 2016. Such comments are summarized as follows.

The Board should be presented with more complete information as to actual capacity factors, as suggested by a 2015 Rutgers study that concluded that actual CHP performance is often lower than expected, especially as to capacity because CHP has relatively high design capacity but relatively low actual capacity.

The proposed budget and incentive structure for the CHP / Fuel Cell Program are inadequate, especially when compared to those of neighboring states, which they argue is demonstrated by the table below:

Connecticut	New Jersey (Proposed)	New York
$60M annual fuel cell program	$9.0 M CHP and fuel cell program	$150M+ annual program(s)
Fuel Cell Net Metering at Retail Rate	No Fuel Cell Net Metering	Fuel Cell Net Metering at Wholesale Rate
Standby charge exemption	No standby charge exemption	Standby charge exemption

The Board should assign an appropriately higher value to the reduction of Greenhouse Gas and other air pollutant emissions.

Response: Board Staff's responses to such comments are the same as those responding to such comments at I/M/O The Clean Energy Programs and Budget for Fiscal Year 2017, Docket No. QO16040353 (June 29, 2016)(FY17 Order), p. 25 – 28, other than as updated or otherwise revised below in this response and the other responses under this CHP / Fuel Cell sub-heading. In brief summary, Board Staff's responses were that (a) it recommended the Board conduct an independent evaluation of the costs, emissions, and benefits All-Electric Fuel Cells and other distributed generation technologies, (b) the results of the evaluation be considered in reviewing and setting eligibility criteria and incentive levels for the CHP / Fuel Cells Program, and (c) in part because of the relatively high cost of All-Electric Fuel Cells, it stood by its proposal to suspend incentives for All-Electric Fuel Cells until the above process was completed.

Board Staff agreed and agrees the 2015 Rutgers study (http://ceeep.rutgers.edu/wp-content/uploads/2016/02/WP2-Do-CHPs-Perform-Case-Study-of-NYSERDA-funded-Projects-11302015.pdf)(2015 Rutgers Study) does indeed suggest some CHPs in New York have lower (i.e., < 60%) than expected capacity factors. However, the study concludes the likely cause is that those CHPs are oversized and/or poorly maintained, not some inherent superiority of All-Electric Fuel Cells over CHP. Thus, if engineering was used to right-size the CHPs and if incentives were based at least in part on post-construction performance in order to incentivize appropriate maintenance (as are NJCEP's, see 2015 Rutgers study at pp. 19-20), it seems likely that CHPs actual capacity factor would be closer to their peak capacity factor of ≥ 90%. (2015 Rutgers study, at p. 12).

See the response above under *Budgets*. To the extent additional funds become available in FY18, Board staff will review all funding levels and recommend budget increases if appropriate.

Although Board Staff takes note of Massachusetts' inclusion of All-Electric Fuel Cells in its Alternative Portfolio Standard, Board Staff is not persuaded that such approach is appropriate for New Jersey.

Comment: Bloom submits that because the evaluation the Board committed to conduct in the FY17 Order of All-Electric Fuel Cells and other distributed generation technologies "remains incomplete," the Board should reverse the portion of its FY17 Order that suspended All-Electric Fuel Cells' eligibility for NJCEP incentives. Rate Counsel, in contrast, supports the continuance of the suspension.

Response: Board Staff appreciates Rate Counsel's support. As to the other comments, the subject evaluation is well-underway and is expected to be released upon completion. For the reasons set forth in the FY17 Order, Board Staff believes it appropriate to maintain the suspension at least until the evaluation and any associated recommendations are presented to the Board.

Comment: Bloom comments that during the time between the reversal of All-Electric Fuel Cells' suspension from NJCEP and the time the Board sets new criteria for reviewing applications for All-Electric Fuel Cells and other distributed generation technologies, the Board should be provided correct and complete information about "projects ... presented for approval," including such information regarding what it identifies as job creation and retention, relative efficiency figures, criteria pollutants, avoided system O&M, etc. Bloom then creates and compares two hypothetical projects and argues that the current CHP / Fuel Cells Program would approve the "inferior" one but reject the "superior" one. NFCRC and Assemblyman Johnson suggest the Board should consider whether a technology decreases criteria pollutants, not just "payback."

Response: Board Staff begins by noting that it recommends against the Board reversing its suspension determination pending the evaluation noted above. However, the following is offered for clarification.

Whenever the Board reviews an NJCEP application, Board Staff, of course, strives to provide it with correct and complete information regarding all items relevant to the application. The pending distributed generation evaluation will consider many of the criteria Bloom identifies and is anticipated to inform the application review processes currently conducted. That said, Bloom's comments fail to recognize that the current CHP / Fuel Cell Program is a prescriptive approach in which applications that meet a prescribed set of eligibility criteria are awarded an incentive in a prescribed amount. Eligible projects are approved on a first come / first serve basis so long as there is available funding. Accordingly, when reviewing an individual application under the CHP / Fuel Cell Program or other current NJCEP programs, there is no need to collect and analyze the relative merits of individual projects' "avoided transmission and distribution investments," "job creation and retention," nor similar criteria as cited by Bloom. Such impacts can be safely assumed to be consistent across technologies with more meaningful adjustment dependent upon scale of application. Board Staff nonetheless notes that many NJCEP programs at least indirectly cause a decrease in criteria pollutants and that the CHP program requires standardized reporting of not only CO2 but also of the criteria pollutants SO2 and NOX. It also notes that the current CHP Program requires the project specific consideration of multiple criteria (e.g., annual system efficiency, run time), not just payback. It also notes that many of the criteria cited by Bloom are analyzed and considered in the context of program design and the setting of prescriptive incentives.

Comment: Bloom comments that the Board should not reduce new funding for distributed generation to $9,000,000 in FY18; rather funding should be increased.

Response: See the response above under *Budgets*. To the extent additional funds become available in FY18, Board staff will review all funding levels and recommend budget increases if appropriate.

Comment: NRCFC recommends using a reverse auction process to set and award incentives for "fuel cell projects."

Response: Board Staff would consider the use of a reverse auction if some future appropriate situation warranted same. However, its present suite of programs does not need or contemplate such a process and instead generally relies on more cost-efficient review and approval processes. Incentive auction processes that award commitments based upon lowest bid incentive amounts are frequently oversubscribed with project proposals that fail to advance to construction completion. These type of incentive commitment processes frequently result in high administrative costs and low implementation success and are characterized by significant sums of uncommitted, unexpended funds being rolled over annually to the disadvantage of more viable but higher cost projects.

RE Energy Storage

Comment: Rate Counsel supports Board Staff's proposal.

Response: Board Staff appreciates Rate Counsel's support.

Town Center DER Microgrid

Comment: Bloom argues that the proposed $2,052,480 budgeted for feasibility studies is inadequate and that the Board should instead provide substantially more funds for actual microgrid design and construction. Rate Counsel, in contrast, supports Board Staff's proposal.

Response: Board Staff appreciates Rate Counsel's support and believes it most appropriate to proceed with its original proposal to provide sufficient funds for the microgrid feasibility studies. Due to the nascent stage of the microgrid projects, staff does not anticipate project readiness for design and construction in FY18. Staff will monitor the feasibility studies during FY18 and make a recommendation for additional funds in FY19.

Outreach & Education – Sustainable Jersey

Comment: NJLM/NJSBA and NJNG encourage the Board to maintain Sustainable Jersey's previous funding of $500,000 rather than reducing it by 25%. They argue that Sustainable Jersey is the strongest resource supporting NJCEP at schools and municipalities, that 79% of

New Jersey's municipalities and 45% of its public school districts participate in Sustainable Jersey, and that this has led to 1,304 energy actions by schools and 1,969 by municipalities.

Response: Although Board Staff agrees that Sustainable Jersey provides a valuable service to the NJCEP, it believes that Sustainable Jersey's FY18 funding is set at the appropriate level for reasons set forth above in its response under *Budgets*.

BOARD STAFF RECOMMENDATIONS

The draft FY18 TRC Compliance Filings and Budgets (dated June 6, 2017) set out in detail the rationale utilized by Board Staff and the TRC Team to develop the subject proposed programs and budgets. Likewise, the OCE and Utilities Compliance Filings set forth additional programs, evaluations, and other programmatic support under the NJCEP umbrella.

Having reviewed and considered the comments, Board Staff recommends certain limited changes, as described in the responses above. At Staff's direction, TRC has incorporated the recommended changes into its FY18 Compliance Filing, and has submitted the final document -- titled FY18 TRC Compliance Filing, dated June 28, 2017. Staff is not recommending changes to the OCE or Utilities Compliance Filings. Accordingly, Staff recommends approval of the TRC, OCE, and Utilities FY18 Compliance Filings and Budgets.

DISCUSSION AND FINDINGS

Consistent with the Board's contract with TRC, Board Staff coordinated with the TRC Team regarding the FY18 Compliance Filings and Budgets, as well with regards to the comments received on same. Further, Board Staff, in conjunction with the TRC Team, discussed the FY18 Compliance Filings and Budgets at a public hearing and at public meetings of the EE and RE Stakeholder Groups, all to receive comments and input. Finally, the FY18 Compliance Filings and Budgets were circulated to the EE and RE listservs, they were posted on the NJCEP web site, and written comments about them were solicited from the public and considered by Board Staff and the Board. Accordingly, the Board **HEREBY FINDS** the processes utilized in developing the FY18 Compliance Filings and Budgets were appropriate and provided stakeholders and interested members of the public adequate notice and opportunity to comment on them.

The Board has reviewed the FY18 Compliance Filings and Budgets, and Board Staff's recommendations regarding same, and the Board **HEREBY FINDS** the FY18 Compliance Filings and Budgets will benefit customers and are consistent with the EMP goal of reducing energy usage and associated emissions. Further, the programs will provide environmental benefits beyond those provided by standard offer or similar programs, and are otherwise reasonable and appropriate. Therefore, the Board **HEREBY APPROVES** the FY18 Compliance Filings and Budgets.

The Board **HEREBY DIRECTS** Board Staff, with assistance from the Program Administrator, to update relevant program documents (i.e. applications, program manuals, etc), and take the necessary steps to implement the programs and changes ordered herein.

The budgets approved herein are based on estimated FY17 expenses and once final FY17 expenses are known, are subject to "true up" in a future Order. For example, if actual FY17 expenses are less than the estimated expenses for any program, then the unspent amount will carry over into FY18. To the extent that FY18 budgets approved herein are below FY18 expenses due to actual FY17 expenses being less than estimated FY17 expenses, the Board's Fiscal Office is authorized to pay invoices for approved program expenses.

Pursuant to its authority under N.J.S.A. 48:2-40, the Board, as required, may reopen this matter and adjust the FY18 budgets in a separate Order. Any such adjustments will be considered by the Board and memorialized in a separate Order. The budgets approved herein are contingent on appropriations by the Legislature and subject to State appropriations law.

This Order shall be effective on July 1, 2017.

DATED: 6\30\17

BOARD OF PUBLIC UTILITIES
BY:

RICHARD S. MROZ
PRESIDENT

JOSEPH L. FIORDALISO
COMMISSIONER

MARY-ANNA HOLDEN
COMMISSIONER

DIANNE SOLOMON
COMMISSIONER

UPENDRA J CHIVUKULA
COMMISSIONER

ATTEST:

IRENE KIM ASBURY
SECRETARY

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

IN THE MATTER OF COMPREHENSIVE ENERGY EFFICIENCY AND RENEWABLE ENERGY RESOURCE ANALYSIS FOR THE FISCAL YEAR 2017 CLEAN ENERGY PROGRAM; DOCKET NO. QO17050465

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