RED FOX
ENGINEERING

22 Megill Road

Farmingdale, NJ 07727

Phone: (908) 770-4054

Email: Michael@redfoxengineering.com

June 11th, 2017

New Jersey's Clean Energy Program

New Jersey Board of Public Utilities

44 South Clinton Avenue

Trenton, New Jersey 08625

Re: Restore the 200kW Exemption threshold for Public Entities to participate in the Pay for Performance Program that are engaged in the Energy Savings Improvement Program

In 2015, the Pay for Performance Program suffered an eligibility change that has re-shaped the incentive opportunities for public entities engaging in energy efficiency projects. The change was the removal of a 200kW minimum exemption for public entities in order to enter into the Pay for Performance (P4P) program. Taking place in the FY16, this change has directly resulted, on projects I have personally worked on, in approximately $10M less energy efficiency work. For public entities that desperately use the Energy Savings Improvement Program (ESIP) as a way to reduce their energy spend and capital improvement referendums, this change has had a wide negative impact on their ability to do so. Less incentives for these public entities means greater burden on the taxpayer. Furthermore, this removal of the 200kW exemption for public entities is 100% counterproductive towards the NJ Clean Energy Program's mission of reducing utility consumption and greenhouse gas emissions - less energy efficiency work is incentivized and able to be conducted. **To summarize, the rule change, meant to steer the smaller buildings within a public entity from P4P to Direct Install has resulted in no Direct Install participation within ESIP (these buildings now go through Smart Start) and less comprehensive energy efficiency work in the public sector.**

The Pay for Performance program is an excellent program with great financial incentives. We applaud the Board of Public Utilities for instituting such a program. The program requires, but also encourages comprehensive energy efficiency measures. In general, the program does what it is set out to do, it results in greater energy savings and less energy consumption for buildings who participate. Since the ESIP program targets comprehensive energy efficiency projects, the P4P program has been a near perfect fit. It also promotes the NJ Clean Energy Program goals through the marriage of ESIP and P4P. As we seen over the past several years, it makes sense, and works well.

RED FOX ENGINEERING

22 Megill Road

Farmingdale, NJ 07727

Phone: (908) 770-4054

Email: Michael@redfoxengineering.com

What the removal of the 200kW exemption for public entities has done very successfully is exclude previously eligible buildings elementary schools and smaller public buildings from promoting energy efficiency since only a fraction of the money, once received, is now possible through the Smart Start Program. **In theory, the Direct Install program should cover these elementary schools and smaller public buildings, but in reality, it does not.** This is for a variety of different reasons, which we list below. To be clear, there is no practical marriage between the comprehensive ESIP and Direct Install program no matter the argument otherwise since they are two different paths with distinct differences.

Since the rule change in FY16, public entities have seen their bigger buildings, such as High Schools, Middle Schools, participate in the P4P program and receive substantial incentives. This has created more comprehensive energy efficiency work. Public entities have seen their smaller buildings, such as Elementary Schools, participate in the Smart Start program and receive significantly less incentives. This has created less comprehensive energy efficiency work. **Within one school district, participating in one ESIP project, the High Schools and Middle Schools benefit, while the Elementary Schools are left behind**. When there was a 200kW exemption for public entities, all buildings would have benefited, and the district would have conducted more energy efficiency work which furthers the goals of the NJ Clean Energy Program, as well as the public entity. Now, the program creates winners and losers within the same school district, despite the desire, by all parties to be as energy efficient as possible.

Here are a few reasons why these under 200kW buildings, within an ESIP project, do not move over to the Direct Install program:

1) The Direct Install program does not cover half of energy conservation measures that an ESCO includes in their ESIP project. There is a large amount of lost opportunity in the building as a result and is not nearly as comprehensive as the ESIP project.
2) Direct Install work cannot be guaranteed since the energy services company (ESCO) is not responsible for the work.
3) Energy savings from the Direct Install program can be carried within an ESIP project, but will not be used to create additional energy efficiency scope, since it is not guaranteed. In essence, this eliminates the entire premise of the ESIP project – utilize energy savings to pay for the work
4) It adds logistical and project management issues on the ESCO since typically only one contractor is responsible for one type of work within an ESIP project.
    a. i.e. One lighting contractor for all lighting related work in an ESIP project
5) Public entities choose moving forward with an ESIP, in part, because only one party is responsible for the work and manages all aspects of construction. This minimizes the work load on the public

RED FOX
ENGINEERING

22 Megill Road

Farmingdale, NJ 07727

Phone: (908) 770-4054

Email: Michael@redfoxengineering.com

entity, whom are already resource strapped. Adding Direct Install, within an ESIP project, adds another contractor that the public entity has to interface with. It adds logistical and resource constraints on the customer who has to now juggle two parties. This usually results in the public entity deciding not to do the work, which in turn, means the goals of the NJ Clean Energy program do not get fulfilled.

We ask the Board of Public Utilizes correct a rule change that has proven destructive towards incentivizing public entities and advancing the goals of the NJ Clean Energy Program. We believe, outside of ESIP projects, the 200kW threshold has merits and makes sense, but within an ESIP project it does not. It does not accomplish, within the ESIP sphere, what the Board of Public Utilities has intended it to. The proof has already been established over the past two years, arguments for these smaller public entities, within an ESIP project, going to Direct Install are simply theoretical and not the reality in the marketplace.

We thank you for your consideration. We hope the forthrightness of our argument conveys the negative impact that this rule change, established in FY16, has had in the market as a whole.

Sincerely,

Michael Claps

Principal

Redfox Engineering LLC

Honeywell
15 Tabor Road
Morris Plains, NJ 07950
973-455-2295
June 12th, 2017

New Jersey's Clean Energy Program
New Jersey Board of Public Utilities
44 South Clinton Avenue
Trenton, New Jersey 08625

Re: Restore the 200kW Exemption threshold for Public Entities to participate in the Pay for Performance Program

School Districts and Municipalities have been adversely effected by a rule change that took place July 1st 2015. At that time, the NJ Clean Energy Program changed the eligibility criteria for public entities that were previously exempt from the 200kW threshold required to participate in the Pay for Performance (P4P) program. Last year, we relayed our concerns, as well as, reiterated them earlier this year. Unfortunately, the draft of FY18 program guidelines still does not include this exemption. Doing this for the past twenty five years, and on behalf of the Honeywell Energy Team, I have seen firsthand the negative impacts of this rule change. Due to this rule change, the typical elementary school and town building can no longer qualify for P4P, despite the need for more comprehensive energy efficiency work. **School Districts and Municipalities now receive less incentive, less energy efficiency work is performed, less energy savings are achieved, and less financial relief from expensive referendums have resulted despite these entities performing the same Energy Savings Improvement Plan (ESIP) they did two years ago.**

We understand the reason for the 200kW, and agree with it in principal for projects that do not go through the ESIP program. However, the ESIP program has many distinct advantages which are attractive to public entities. It is why the ESIP program has done exceedingly well. Our working relationship with the Board of Public Utilities ensures that the best in practice standards are conducted and sufficient protections to the public entity are assured.

Since this rule change we now have elementary schools and smaller town buildings go through the Smart Start Incentive program. Although it has its merits, it does not provide the same advantages as the P4P program does for an ESIP project. The result is less energy efficiency work for the public entity. As you are aware public entities such as school districts and municipalities are very challenged for available dollars in both operating costs and capital. Therefore, even though the Smart Start program is a very worthwhile program, most of these smaller entities still struggle to pay their portion of the upgrades due to lack of funds. Within the ESIP program, funding is part of the solution and the out of pocket costs are eliminated while implementing an efficiency solution.

The other option for buildings under 200kW is to engage in the Direct Install program. However, as of the past two years we have never performed a Direct Install program within an ESIP program. There are several reasons that create substantial hurdles that cannot be overcome. At its core, it is because ESIP and Direct Install are two distinct pathways and programs. They have two different markets and customer types. Two different and distinct approaches to energy efficiency. Two different opportunities for a public entity to engage in energy efficiency.

One of several examples; Direct Install does not cover half of the types of energy efficiency measures we incorporate into our program, whereas P4P covers nearly all. Another is that no Energy Service Company (ESCO) will ever guarantee the work of another contractor. Therefore, energy savings associated with the work could be carried, but having non-guaranteed energy savings exhibited in a cash flow to the customer is directly contrary to the fundamental tenants of ESIP. It creates risk on the customer's side.

If there was a way that Honeywell could make Direct Install work within ESIP, we would have. As an example, we now utilize lighting co-ops approved by the Board of Public Utilities in our projects. This is a recent addition of about one year ago. In some cases it is a great fit, and we applaud the Board of Public Utilities for these ways to better serve the public. If there are opportunities to better the financial and energy agenda of these public entities we would do it.

When evaluating energy conservation measures, economics plays the central role. To date, Honeywell has had the most amount of success in the State of New Jersey in performing ESIP projects. Furthermore, it also has had the most amount of P4P approved projects at 106+. Nearly all of our ESIP projects have gone through the P4P incentive program. It has been very beneficial for the ESIP program, the public entities, and most importantly the taxpayers. P4P incentive funding has allowed fiscally strapped public entities to avoid public referendums and has eliminated a tremendous amount of deferred maintenance. With the restoration of the exemption from the 200kW minimum demand requirement, we would continue to see the trend of nearly all buildings within ESIP projects qualifying for P4P. This restoration of the 200kW exemption goes beyond Honeywell's projects, as all ESIP projects are affected. We believe that part of the ESIP programs success has been tethered to the generous rebate opportunity provided by the P4P program, which is one of the best in the country.

The P4P program has been a very strong marketing tool for public entities to participate in the ESIP program. In fact, the P4P program is discussed with every potential customer to show that the NJ Clean Energy Fund offers high levels of incentivizes for inclusive, comprehensive energy savings projects. This has allowed customers to further validate the benefits that the ESIP program can provide.

Furthermore, the Energy Efficiency Committee within the New Jersey Clean Energy Program's finds that on 4/11/17 the Pay for Performance Program has a much cheaper cost than the Direct Install program to achieve energy savings. Assessed at $1.98, the P4P costs half of the Direct Install program's $4.10 to achieve one MMBtu of energy savings. The Pay for Performance program also outscores Direct Install in both "Promoting Long-Term Market Transformation" and "Environmental Benefit per NJCEP $". **From a strictly financial sense, the taxpayers unequivocally benefit when public entities utilize P4P instead of Direct Install.**

Illustrative Example: PY17 Program Scores

Program	Rubric Metrics and Scores					
	NJCEP $ per Lifetime MMBtu Saved	Lifetime Peak kW Saved per NJCEP $	Significantly Enhances Equitable Access	Promotes Long-Term Market Transformation	Environmental Benefit per NJCEP $	Addresses Lost Opportunity Markets
EE C&I EB	$1.19	+++	+	+	+++	++
EE C&I LEUP	$1.35	+++			+++	
EE Res Products	$1.96	++	+++	+	++	+
EE C&I NC	$1.97	++		++	++	++
EE C&I P4P EB	$1.98	++		+++	++	++
EE Res HVAC	$2.36	+	+	+	++	++
EE C&I P4P NC	$2.96	+++		+++	+	++
EE Res RNC	$3.29	++		++	+	+++
DER CHP/Fuel Cell	$3.77	++		+	++	
EE C&I DI	$4.10	++	+++		+	
EE Res HPwES	$7.84	+		+++	+	
EE Res Low Income	$26.07	+	+++		+	
EE C&I LGEA	?	?	+++	+	?	

Notes:

1. These are based on best current information regarding expected expenditures (i.e. budgets excluding rebates set aside for expected new commitments) and related savings for FY17.
2. Savings and/or budgets for FY17 programs upon which "scores" above are based should be viewed as illustrative, as there are some refinements that could probably still be made. A more definitive set of values will be used when assessing any future programs.

To date municipalities and school districts do not understand the reasoning behind this rule change. It has been the topic of several conversations, and all the feedback we have received has been very negative. They cannot understand that despite the inclusive nature of the LGEA and ESIP program; and the proposed comprehensive scope through the ESIP project, some schools/buildings within their district that meet the 15% savings threshold would not qualify for the higher level of incentives simply due to the 200kW threshold.

To conclude, excluding previously eligible buildings with a peak demand of less than 200kW has resulted in millions of dollars of lost opportunity. The same lost opportunity that the Board of Public Utilities is looking to reduce (as per two presentations this past year). **The rule change has targeted and disadvantaged elementary schools, within an ESIP project, from participating in the P4P program. These elementary schools are often the most in need of infrastructure upgrades. It has been counterproductive towards the Board of Public Utilities goals, the NJ Clean Energy Program's goals, and the economic well-being of these public entities. For the foreseeable future we do not see the possibly to include Direct Install in lieu of P4P for these buildings.**

We estimate that public entities that have undergone ESIP within the past two years with Honeywell have lost $10M of available energy efficiency/infrastructure work. This infrastructure work, like roof replacements, boiler replacements, chiller replacements then fall on public referendum which is not good for them nor the public they serve. We greatly appreciate the NJ Clean Energy Program's consideration in this matter and strongly believe that the restoration of the 200kW exemption for public entities that perform through ESIP is good for the NJ Clean Energy program, the ESIP program/participation, for public entities, and for the taxpayers of the State of New Jersey.

Sincerely,

Joseph J. Coscia
Sr. Business Consultant
Honeywell International

VIA ELECTRONIC MAIL (publiccomments@njcleanenergy.com)

June 12, 2016

Hon. Irene Kim Asbury, Secretary
New Jersey Board of Public Utilities
44 So. Clinton Ave., 3rd Floor, Suite 314
P.O. Box 350
Trenton, NJ 08625-0350

THE MATTER OF THE COMPREHENSIVE
ENERGY EFFICIENCY AND RENEWABLE ENERGY
RESOURCE ANALYSIS FOR FISCAL YEAR 2018
CLEAN ENERGY PROGRAM - DOCKET NO. QO17050464

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

Dear Secretary Asbury:

The New Jersey League of Municipalities and the New Jersey School Boards Association represent all the municipal governments and school boards in the State of New Jersey. In addition, our organizations were instrumental in the creation and extension of the programs Sustainable Jersey and Sustainable Jersey for Schools. We are writing today with respect to critical FY18 funding necessary for those programs.

We have reviewed the Comprehensive Resource Analysis Staff Straw Proposal for New Jersey's Clean Energy Program ("NJCEP") Funding Levels for Fiscal Year 2018 ("CRA Straw Proposal") and the companion budgets and compliance filings for Fiscal 2017 ("Compliance Filings"). Through this letter, we would like to share concerns regarding the proposed reduction in the level of financial support for Sustainable Jersey.

To start, we would like to thank the Board for the significant level of support and continued commitment it has provided to Sustainable Jersey to date. With the Board's financial support and technical assistance, Sustainable Jersey and Sustainable for Jersey for Schools have developed a national role model for promoting energy efficiency and renewable

energy actions at the local level. Currently, 444 municipalities participate in Sustainable Jersey, representing more than 79% of the communities within the state. Despite being much younger, Sustainable Jersey for Schools is already displaying very impressive participation levels. There are already 265 School Districts enrolled, representing nearly 45% of all public districts, and the program has engaged more than 650 individual schools as well. The number of participating municipalities and schools continues to rise each year, increasing demand on the programs.

Energy actions are among the most popular that municipalities and school districts pursue through Sustainable Jersey. Through the 2016 program cycle, municipalities had submitted 1,304 energy actions and schools had submitted 1,969. There is a tremendous amount of administrative work behind the scenes at Sustainable Jersey to develop and refine theses energy actions, to provide support to the entities trying to earn points in the energy category, and to review the submissions.

In addition to quantifiable impacts, funding for Sustainable Jersey creates a receptive environment in local governments and communities for NJCEP programs and energy efficiency. For example, not included in the action tally above are the hundreds of school and municipal "green fairs," launched as a result of Sustainable Jersey participation, where every year tens of thousands of citizens are educated about NJCEP programing and clean energy.

The funding NJCEP has historically provided is critical to maintaining the quality of the content and strong customer service that participants expect. It has also provided an opportunity to develop innovative approaches. We are pleased to see that the FY18 Compliance plan assumes that will continue with the development of a Gold Energy Standard and a new action targeting behavioral energy savings in schools. We know our members value the importance of the Sustainable Jersey network, and we want to keep them engaged so they can continue to lead at the local level.

We recognize that the NJCEP budget has limited resources. However, Sustainable Jersey provides a valuable partnership between state leadership and local policymakers, and we hope that you can reconsider the proposed funding level and maintain the current fiscal year appropriation of $500,000. This will ensure that the Board and Sustainable Jersey can continue to innovate and provide the proper level of service to our members. In the event that you can't make that adjustment at this time, we respectfully request that you keep this funding request in mind as you adjust budgets during the course of the fiscal year.

We appreciate the opportunity to provide comments on these topics. Please feel free to contact us if you need any additional information regarding these issues.

Sincerely,

Michael J. Darcy, CAE
Executive Director
New Jersey League of Municipalities

Lawrence S. Feinsod, Ed.D.
Executive Director
New Jersey School Boards Association

NEW JERSEY GENERAL ASSEMBLY

GORDON M. JOHNSON
ASSEMBLYMAN, 37TH DISTRICT
545 CEDAR LANE
TEANECK, NJ 07666
PHONE: (201) 530-0469
FAX: (201) 530-0486

COMMITTEES
COMMERCE AND
ECONOMIC DEVELOPMENT - CHAIR
JUDICIARY - VICE CHAIR
BUDGET

June 13, 2017

The Honorable Irene Kim Asbury
Secretary, New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350
publiccomments@njcleanenergy.com

Re: Proposed NJCEP 2018 Programs

Dear Irene Kim Asbury,

In reviewing the Board of Public Utilities' Fiscal Year 2018 budget proposal, I noted that the Board proposes again to require fuel cell projects to include heat recovery. Also, the cuts made last year to fuel cell projects under 500 kW are maintained. Total funding for fuel cell projects is reduced by $11 million from Fiscal Year 2017. The Board should reverse these policies and restore the ability for all fuel cell projects to qualify for the Distributed Generation Program. Stationary fuel cell systems are the cleanest, most efficient way to produce power from natural gas, and also operate directly on biogas. Fuel cell systems in both electric-only and combined heat and power applications reduce greenhouse gas and criteria air pollutant emissions, balance the grid and create firm power, even when the grid goes down.

The budget does not specify the total backlog of fuel cell projects or the amount of funding that is available for new projects in Fiscal Year 2018, making it hard to measure how the Board is addressing the demand for fuel cells. I sought more information about fuel cell projects at the May 3rd budget hearing and via the follow-up letter, but to date, my questions have not been answered. The total budget for all distributed generation projects is $38 million, but the annual budget to one consulting firm for the administration of all Clean Energy Programs programs is $25 million, representing administrative costs of 12%. This should be carefully reviewed and funding should be restored to programs that reduce emission and increase resiliency, both of which are desperately needed in our State.

The Fiscal Year 2017 Summary of Program Changes called for an independent study of costs, benefits, and emissions of distributed energy, however, no such study has been completed

or released. Real life concerns such as resiliency, avoided transmission and distribution costs, and greenhouse criteria air pollutant emission reductions are co-benefits that should be taken into account by the consultants, not just the "payback period." The Board is also proposing to increase funding for State Energy initiatives and microgrids, and reallocate funding within Energy Efficiency line items in response to new demand. However, when demand for fuel cell projects increased, the Board acted immediately to cut funding, before a study could even take place. After Hurricane Sandy, microgrid programs have resulted in installations of new, clean and resilient distributed generation in many other states including Connecticut and New York. The New Jersey Program is currently conducting feasibility studies of microgrids and needs to move quickly to use the Clean Energy Program to create resilient infrastructure in the short-term.

In closing, I urge the Board to increase available funding and rates to all fuel cell projects and take a hard look at the money appropriated to contracted consultants. The Board should also restore eligibility to fuel cell projects without heat recovery and fully value all the attributes of distributed generation. Lastly, the Board should strengthen its dialogue and outreach to the fuel cell industry and stakeholders in New Jersey.

Sincerely,

Gordon M. Johnson
Assemblyman, District 37

CC: Richard Mroz, Board President
Upendra Chivukula, Commissioner

GMJ/sd

From: Tim Paulus <tpaulus@wickcompanies.com>
Sent: Wednesday, June 14, 2017 9:49 AM
To: publiccomments@njcleanenergy.com
Subject: NJ Direct Install

To Whom It May Concern,

It has come to my attention that funding for the New Jersey Direct Install Program is being reduced. I am writing to express support for the New Jersey Direct Install Program.

Wick Companies is a commercial real estate developer and property manager. We redevelop many industrial, office and retail properties for ourselves and 3rd parties. Over the years, through the NJ Direct Install program, we have been able to make energy efficient upgrades to our properties and have recommended Direct Install to many tenants and 3rd parties so that they made upgrades. Without the Direct Install Program these upgrades would have not "penciled out" financially and would not have been done. Thanks to Direct Install the upgrades were made and energy is being saved.

We hope you continue supporting this program. Thank you.

Tim Paulus, Esq.
Wick Companies, L.L.C.
100 Woodbridge Center Drive, Suite 301
Woodbridge, NJ 07095
732-750-4444
www.wickcompanies.com

From: Anthony Megaro <anthony.s.megaro@gmail.com>
Sent: Wednesday, June 14, 2017 10:23 AM
To: publiccomments@njcleanenergy.com
Subject: NJDI

To Whom it may concern

As a business owner and landlord it greatly concerns me that funding for this program is in question. Three of the buildings that I own are commercially occupied and the tenants have taking advantage of this program. They have seen significant reductions in energy costs and equipment repairs,as well as a more comfortable and healthy environment. When businesses operate this way the economy flourishes. That is why I am appealing to the powers that be to continue to fund this program as it has in prior years. In fact I would recommend additional funds so others can also benefit.

Thank you,
Anthony Megaro

From: petermac53@aol.com
Sent: Wednesday, June 14, 2017 10:28 AM
To: publiccomments@njcleanenergy.com

NJDI has been a tremendous program that has enabled my business to upgrade our HVAC when without the program we would not have been able to do. With operating costs being so high in NJ, programs like this enable us to economically reinvest in our business

TY. Peter Fonseca

Sent from my Verizon LG Smartphone

From: malmasi3@yahoo.com
To: publiccomments@njcleanenergy.com
Subject: Direct install
Date: Wednesday, June 14, 2017 2:36:05 PM

I would like to voice my support of the direct energy program I've had a small business for33 years and for the most part small businesses are steeped on or stepped over we need programs like this they are a major help I hope you will hear our support. Thank you

From: Taras Lonchyna <lonchtar@hotmail.com>
Sent: Thursday, June 15, 2017 11:53 PM
To: publiccomments@njcleanenergy.com
Subject: Please support Direct Install

Irene Kim Asbury, Secretary of the Board
Board of Public Utilities
Trenton, NJ

Dear Irene,

The NJ Direct Install program is imperative for St. Josaphat Ukrainian Catholic Church on Deutz Ave. in Hamilton,NJ. It makes it affordable to put energy efficient equipment in our church and church hall. Cleaner energy and energy efficient equipment saves energy and keep the NJ environment cleaner. Please continue to support this program.

God bless you and the Board!

Rev. Taras R. Lonchyna
pastor

TOWNSHIP OF EDISON

Tom Lankey, *Mayor*

Office of the Mayor

Edison Municipal Complex
100 Municipal Boulevard
Edison, New Jersey 08817
732-248-7298 Telephone
732-287-6679 Fax
www.EdisonNJ.org Website

June 15, 2017

NJ Board of Public Utilities
44 South Clinton Avenue 3rd Floor Suite 314
P.O. Box 350
Trenton, NJ 08625-0350

Attn.: Ms. Irene Kim Asbury, Secretary to the Board

Dear Ms. Asbury:

Of late we have learned that, once again, efforts are underway to severely curtail funding for the NJBPU Direct Install Program. How distressing and disappointing!

As a result of such repeatedly negative efforts to reduce and divert NJBPU DIP funds, NJ has slipped to a national ranking of 24 for energy efficiency, having once been a leader and innovator in the field of energy conservation. This makes it all the more difficult for small businesses and residents to live and work in NJ, already one of the most expensive states in the USA. It also undermines NJBPU DIP's efforts to reduce demands on NJ's critically challenged energy infrastructure through efficiencies and conservation.

Since 2010, Edison has effectively participated in NJBPU DIP, having successfully completed energy and cost-saving retrofits at ten (10) municipal buildings townwide with its assistance, to date. This has resulted in significantly lowering Edison's energy costs, reducing its demands on the local energy grid and decreasing its municipal carbon footprint.

In fact, we are in the process of submitting yet another NJBPU DIP application, with plans to develop further NJBPU DIP applications, given our past experience of continuing positive results, both financial and environmental. Edison has been and continues to be a Sustainable Jersey Certified Community since 2009, toward which its NJBPU DIP projects have contributed.

Please relinquish any efforts to reduce funding to NJBPU DIP and accept this Letter of Support as a protest against such considered actions. Should you have any comments, questions or requests, please contact me via e-mail at cmazauskas@edisonnj.org or by telephone at 732-248-7356. Thank you for giving this important matter your consideration and support.

Sincerely,

Chris Mazauskas

Chris Mazauskas
Resource Development Officer

c: Hon. Thomas Lankey, Mayor
Maureen Ruane, Business Administrator

From: Rey Montalvo <reym@cedinternational.com>
Sent: Thursday, June 15, 2017 11:45 AM
To: Renewable Energy Committee (Notification); ee@njcleanenergy.com
Cc: REadmin@njcleanenergy.com
Subject: RE: CRA Straw and FY18 Budgets and Filings

Importance: High

Hi Linda,

Even more important than how the money gets moved around for the budget is this:

Has the NJBPU finally added KW reduction incentives as KW Demand represents some 30% - 40% of the total utility bill?

All I have seen is KWH (consumption) incentives.

Please advise.

Rey Montalvo
President & CEO
1933 Hwy 35, Suite 105, No. 367
Wall, New Jersey 07719-3502
reym@cedinternational.com
www.fadrs.com
(732) 681-8800

From: renewables-bounces@njcleanenergy.com [mailto:renewables-bounces@njcleanenergy.com] **On Behalf Of** Wetzel, Linda
Sent: Thursday, June 15, 2017 11:03 AM
To: ee@njcleanenergy.com; renewables@njcleanenergy.com
Subject: CRA Straw and FY18 Budgets and Filings

The complete set of documents for the FY18 CRA Straw Proposal and the proposed FY18 program budgets and compliance filings can be found on the link below. Appendix E: Outreach and Interim Marketing Plan has been added for stakeholder and public input. As a reminder, comments are due by June 20, 2017 and should be submitted to publiccomments@njcleanenergy.com.

http://njcleanenergy.com/main/njcep-policy-updates-request-comments/policy-updates-and-request-comments

Regards,

Linda Wetzel

From: jgrant@matchless-energy.com
Sent: Friday, June 16, 2017 1:31 PM
To: publiccomments@njcleanenergy.com
Subject: NJ Clean Energy Program changes
Attachments: _ About Us IR Photo Set 1502.pdf

Gentlemen:

We understand that New Jersey is considering a reduction in funding for the NJ Clean Energy Program. While we believe that some correction/adjustment to this program is warranted, however, reducing the scope of a program that has the potential to promote energy saving measures in this state where so much old, outdated and wasteful technology is still in place and is still sold every day would be a mistake.

We specialize in gas infrared heating, a technology that can deliver 50% reduction in gas use and 90% reduction in electric use associated with industrial and commercial space heating. We would welcome any opportunity to discuss the application of this energy saving technology with you.

We would urge correction and adjustment to energy incentive programs rather than elimination.

Kind regards, John Grant
Matchless Energy Management, Inc.
973-335-5885

South Jersey Gas

Where we put all of our energy®

Irene Kim Asbury, Secretary of the Board
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, New Jersey 08625-0350

Comments of Bruce S. Grossman, Program Manager, Residential Energy Efficiency; South Jersey Gas Company June 16, 2017

Public Hearing Regarding CRA Straw Proposal and Revised FY 2018 Budgets

Good morning; my name is Bruce S. Grossman, and I am the Program Manager for Energy Efficiency for the South Jersey Gas Company. I also serve as the Senior Utility Sponsor the New Jersey Clean Energy Program Comfort Partners Low Income Program.

For the record, South Jersey Gas Company is a local distribution company which provides natural gas service to approximately 370,000 customers within seven counties in Southern New Jersey.

First; South Jersey Gas appreciates the opportunity to offer remarks regarding the 2018 CRA proposal, and to state that we, along with other

South Jersey Gas

Where we put all of our energy®

utilities in NJ, have successfully partnered with the Clean Energy Program to foster greater overall customer participation, and energy saving success since 2009. Over the past six years, South Jersey Gas has continued to make the promotion of energy efficiency part of its corporate culture, and has directed this approach to its wide array of constituents and customers. It is our hope that our efforts, in concert with the good work performed by the State and the other utilities, can continue in this fashion long into the future.

To that end; Fiscal Year 2018 appears to be a transition year for the Clean Energy Program, as the Strategic Plan is still a work in progress, and the budget for the coming year is still planned to be a one year financial term.

A review of the proposed CRA Budget for Fiscal Year 2018, and the proposed program descriptions take into account the importance of maintaining a strong commitment to some of the major programs, that have established success in the areas of commercial and industrial energy savings, and economic growth, while engendering an emphasis upon solid building science in the residential markets. The proposed change for the Commercial Industrial Programs to overhaul the Prescriptive application

South Jersey Gas

Where we put all of our energy®

forms to improve customer service is well overdue, and the effort to streamline multiple site submittals will be welcomed by mid to large businesses. Increasing customer satisfaction and their experience in participating in these programs serves as a key tactic to increase programs objectives.

However, there needs be an understanding the energy efficiency is a business performed by contractors and other trade allies. Though imposing a procedure or a requirement may be beneficial for the Program, if the contractor perceives that a requirement serves as a barrier to their company, or their customer, they will be less likely to promote the program. Specifically, the proposal to only allow contractors to apply for a customer's Warm or Cool Advantage Rebate has benefit to the purchaser, while imposing more administrative time and cost onto the contractor. The result of that could either increase cost to the customer, or influence lack of participation into the program, though an efficient piece of equipment may be installed. In such a case, the savings will occur, yet will not be captured and thereby could hurt the value of the Warm or Cool Advantage Program.

South Jersey Gas

Where we put all of our energy®

That said, all in all, these programs have created a model to create positive results through holistic and sensible approaches to energy savings. The State of New Jersey has stood tall in demonstrating to other states and other energy efficiency organizations though-out North America, that it is important to apply energy efficiency programs to homeowners and businesses in a manner that is affordable, safe, and environmentally compatible.

Even in these challenging budgetary times, the Board of Public Utilities has tried to find a balance between fostering a policy of energy saving and, economic growth in the energy efficiency and renewable industries, while answering the call to help mend tears in the State's fiscal cloak. That said there is an item that needs to be further illuminated for further discussion.

Simply stated; that item is equity. In this case, the goal is equity for rate-payers, equity for business, and equity amongst the varied markets that the NJ utilities serve, and that those in public office govern or regulate. Yet; in this CRA budget, an energy efficiency program that applies to the most "at risk" population of our State, has been reduced by six million

South Jersey Gas

Where we put all of our energy®

dollars ($6M), or by 20%. This program is the Comfort Partners Low Income Program, and is the only program that is administered by the Office of Clean Energy, and carefully, and dutifully managed collaboratively by the following Utilities; Atlantic City Electric (an Exelon Company), Elizabethtown Gas (a Southern Company), Jersey Central Power and Light (a First Energy Company), New Jersey Natural Gas, Public Service Electric and Gas, and South Jersey Gas. This program is also supported by six highly qualified installation contractors, who in some cases, subcontract to several skilled trades, and also contracts with an independent Quality Assurance Inspection Company.

For a number of years, this program has been operating under a budget of thirty million dollars ($30M), for which the Utilities of NJ are appreciative. Through May of 2017, the Comfort Partners Program has booked over twenty three million ($23M), and has invoices to be approved worth well over one million ($1M). We also know that over three million, two hundred thousand ($3.2M) has been has been incurred by our contractors for work not yet completed, with another three million ($3M) worth of work expected to be completed during the coming months.

South Jersey Gas

Where we put all of our energy®

By the close of Fiscal Year 2017, this program will upload expenses close to the current budget cap of $30M, into the State's IMS reporting system. Unfortunately, due to the nature of how expenses are reported, commitments and "work in progress" costs do not appear on the IMS financial forecast screen. However, the overflow of work that will be completed over the next 60 days will have a detrimental impact on the proposed constricted budget of twenty four million ($24). The result of which will create serious unintended consequences. Those are consequences are; the potential layoffs of skilled staff, health and safety issues that will go unattended, along with energy and environmental savings that won't be obtained. Most importantly, we leave behind the needs of people who need the services of this Program the most. It is one thing to save energy. It is another to prevent the degradation of health, and perhaps the loss of life by mitigating natural gas leaks, carbon monoxide, hazardous wiring, mold, asbestos, and unacceptable living conditions. By decreasing the current budget to the level proposed, we also incur the risk of burdening our other rate payers with higher costs to defray uncollectable accounts, while placing more pressure on the Universal

South Jersey Gas

Where we put all of our energy®

Services Fund. This will occur, knowing that our State's weatherization agencies face severe federal budget cuts in the near future.

We all recognize that even with the burgeoning partnerships that are happening with several of the State's weatherization agencies, and private foundations, our FY 2017 budget of $30M can't solve all of the problems I've just stated for such a large, and growing population. However, to financially deflate this program to such a degree sends the wrong message, at the wrong time, and deserves additional review. Over the past sixteen (16) years, the Utilities have been proud to partner with the Office of Clean Energy, and have been fortunate to have been able to assemble a dedicated and knowledgeable network of contracting companies to deliver energy savings for our customers. Above all else, our partnership has consistently provided basic health and safety measures to the most vulnerable segments of our State's population. With your support, the Utilities will continue to offer Comfort Partner program services over the next fiscal year for as many customers as the program can effectively serve.

South Jersey Gas

Where we put all of our energy®

Finally, South Jersey Gas offers its resources to work with the Office of Clean Energy, to actively participate with other NJ Utilities on the newly created Utility Working group over the coming months. Our mission will be, to help craft programs with even greater value for its various markets, and to craft a solution to the matter of finding a way to help the Board of Public Utilities in its mission, to include equity in the delivery of programs that have a deep societal and energy saving benefit.

Sincerely,

Bruce S. Grossman

Bruce S. Grossman

1 South Jersey Plaza, Folsom, New Jersey 08037 ● www.southjerseygas.com
Tel. (609) 561 -9000 ● Fax (609) 561-8225 ● TDD ONLY 1-800-547-9085

From: John <johndamurjian@netscape.net>
Sent: Friday, June 16, 2017 11:06 AM
To: publiccomments@njcleanenergy.com
Subject: nj direct program

to whom it may concern.. please support nj direct program thank you john damurjian vestry member st.mary's by the sea church

Lynn Schambach
525 Harris Avenue
Brielle, NJ 08730

June 15, 2017

Via Email
publiccomments@njcleanenergy.com

Irene Kim Asbury
Secretary of the Board
Board of Public Utilities
44 South Clinton Avenue
Post Office Box 350
Trenton, NJ 08625-0350

Re: New Jersey Direct Install Program

To Whom It May Concern,

I have just learned of the Public Hearing taking place tomorrow regarding cutting funds to the New Jersey Direct Install (NJDI) Program. I am a resident of New Jersey, and a parishioner and elected Vestry member of Saint Mary's by-the-Sea in Point Pleasant Beach.

Our vestry recently approved and is in the active process of having energy efficient upgrades made to our lighting and heating and cooling systems. We are a small church, however, our electric bills in peak season have climbed over $2,000.00 per month. Our heating bills, while on a budget, still reached over $1,000.00 in the coldest months. Along with many if not most houses of worship, our budget is *tight*. While paying exorbitant energy bills, we have also been paying for repairs to our aged mechanical systems, i.e. air conditioning units over 25 years old.

Outreach ministries offered through our small church touch many people in the local community and beyond through: Saint Gregory's Food Pantry, weekly community meals that feed over 125 hungry people each Thursday since Superstore Sandy, quarterly one-week hosting/housing of families in transition who have lost their homes, a safe weekly meeting place for numerous self-help groups and hosting/housing Habitat for Humanity summer volunteers.

The NJDI is making it possible for Saint Mary's to make significant energy efficient upgrades to our systems which will:

- Decrease our consumption of energy thus reducing our carbon footprint
- Lower our monthly energy bills
- Provide a level of financial security and physical comfort for future parishioners and vestries

Through the NJDI Program, Saint Mary's will realize an annual cost savings of over $9,400.00. This cost savings will help ensure Saint Mary's can continue keep her doors open to serve those in need in the community.

Looking forward from 2017, we (collectively) face an imminent crisis due to climate change. This is a public health issue *and* a social justice issue. NJDI is making it possible for residents, small businesses and nonprofits to better afford to live, work and serve in this great State of New Jersey while also addressing the health of the planet.

I implore you to please leave the funding for the NJDI Program intact. New Jersey has slipped to #24 for energy efficiency. As a technologically advantaged state, we should be closer to #1. With the cost of living and doing business in New Jersey becoming more and more burdensome, the Board of Public Utilities has the opportunity to stem rising costs and rising sea levels.

Thank you very much for your attention.

Sincerely,

Lynn Schambach

Gary Smerillo
806 Rosewood Avenue
Point Pleasant Beach, NJ 08742

June 15, 2017

Via Email
publiccomments@njcleanenergy.com

Irene Kim Asbury
Secretary of the Board
Board of Public Utilities
44 South Clinton Avenue
Post Office Box 350
Trenton, NJ 08625-0350

Re: New Jersey Direct Install Program

To Whom It May Concern,

I have just learned of the Public Hearing taking place tomorrow regarding cutting funds to the New Jersey Direct Install (NJDI) Program. I am a resident of New Jersey, and a parishioner and Treasurer of Saint Mary's by-the-Sea in Point Pleasant Beach.

Our vestry recently approved and is in the active process of having energy efficient upgrades made to our lighting and heating and cooling systems. We are a small church, however, our electric bills in peak season have climbed over $2,000.00 per month. Our heating bills, while on a budget, still reached over $1,000.00 in the coldest months. Along with many if not most houses of worship, our budget is *tight*. While paying high energy bills, we have also been paying for repairs to our aged mechanical systems, i.e. air conditioning units over 25 years old.

Outreach ministries offered through our small church touch many people in the local community and beyond through: Saint Gregory's Food Pantry, weekly community meals that feed over 125 hungry people each Thursday since Superstore Sandy, quarterly one-week hosting/housing of families in transition who have lost their homes, a safe weekly meeting place for numerous self-help groups and hosting/housing Habitat for Humanity summer volunteers.

The NJDI is making it possible for Saint Mary's to make significant energy efficient upgrades to our systems which will:

- Decrease our consumption of energy thus reducing our carbon footprint
- Lower our monthly energy bills making us more fiscally responsible
- Provide a level of physical comfort for future parishioners and vestries

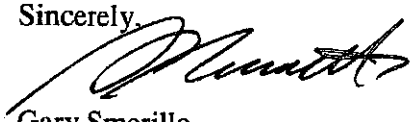
Through the NJDI Program, Saint Mary's will realize an annual cost savings of over $9,400.00. This cost savings will help ensure Saint Mary's can continue keep her doors open to serve those in need in the community.

Looking forward from 2017, we (collectively) face an imminent crisis due to climate change. This is a public health issue and a social justice issue. NJDI is making it possible for residents, small businesses and nonprofits to better afford to live, work and serve in this great State of New Jersey while also addressing the health of the planet.

I implore you to please leave the funding for the NJDI Program intact. New Jersey has slipped to #24 for energy efficiency. As a technologically advantaged state, we should be closer to #1. With the cost of living and doing business in New Jersey becoming more and more burdensome, the Board of Public Utilities has the opportunity to stem rising costs and rising sea levels.

Thank you very much for your attention.

Sincerely,



Gary Smerillo

Barbara Foster
212 A Laurel Pl.
Whiting, NJ 08759

June 15, 2017

Via Email
publiccomments@njcleanenergy.com

Irene Kim Asbury
Secretary of the Board
Board of Public Utilities
44 South Clinton Avenue
Post Office Box 350
Trenton, NJ 08625-0350

Re: New Jersey Direct Install Program

Dear Ma'am;

Please leave the funding for the NJDI Program intact. New Jersey has slipped to #24 for energy efficiency. As a technologically advantaged state, we should be closer to #1. With the cost of living and doing business in New Jersey becoming more and more burdensome, the Board of Public Utilities has the opportunity to stem rising costs and rising sea levels.

I am a member of St. Mary's by-the-Sea Episcopal Church in Pt. Pleasant Beach and our vestry recently approved and is in the active process of having energy efficient upgrades made to our lighting and heating and cooling systems. We are a small church, however, our electric bills in peak season have climbed over $2,000.00 per month. Our heating bills, while on a budget, still reached over $1,000.00 in the coldest months. Along with many if not most houses of worship, our budget is *tight*. While paying exorbitant energy bills, we have also been paying for repairs to our aged mechanical systems, i.e. air conditioning units over 25 years old. Outreach ministries offered through our small church touch many people in the local community and beyond.

The NJDI is making it possible for Saint Mary's to make significant energy efficient upgrades to our systems which will help us decrease our consumption of energy thus reducing our carbon footprint, lower our monthly energy bills and provide a level of financial security and physical comfort for future parishioners and vestries. Through the NJDI Program, we will realize an annual cost savings of over $9,400.00 and this cost savings will help ensure Saint Mary's can continue keep her doors open to serve those in need in the community.

Sincerely,

Barbara W. Foster

From: George Geiger <ggeiger@buildingmgmt.com>
Sent: Friday, June 16, 2017 4:53 PM
To: publiccomments@njcleanenergy.com
Subject: I support the NJ Direct Install Program

To Whom It May Concern:

My name is George C. Geiger. I have managed commercial office properties in the Greater Mercer County area since 1982, many of which were built from the mid-1970s and the 1980s. As you can imagine, ALL of them have outdated HVAC and lighting systems. In 2013, we began implementing the NJDI program to update as many buildings as we could get qualified for in a given time period. We still have many more to do.

The recent diversion of $356M is affecting the current NJDI budget. NJDI is THE most-popular, most-used program by NJ businesses. I am hoping the program will consider shifting some of the remaining funds from the more underused programs to the ones that have the most benefit for New Jersey, specifically the NJDI.

Thank you in advance for your consideration.

Sincerely,

George C. Geiger
President

GEIGER
& ASSOCIATES

George Geiger & Associates, Inc.
163 Nassau Street
Princeton, NJ 08542
609-924-8202

From: Y <y2kworld@yahoo.com>
Sent: Saturday, June 17, 2017 7:16 AM
To: publiccomments@njcleanenergy.com
Subject: Nj direct install

Please continue the nj direct install program. It not only helps the small businesses but helps the environment greatly.

Thx

Small businesses owner

EnSync
ENERGY SYSTEMS

June 16, 2017

New Jersey Board of Public Utilities
44 South Clinton Avenue, 3rd Floor
Suite 314
Post Office Box 350
Trenton, New Jersey 08625-0350
Irene Kim Asbury, Secretary of the Board
Revision 1

Dear Secretary Asbury,

EnSync, Inc. (NYSE MKT: ESNC), dba EnSync Energy Systems, a leading developer of innovative distributed energy resource (DER) systems and internet of energy (IOE) control platforms for the utility, commercial, industrial and multi-tenant building markets, hereby submits the following comments regarding the Request for Comments, Proposed NJCEP FY17 Budget Revisions as requested on June 9, 2017.

EnSync's Matrix Energy Management platform is a differentiated technology for easily integrating and controlling distributed energy resources, such as solar and storage, with great potential value in leveraging those assets as a controllable on-demand energy source. Matrix provides useful flexibility and the ability to seamlessly add distributed energy resources to existing commercial and industrial assets. In addition, Matrix enables future proofing capabilities and flexible system operation.

We take exception to the proposal put forth by the Board Staff as reflected in the "FY18 Draft CRA and Budget", which essentially recommends that the Board approve the transfer of $1,052,480.00 from the RE Storage Program "Rebates, Grants, and Other Direct Incentives" cost category to the Microgrid Program "Rebates, Grants and Other Direct Incentives" cost category as a response to demand for Microgrid funding. EnSync supports efforts to harden our energy infrastructure and believes wholeheartedly that micro and nano scale grid development plays an integral role for increasing reliability, resiliency and deriving significant ratepayer benefits which ultimately will bring higher value from clean energy resources to New Jersey ratepayers. We also believe the efforts to promote Microgrids can be enhanced significantly through funding and other regulatory and policy measures to meet rising market capability and end user demand. We take exception, however to transferring these funds as proposed and believe there will be negative

EnSync
ENERGY SYSTEMS

repercussions to the RE Storage program and stakeholders who have set their sights on tapping these previously earmarked funds for development of innovative storage deployment.

EnSync Energy respectfully requests keeping funding levels for the RE Storage Program intact. Our firm, and many others in the space where energy storage technologies can be paired with solar and renewable forms of energy, have been challenged in efforts to educate end users about the merits and benefits of adding energy storage to their operations. New technologies, like chemical energy storage, while established in other industries, require that customers feel confident in selecting an energy storage option, and this requires added time as well as funding to assuage the financial concerns and help shore up economic project illustrations. Removing funding sends a negative market signal that the BPU is not serious about opening New Jersey's energy market to proven technologies which are pursuing new applications.

Our firm is also active in the nascent electric vehicle charging market, with innovation to bring direct-DC sourced from solar to vehicles using energy storage as the primary conduit along with our innovative Matrix Energy Management System that together presents the compelling economic case to deploy this much needed improvement to market offerings. The NJ RE Storage incentive is integral to these economic cases.

Furthermore, EnSync Energy has already spent several months and made investment in reaching customers in New Jersey who have sincere interest in storage. To have the funding removed at this point will strand our investments and hurt our credibility. Customers will take pause on project opportunities because of funding uncertainty.

We believe the cycle for energy storage projects at this stage of the market requires additional time for education, added resourcing for site evaluation and critical load surveys, has deeper scrutiny for economic modeling and should have a matching commitment from the BPU for staying the course and allowing the funds allocated to this program to remain in place to fulfill projects in development.

Maybe there is middle ground based on available dollars in the RE Storage Program - On the website it notes that as of April 13th, 2017 (most recent date) there is about, $1.485M, so the transfer and withdrawal of $1M would nearly exhaust this current pool, especially if new data shows less remaining funding.

EnSync
ENERGY SYSTEMS

Renewable Electric Storage

Application Status*

	Applications	Energy Capacity (kWh)	Program Funding
FY17 Budget			$3,000,000
Under Review	0	N/A	N/A
Approved	7	6,625	$1,519,500
Available Funding			$1,480,500

*as of April 13, 2017

Without having visibility to the total budget allocated, it may be the case that the RE Storage Program has more than the sum and if this is the case, then EnSync could support leaving at least $1M in the RE Storage Program funding pool. We hope that the Board agrees with this plea and can find other ways to support the Microgrid segment of the market, a segment with even higher positive impact value to New Jersey citizens and all its ratepayers.

I remain appreciative of the historic efforts that New Jersey leadership has delivered to promote a clean energy future. Please contact me with any questions or thoughts about our position regarding the FY18 Draft CRA and Budget.

Respectfully submitted,

David Eisenbud
Managing Director, Distributed Energy Resources
EnSync Energy Sytems, Inc.
Cell: (617) 676-5267
deisenbud@ensync.com

lime

4 Gateway Center, 4th Floor
100 Mulberry Street
Newark, NJ 07102

June 16, 2017

New Jersey Board of Public Utilities
44 S. Clinton Avenue
Trenton, NJ 08625
Attn: Mr. Richard Mroz, President

Re: (Small Business) Direct Install Program Budget Cuts

Dear President Mroz,

I am writing to express the concern of Lime Energy with respect to the proposed FY18 Funding for the (Small Business) Direct Install Program. The $20.9 million in new funding for FY18 would represent a significant reduction over where the Program left off when it was interrupted by the Program Administrator procurement process at the end of August 2015. The reduction in use of the Systems Benefit Charge (SBC) funds for customer energy efficiency improvements is troubling in general, as these are the most cost-effective investments in our clean energy future and represent the most direct way to provide a return to customers for the investments that they have made in the SBC.

Small Business customers represent a great opportunity for New Jersey to cost-effectively meet their clean energy goals, and they also represent the segment of commercial customers that is most likely to miss out on the benefits of energy efficiency upgrades. These businesses make up as many as 95% of ALL commercial electric accounts in New Jersey, hundreds of thousands of small businesses, and they account for as much as half of all commercial building energy use. They pay higher rates and have less efficient facilities, they lack the time or knowledge to participate in the green revolution. They are the job creation engine of the New Jersey economy, but they are missing a spark plug. For all these reasons, utilities and regulators nationwide have overwhelmingly moved to a Small Business Direct Install model for deploying energy efficiency. New Jersey has done the same, but the efforts of this Program and of all those who work on it has been stymied time and again, most recently through the proposed FY18 budget cuts.

Rolled out to much fanfare in 2009, the (Small Business) Direct Install Program was going to be the way that New Jersey helped these 95% of commercial customers to stay in business, to stay in the State and to drive economic growth. It was going to be the way that these most important entities recouped their investment in the SBC. But no sooner did it ramp up than the federal stimulus steered the Program toward assisting local governments instead, providing retrofits of their facilities in combination with stimulus funds. While much good work was done in 2010 and 2011 in the Program, very little of it benefited small businesses, who were paying into the SBC all along. During 2012 the Program did shift back toward small businesses, and actually had gained momentum by 2015 when it was abruptly halted, leaving small businesses without a Program for a full year, again while they continued to pay into the SBC. Its important to remember that these businesses will not act on their own or without the assistance of a Direct Install program, and they are not served by other CEP programs.

lime

4 Gateway Center, 4th Floor
100 Mulberry Street
Newark, NJ 07102

New Jersey's small businesses have clearly been historically underserved by the CEP and as we have discussed with the BPU in the past, there are great best practices in place elsewhere that result in dramatically higher rates of participation by small businesses. As a company headquartered in New Jersey, Lime Energy is anxious to bring these lessons learned to our work here at home, however, we are not advocating for any program design changes at this time. There is a process for that and we look forward to participating in it. We are specifically addressing the drastic budget reduction which comes at a time when New Jersey should be trying hard to repay the investments that the State's small businesses have made in the SBC and the CEP. This budget should be going up, not going down.

If we look at annual funding for the (Small Business) Direct Install Program during the period when it served small businesses between 2012-2015, we saw an average annual funding level of more than $31 million, with a peak of greater than $42 million. The CEP did not serve small businesses during FY16, and as DI contractors ramped their staffs back up over the last 12 months, FY17 provided roughly $20 million in funding. Given the ramp up from a dead stop, the FY17 annual run rate is probably closer to $40 million, similar to where we were in 2015 before the shut down. At this rate in 2015, the (Small Business) Direct Install Program was one of the CEP's most successful programs, and even at that it served New Jersey's small businesses at a dramatically lower rate than similar programs elsewhere.

Six of the eight (Small Business) Direct Install Program Participating Contractors are headquartered in New Jersey, and the other two have deep roots in the state's energy efficiency efforts. When properly funded this program employs more than 200 people directly, and has created thousands more indirect jobs through the savings it has generated for New Jersey businesses. It hit a cliff when the Program shut down in August 2015, and most of these jobs were eliminated. The contractors have all invested in people, leases and equipment to get back to an appropriate run rate. The proposed FY18 funding of $20.9 million will have the program hitting another cliff by November or December of this year, and once again these jobs will be eliminated and New Jersey's small businesses will be without a program to serve them.

On behalf of Lime Energy, the New Jersey clean energy industry and New Jersey's small businesses, I implore you to consider the negative effect on the State's economy of the proposed FY18 (Small Business) Direct Install Program budget. At a minimum, when the Program races through this inadequate funding, please consider how money could be shifted from underperforming programs to this most important Program with a demonstrated track record of success.

Very truly yours,
Lime Energy

Adam Procell
President & CEO

To: **Irene Kim Asbury, Secretary of the Board** June 19, 2017
Board of Public Utilities (publiccomments@njcleanenergy.com)

A Proposal to the FY18 CRA Straw Proposal for New Jersey's Clean Energy Program

I am making a request that The Clean Energy Program (CEP) include funding in the Comprehensive Resource Analysis (CRA) and the proposed FY18 program budget for systems that can process municipal solid waste (MSW), including the effluent from waste water treatment plants, into energy by means that exclude incineration.

In some way, shape or form, the goals of the NJ Clean Energy program can be summed by the following statement from the NJ CEP web site:

> "New Jersey's Clean Energy Program *is a statewide program that offers financial incentives, programs and services for New Jersey residents, business owners and local governments to help them save energy, money and the environment."*

Processing waste into energy that excludes incineration does exactly this. There are many reasons why WTE should be considered at this time:

- Waste disposal is a real problem in NJ and surrounding states, many landfills are closing;
- Landfills emit methane gas which has been proven to be detrimental to the environment;
- Waste that is trucked out of state additionally creates emissions from the trucking process;
- Incineration of waste is generally not desired for many health reasons;
- When properly processed, waste can produce clean energy that avoids the use of fossil fuels.

There are companies employing new technologies for processing waste with a calorific value into energy, usually in the form of a synthetic gas that is processed into a useable fuel. The subject technologies usually are based on gasification or pyrolysis. A good waste-to-energy (WTE) system will meet the emissions guidelines of New Jersey's current CHP program. This should be a requirement for inclusion in the NJ CEP.

New Jersey should support these efforts through the Clean Energy Program. It is to our benefit. Funding support for a non-incineration WTE will have the following benefits to NJ:

- It will establish NJ as THE leader in its support of clean energy generation;
- It will improve our air as the MSW material will no longer be dumped in a landfill emitting methane gas;
- It will create good jobs in the state;
- It will reduce the state's dependence on fossil fuels.

There are several statements from text in the NJ Clean Energy Program that support inclusion of non-incineration of waste to energy in the budget. Here are some excerpts:

From the recent email notice on the FY18 Budget:

> "The CEP serves a vital role in enhancing the competitiveness of New Jersey's economy by ensuring that businesses, from a small, family-owned business to Fortune 500 companies, can conserve energy and reduce energy costs, while delivering environmental benefits and supporting job creation. .... By providing financial incentives, along with programs and services that encourage energy efficiency and renewable energy projects, the CEP supports the goals of Governor Christie's Energy Master Plan."

From the *Executive Summary of New Jersey's Clean Energy Program™*
Proposed Funding Levels FY18

> ..."This straw proposal recommends the funding level for FY18, high lights recent accomplishments, and describes the framework on which New Jersey's Clean Energy Program will continue to deliver innovative, cost-effective programs throughout the state. The proposed funding level will support five funding categories including: 1) Energy Efficiency; 2) Distributed Energy Resources; 3) Renewable Energy; 4) NJCEP Administration; and, 5) State Energy Initiatives. The total recommended funding for FY18 programs is $344,665,000, the same level of funding approved for FY17. "

And from the section on *State Energy Initiatives*

> The expenditure for State energy initiatives recognizes that the State's EE initiatives extend beyond the BPU. Through energy efficiency efforts implemented by sister agencies, such as the office of Air Quality, Energy and Sustainability in DEP, the State conducts valuable research on clean energy technologies....

It is time for New Jersey to act; soon other states will. Please give this request your full consideration. It is time to address the waste problem with a clean solution that has real benefits to the state.

Regards,
James

James Pfeiffer, CEM
Green Waste Energy
www.GreenWasteEnergy.net
201-251-3815 office
201-264-5361 mobile

EDF
ENVIRONMENTAL DEFENSE FUND
Finding the ways that work

June 19th, 2017

Via Electronic Mail

New Jersey Board of Public Utilities
44 South Clinton Avenue
Trenton, NJ 08625

RE: FY 18 Compliance Filing

Dear NJBPU Staff:

The Environmental Defense Fund ("EDF") thanks New Jersey's Office of Clean Energy ("OCE") and Board of Public Utilities ("BPU") for this opportunity to comment on the June 6th, 2017, FY 18 Compliance Filing. EDF is a national nonprofit membership organization engaged in linking science, economics and law to create innovative, equitable and cost-effective solutions to society's most urgent environmental problems. EDF has more than 750,000 members nationwide and over 68,731 in New Jersey. As an organization, EDF has been active in New Jersey on environmental issues since the 1970's.

EDF appreciates OCE's commitment to initiatives that ensure the adoption and implementation of the state's energy efficiency and renewable energy programs. We are pleased to see that the Pay for Performance program is continuing with ICP as a non-pilot. EDF supports the proposed changes in the FY 18 Compliance Filing that will clarify information and strengthen incentives for P4P Partners to participate in P4P/ICP.

Increasing incentive #1 from $15,000 to $25,000 will further off-set potential cost increases associated with ICP requirements and further encourage Partners to take advantage of P4P/ICP. We are also pleased to see the FY 18 Compliance Filing clarify that Partners do not have to participate in incentive #4 or #5 in order to receive the $25,000 in incentive #1, which will reduce confusion in the marketplace.

ICP protocols were developed as an engine for breaking down barriers to private capital participating in energy efficiency financing at a very large scale and to reduce administrative

257 Park Avenue South
New York, NY 10010
T 212 505 2100
F 212 505 2375
edf.org
New York, NY / Austin, TX / Bentonville, AR / Boston, MA / Boulder, CO / Raleigh, NC
Sacramento, CA / San Francisco, CA / Washington, DC / Beijing, China / La Paz, Mexico

overhead for energy efficiency programs. We believe that this incorporation of ICP protocols by programs in New Jersey has the potential to contribute to the scaling up of energy efficiency financing in the state, making New Jersey a leader in this field.

We also recommend adopting ICP for the new Custom Tailored C&I EE program as well as the new Multifamily Program. The lack of standardization in the development and documentation of multifamily energy efficiency projects is a major barrier to growing investment in the sector and engaging private capital at scale. Incorporating ICP into the new Multifamily Program will standardize the way in which multifamily energy projects are conceived, developed, measured, and verified. ICP can transform this market in New Jersey into one that can broadly engage and scale private capital.

This year, we were excited to announce the ICP system and its Investor Ready Energy Efficiency™ (IREE) certification have transitioned to the Green Business Certification, Inc. (GBCI) platform, the leading global provider of certifications and credentials for the building sector that today includes the Leadership in Energy and Environmental Design (LEED) green building rating systems, PEER standard for power systems, WELL building standard, Excellence in Design for Greater Efficiencies (EDGE) program, Sustainable Sites Initiative (SITES®) and Global Real Estate Sustainability Benchmark (GRESB).

Our vision for ICP has always been to establish it as a "go-to" system that can be adapted through partnerships into key markets in the United States and internationally. As ICP continues to gain momentum in the U.S., Europe, and specifically New Jersey, this new partnership with GBCI represents an important and exciting step forward.

Respectfully submitted,

Mary Barber
New Jersey Director, Clean Energy
Climate and Energy
Environmental Defense Fund
257 Park Avenue South, 17th FL
New York, NY 10010

New Jersey
Natural Gas

VIA ELECTRONIC MAIL (publiccomments@njcleanenergy.com)

June 20, 2017

Hon. Irene Kim Asbury, Secretary
New Jersey Board of Public Utilities
44 So. Clinton Ave., 3rd Floor, Suite 314
P.O. Box 350
Trenton, NJ 08625-0350

THE MATTER OF THE COMPREHENSIVE
ENERGY EFFICIENCY AND RENEWABLE ENERGY
RESOURCE ANALYSIS FOR FISCAL YEAR 2018
CLEAN ENERGY PROGRAM - DOCKET NO. QO17050464

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

Dear Secretary Asbury:

New Jersey Natural Gas Company ("NJNG") has reviewed the Comprehensive Resource Analysis Staff Straw Proposal for New Jersey's Clean Energy Program ("NJCEP") Funding Levels for Fiscal Year 2018 ("CRA Straw Proposal"), which was released on June 6, 2017 by the Staff of the New Jersey Board of Public Utilities ("BPU" or "Board"), as well as the Draft Compliance Filings for the NJCEP Programs for Fiscal 2018 ("Compliance Filings") and related Proposed Budget for Fiscal 2018 ("Budget"). Through this letter, NJNG hereby provides comments related to both the Straw Proposal, the Compliance Filings and Budget.

Comments

Comfort Partners Budget

NJNG recognizing that it is challenging to balance the NJCEP budgets with competing priorities but would like to express concern regarding the Budget's proposed level of funding for the Comfort Partners program. The Comfort Partners budget has been set at a $30 million

annual funding level for the past few years. Final results for fiscal 2016 reflect more than $29 million in expenditures for this program and the current budget proposal confirms expected expenditures of nearly the full $30 million for fiscal 2017. NJNG is confident that the utilities would be able to expend a full $30 million for this program to continue to serve the needs of our most at risk customers and support employment for the companies serving that market. Further, given current Federal budget proposal for the weatherization program, there is the potential for an even stronger demand for this program. We respectfully request the Board consider increasing the budget for the Comfort Partners program.

In addition to providing energy savings, comfort and safety benefits to the participants, this program also has the potential to reduce future costs for all customers by reducing the costs associated with the Universal Service Fund program as the work performed, i.e. energy efficiency measures installed, through the Comfort Partners program directly reduces the energy burden of participating customers.

Proposed Pilot Approaches

The Summary of Proposed Program Changes references an intention to pilot two new approaches within the Home Performance with ENERGYSTAR program. The proposals are targeted at testing the "direct install" of low cost measures, and prescriptive incentives for air-sealing and insulation. While the document clearly references that such pilots are subject to budgetary capacity, we believe that there are stronger uses of NJCEP funds if extra funds are available. Further, we suggest that the BPU's April 2017 approval of a new energy efficiency filing for Elizabethtown Gas Company includes new programs in these areas that may provide more meaningful insights than these limited pilots might offer. Parties can collectively review feedback from that experience and consider what the most effective ways to offer these types of programs in the future.

Residential HVAC Programs

NJNG generally supports the proposals for the residential HVAC program but is sharing suggestions regarding these two specific areas.

New Water Heater Ratings

In order to help consumers in their water heater purchase decisions, the United States Department of Energy (DOE) Department of Energy has developed new industry standards for the rating of water heaters. Beginning, June 12, 2017, ratings will now reflect this new industry standard for measuring energy efficiency in water heaters called, Uniform Energy Factor (UEF). The Compliance Plans' table showing the minimum efficiency for water heaters to qualify NJCEP's WARMAdvantage Program should be adjusted to reflect this change to ensure that customers and contractors have a clear understanding of which

products qualify for the rebate. NJNG will work closely with NJCEP to share these updates with contractors and customers.

Clarification of Cold Climate Heat Pump Incentives

In regard to the proposed creation of a new tier within COOLAdvantage for Mini-Split Cold Climate Heat Pump, we recognize NJCEP's interest in encourage this technology, especially in instances where natural gas service is not available. However, we would like to note that there is an inconsistency in regard to the language used referencing the proposal for a bonus incentive. The Summary of Program Changes document characterizes the proposed bonus for projects "where natural gas service is not available" but the chart within Appendix A of TRC's Compliance Filing incentive chart characterizes the availability of the bonus "if converting from an electric resistance heat and the house does not have natural gas service". Given that the Northeast Energy Efficiency Partnership's (NEEP) 2017 Air Source Heat Pump Market Strategy Report shows that natural gas equipment has the lowest annual operating cost, we believe that consideration for any bonus incentive should be limited to only areas where natural gas service is not available since that should be in the best interest of the consumer in the long run. Accordingly, we believe the language used in the Summary of Program Changes is more appropriate. Excerpts from the referenced NEEP showing the operating costs are attached for reference.

Sustainable Jersey

NJNG recognizes the challenges of the NJCEP budget but encourages the Board to consider maintaining a consistent level of annual funding for Sustainable Jersey. The FY'18 Budget proposes a 25% reduction in their annual budget. Given the CRA Straw Proposal's references to customer-focused outreach, it is important to recognize that Sustainable Jersey is the strongest resource for NJCEP's support of municipalities and schools. The Sustainable Jersey Action Plans and outreach efforts educate and motivate schools and municipalities to reduce their energy usage and also facilitate outreach to their respective businesses and residents.

NJNG appreciates the opportunity to provide comments on these topics. Please feel free to contact me if you need any additional information regarding these issues.

Respectfully submitted,

Anne Marie Peracchio

Anne-Marie Peracchio
Director- Conservation and Clean Energy

ATTACHMENT A

International Energy Conservation Code (IECC), it's hoped that home space heating loads will start to decline. In the two low-load examples above, the annual space heating loads are likely 10-25 MMBtu.

As discussed further in the following section, natural gas can often provide heating at lower costs than ASHPs. With historically low oil prices, costs for heating with oil may be quite comparable to ASHP heating costs. In very low-load homes, however, operating cost difference become quite small, and installation and infrastructure costs can be much more significant. An ASHP can provide both heating and cooling at costs that are often much lower than fossil-fired heating systems with separate cooling systems.

Table 4 shows example heating costs for several systems with several thermal loads. This table is oversimplified in many ways; it only shows one system efficiency, one set of fuel rates, and it makes assumptions about electricity needed for pumps, fans, controls, etc. for the non-heat pump systems. The simple efficiency calculations are shown to demonstrate three key points:

- Efficient natural gas systems have the lowest operating costs followed closely by ASHPs. Some studies suggest that the seasonal COP of heat pumps is closer to 3.0; in this case, gas and ASHP operating costs would basically be the same.
- Operating costs for electric resistance is approximately twice as high as gas and ASHP systems.
- As the heating loads become smaller, the differences in operating cost become much smaller. At 10 MMBtu/year – the load of an efficient apartment or a very efficient, zero-energy-type home – first-cost may be a much larger factor in system selection. At this point, the system with the lowest first-cost is often the most practical. This is often an ASHP (which provides both heating and cooling in one system) or even some electric resistance in extremely low load homes. There can be difficulty in even finding natural gas/oil/propane fueled systems designed to supply such small loads.

Table 4: Estimated heating costs with various loads and fuels. Fuel prices from EIA (EIA 2016i)

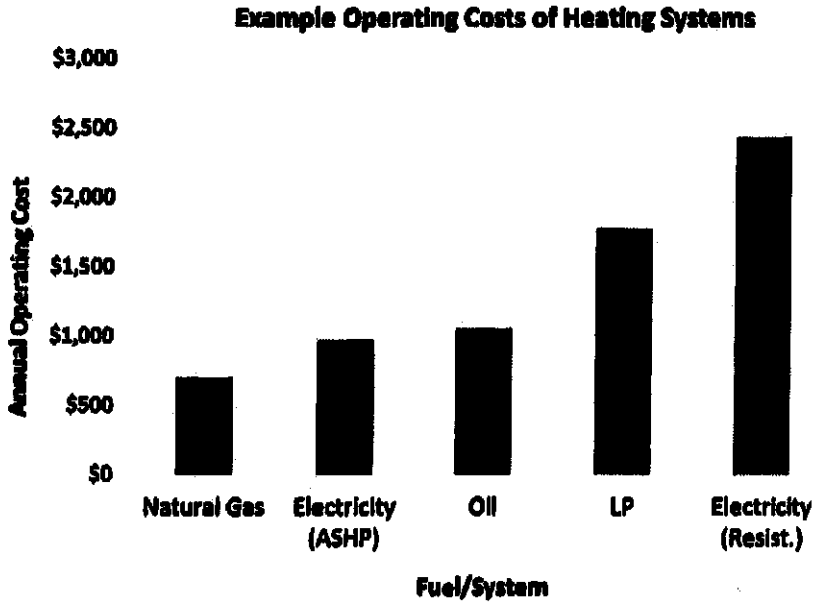
Fuel	Oil	LP	Natural Gas	Electricity (ASHP)	Electricity (Resist.)
Seasonal Eff/COP	80%	90%	90%	2.5	100%
Fuel Cost	$2.07 per gallon	$2.71 per gallon	$1.04 per therm	$0.166 per kWh	$0.166 per kWh

Example Home Type	Annual Heating Load	Approximate Annual Operating Cost*				
Large, inefficient	100 MMBtu	$2,111	$3,547	$1,406	$1,946	$4,865
Average NE Home	50 MMBtu	$1,055	$1,774	$703	$973	$2,433
New, code-compliant	30 MMBtu	$633	$1,064	$422	$584	$1,460
Very efficient	10 MMBtu	$211	$355	$141	$195	$487

*Fossil fuel operating costs include 150 kWh/y for fans, pumps, etc. per 10MMBtu of load. Costs do not account for different distribution efficiencies of various systems.

ATTACHMENT A.

Figure 8: Estimated heating costs for an average Northeast home with an annual space heating load of 50 MMBtu



Greenhouse Gas Emission Savings

Since 2013, our estimates for greenhouse gas (GHG) savings associated with ASHPs have changed fairly dramatically based on decreases in electricity generation-related emission profiles due to a changing fuel mix.

Table 5: Estimated greenhouse gas emissions (in equivalent pounds of CO2) for several fuels and systems.

Fuel	Oil	LP	Natural Gas	ISO-NE Electricity (ASHP)	ISO-NE Electricity (Resist.)
Seasonal Eff/COP	80%	90%	90%	2.5	100%
CO_{2e} [lbm]	26.9 per gallon	16.1 per gallon	14.9 per therm	1.35 per kWh	1.35 per kWh
Fuel and Emissions to meet 50MMBtu thermal load*					
Fuel used	450 gallons	608 gallons	556 therms	5,862 kWh	14,654 kWh
CO_{2e} [lbm]	12,356	10,033	8,555	7,903	19,755

*Fossil fuel system emissions include 750 kWh for fans, pumps, controls, etc. Values do not account for different distribution efficiencies of systems. ASHP and resistance heating values derived from ISO-NE marginal fuel mix and includes line losses. All CO_{2e} figures include pre-combustion emissions.

Table 5 and Figure 9Error! Reference source not found. show global warming potential of several fuels/heating systems in units of equivalent pounds of carbon dioxide emissions (CO_{2e}). The values include emissions related to production, distribution and delivery of the fuel or electricity to a building – not just the emissions from the generation plants or the direct combustion of the fuels themselves (Deru

Bloomenergy

June 20, 2017

Via Electronic Mail

The Honorable Irene Kim Asbury
Secretary, New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350
publiccomments@njcleanenergy.com

Re: Proposed NJCEP FY 2018 Programs

Dear Secretary Asbury:

Please accept these comments from Bloom Energy Corporation ("Bloom Energy") regarding the New Jersey Clean Energy Program ("NJCEP") CRA Straw Proposal, Proposed Fiscal Year ("FY") 2018 Budget, and Proposed Program Modifications which is dated May 31, 2017, but was not released for initial public comment until June 6, 2017, less than three weeks prior to the start of the 2018 program fiscal year.

The CRA Straw Proposal recommended by Staff continues discriminatory changes to the Distributed Energy Resources ("DER") program (formerly the Combined Heat and Power("CHP")/Fuel Cell program) that were adopted by the Board in June, 2017 without supporting study, analysis, data collection, or rational basis. Similarly, the CRA Straw Proposal also recommends a level of funding for the Distributed Generation category that does not reflect market demand. Finally, nearly five years after Superstorm Sandy, the CRA Straw Proposal recommends only a micro-grid "study" program rather than an actual micro-grid project development program.

Distributed Generation Program Eligibility and Administration

In the June 2016 CRA Straw Proposal, Board of Public Utilities' ("BPU" or "Board") Staff recommended that fuel cells without heat recovery be excluded from the DER program and then, in an apparent ex post facto search for a rational basis, it proposed to conduct "an independent evaluation of the costs, emissions and benefits of various distributed generation technologies, including fuel cells without heat recovery." At the time, Bloom Energy welcomed an independent evaluation of the costs, emissions, and benefits of various distributed generation technologies because we believed that an independent study would provide a forum for the assessment of important factors that are currently excluded from the Board's consideration, including;

- Actual capacity factor
- Actual thermal energy utilization
- Avoided criteria pollutant emissions
- Locational benefits
- Voltage support and ancillary services
- System and customer resiliency
- Electric Vehicle charging capabilities
- Job creation and retention
- Levels of outside investment attracted to New Jersey

The Board's June 29, 2016 Order on the Clean Energy Programs and Budget for FY 2017 directed the Office of Clean Energy ("OCE") to conduct the independent evaluation. The Order stated, "once the evaluation is complete, OCE Staff can utilize those findings to develop recommendations regarding incentive levels and performance standards, etc. for All-Electric

Be

Fuel Cells, as well as the value of fuel cells and other forms of distributed generation in building resilience, and present those findings to the Board."[1]

The Study apparently remains incomplete. Absent a rational basis for eliminating all-electric fuel cells from the CHP/FC (now "DER") program, the Board's June 2016 decision should be reversed until such time as the Study is complete. The Study would presumably have expanded the level of information provided to the Board beyond the highly misleading "design efficiency" and "payback period" data points that are currently provided to the Board. In the meantime, the Board should be provided correct and complete information about the projects that are presented for approval, especially with respect to the following topics;

Actual Capacity Factors - The FY 2018 CRA Straw Proposal should be revised to ensure that Distributed Energy projects are presented to the Board only upon sufficient explanation of the impact of capacity factor on actual environmental performance. When projects are not operating, they are not actually achieving the benefits indicated by the design efficiency figures presented to the Board. Simply put, during the times that a project is not operating, it has an efficiency of zero and does not avoid any emissions at all. The result has been that projects with a high design efficiency but low actual capacity factors have appeared, when presented to the Board, to be "cleaner" than projects with somewhat lower efficiencies but much higher capacity factors, when in fact the reverse is often true. [2] The program should

---

[1] I/M/O The Clean Energy Programs and Budget for Fiscal Year 2017, Docket No. QO16040353, and I/M/O Revisions to New Jersey's Fiscal Year 2017 Protocols to Measure Resource Savings, Docket No. QO16060525, Order dated June 29, 2016, p. 16.

[2] A 2015 Rutgers University report found that *"under-performance of existing CHPs, as demonstrated by low and volatile capacity factors, also suggest that the emissions and*

Be

be based upon actual performance and environmental performance should be measured on actual emissions avoided, not on design efficiency.

Relative Efficiency Figures - The FY 2018 CRA Straw Proposal should be revised to ensure that the Board is no longer improperly presented with "overall efficiency" figures for CHP projects in a way that allows those figures to be compared to the relative efficiency of all-electric generation projects and to the electric grid. According to the U.S. EPA and the California Air Resources Board this comparison is incorrect and has the effect of overstating the efficiency of CHP relative to all-electric generation by between 5 and 15%.[3]

Criteria Pollutants - The FY 2018 CRA Straw Proposal should be revised to ensure that the Commissioners are presented with information regarding emissions of pollutants other than CO_2. The current practice has the effect of minimizing the benefits of a non-combustion fuel cell projects while shielding the actual emissions of criteria pollutants by combustion CHP from Board review. Every county in New Jersey is in non-attainment status for NOx. According to the state of Connecticut, a reciprocating engine CHP project can be expected to emit *150 times more NOx than a fuel cell*. This information should be provided to the Board when a Distributed Generation project is reviewed.

---

associated environmental benefits and higher efficiencies are not translated into reality." (http://ceeep.rutgers.edu/wp-content/uploads/2016/02/WP2-Do-CHPs-Perform-Case-Study-of-NYSERDA-funded-Projects-11302015.pdf, at 6.)

[3] https://www.epa.gov/chp/methods-calculating-efficiency; https://www.arb.ca.gov/cc/ccei/presentations/chpefficiencymetrics_epa.pdf

Be

"Payback Period" Calculations - The FY 2018 CRA Straw Proposal should be revised to ensure that the Board is advised that the payback metric is a very limited version of "value" that does not reflect the actual financing or performance of funded projects, while it also excludes other important considerations such as customer resiliency, avoided transmission and distribution investments, avoided system O&M, voltage management, ancillary services benefits, outside investment into New Jersey, jobs created or retained in New Jersey, and additional project capabilities such as integrated energy storage and electric vehicle charging.

Most importantly, the Board should be advised that the consultants' "payback period" metric does not reflect the actual value of a given project nor does the program challenge project developers to provide the best value. The existing program simply offers developers a predetermined incentive figure even if the same project could be built for less. Take for example, the following hypothetical comparison:

Project A	Project B
500 kW combustion CHP	500 kW all-electric fuel cell
"Payback period" = 5 yrs	"Payback period" = 10 yrs
65% total system efficiency[4]	54% electrical efficiency
53% effective electrical efficiency[5]	54% electrical efficiency
57% capacity factor	95% capacity factor

[4] The efficiency and capacity figures for Project A represent the current minimum program requirements. The efficiency and capacity figures for Project B are lower than the demonstrated efficiency and capacity factors for the all-electric fuel cell projects approved by the Board in 2015 and 2016.

[5] Assumes 7,500 MMbtu/yr thermal load

Be

Annual CO_2 avoided 1.23M tons	Annual CO_2 avoided 1.72M tons
Annual NOx avoided 389 lbs[6]	Annual NOx avoided 2,686 lbs
Grid Parallel – Down During Outage	Islanding – Up During Outage
No Locational Grid Benefits	Locational Grid Benefits
Capital Invested by NJ Customer	Invested from Outside NJ
BPU Incentive = $2,000/kW	BPU Incentive <2,000/kW

Project B is clearly a superior project. It results in a greater reduction in emissions, attracts external funding to New Jersey, enables the customer to ride through grid outages, contributes to the efficiency and resiliency of the electric system, and can be achieved at a lower cost to the program than Project A.

However, *the FY 2018 program now proposed by Staff would prohibit Project B and select Project A even though it is an inferior project and will cost the program more incentive funding*. The current "payback period" and "design efficiency" based project evaluation structure does not reflect reality nor does it advance the Board's policy or fiscal objectives. The CRA Straw Proposal should therefore be revised in favor of a program that is designed to elicit the best projects at the lowest possible cost to the program.

Distributed Generation Program Budget & Incentive Levels

The FY 2018 Budget proposed by Staff should be viewed in comparison to the other states in the region that are, in many respects, competing against New Jersey to attract investment, expand their tax base, and create job

[6] Based on EPA Catalog of CHP Technologies data for GE Jenbacher JMS 312

Be

opportunities. The clean energy industry is scaling up and increasingly moving to a business model that involves projects with customers that have multiple facilities funded by third parties capable of quickly redirecting capital across state lines. This trend is happening in solar, energy efficiency, and in the fuel cell industry.

A review of fuel cell programs in other states in the northeast region appears to indicate that the proposed FY 2018 program in New Jersey would be an extreme outlier on the low side in terms of budget and incentive levels, particularly when the much lower delivered costs of electricity (COEs) in New Jersey are taken into account.

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

Additionally, in 2017 the State of Massachusetts enacted legislation specifically including fuel cells in its approximately $30M Alternative Portfolio Standard (APS).

At a time when distributed generation and concerns about resiliency are sweeping the nation, the Board has progressively decreased funding for distributed generation. In Calendar Year 2012, the Board approved a total budget of $75M for CHP/Fuel Cell projects, which was later reduced to $30M. During the next budget cycle for Fiscal Year 2014, the Board originally

Be

approved a $65.6M budget, which was later reduced to $38 million. In Fiscal Year 2015, the Board originally budgeted $40.4 million to the program, which was later reduced to $24.5 million and then to $19.5 million. Last year in Fiscal Year 2016, the Board originally approved a budget of $20.6 million, $14 million of which was already committed, and then added another $19.6 million in January. The FY 2018 Straw Proposal now recommends, without explanation or support, a Distributed Generation program budget that appears to total only $9.0 million.[7]

Microgrid Studies

The FY 2018 CRA Straw Proposal and Budget recommends approximately $2.0M for "feasibility studies for potential microgrids." It has been nearly five years since Superstorm Sandy swept across New Jersey, leaving nearly two and one half million customers without power and causing economic losses exceeding $30 billion. During the intervening time frame adjacent states have invested in high resiliency distributed generation, including all-electric fuel cells. More specifically, in the other two states most impacted by Superstorm Sandy - Connecticut and New York - microgrids are well beyond the "feasibility study" phase that Board Staff now recommends. In fact, Bloom Energy itself has constructed and is now operating microgrids that were installed in Connecticut and New York since Superstorm Sandy.

[7] It is again unclear how much funding is actually available for projects. As in the past the proposed budget does not specify how much of the $9M program funding has been previously encumbered.

Be

In 2016 Bloom Energy and Constellation Energy installed the "Parkville Neighborhood" microgrid in the City of Hartford, CT.[8] The Parkville microgrid includes an elementary school, senior center, gas station, and supermarket and is designed to operate indefinitely in the event of an outage of the electric grid. In June 2017, Bloom Energy, Consolidated Edison of New York and the New York Energy Research and Development Authority announced the installation of a microgrid at the Marcus Garvey Village, a low-income housing development in Brooklyn, New York.[9] The project includes a 400kW Bloom Energy fuel cell, a 400kW solar array, and 300kW lithium ion battery.

The state that was the most heavily impacted by Superstorm Sandy is lagging far behind its neighbors when its comes to the development of microgrids and high resiliency distributed generation. The reason for that level of performance is plainly evident in Board Staff's FY 2018 Straw Proposal and Budget. The time for underfunded feasibility studies is past. The FY 2018 CRA Straw Proposal should be revised to include sufficient funding for microgrids and that funding should be directed to the development of projects, not to more studies.

Very truly yours,

/S/

Charles Fox
Sr. Director, East Coast Business Development & Regulatory Affairs

---

[8] http://microgridknowledge.com/microgrid-and-fuel-cell-hartford/

[9] https://microgridknowledge.com/marcus-garvey-microgrid/

Be

Bloom Energy Corporation
PO Box 1406
Princeton, NJ 08540
212-920-7151
charles.fox@bloomenergy.com
www.bloomenergy.com

Be

NATIONAL FUEL CELL RESEARCH CENTER

University of California, Irvine
Irvine, California 92697-3550
(949) 824-1999

June 20, 2017

VIA ELECTRONIC FILING

The Honorable Irene Kim Asbury
Secretary, New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, NJ 08625-0350
Email: publiccomments@njcleanenergy.com

Re: Proposed NJCEP FY 2018 Programs

Dear Irene Kim Asbury:

Please accept these comments on behalf of the National Fuel Cell Research Center in response to the Notice requesting comments on the FY18 Straw Proposal for NJ's Clean Energy Program (CEP) Comprehensive Resource Analysis (CRA) and the proposed FY18 program budgets and compliance filings for stakeholder and public input.

Respectfully Submitted,
__/s/___Scott Samuelsen____
Dr. Scott Samuelsen
Director, National Fuel Cell Research Center
Professor of Mechanical, Aerospace, and
Environmental Engineering
University of California Irvine
Irvine, CA 92697-3550
Email: gss@nfcrc.uci.edu
Phone: 949-824-5468

CRA STRAW PROPOSAL AND PROPOSED FISCAL YEAR 2018 BUDGETS

IN THE MATTER OF THE COMPREHENSIVE ENERGY EFFICIENCY AND RENEWABLE ENERGY RESOURCE ANALYSIS FOR FISCAL YEAR 2018 CLEAN ENERGY PROGRAM - DOCKET NO. QO17050464;

AND

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

Comments of the National Fuel Cell Research Center

I. Introduction and Background

The National Fuel Cell Research Center ("NFCRC") appreciates the opportunity to submit comments on the New Jersey Energy Efficiency and Renewable Energy Program Plan's Summary of Proposed Program Modifications and Budget for Fiscal Year 2018, with specific comments on Staff's recommended changes to the Distributed Energy Resources (DER) Section (including Combined Heat and Power and Fuel Cells) of the New Jersey Clean Energy Program (NJCEP).

The NFCRC facilitates and accelerates the development and deployment of fuel cell systems; promotes strategic alliances to address the market challenges associated with the installation and integration of fuel cell systems; and educates and develops resources for global distributed generation and combined heat and power (CHP) stakeholders. The NFCRC is working with GE-Fuel Cells, LLC; LG Fuel Cell Systems Inc.; Fuel Cell Energy; Doosan Fuel Cell America; and Bloom Energy.

The NFCRC continues to express concern that the recent and proposed changes to the Distributed Energy Resources (DER) program will reduce support for highly efficient all-electric and CHP fuel cells. Both systems provide unique clean power generation advantages to address the State of New Jersey's long-term energy and emissions goals.

Specifically, the NFCRC requests that the BPU:

1. **Reinstate funding for all-electric fuel cell systems.**
2. **Examine consultant costs, with the goal of reallocating a portion of this funding to the NJCEP.**
3. **Consider a future program that compensates for performance, rather than up-front incentives.**
4. **Allocate sufficient funding to DER projects that reflect past success and current market demand, and recognize the numerous benefits that fuel cell systems bring to New Jersey.**
5. **Assign a higher value to GHG and criteria air pollutant emission reductions when considering incentivizing technologies, and**
6. **Fully value DER attributes, rather than just energy efficiency in allocating program funding.**

Stationary fuel cells have highly dynamic dispatch capabilities to (1) manage the diurnal and seasonal power demand variations, (2) handle intermittencies associated with solar and wind power generators, and (3) increase the maximum penetration of renewable resources that can be accommodated in the utility grid network.[1,2] These capabilities will result in maximum sustainability and additional GHG reductions through the integration of renewables with transportation electrification. Stationary fuel cells can also improve the quality of power while contributing to cleaner air and improved health of citizens. In fact, fuel cells are suitable for citing near or even inside buildings, due to virtually zero pollutant emissions, an acoustically benign attribute, and the avoidance of the challenges related to permitting and zoning.

Stationary fuel cells are today providing stable power and heat in New Jersey and globally in microgrids and at wastewater treatment plants, food and beverage plants, grocery

[1] Maton, Jean-Paul, Zhao, Li, and Brouwer, Jacob, *Dynamic modeling of compressed gas energy storage to complement renewable wind power intermittency*, International Journal of Hydrogen Energy, Volume 38, pp. 7867-7880, 2013.
[2] Shaffer, Brendan, Tarroja, Brian, Samuelsen, Scott, *Dispatch of fuel cells as Transmission Integrated Grid Energy Resources to support renewables and reduce emissions*, Applied Energy, Volume 148, 15 June 2015, Pages 178-186.

stores, office buildings, telecommunication hubs, data centers, retail stores, universities, hospitals, hotels, government facilities, and other applications. Highly efficient electric and CHP fuel cell systems have been successfully operating as part of the NJCEP.

Fuel cells provide exceptional resiliency and have maintained heat and power for critical communication hubs, cell towers, data centers, emergency shelters and other essential services across the Northeast during and after Hurricane Sandy and other severe weather events. Fuel cells also help mitigate an over-reliance on the long-distance transmission of electricity from intermittent large scale resources that are located far from load centers. In the event of a grid outage, fuel cell systems are able to seamlessly island, separate from the utility grid network and support key loads for customers who increasingly require an un-interrupted supply of electricity.

On the utility side of the meter, large-scale fuel cell systems are being deployed to create grid support solutions where transmission is constrained or increased reliability is sought. Examples range from a 15MW system in Connecticut, to a 30MW system in Delaware, to a 59MW system in Seoul, Korea. These resources are providing clean, 24/7, load-following power generation to complement the increasing deployment of intermittent solar and wind resources and support grid reliability in locations where it is most needed.

II. Discussion

The FY18 CRA Straw Proposal retains the extensive changes that were made to the CHP and Fuel Cell Program in FY16 and FY17. This fuel cell program had previously been fully utilized and successfully met its objectives. The further reduction of fuel cell systems in the NJCEP is not supported by the record, nor by the analysis that was used to inform the record. The NFCRC provides new information and recommendations as follows:

A. Reinstatement of Funding for All-Electric Fuel Cell Systems

The eligibility of fuel cells without heat recovery should be reinstated. The reasons provided by past analyses for eliminating highly efficient, all-electric fuel cell systems were based on a false assertion that they were no longer eligible for funding in California and that they do not create emissions reductions. To the contrary, all-electric fuel cell systems <u>are</u> eligible for California's Self Generation Incentive Program and all-electric fuel cell systems have resulted in the largest GHG and criteria air pollutant

reductions in the program to date. There is no justification for the continued exclusion of all-electric fuel cell systems from the NJCEP.

B. Review of Consultant Costs

The budget for the consultants who administer the NJCEP is stated in the New Jersey Department of the Treasury budget analysis to be $25 million per year. Based upon experience in other jurisdictions, we consider the consultant-driven, cost-benefit analysis approach currently employed by the BPU to be neither cost effective nor a necessary use of the Board and Board Staff's time. The NFCRC understands that the Board's current course of action involves conducting a cost-benefit analysis (1) by third party consultants intended to evaluate the costs and benefits of a project from the perspective of the customer, rather than the electric system as a whole, and (2) using pre-determined assumptions that will directly and materially affect the outcome of the cost-benefit analysis. In many cases, however, the assumptions do not reflect the actual specifics of the projects brought before the Board. Major variables, including the form of financing, the impact of federal tax incentives, the value of resiliency to a customer, and the amount of out-of-state funding levered into New Jersey, should all be considered in evaluating project specific cost-benefit analysis.

C. Creation of a Pay-for-Performance Incentive

The NFCRC recommends that the Board direct New Jersey to conduct a simple "reverse auction" designed to fund those projects that can achieve the program objectives at the lowest possible cost, similar to a successful model used in other states. In addition to eliminating the cost of consultants, this approach also eliminates the need for Staff to review individual projects. A reverse auction mechanism also ensures pay for performance – with payments based on multiyear operational performance that is carefully measured.

In other states with programs to support clean energy and fuel cells, the incentive amount for each project is determined not by Staff selection, but rather via a competitive auction, ensuring that projects do not receive more funding than absolutely necessary to achieve program objectives. The Connecticut Low Emission Credit ("LREC") program

and the New York Renewable Portfolio standard use a reverse auction model. The use of a competitive reverse auction process in New Jersey will more accurately determine the minimum incentive necessary than will the consultant driven cost-benefit analyses currently used by the Board, by compensating only for systems that are operating as expected. The Connecticut and New York programs, and additionally the California Self Generation Incentive Program, are all pay for performance programs, using meters to measure the actual system operation and making payments contingent upon a specified minimum level of operational capacity.

For over a decade, New Jersey has utilized a reverse auction format to procure Basic Generation Service ("BGS") for the State's utility default electric customers, with the consideration that this approach results in the best default service pricing for these customers. A similar reverse auction process would result in selecting the most cost-effective fuel cell projects.

D. Increase Incentive Levels for Fuel Cell Systems

Fuel cells are non-combustion energy systems that produce (1) lower criteria pollutant emissions than all other CHP systems, [3,4,5] and (2) higher electrical efficiency than all other CHP systems [4,5] (and the electricity produced is more valuable - thermodynamically and fiscally - than the heating/cooling). Fuel cells also have extremely high capacity factors of more than 98% with greater potential for energy savings and emissions reductions. Yet BPU staff recommends lower incentives for fuel cell systems that are the same level as for non-fuel cell CHP systems without consideration for the significant environmental and technical advantages of fuel cell systems. The lower incentive levels proposed by Staff significantly undervalue the technology characteristics that meet the goals of the NJCEP.

New Jersey programs and policy to support fuel cell systems lag behind neighboring states that recognize the benefits that fuel cells provide. The NJCEP FY18

[3] California Energy Commission, CEC-500-2011-042, Final Report, National Fuel Cell Research Center, August 2011, available on-line at: http://www.energy.ca.gov/2011publications/CEC-500-2011-042/CEC-500-2011-042.pdf
[4] Y Yi, VG McDonell, J Brouwer, M Fujiwara, M Adachi, Emissions sensors for high temperature fuel cell applications, IEEE Transactions – Sensors Conference, 2005.
[5] Y Yi, A Rao, J Brouwer, S Samuelsen, Ammonia as a Contaminant in the Performance of an Integrated SOFC Reformer System, ASME Paper FC2006-97037, June, 2006.

Budget document shows a Commitment Backlog in Distributed Energy Resources of $25 million for the CHP/Fuel Cell Program but only $9 million in Current-year Funding Need for new projects.[6] The $9 million allocation for new projects does not support the demand for the program that is evidenced by the existing backlog.

Based on experience in other states, the NFCRC also recommends integrating a manufacturer's cap to prevent one technology manufacturer from receiving a disproportionate amount of funding from the NJCEP.

E. Full Valuation of Distributed Generation Attributes

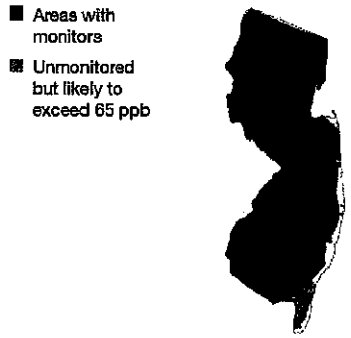
Key objectives of the NJCEP are to save energy, money, and the environment. To this end, it is important that informed, data-driven decisions are made to specifically address these priorities and to ensure use of a diversity of technologies that are proven to satisfy these objectives. Eligibility and incentive levels should be based the ability of a technology to reduce emissions, while maintaining cost effectiveness and resiliency – rather than just the payback metric presented in the FY18 CRA Straw Proposal.

The reduction of criteria air pollutant emissions, such as ozone, SO_x, NO_x and particulate matter, should be highly valued by the BPU in deciding incentive levels, along with the reduction of GHG emissions. Currently 21 New Jersey counties are already in nonattainment zones. Figure 1[7] below, however, demonstrates that as the recently announced federal ozone standards are established, most of the State will be in nonattainment zones. Not only should New Jersey invest in energy conversion technologies that reduce criteria air pollutants as a priority to meet federal requirements, but also to improve air quality and provide societal and health benefits.

[6] New Jersey Clean Energy Program, Policy Updates and Request for Comments, FY17 Draft CRA and Budget: NJCEP Budget, p.6. http://www.njcleanenergy.com/main/njcep-policy-updates-request-comments/policy-updates-and-request-comments

[7] New Jersey Ozone Data 2015. National Association of Manufacturers: http://www.nam.org/Issues/Energy-and-Environment/Ozone/State-Data/NewJersey-Ozone-Data-2015.pdf

Figure 1: Projected Nonattainment with a 65 Parts Per Billion (ppb) Ozone Standard



Projected Nonattainment in New Jersey (65 ppb)

III. Conclusion

The NFCRC strongly recommends that the BPU reinstate the full fuel cell incentive so that the unique benefits provided by fuel cells can contribute to making New Jersey more energy resilient, increase system efficiency, reduce emissions, and attract investment into the State. The NFCRC welcomes the opportunity to discuss in more depth this information and recommendations at the BPU's earliest convenience.

The NFCRC values the State of New Jersey's support for clean power generation and resiliency through the NJCEP, and will continue to participate in further refinement of changes to the current Clean Energy Program and the creation of a pay for performance structure.

NJACCA
New Jersey Air Conditioning Contractors Association

Changes to Residential Efficiency Programs

June 20, 2017

New Jersey Home Performance with Energy Star Program
C/o Conservation Services Group
75 Lincoln Highway
Suite 100
Iselin, NJ 08830

Re: Changes to Program Procedures

To Whom It May Concern,

The Air Conditioning Contractors of America New Jersey State Association (ACCA-NJ) has reviewed the changes to the Home Performance with Energy Star Program along with the residential HVAC Programs and wish to submit our observations, concerns and questions.

Comments on Proposed HPWES Changes:

1. **Prescriptive Envelope Measures** – NJACCA Supports this pilot.
2. **Direct Install Component** – While in support of the concept, we feel that contractors should be able to offer this to ALL program participants, potentially at the audit to capture as wide an audience as possible as opposed to 10% of completed projects. We also have concerns of customers requesting inspection if they are aware that they may receive free energy improvements.
3. **Reduce Paperwork and Streamline Processes** - NJACCA wholeheartedly supports the intent to reduce paperwork submittal requirements, and streamline processes to make administrative process of program less burdensome and attract more contractors to participate in the program. While we are curious as to what improvement Program Administrators have in mind since they are not specified, below are our recommendations.
   i. **New modern software to calculate Energy Savings is absolutely past due.**
      1. Current software is archaic, unnecessarily difficult and time consuming, as well as not being mobile friendly.
      2. The ability to use an intuitive interface and enter info and get results while at clients home would be a huge boost to contractor and customer participation. Current software requires much time and delays the ability to tell a ratepayer if they are eligible or not, hurting program participation.
   ii. **Eliminate the need to submit audit data collection form.**
      1. Form is outdated for contractors that have been doing this, and most of our members have their own computerized or mobile solution for collecting the data. At this point, the audit form is just a formality that needs to be filled out at submission time and creates a point of failure when checking to see if form matches software.
   iii. **Eliminate Completion Certificate Generated in Software and return to a General Form.**

1. On a good day it can take 10-15 minutes just to go in and generate this single form. Sometimes something in the software changes and the savings % changes a fraction of a point and then we cannot even use the form, and need Administrators to help us generate a new one. This puts the contractor at risk of needing to get form signed another time, creating extra work and time for the contractor and inconvenience to the customer. With all the contract requirements and other QA associated with a project, this seems unnecessary.

Other Recommendations for HPWES:

1. **Payment Timelines** - We would continue to encourage as always, any improvements to payment timelines as always, this is the key to getting further contractor participation.
2. **Cash vs. Financing** - Give homeowners an incentive not to use the financing, with an enhanced rebate, this could save program funds by eliminating people who take the financing even though they would do the project without it.
3. **Marketing** – While we are in support of proposed marketing activity by the Programs, we would strongly encourage Re-establishing the CO-OP Marketing program so active HPWES contractors can promote program effectively.

Comments on Proposed Residential HVAC Changes:

1. **Licensed Contractor Requirement** - NJACCA is in full support of requiring licensed contractor install WARM/COOL eligible equipment. This is the law in NJ that these systems need to be installed by licensed HVACR Contractors. The Clean Energy Programs should not be incentivizing illegal potentially dangerous installs by unlicensed individuals.
2. **Cold Climate Heat Pumps** - We fully support the cold climate heat pump incentive.
3. **The Geothermal and Solar Hot Water changes** – These are unfortunate, while they are both niche products, the incentive is small compared to the savings achieved for the ratepayers that these products make sense for. As both are significant investments in and of themselves, it seems unfair to force the ratepayer into the HPWES Program that will add additional expense to an already expensive project.

We would like to thank you for taking the time to read and consider our proposal. We feel that the Residential Efficiency Programs are very beneficial to the rate payers of New Jersey. Therefore, we want these programs to continue down a successful path and hope that these suggestions will allow that. We look forward to discussing this further with all interested parties. We also have concerns that the impending strategic plan seems like it might be favoring Commercial Programs over Residential ones based on the ranking of programs in the Rubric. We would strongly encourage not judging commercial and residential programs on equal footing as they are inherently different. Residential ratepayers have and should continue to reap the benefits of these programs to make their homes more energy efficient, safer and more comfortable.

Sincerely,

Todd Von Deak
Executive Director
NJACCA

State of New Jersey
DIVISION OF RATE COUNSEL
140 EAST FRONT STREET, 4TH FL
P. O. BOX 003
TRENTON, NEW JERSEY 08625

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

STEFANIE A. BRAND
Director

June 20, 2017

By Hand Delivery and Electronic Mail
Honorable Irene Kim Asbury, Secretary
NJ Board of Public Utilities
44 South Clinton Avenue, 3rd Floor, Suite 314
P.O. Box 350
Trenton, New Jersey 08625-0350

Re: CRA Straw Proposal and Proposed Fiscal Year 2018 Budgets
I/M/O the Comprehensive Energy Efficiency and Renewable Energy Resource Analysis for Fiscal Year 2018 Clean Energy Program
BPU Docket No. QO17050464
and I/M/O the Clean Energy Programs and Budget for the Fiscal Year 2018
BPU Docket No. QO17050465

Dear Secretary Asbury:

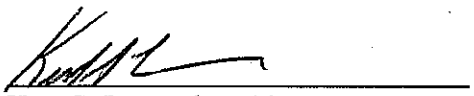
Please accept this original and ten copies of Comments submitted on behalf of the New Jersey Division of Rate Counsel ("Rate Counsel") in connection with the above-captioned matter. Copies of the comments are being provided to all parties on the e-service list by electronic mail and hard copies will be provided upon request to our office.

We are enclosing one additional copy of the comments. Please stamp and date the extra copy as "filed" and return it in our self-addressed stamped envelope.

Thank you for your consideration and assistance.

Respectfully submitted,

STEFANIE A. BRAND
Director, Division of Rate Counsel

By: 
Kurt S. Lewandowski, Esq.
Assistant Deputy Rate Counsel

KSL

c: publiccomments@njcleanenergy.com
OCE@bpu.state.nj.us
Marisa Slaten, BPU
Rachel Boylan, BPU
Caroline Vachier, DAG
Carolyn McIntosh, DAG
Michael Ambrosio, AEG

CRA Straw Proposal and Proposed Fiscal Year 2018 Budgets

I/M/0 the Comprehensive Energy Efficiency and Renewable Energy Resource Analysis for Fiscal Year 2018 Clean Energy Program
BPU Docket No. QO17050464;

and

I/M/0 the Clean Energy Programs and Budget for the Fiscal Year 2018
BPU Docket No. QO17050465

Comments of the New Jersey Division of Rate Counsel

June 20, 2017

(Draft: June 19, 2017)

INTRODUCTION

The Division of Rate Counsel ("Rate Counsel") would like to thank the Board of Public Utilities ("BPU" or "Board") for the opportunity to present comments on the Comprehensive Energy Efficiency and Renewable Energy Resource Analysis ("CRA") Straw Proposal and proposed Fiscal Year 2018 ("FY2018") Budgets for the New Jersey Clean Energy Program ("NJCEP" or "CEP") and associated compliance filings.

On June 6, 2017, the Board's Office of Clean Energy ("OCE" or "Staff") released for public comment a Straw Proposal ("Straw Proposal") and supporting schedules describing the history and current status of the CEP and providing Staff's recommendations regarding the CEP budget and program evaluation activities for FY2018. In addition, Staff posted a Compliance Filing ("OCE Compliance Filing") containing descriptions and budgets for OCE's proposed individual program offerings. The Board's Program Administrator, TRC, submitted a Compliance Filing ("TRC Compliance Filing") containing the details of a broad portfolio of programs designed to promote energy efficiency, distributed energy and renewable energy. (The

TRC Compliance Filing was initially posted with placeholders for Appendices E, F, and G, which were provided several days later.) Staff also posted a document containing summary budget charts ("CEP Budget Charts") and a summary of proposed changes to the individual NJCEP programs ("Summary of Proposed Changes"). The State's seven electric and gas utilities submitted a Compliance Filing that included proposals for the State's Comfort Partners program ("Utilities Compliance Filing"). Comfort Partners is a program administered by six of the seven New Jersey electric and gas utilities, using CEP funding, to improve energy affordability, safety, and comfort for low-income households through home audits, along with energy efficiency and conservation measures, and other measures that address obstacles to implementation of energy efficiency. The OCE submitted a Compliance Filing ("OCE Compliance Filing") containing its proposals regarding OCE's administrative activities and for the CEP-funded programs managed by the New Jersey Economic Development Authority ("EDA") and Sustainable Jersey.

In accordance with the Notice posted by the Board on June 6, 2016, a public hearing on the above proposals and compliance filings was held on June 16, 2016. Rate Counsel participated in that hearing and presented some initial observations.

The current CRA process is occurring just prior to the expected release of the NJCEP Strategic Plan, several years in the making, which is expected to guide refinements, improvements, and greater coordination among energy efficiency and clean energy programs throughout New Jersey. Ideally, the implementation of this plan and associated protocols will help return the State to a three-year cycle of CRA budgeting and planning, which will enhance program effectiveness by providing continuity and predictability for utilities, vendors and contractors, and customers alike. In the current filing, however, Staff is once again presenting a budget proposal for a single fiscal year, FY2018..

In view of the still-transitional status of the NJCEP, the limited changes in the current programs being proposed in the FY2018 filing, the limited amount of information and justification provided for the proposed budget and program changes, and the short time period for comment, Rate Counsel is providing the Board with these general observations and concerns about the Board's CRA process and budget, along with observations and comments about certain specific program elements. Rate Counsel has provided some of the same comments in response to previous CRA filings; however, the implementation of the Strategic Plan and the general effort at program and process improvements by Program Administrator make this an opportune time to be heard on these issues.

GENERAL COMMENTS

Strategic Planning and Evaluation

As noted above, the OCE is proposing a single-year CRA which essentially maintains the status quo, with some refinements, while "beginning to implement improvements flowing from New Jersey's Clean Energy Program FY2018-FY2021 Strategic Plan." The proposal introduces "modest adjustments to programs and budgets that are consistent with the Strategic Plan and that put the programs on track to transition more smoothly as the Strategic Plan becomes fully implemented, [while] the majority of changes arising out of the Strategic Plan will be made in FY2019-2020."[1] Rate Counsel agrees that in order to maintain continuity it is reasonable to essentially maintain the status quo for one more year.

Rate Counsel is encouraged by the focus on simplifying processes for program participants and contractors and on improving levels of participation, as described throughout the filing and particularly in the Summary of Proposed Program Changes. Rate Counsel is also

[1] TRC Compliance Filing, p.5.

encouraged by the OCE's efforts to strengthen its data collection and evaluation program.[2] As illustrated below, however, neither of these priorities is supported by the proposed budget, which would decrease funding for both energy efficiency programs and evaluation and planning. Rate Counsel also notes that OCE proposed a similarly rigorous program of program evaluation in its FY2017 Straw Proposal, and it does not appear that many of the proposed evaluation activities have fully materialized. Rate Counsel urges OCE and the Program Administrator to place a high priority on implementing rigorous program evaluation during FY2018 to ensure that future budgets, programs, and compliance plans make the best use of SBC funds to provide benefits for ratepayers and for the State of New Jersey.

Stakeholder Review Process

Rate Counsel believes that insufficient time and information have been provided to allow Rate Counsel or other stakeholders the opportunity to thoroughly review and comment upon the proposed program changes and budget for FY2018. The OCE's proposed FY2018 budget and the related compliance filings were initially released for public review and comment late in the afternoon on June 6, 2017 allowing only 10 calendar days to prepare for the public hearing held on June 16, 2017 and only two weeks to prepare written comments by the June 20, 2017 deadline. (The Program Administrator Compliance Filing was not posted in full until June 14, the day before the public hearing.) This is not enough time to allow for an in-depth review of a budget totaling nearly $500 million.

Further, the Program Administrator has not provided stakeholders with sufficient analytical information to support a thorough review of the programs. As noted above, many of the proposed evaluation activities for FY2017 do not appear to have been implemented, or at

---

[2] CRA Straw Proposal, pp. 6-7.

least, the results have not yet been made available to stakeholders. Additionally, no Cost Benefit Analysis ("CBA") summary was provided with this year's filing – an omission that precludes a full review of the cost effectiveness of the programs.[3]

In previous years, Rate Counsel has noted the lack of transparency with regard to the "State Energy Initiatives" budget category.[4] This is of particular concern this year because, while the overall FY2018 budget proposal is somewhat reduced from FY2017, the State Energy Initiatives budget has grown by $45 million, or 33%.[5] (See detailed discussion of budget below.) As this budget item now consumes more than half of the proposed FY18 SBC funding, stakeholders deserve more detailed information on how this money is being used, and why it is an appropriate use of SBC funds.

Use of FY2017 Budget

It appears from the posted NJCEP Proposed Budget that there is no projected unused/uncommitted balance from FY2017 to be carried forward into FY2018. In general, Rate Counsel is supportive of the expenditure or commitment of ratepayer SBC funds in the year in which they are collected. However, Rate Counsel also notes that there was underspending of the NJCEP budget and committed funds carried over from FY2016 by almost $36 million in FY2017, or nearly 10% of its budget. This underspending of FY2017 funds is subsumed into the "State Energy Initiatives" budget category. Rate Counsel urges OCE and TRC to ensure that the full CEP budget for FY2018 is spent on the proposed FY2018 CEP programs, including research

---

[3] In the FY2017 filing, a CBA summary table was provided as the final page of the AEG Draft Compliance Filing.

[4] Rate Counsel June 17, 2016 FY2017 CBA and Budget Comments, p 5; Straw Proposal, pp. 11-12; also CEP Budget Charts generally.

[5] See CEP Budget Charts. The FY18 proposed budget is $183,261, compared to a FY17 final budget, approved February 2017, of $138,289.

and program evaluation activities, yielding the full anticipated benefits for ratepayers and the State.

PROGRAM EVALUATION

Rate Counsel agrees, as noted in the Straw Proposal, that "Program evaluation is an integral component of proper program planning and reporting" and that "Continuous program evaluation ensures ratepayer funds are being effectively spent on NJCEP programs and are achieving the energy savings targets set by the CRA process."[6] The total proposed budget for Program Evaluation is $2.043 million,[7] or only 0.4% of the overall proposed FY2018 expenditures (0.66% of proposed CEP spending.) This is a low percentage relative to industry standards. A 2012 guidance document from the US Department of Energy notes that "common practice suggests that a reasonable spending range for evaluation (impact, process, and market) is 3% to 6% of a portfolio budget.[8] Rate Counsel believes that 2% of the CEP budget would be a reasonable minimum target for a program evaluation budget for New Jersey.

In addition, it appears from the CEP budget charts that just over half of the FY2017 program evaluation budget was actually spent during the fiscal year[9] – an observation consistent with the apparent lack of evaluation reports made available to stakeholders in the current proceedings. For the Comfort Partners program, Rate Counsel notes that only one utility – Jersey City Power and Light ("JCP&L") has any program evaluation funding at all in its proposed budget - at a level of 1% of JCP&L's budget for this program, and only 0.1% of the statewide

---

[6] Straw Proposal, p.6.

[7] CEP Budget charts, p.6.

[8] https://energy.gov/sites/prod/files/2013/11/f5/emv_ee_program_impact_guide.pdf.

[9] CEP Budget Charts p.6.

utility budget for Comfort Partners.[10] Finally, Rate Counsel notes that the table of "Proposed FY18 Evaluation Activities" on page 7 of the Straw Proposal shows that "to be conducted by" entities have yet to be identified for half of the listed activities, including all impact evaluation studies, the baseline studies, the retrospective cost benefit analysis, and the evaluation and research plan.

Rate Counsel does not believe that this low level of budgeting for evaluation throughout the programs, the low level of expenditure for the last fiscal year, and the inchoate status of planning for evaluation and research in FY2018 are consistent with OCE and TRC's stated commitment to rigorous, ongoing program evaluation and research.

Cost Benefit Analysis

In its FY2017 Compliance Filing, AEG (TRC's predecessor) provided a summary CBA using its proprietary BenCost™ model, reporting CBA ratios for each of its programs using the Total Resource Cost ("TRC") test, the Utility Cost Test ("UCT"), the Societal Cost Test ("SCT"), the Participant Cost Test ("PCT"), and the Ratepayer Impact Measure ("RIM") Test.[11] Rate Counsel noted then that it had no realistic opportunity to review the underlying logic or assumptions for this model.[12] Because there has been wide variation in approach and application of CBA models in New Jersey, it is unreasonable to expect stakeholders to take CBA results at face value without a full opportunity to review the underlying analysis.

Program Administrator TRC does not appear to have provided any CBA of its programs with its FY2018 compliance filing. TRC's initial compliance filing did not even include

---

[10] Comfort Partners Compliance Filing, p.5.

[11] AEG FY2017 Draft Compliance Filing, p.129. Results are summarized in a table on p.131 of the Draft Filing.

[12] Rate Counsel June 17, 2016 FY2017 CBA and Budget Comments, p. 10. AEG stated that it was "prepared to assist the BPU in its review of our analysis and/or provide training on how to examine or use the BenCost tool if desired," (p. 130) but given the short timeframe for review, this was not a practical option.

Appendix F ("FY18 Program Budgets") or Appendix G ("NJCEP FY18 Energy Savings Goals").[13] Rate Counsel's preliminary analysis of these two late-filed Appendices raises concerns about the cost of saved energy projected for some of the underlying programs; however, Rate Counsel believes it is TRC's role to provide a rigorous, transparent and fully documented CBA for stakeholder review and Board consideration.

COMMENTS ON SPECIFIC PROGRAMS

I. ENERGY EFFICIENCY PROGRAMS

Customer Experience Improvements

Rate Counsel notes that the FY2018 proposal includes several program changes aimed at increasing flexibility, simplicity, and customer-friendliness in several areas, particularly as it applies to the participant application process for residential and small commercial ratepayers. On the residential side, TRC proposes to reduce paperwork requirements in the HPwES and Residential New Construction programs,[14] to move to on-line submittal of Residential HVAC applications to "reduce the costs and delays associated with the incomplete and/or inaccurate applications submitted by homeowners or other unlicensed persons,"[15] and to make certain modifications to the pre-drywall inspection routine to increase both convenience and quality.[16] On the commercial side, TRC proposes a number of customer experience improvements, including a streamlined multiple-site submission process as well as pre-approval waivers, early

---

[13] The title provided for Appendix G refers to FY17, but the table comprising the Appendix is labeled FY18. Rate Counsel believes, subject to confirmation, that the data shown represent FY18 savings projections.

[14] Summary of Proposed Changes, pp.1-2.

[15] Ibid., p. 2.

[16] Ibid.

inspections, and other process improvements.[17] Rate Counsel supports such changes that are designed to facilitate customer participation. While rigorous oversight and sufficient supporting information is necessary for the application process, administrative hurdles should not stand in the way of cost-effective energy efficiency.

Add-On Measures

TRC proposes certain changes that add additional services and benefits to existing programs for little marginal cost. One of these is "the option of customers receiving an additional rebate for room air conditioners and dehumidifiers when a refrigerator or freezer is already being picked up for a household" under the Appliance Recycling Program.[18] TRC also proposes that "If sufficient budgetary capacity remains later in the FY…pilot a 'Direct Install' component" for the HPwES program by which "NJCEP quality assurance inspections…would install, at no cost to the applicant, up to five screw-in LED bulbs, a low flow shower head, and faucet aerators [to] create additional, cost-effective energy savings."[19] Rate Counsel supports such changes that further increase the benefits of existing EE measures at little to no additional cost. However, Rate Counsel believes that the "Direct Install" component should be a priority, and not reserved for "budgetary capacity…later in the FY" as proposed in the compliance filing, because such modifications are low-cost and provide high value for both participants and the CEP.

---

[17] Ibid., p.3

[18] TRC Compliance Filing, p.24.

[19] Summary of Program Changes, p.1.

Multi-Family Program

TRC proposes to "develop a single Multifamily Program to serve all multifamily projects and ensure they receive energy efficiency services suited to their particular needs."[20] This new program is designed to meet these needs by "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 (WARMAdvantage and COOLAdvantage), (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."[21] Rate Counsel supports the proposed new multi-family initiative as a cost-effective way to provide comprehensive EE services to this critical market. However, OCE's proposed multi-family programs need to be coordinated with any utility multi-family programs to ensure they complement each other and are not redundant.

Commercial and Industrial Programs

OCE has proposed the following changes to its Commercial and Industrial Programs[22]:

- An "overhaul of Prescriptive application forms" to "help improve application quality and shorten review cycles, which could lead to increased participation"
- Streamlining of the multiple-site submission process
- Certain modifications to the lighting measures to reflect additional opportunities, along with excluding retail display lighting as "insufficiently permanent and difficult to administer"
- A new incentive tier for lower efficiency condensing boilers that are still more efficient than noncondensing boilers

---

[20] TRC Compliance Filing, p.52.

[21] Summary of Program Changes, p.6.

[22] Summary of Program Changes, pp. 3-4

- Certain administrative changes that provide greater flexibility for Program Managers and convenience for customers, with the goal of increasing participation by streamlining the review process.

Rate Counsel supports these modifications that will improve efficiency and customer experience, and that respond to opportunities to realize cost effective energy savings from addressing specific lighting needs in the commercial and industrial sector.

Large Energy Users Program ("LEUP")

In January, 2017, NJCEP proposed certain modifications to the LEUP, an energy efficiency program which has been offered since 2011 tailored to the needs of the largest energy users in New Jersey. "Large energy users" had been defined as users who contribute at least $300,000 annually to the NJCEP through SBC funds.[23] OCE proposed reducing this threshold to $200,000, and also reducing the minimum incentive level to $100,000 with the goal of increasing participation.

Rate Counsel looks forward to analysis of LEUP program performance in light of these changes. NJCEP describes the LEUP as "one of the most cost effective programs delivering large savings at a low-cost relative to other programs." Rate Counsel's preliminary review of the limited data provided in Appendices F and G of TRC's Compliance filing does not support this conclusion: the proposed LEUP budget of $16,300,931 is projected to yield 242,814 MWh in lifetime electric savings, 1.3 MW in annual peak reduction savings, and 910,935 therms in lifetime gas savings. If one assumes, in the absence of a CBA developed by the Program Administrator, an avoided gas cost of 42 cents per them and an avoided electricity cost of $33 per MWh, that suggests approximately $8.4 million in savings (not including a modest amount of

[23] NJCEP Request for Comments, January 27, 2017.

peak load savings). This cursory analysis suggests that NJCEP proposes to spend approximately $1 for every $0.50 of savings through this program. More data is needed to evaluate the changes to this program.

Incentive Levels

Rate Counsel has concerns about certain incentive levels under the Residential New Construction and COOLAdvantage/WARMAdvantage programs, which appear to be too generous in providing incentives for equipment that meets lower efficiency standards.[24] As a general principle, customers should be required to invest in higher-efficiency equipment in order to obtain rebates. Paying customers incentives for equipment that only meets minimal efficiency standards not only misses the immediate opportunity for the installation of more efficient equipment, it also locks in the lower-efficiency equipment for years or decades to come. In many cases, incentivizing lower-efficiency practices and products opens the door to higher levels of free-ridership, as customers receive rebates for the same products and services they would have purchased absent the rebates. Customers who are actively responding to incentives are more likely to choose the higher-efficiency option to obtain the higher rebate level; especially if there is no lower-efficiency rebate available. In this light, Rate Counsel supports OCE's emphasis on promoting adoption of high-efficiency mini-split heat pumps, including the bonus incentive for households that do not have gas service and heat with electric resistance.[25] Finally, offering an incentive for lower-efficiency equipment effectively decreases the marginal incentive to select higher-efficiency equipment.

---

[24] See summary tables of rebate incentives under all programs in the TRC Compliance Filing, Appendix A.

[25] TRC Compliance Filing, p.17.

Under the Residential New Construction Program, incentives should be reserved for homes with a HERS rating of 55 and below; TRC proposes to offer incentives in some cases to homes with a HERS rating of up to 90.

Under the COOLAdvantage/WARMAdvantage programs, Rate Counsel offers the following suggestions in this area:

- Eliminate incentives for central air conditioning and central source heat pumps with a SEER of less than 18;
- Eliminate incentives for oil furnaces and boilers, and for Tier I gas furnaces;[26]
- Eliminate incentives for Tier I clothes washers, clothes dryers, and refrigerators.[27]

Individual measures implemented under the Commercial and Industrial programs should also be screened to ensure that beneficiaries of the NJCEP program funds are implementing high-efficiency retrofits and equipment replacements wherever possible, and not merely obtaining discounts for equipment that meets minimal efficiency standards.

Finally, while Rate Counsel recognizes the value of advanced power strips for home energy management, Rate Counsel has noted for several years that the incentives for advanced power strips are too generous, in that they exceed the cost of these devices.[28] This situation has only become more unbalanced as the price of the devices continues to decline.

Comfort Partners

---

[26] Tier I gas furnaces have minimum efficiency ratings of =>95%, versus efficiency ratings of =>97% for Tier 2 gas furnaces. See TRC Compliance filing, p. 96.

[27] Tier I clothes dryers have minimum efficiency ratings of CEF =>3.48 for gas (3.93 for ventless/electric), versus Tier 2 efficiency ratings of CEF =>4.0 for gas (4.30 for electric). See TRC Compliance filing, p. 97.

[28] E.g., Rate Counsel June 17, 2016 FY2017 CBA and Budget Comments, p. 13.

The Residential Low Income Program, known as Comfort Partners, managed by six of the seven electric and gas utilities, provides a variety of energy efficiency measures to improve the affordability of energy for low-income households. Rate Counsel continues to support this program, which serves the State's most vulnerable ratepayers.

Rate Counsel's comments on the Fiscal Year 2017 CRA Straw Proposal and Budgets noted that the utilities had begun to implement the recommendations contained in a program evaluation report issued by APPRISE, Inc. (the "APPRISE Report") in December of 2014.[29] The APPRISE Report identified a number of significant issues including weaknesses in audit and installation procedures and failed inspections, most commonly due to health and safety issues and missed opportunities.[30]

The utilities' compliance filing states that they are changing their focus from serving as many homes as possible to "install[ing] deeper cost effective energy saving measures." [31] The process of implementing the APPRISE recommendations should continue. As stated in previous Rate Counsel comments,[32] in addition to improving the identification of cost-effective implementation, the utilities should also focus on (1) implementing quality control measures to improve the contractor performance and minimize failed inspections, and (2) implementing better reporting to facilitate further evaluations of this important program.

---

[29] Rate Counsel June 17, 2016 FY2017 CBA and Budget Comments, p. 13-14, APPRISE, Inc., New Jersey Comfort Partners Final Evaluation Report (Dec. 2014), available at: http://www.njcleanenergy.com/files/file/Final%20NJ%20CP%20Evaluation%20Report%20(2).pdf

[30] APPRISE Report, p. vii & xv.

[31] Utilities' Compliance Filing, p. 4.

[32] See Rate Counsel's May 29, 2015 comment filed in BPU Dkt. Nos. QO15040476 & QP15040477, p. 7-9 and June 17, 2016 comments filed in BPU Dkt. Nos. QO16040352 & QO16040353, at p. 13-14.

Rate Counsel notes its concern about the proposed $24 million budget for this program. This is a reduction of 20 percent from the $30 million budgeted for this program in Fiscal Year 2017. This program has consistently expended its budgeted funds, and the "NJCEP Budget Charts" posted by OCE indicate that the entire $30 million is forecast to be expended in Fiscal Year 2017.[33] None of the materials posted for comment by OCE explain the reason for the proposed budget reduction. Indeed, utilities' ongoing efforts to identify a greater number of cost-effective measures in each residence would seem to justify a budget increase, not a decrease. Of the all of the programs administered by OCE, Comfort Partners is the only one that specifically targets low-income ratepayers. As a matter of equity, this program, at a minimum, should be budgeted at the same $30 million level as in Fiscal Year 2017.

II. DISTRIBUTED ENERGY RESOURCE PROGRAMS

Combined Heat and Power and Fuel Cells

The proposed FY2018 budget for Combined Heat and Power ("CHP") and Fuel Cell projects has been reduced to about $34.2 million from the $49.8 million budgeted in FY2017. Rate Counsel has previously expressed concerns about ratepayer-funded subsidies for fossil-fueled CHP and Fuel Cell projects. These are mature technologies with established markets. As part of the ongoing strategic planning process, OCE should carefully evaluate the need for ratepayer-funded subsidies for these facilities.

---

[33] CEP Budget Charts, charts entitled "Clean Energy Program FY18 Budget ($000) and Clean Energy Program Budget ($).

In Fiscal Year 2017, OCE discontinued subsidies for fuel cells without waste heat recovery, and OCE is proposing to continue this restriction. [34] While continuing to voice concerns about subsidies for fossil-fueled facilities, Rate Counsel supports OCE's proposal to continue limiting incentives for fuel cells to those with waste heat recovery.

Renewable Electric Storage

The OCE is proposing not to make any new commitments under the Renewable Electric Storage Program. Payments would be for commitments made prior to FY2018. [35] Rate Counsel has previously expressed concerns about the structure and cost-effectiveness of this program, and supports the proposal to discontinue any new commitments in FY2018.

Microgrids

In its Clean Energy Program budget Order for Fiscal Year 2017, the Board established a Microgrids program to fund feasibility studies for Town Center microgrid programs.[36] The Board's Staff is currently considering 13 applications received under this program, and has requested the Board's authority to transfer additional funds to this budget category. With the transfer, the FY 2017 budget for this program would be approximately $2.052 million.[37] Although the Microgrids program is not discussed in the text of any of the compliance filings

---

[34] TRC Compliance Filing, p. 81.

[35] TRC Compliance Filing, p. 83.

[36] I/M/O the Clean Energy Programs and Budget for Fiscal Year 2017 and I//M/O Revision to New Jersey's Fiscal Year 2017 Protocols to Measure Resource Savings, BPU Dkt. Nos. QO16040353 & QO16060524, Order at 16 (June 29, 2016).

[37] See Request for Comments, NJCEP FY17Budget Revisions, June 9, 2017.

that were posted for comment, OCE's NJCEP Budget Charts indicate that the total budget for this program is limited to the $2.052 million that is expected to be awarded to fund the feasibility studies proposed in the pending applications.[38] Rate Counsel supports this proposal. The results of the feasibility studies should be analyzed before proceeding with funding for the development of microgrids.

III. RENEWABLE ENERGY PROGRAMS

There do not appear to be any significant changes to the Renewable Energy programs. The proposed Renewable Energy budget is $2.6 million, including $2.5 million for the SREC Registration Program ("SRP") and $100,000 for Offshore Wind projects. The SRP budget is $200,000 less than provided for this program in the modified FY2017 budget adopted by the Board in February 2017 and slightly higher than forecasted expenditures for FY2017. The Offshore Wind budget, has been reduced to $100,000 from the FY2017 budgeted amount of $450,000, none of which was expended. Rate Counsel supports the recommended Renewable Energy budget.

PROPOSED BUDGET

OCE proposes a level of new SBC funding for FY2018 that is the same as for FY2017 in total, but with significant reallocations of funds among individual budget items. Specifically, The FY2018 budget suggests a significant refocus of SBC funding away from energy efficiency, primarily in favor of "State Energy Initiatives". A comparison of the FY2017 and FY2018 budgets is shown below.

---

[38] NJCEP Budget Charts, charts entitled "Clean Energy Program FY18 Budget ($000) and Clean Energy Program Budget ($).

Budget Category	FY17 New SBC Funding ($000)	FY18 New SBC Funding ($000)	Change ($000)	Change (%)
Energy Efficiency:				
Residential	71,388	49,847	-21,541	-30.2%
Low Income	29,657	23,865	-5,792	-19.5%
Commercial & Industrial	74,117	69,410	-4,707	-6.4%
State Facilities	7,414	100	-7,314	-98.7%
Total Energy Efficiency	**182,576**	143,221	-39,355	-21.6%
DER	**22,739**	8,735	-14,004	-61.6%
Renewable Energy	**1,977**	2,585	608	30.8%
NJCEP Administration	**12,477**	6,862	-5,615	-45.0%
NJCEP Total	**219,770**	**161,404**	-58,366	-26.6%
State Energy Initiatives	**124,895**	183,261	58,366	46.7%
Total FY17 Funding	**344,665**	**344,665**	0	0.0%

Sources: CEP FY2017 Budget Charts, chart entitled "NJ Clean Energy Program Proposed FY2017 Budget" and CEP FY2018 Budget Charts, chart entitled "NJ Clean Energy Program Proposed FY18 Budget"

Rate Counsel opposes this general shift in priorities away from funding cost-effective energy efficiency programs with SBC funds. Rate Counsel agrees with OCE's description of energy efficiency as "a foundational energy resource that, when delivered cost-effectively, reduces the cost of energy for all ratepayers while providing additional benefits, including the health benefits associated with improved air quality, lower environmental compliance costs, increased grid reliability, and economic development opportunities in the form of local jobs and

a more competitive business environment."[39] The budget reallocations proposed in the Straw Proposal would erode the availability and quality of this "foundational energy resource."

Many of the proposed program changes for FY2018 are designed to increase participation, while at the same time OCE proposes to reduce spending on these same programs. For example, the Residential Energy Efficient Products Program includes program improvements to increase sales volumes, along with additions such as secondary appliance recycling, while OCE proposes a budget reduction of $16.256 million, or a 57% reduction. The residential programs also include a reduction in required paperwork under HPwES and Residential New Construction, additional incentive for mini-split heat pumps, and the new Multifamily program, while the proposed residential budget overall is 25% less than the FY2017 budget. The rationale and basis for these reductions needs to be set forth by the OCE.

On the C&I side, the proposed program would overhaul the Prescriptive Measure application process and the multiple-site submission process, add a new incentive tier for condensing boilers, and make administrative changes to be reflected in lower tier documents.[40] The FY2017 proposal also incorporates the mid-FY2017 changes to the LEUP to expand participation, additional audit levels in the Local Government Energy Audit program, and additional flexibility in the Direct Install Program.[41] The proposed C&I budget includes a 4% increase over FY2017 spending, but due to the commitment backlog, this amounts to

---

[39] Straw Proposal, p. 15.

[40] Summary of Proposed Changes, p.3.

[41] Ibid, pp. 4-5. The proposed FY18 Direct Install budget has been increased by $9.6 Million over FY17 spending levels. No explanation has been given for increasing this budget item while other efficiency measure budget items have been reduced.

approximately a 6% reduction in funding for new projects. It is difficult to see how these program expansions are consistent with the reductions in funding in these areas.

The proposed budget also includes a significant reduction – by almost half – of the NJCEP Administration budget. The proposed cuts include such items as marketing (76% reduction), evaluation and research (55% reduction), and outreach and education (21.5% reduction).[42] The reduction in administration budget items is inconsistent with OCE's stated intentions in the areas of customer engagement, outreach, and program evaluation. While Rate Counsel supports many of the proposed program improvements as described in the CRA Straw Proposal and in the Compliance Filings, we are concerned that these aspirations will not be realized in strong, cost-effective energy efficiency initiatives given the proposed funding structure.

The OCE should provide more detailed explanations for its proposed FY2018 budget items, particularly for those line items with large decreases or increases in funding levels, such as those items discussed above and in the Comfort Partners and other sections of these comments.

---

[42] CEP Budget Charts, p.6.