

Deborah Petrisko

From: Rodney Richards [rrenergyconsulting@gmail.com]
Sent: Thursday, April 04, 2013 10:36 AM
To: publiccomments@njcleanenergy.com
Subject: revised staff straw proposal for cep and cra

After review of the documents, I have some questions:

1. What can the sudden increase (between 2010 and 2011) in use of TPSs for supply be attributed to?
2. What is the structure of the State Energy Office? Where is it housed? Who are staff? What is its mandate? What is its budget? Is it a division in NJBPU? Is this an offshoot of the Energy Office in Treasury established by Executive Order 11 with a Director of Energy Savings?

Sincerely,

Rodney Richards, Principal
RR Energy & IT Consulting
609-585-6120
rrenergyconsulting@gmail.com

Deborah Petrisko

From: Neal Zislin [zislinns@comcast.net]
Sent: Monday, April 22, 2013 10:47 AM
To: publiccomments@njcleanenergy.com
Subject: Comments to OCE Staff Straw Proposal - CRA 2014-2017

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

Board of Public Utilities:

Thank you for extending to stakeholders the opportunity to provide input on the CRA 2014-2017 straw proposal. Renu Energy is pleased to offer these comments and recommendations to the Board of Public Utilities on the subject of the CRA 2014-2017 straw proposal.

Renu Energy commends the Office Clean Energy in recognizing experiences from the implementation of the NJCEP that have highlighted shortfalls in performance from expectations and offering recommendations to improve future results. Renu Energy concurs with the OCE that collaborating with Treasury to more closely correlate program commitments and expenditures with budgets to minimize unallocated budgeted money from one year to the next synchronizes ratepayers' contributions under SBC to the earmarked programs. This avoids an indirect taxation by the State to fund programs and support governmental activities that are unrelated to the objectives of the NJCEP. Renu Energy supports the allocation of more resources and the formation of a working group towards quantifying the benefits and costs of the NJCEP initiatives and benchmarking to other states as the pathway towards continuous improvement with program outcomes. The CRA 2014-2017 straw proposal discloses overlapping NJCEP and utility initiatives in delivering rebates to ratepayers for adopting increased energy efficiency measures. Renu Energy supports the recommendation to rationalize these energy efficiency incentives through scheduled coordination of program submissions and selective program approvals which should result in the elimination of unnecessary program administrative expenses, confusion among the marketplace participants and possible duplicative reimbursements. The priority in directing the Program Administrator (once confirmed) to create a clean energy strategic plan and a managed marketing strategy to elevate outreach to and education of the public creates the foundation for increasing the effectiveness of the NJCEP. Renu Energy believes that it is desirable to attract to and nurture within NJ a critical mass of intellectual and financial resources that might generate innovative renewable energy technologies and invest in manufacturing assets to commercialize equipment, software, services, etc. The grants that might be offered under the NJCEP need to be linked to tangible recipient commitments and job creation.

The Energy Master Plan indicated that over the 7-year period from 2003-2010, every \$1 investment in energy efficiency generated \$1.80 of benefits in the residential sector and \$4.29 in the commercial/industrial sector. For the residential sector, these benefits translate to \$0.26 per year yielding a simple payout of approximately 4 years. For the commercial/industrial sector, these benefits translate to \$0.61 per year yielding a simple payout of approximately 1.7 years. The energy savings of kwh's are sustainable as long as the systems benefiting from the conservation or efficiency measures remain operational and cost avoidance in \$/kwh continues its historical behavior of increasing over time. The Expenditure Forecast Based on 50/50 Weighting and the Savings Goal Based on EnerNOC 50/50 Weighting project electricity costs of \$0.12-\$0.16/kwh saved in the residential sector and \$0.24-\$0.21/kwh saved in the commercial/industrial sector over 2013-2016 interval. This suggests a simple payout of approximately 1 year in the residential sector and 1.7 years in the commercial/industrial sector based on the prevailing cost of electricity within these customer rate classes. These projections correlate well with past performance in the commercial/industrial sector and appear to be extremely, and perhaps unrealistically, optimistic based on past performance in the residential sector.

The Expenditure Forecast Based on 50/50 Weighting and the Savings Goal Based on EnerNOC 50/50 tables also project natural gas costs of \$12.50-\$14.00/decahtherm saved in the commercial/industrial sector and \$130-\$98/decahtherm saved in the residential sector. This suggests a simple payout of approximately 1.7 - 3 years in the commercial/industrial sector depending on the delivered price of natural gas. However, it appears that the projected cost-benefit for the residential sector yields a simple payout that extends beyond 10 years. Renu Energy suggests that the OCE revisit the underlying cost-benefit assumptions for the residential sector.

The Energy Master Plan acknowledges that, although the creation of new jobs through the implementation of energy efficiency and renewable energy programs is desirable, it is not a primary factor in justifying NJCEP programs. Renu Energy concurs with the OCE that it is vital to quantify the creation of new jobs. It is also necessary to establish guidelines in terms of what is practical and affordable to spend towards creation of jobs. A distinction needs to be made between forecasting temporary jobs that exist throughout phases of a project with stable jobs that exist once the project has been completed and the system or facility becomes operational. A simple payback period is designated as the threshold in discerning how financial incentives might be disbursed. Returns to the state treasury from collected state income tax and sales tax based on estimated consumption generated by the newly created stable job would be weighed against the financial incentives offered. An example illustrating this using a 5-year simple payback is the state offering up to \$20-25K in financial incentives supporting a program within the NJCEP (e.g. reducing the initial capital investment to increase energy efficiency or implementation of public policy in expanding the development and adoption of non-competitive renewable energy technologies) that results in creating 1 stable job earning \$50K/year. Renu Energy believes it would be worthwhile to tabulate the number of new, stable jobs created through implementation of the RPS and the Energy Efficiency Program separately. Job creation within the RPS would be weighed against the total outlay of ratepayers' money through the combined purchases of SREC's and SACP's over the 2005-2012 period. Job creation within the Energy Efficiency Program would be weighed against the total outlay of ratepayers' money through equipment rebates and performance grants over the 2005-2012 period. All jobs that were created with financial incentives that satisfied the designated simple payback threshold would be considered affordable and potentially produce future benefits experienced as reduced taxes or greater services from the state government for the ratepayers (and taxpayers). The real net cost to NJ ratepayers is that expended amount that exceeds the simple payback threshold period.

Neal Zislin
VP Engineering
Renu Energy
www.renuenergy.com
nzislin@renuenergy.com
908-371-0014 (Office)
908-425-0089 (Cell)



Phone: (732) 240-2828 Fax: (732) 240-7488
E-Mail: info@bcexpressinc.net

2115 Route 9
Toms River, NJ 08755

April 19, 2013

To Whom It May Concern:

BC Express has been a participating contractor in the Home Performance with New Jersey Clean Energy Program for more than four years. Our company was founded in 1992 and our participation in this program has allowed our business to grow each year and enabled us to increase our staffing.

Our customers are experiencing significant energy savings and are heating and cooling their homes more efficiently. The 0% financing option has helped many of our customers replace their old inefficient equipment when they felt that they could not afford better more eco-friendly systems.

The Home Performance with New Jersey Clean Energy Program helps local businesses increase sales, creates jobs and employment opportunities, saves money for the consumers and protects the environment.

Our company fully supports the Home Performance with New Jersey Clean Energy Program and we hope that the program is able to continue because it truly helps so many of New Jersey's residents.

Sincerely,

A handwritten signature in black ink, appearing to read 'Doug Wong', is written over the typed name and title.

Doug Wong
Manager

April 25, 2013

VIA ELECTRONIC AND REGULAR MAIL

The Honorable Kristi Izzo
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: Comments on the Revised Staff Straw Proposal for New Jersey's Clean Energy Program Comprehensive Resource Analysis

Dear Secretary Izzo:

On behalf of our client, The Bloom Energy Corporation ("Bloom Energy"), please accept these comments and concerns regarding the Revised Staff Straw Proposal for the Clean Energy Program Comprehensive Resource Analysis ("Proposal") issued by the Board of Public Utilities ("Board") on March 28, 2013.

Bloom Energy is a provider of breakthrough solid oxide fuel cell technology that generates clean, reliable, and highly-efficient onsite power using an environmentally superior non-combustion process. Bloom Energy currently has over 75 megawatt ("MW") of operating systems at over 100 locations across the United States. In New Jersey, Bloom Energy is seeing growing demand from customers, including telecommunications providers, data centers, office buildings, nursing homes, supermarkets, and other customers who desire a highly reliable distributed power generation solution, but may not have the thermal requirements necessary to support a traditional Combined Heat & Power ("CHP") solution.

First, we would like to point out that the term "combined heat & power" is an exclusionary term, not only for Bloom's "all-electric" fuel cells, but also for all of those electric customers in New Jersey who do not happen to have a thermal load that matches their electric

load. This is an important point because the semantics seem to be translating into programmatic choices, whether intentional or not, that will have the effect of depriving an important group of customers from accessing the Board's programs. The language of the Proposal itself is exclusionary; the very section of the Proposal in which fuel cells and other types of distributed generation are supposed to be covered is entitled "5.2 Combined Heat and Power." As discussed below, the intent of the Proposal appears to be to drive funding toward large CHP projects and away from the single cleanest and most resilient form of on-site power available to many New Jersey customers, the all-electric fuel cell.

Second, we hope the Board will recognize that Hurricane Sandy was a "game changer" for New Jersey electricity customers and it should be a "game changer" for the way that the Board evaluates its own program funding needs. While the Proposal indicates that Staff "took numerous factors into consideration in developing a proposed FY14 funding level," none of the listed factors relate to the Hurricane, or the fact that commercial and industrial customers have a renewed interest in installing on-site power generation. The Small CHP/fuel cell program was not fully subscribed last year, but that fact should not form the basis of the Board's expectations for next year, considering the formative experience that many customers have just been through.

Since Hurricane Sandy, we have seen a spike in interest from New Jersey commercial and industrial customers interested in exploring a resilient, on-site clean energy solution. But instead of fostering this renewed interest in cleaner and more reliable distributed generation, the Proposal would reduce the overall amount of incentives available to CHP and Fuel Cells down from \$70 million to \$30 million. At this point a reduction in the program funding would send exactly the wrong signal at exactly the wrong time. The pre-Sandy experience in terms of subscription levels should not be used as a guidepost for post-Sandy funding decisions. In the wake of the storm, the funding levels for the highest resiliency forms of on-site power generation should be *increased* rather than *decreased*.

Third, the way that the Board measures the "value" that is returned on each program dollar expended is critically important. The Proposal says that "CHP funding should emphasize

larger systems and those technologies that generate electricity at a lower cost per kW.” Instead of merely gauging the value of a CHP or fuel cell project by measuring *the number of megawatts of installed capacity that is installed per dollar of expenditure*, we encourage the Board to instead focus on the actual value created by the investment, *taking into account the services the facility provides to the State of New Jersey and its citizens*. This will require an evaluation process that takes into account not only project economics, but also the importance of the facility itself in terms of its contribution to resiliency and preparedness.

For example, a fuel cell project that provides primary un-interruptible power for a telecommunications provider may not have a thermal load or benefit from the economies of scale of a large CHP project. It may be that such a facility would in fact require more incentive dollars per MW of installed capacity. On the other hand, if the facility provides telecommunications service to millions of customers, including first responders and emergency management officials, is it really a better use of program dollars to have that funding go to a CHP plant in an industrial park somewhere that happens to have better project level economics? The Board should reject the idea that funding should be evaluated exclusively on a “dollars per MW installed” basis, and instead acknowledge the emergency preparedness value and the true cost savings of an un-interrupted supply of electricity at high value facilities. Moreover, the Board should also consider that solid oxide fuel cell projects produce fewer emissions than combustion technology CHP projects.

Finally, the proposal to combine the Small and Large CHP/fuel cell programs will have the effect of discriminating against all those electric customers that are smaller or very often do not have a matching thermal load like many supermarkets, retail stores, telecommunications providers, and nursing homes . . . the very types of customers the state should be encouraging to install reliable distributed generation. The combination of the Small and Large CHP/Fuel Cell programs into one large program, in concert with the proposition that value should be measured simply on a dollar per kilowatt installed basis, will have the practical effect of driving all of the funding to the larger CHP projects and eliminating funding for all-electric fuel cells at smaller

Hon. K. Izzo
April 25, 2013
Page 4 of 4

facilities that provide critical services to the people of New Jersey. We are asking that the Board avoid this result and instead maintain the two different categories within the CHP/Fuel Cell program.

As the Board adopts its program budgets for the next several years, there are opportunities to apply new innovations that can help New Jersey achieve its resiliency and clean energy objectives at the same time; all-electric fuel cells are one of those opportunities. Please do not hesitate to contact me should you have any questions or concerns.

Very truly yours,



Murray E. Bevan

cc: President Robert Hanna
Commissioner Jeanne Fox



April 26, 2013

Elizabeth Ackerman
Acting Director, Division of Economic Development and Energy Policy
New Jersey Board of Public Utilities
POB 350 - 44 S Clinton Ave
Trenton, NJ 08625-0350

Re: Response to the New Jersey Board of Public Utilities Request for Comment on the Proposed FY2014 Budget for the New Jersey Clean Energy Program (NJCEP)

Comments of ClearEdge Power

Dear Ms. Ackerman:

ClearEdge Power submits the following comments based on the public request from the New Jersey Board of Public Utilities related to the proposed FY2014 budget for the New Jersey Clean Energy Program (NJCEP).

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Lisa C. Ward".

Lisa C. Ward
Government Relations Manager

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES
PROPOSED FY14 NEW JERSEY CLEAN ENERGY PROGRAM BUDGET
COMMENTS OF CLEAREDGE POWER

I. Introduction

ClearEdge Power is a company headquartered in Sunnyvale, CA with manufacturing and office facilities in Hillsboro, OR and South Windsor, CT. ClearEdge Power is producing fuel cell systems for distributed energy generation that scale from 5kW to multiple megawatts. Through the use of combined heat and power, our ultra-clean and quiet stationary fuel cells are combustion free and meet the strictest air emissions requirements in the United States. PureCell[®] systems bridge environmental goals established by policy makers with consumers' need to save energy and money.

We offer the following as comments related to the proposed FY2014 budget for the New Jersey Clean Energy Program (NJCEP).

II. Comments

A. Fiscal Year 2014 Budget for Fuel Cells and Combined Heat and Power (FC/CHP)

The suggested \$30M plus 2012-2013 funding rollover seems sufficient for current market demand for both the small and large fuel cell programs combined. However, the suggested budget may not be adequate for future market demand given the anticipated timing for distributed generation projects in the pipeline. Distributed generation projects using fuel cell systems typically require between 12 and 18 months to properly qualify, develop and contract. Incentive funding stability is critical to early project phases, such as qualification and development. If drastic budget changes occur during initial project discussions, New Jersey energy consumers considering the use of fuel cell systems at their site may withdraw from an excellent project because they are unsure of the State's commitment to the program and the technology.

The market demand for fuel cells in New Jersey has increased in part due to the significant advantages they offer during grid outages. During Hurricane Sandy, twenty-three PureCell[®] systems installed in the region continued to provide power and heat throughout the storm. Several of the PureCell[®] systems operated for days without the grid, allowing customers to maintain basic business operations, provide hot water and keep the lights on. Without stationary fuel cells, these businesses would have lost revenue and the community would not have had access to critical services during that difficult time. Therefore, a decrease in the fuel cell budget is counter to the intent of making budget adjustments to ultimately improve the State's grid resiliency. The key to a long term strategy for the State will be the continuation of



clean DG programs, indicating New Jersey's commitment to the Energy Master Plan and the State's resiliency goals in the aftermath of Hurricane Sandy.

To address the issue of resiliency, the State should consider a tiered incentive approach for critical facilities versus developing a CHP portfolio standard. By capitalizing on the functionality and presence of current distributed generation programs, the State can quickly implement resiliency solutions and ensure that specific technologies are not excluded by limiting the portfolio standard to CHP only. The FY2014 solicitation for fuel cells and combined heat and power projects should include a tiered incentive, giving the largest amount of State funding to the projects at the most critical facilities operating on renewable fuels, such as anaerobic digester gas, on-site biogas or directed biogas.

The tiered structure should start at the current funding level and an enhanced incentive, in addition to the base, should be given incrementally to the following project types listed in order of priority from least to most:

- 1) Fuel cell/CHP installations for critical facilities in the private sector
- 2) Fuel cell /CHP installations for critical facilities in the public sector
- 3) Fuel cell/CHP installations supporting two or more critical facilities, in either the public or private sector
- 4) Fuel cell/CHP installations for any type of critical facility, public or private, using renewable fuel

where critical facilities could include, but not necessarily be limited to:

- a. *Emergency Communication/Command Centers*
- b. *Ambulatory/Emergency Medical Services*
- c. *Emergency Management Services*
- d. *Facilities of Refuge*
- e. *Emergency Shelters and Rest Centers*
- f. *Public Utilities (Water, Gas, Electricity)*
- g. *Hospitals*
- h. *Managed Care Facilities*
- i. *Broadcasting/Public Information*
- j. *Telecommunications*
- k. *Airports and support infrastructure*
- l. *Supermarkets/retail food stores*
- m. *Any facility that due to its inherent layout or configuration, e.g., university campus, high school, etc., which can be used to provide public benefits such as shelter, remote emergency command centers, etc.*

We do not have a recommendation for the Board related to the incremental incentive amount. Based on the incentive amounts for the current programs, we have confidence the Board will define a fair enhancement for the critical facilities based on priority to the State.

Maintaining dedicated funding for distributed generation programs sends a clear message to the market, allowing project developers adequate time to develop high-quality, long term projects. A stable, committed program is required for at least five years to make an appreciable impact.

III. Conclusion

Thank you for the opportunity to comment on the proposed FY2014 budget for the New Jersey Clean Energy Program (NJCEP). We would be pleased to provide you with additional information or clarification as needed.

Respectfully Submitted:



By: _____

Lisa C. Ward
Government Relations Manager
ClearEdge Power
195 Governor's Highway
South Windsor, CT 06074
Phone: 860-371-4182
Email: lisa.ward@clearedgepower.com

April 26, 2013

April 26, 2013

Hon. Kristi Izzo, Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
PO Box 350
Trenton, New Jersey 08625

Re: IN THE MATTER OF THE COMPREHENSIVE ENERGY EFFICIENCY AND RENEWABLE ENERGY RESOURCE ANALYSIS FOR THE 2013 -2016 CLEAN ENERGY PROGRAM
BPU DOCKET NO. EO11050324V

Dear Secretary Izzo,

On behalf of the seven investor-owned energy utility companies (the “Companies”) that are members of the New Jersey Utilities Association (“NJUA”),¹ I hereby submit formal written comments on the Staff Draft Straw Proposal for New Jersey’s Clean Energy Program (“NJCEP”) Funding Levels for the period from 2014 through 2017 - Comprehensive Energy Efficiency and Renewable Energy Resource Analysis, which was released on March 28, 2013. Many of the Companies continue to be actively involved in the NJCEP Energy Efficiency and Renewable Energy Committees and provide informal feedback directly to the New Jersey Board of Public Utilities (the “Board” or “BPU”) Staff (“Board Staff”) through those stakeholder committees. In addition to participation on these NJCEP committees, the Companies participated in the process for the development of the 2011 Energy Master Plan and have extensive experience in delivering energy efficiency programs to their customers through

¹ The Companies participating in this letter are Atlantic City Electric Company, Pivotal utility Holdings, Inc., d/b/a Elizabethtown Gas, Jersey Central Power and Light, New Jersey Natural Gas Company, Public Service Electric & Gas Company, South Jersey Gas, and Rockland Electric Companies (collectively, the “Companies”).

various platforms, including direct program delivery, delivery through contractors and delivery via competitive procurement. Many of the Companies are delivering supplemental energy efficiency, renewable energy and demand response programs or enhanced features of NJCEP programs, and some have experience delivering clean energy program solutions in other states. Given their experience, the Companies appreciate this opportunity to comment on several crucial aspects within the Revised Straw Proposal. Please note that each of the Companies reserves the right to submit additional, individual comments on the March 28, 2013 Straw Proposal.

Interim CRA Planning/Proposed One-Year Funding

The Companies laud Board Staff for its thoughtful review of the existing energy efficiency and renewable energy landscape in New Jersey and its caution in making proposals while still transitioning to a single Program Administrator. (Revised Straw Proposal at p. 56.) Given the current transition process, the Companies do not oppose the recommendation that funding is initially established for a single year (FY 2014) only and funding for FY 2015-2017 will be defined pending completion of the Strategic Plan. (*Id.* at p. 46.) However, the Companies note that single-year State funding may create additional regulatory uncertainty regarding the continuity of energy efficiency and renewable energy programs. The uncertainty and instability of the programs' existence is an issue identified in the Evaluation of New Jersey's Clean Energy programs, prepared by Applied Energy Group on June 11, 2012. The continuation of the current utility involvement in programs helps to offset that uncertainty.

The Revised Straw Proposal also recommends initiation of a number of processes and working groups to "inform proposed changes to the programs, processes and structure of the NJCEP" in the midst of the transition described above and in the Revised Straw Proposal. (*Id.* at p. 56.) The Companies strongly suggest that the finalization of a Strategic Plan be informed by the working group efforts to ensure coordination and successful implementation going forward.

Furthermore, the development of the Strategic Plan and the work of working groups should not hold up the continuation of programs that are currently serving the needs of customers and supporting thousands of trade allies, including many small businesses. Both NJCEP and the utilities have managed a number of award winning programs that are recognized nationally. The continuation of successful programs helps assure the program continuity needed to sustain the benefits intended by the Energy Master Plan, the enabling legislation (N.J.S.A. 48:3-98.1), and NJCEP.

Mechanics of the Clause

The Companies support Board Staff's recommendation that it coordinate development of appropriate procedures with Treasury to better match the collection of funds from ratepayers to actual program needs. (*Id.* at p. 58.) The Companies believe that, as Board Staff moves forward with development of a Strategic Plan, it is more important than ever to recognize the challenges faced in budgeting for the NJCEP programs since it is difficult to assess potential market response to any program, especially new programs. As a result, the Companies again propose that Board Staff consider structuring NJCEP cost recovery to operate more like a traditional utility rider. As NJUA stated in its October 2012 comments, a NJCEP cost recovery rider would reflect the fact that it is not possible to budget to the exact level of spending for any specific year. To avoid inadvertently over-collecting from customers, the Companies suggest that the NJCEP should be structured more like a traditional utility rider that establishes projected annual expense levels with provisions for true-up to reflect actual expenditures. To the extent that actual expenditures are below projected expense levels, any over-collection is automatically included in the calculation of the subsequent year's recovery rate for that rider.

The Companies understand that the statewide nature of the NJCEP program administration and the need to maintain stable cash flow for the clause may not lend itself to the exact structure of a

traditional clause. The Companies believe that the current system, in which funds not spent or committed at the end of an NJCEP Reporting Year are rolled over into the NJCEP budget for the subsequent NJCEP Reporting Year, should be modified. A rider approach has the benefit of offsetting future payments from ratepayers. The surplus could be reflected as an offset to the defined NJCEP payment schedule established for each utility from the prevailing CRA Funding Order. By allocating such surplus back to each utility's defined payment schedule in the same proportion as the funding obligation for the utility, each utility's next SBC rate filing through which the appropriate recovery rate for the funding obligation is set would reflect this "over-collection" and result in a lower charge. This comment is consistent with the recommendation made by the 2011 Energy Master Plan's Clean Energy Funding Working Group ("EMP Clean Energy Working Group Report," at page 51).

Potential for a CHP Energy Efficiency Portfolio Standard

The Revised Straw Proposal notes that the CHP-FC work group is exploring the costs and benefits of utilizing an Energy Efficiency Portfolio Standard (EEPS) as a means of financing CHP-FC. The Companies urge caution in the review of an EEPS approach, and are pleased that Board Staff cites the need for the work group to evaluate whether an EEPS is likely to be a more cost effective approach before shifting State policy in that direction. At least one previous New Jersey study concluded that such an approach was likely to be considerably more expensive than a rebate structure. While some states have decided to pursue an EEPS model it is still not the predominant model across the country. Although New Jersey markets have accepted the Renewable Energy Portfolio Standards, it should be noted that an EEPS is considerably more challenging to implement since the actual energy efficiency achieved through any program can only be estimated relative to evolving standards and evaluation processes, and cannot be metered in the same way that renewable energy can be metered. Additionally, given the unique characteristics of CHP projects (overall costs, siting requirements, length of time from

design to completion, for example), the limited pool of appropriate customers must not be overlooked.

The Companies look forward to contributing to the work group to assist the BPU Staff in evaluating the appropriate use of CHP-FC in emergency response and as an energy efficiency measure.

Considerations Regarding Proposed Funding Allocations and Uses

BPU Staff proposes extending the current funding level of approximately \$379 million, which incorporates an energy efficiency funding level of approximately \$177 million, given OCE's desire to fully expend funding in FY 2014 and in the interest of keeping customer rates stable. (Revised Straw Proposal at p. 54.)

The Companies note that on p. 47 the proposal states that the need for "additional research into financing options" provides another basis for not developing funding levels beyond FY 2014. Similarly, on p. 57 the proposal discusses evaluation of "the benefits of market-based financing and other mechanisms for leveraging ratepayer funds." We hope this focus on research and evaluation of financing options is a move away from any aggressive shift in a relatively short period of time toward only providing financing programs. Consistent with the companies' and other parties' previous comments, the relatively poor performance of energy efficiency programs across the country² that only offer financing, and the oral and written comments of numerous participants at recent public hearings, the Companies stress that caution, additional evaluation, and further research is warranted prior to making such a shift.

State Energy Costs

Pursuant to "general provisions" language in the proposed State budget for FY 2014, the Straw Proposal reflects the use of \$151,585,000 for an "anticipated budget lapse." The proposed appropriation

² The EMP Clean Energy Working Group Report referenced three industry studies and also responses provided to the BPU's 2011 Request for Information for the Professional Program Management Services for New Jersey's Clean Energy Program. Report at 52-53.

of this amount to the State General Fund represents the allocation of more than one third of the proposed NJCEP budget to the State General Fund. We recognize that the Board must comply with the legal requirements of the annual Appropriations Act. However, we feel it important to highlight that the shift of these funds no longer represents the appropriation of “carry-over surpluses,” as has been argued in prior fiscal years. We are concerned about the impact of this continuing practice on utility ratepayers.

Opportunities for Utility Programs

Many of the Companies have implemented energy efficiency and renewable programs, which were approved by the BPU following extensive review by Board Staff, Rate Counsel and other Parties.³ In achieving Board approval, the Companies held 30 day pre-filing meetings with Board Staff and Rate Counsel, and the filings met the stringent minimum filing requirements established by the BPU, including cost benefit analysis for energy efficiency investments, documentation of direct and indirect benefits resulting from renewable energy programs, and a comparison of the similarities and differences between the utility’s proposed programs and OCE programs.

Consequently, the characterization of utility programs as somehow “piecemeal,” (*id.* at p. 17), implying a lack of Board oversight, coordination, or review, is misleading. As stated above, Board Staff and Rate Counsel participate in mandatory “30-day meetings” in advance of the filing, review the Companies’ filings in great detail, issue and review responses to multiple rounds of interrogatories, engage in settlement discussions, and propose modifications to those utility programs to better align them with the State’s Clean Energy programs. Furthermore, the Board’s review of these programs does not terminate with their approval, but extends as part of annual cost recovery proceedings where Parties review program implementation and annual program expenditures while engaging in detailed

³ The Global Warming Response Act, at N.J.S.A. 48:3-98.1, allows utilities to provide for and invest in energy efficiency and renewable energy programs.

discussions with the Companies. Finally, the Companies also note that Board Staff has already established forums that provide both formal and informal opportunities for the Companies, Board Staff, and others to share information about program implementation that can increase coordination between the Companies and Board Staff. Those forums include Program Coordinator meetings and the monthly Energy Efficiency Committee meetings. The Companies also question a statement about the level of confusion among vendors engendered by differences among utility programs. In the context of energy efficiency, renewable energy, and retail energy competition, the BPU has encouraged innovation and multiple offerings in order to bring the benefits of innovation to customers. The Companies believe that the Board has appropriately provided utilities with the flexibility to develop divergent programs, providing lessons about program effectiveness from which all participants can benefit. Finally, while the Companies can strive for coordination of individual aspects of their programs, we note that the Revised Straw Proposal presents no information to indicate that complete uniformity in utility programming provides benefits to consumers, or to the State.

However, the Companies believe that it may be worthwhile to explore opportunities to better coordinate utility programs with the NJCEP as proposed by the Revised Straw Proposal. (*Id.* at p. 57.) The Companies urge the Board to ensure that any collaborative process it initiates to implement this recommendation not increase the time that the Companies, Board Staff and Rate Counsel already invest in reviewing energy efficiency and renewable filings beyond the current 180-day process.

As suggested above, the Companies also respectfully dispute the need for complete uniformity among the Companies either in terms of the timing or content of their energy efficiency and/or renewable program filings. While the Revised Straw Proposal characterizes the timing of utility filings as “random” (*id.* at p. 18), the timing of these filings is triggered by the Companies’ perceptions of customer need and/or by waiting lists for existing Company programs that exceed existing funding, as

well as by schedules established in prior Board orders. Delay in filing or approval required by a uniform filing date requirement would merely frustrate utility customers who wish to participate in these programs and contractors providing services through utility programs.

The Companies also believe that their customers and the State benefit from utility programs that are customized to meet the needs of each utility's unique customer demographics. Furthermore, coordination of utility offerings, if attempted, should be accomplished in a manner that allows for the utility innovation and investment that the enabling legislation was intended to promote. Total uniformity might lead to a "lowest-common-denominator" approach to programming by utilities with varying interests and expertise.

Finally, the Companies believe that any proposed programs must be judged on their own merits, but suggest that, in order to accomplish NJCEP goals as efficiently and cost-effectively as possible, such programs should be designed to align with available utility programs to the extent practicable. Such an approach is also consistent with the EMP Clean Energy Working Group Report:

The Work Group is satisfied that any administrative structure adopted by the Board should allow the utilities that have energy efficiency capabilities to continue to provide such programs when found to be appropriate and cost-effective. Certain utilities have invested in these programs and relied in good-faith on RGGI Section 13, such that it would be unfair to deny them the ability to continue to invest in and offer meritorious EE programs. Thus, while the Work Group does not recommend that the State rely exclusively or inordinately on utilities for the future provision of energy efficiency programs, we recognize that utilities should be afforded an ongoing opportunity to promote energy efficiency programs that are determined to be beneficial and cost-effective and that complement NJCEP programs. Some Work Group members note that utility programs can potentially help statewide programming by piloting different programming that

could be considered by NJCEP for broader application in the future. (EMP Clean Energy Working Group Report at pages 27-28)

Rate Impacts

The NJCEP Revised Straw Proposal proposes to keep the FY 2014 funding level at the same level approved by the Board for calendar year 2012 and to maintain the same allocation factors used in the 2008 CRA Order such that the level of funding collected from each utility in FY 2014 will remain unchanged from 2012. Although natural gas and electric utility customer bills, on the whole, have decreased in recent years, the Companies are sensitive to the overall costs associated with the provision of safe and reliable utility service. Accordingly, facing a combination of aging utility infrastructure, environmental requirements, an increasing call for the use of renewable resources, and other clean energy initiatives, it is critical to chart a course that ensures cost-effective deployment of resources. To this end, the Companies agree with the Revised Straw Proposal recommendation to enhance the manner in which energy efficiency and renewable energy programs are assessed.

We appreciate the opportunity to provide feedback to the Board in establishing the NJCEP funding levels that will help clean energy initiatives in the state to succeed. Please contact me if you have any clarifying questions. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "A. D. Hendry", with a large, stylized flourish at the end.

Andrew D. Hendry
President & CEO



VIA ELECTRONIC MAIL (publiccomments@njcleanenergy.com)

April 26, 2013

Hon. Kristi Izzo, Secretary
New Jersey Board of Public Utilities
44 So. Clinton Ave., 7th Floor
P.O. Box 350
Trenton, NJ 08625

IN THE MATTER OF THE COMPREHENSIVE
ENERGY EFFICIENCY AND RENEWABLE
ENERGY RESOURCE ANALYSIS FOR THE
2013 -2016 CLEAN ENERGY PROGRAM
DOCKET NO. EO11050324V

Dear Ms. Izzo:

New Jersey Natural Gas (“NJNG”) has reviewed the Draft Straw Proposal for New Jersey’s Clean Energy Program (“NJCEP”) Funding Levels for the period from 2014 through 2017 - Comprehensive Energy Efficiency and Renewable Energy Resource Analysis (“Straw Proposal”), which was released on March 28, 2013 by the Staff of the New Jersey Board of Public Utilities (“BPU”). NJNG is included in the more comprehensive written comments that will be submitted by the New Jersey Utilities Association (“NJUA”) under separate cover today. Through this letter, NJNG wanted to share a few thoughts in regard to utility energy efficiency programs.

NJNG has operated energy efficiency programs that are complementary to those of NJCEP since 2009. These programs are generally marketed to our customers as the SAVEGREEN Project. Although elements of our programs have shifted a little from year to year, NJNG as always worked in partnership with NJCEP. In fact, the SAVEGREEN programs have a

primary focus of trying to raise awareness of the “whole house” approach to energy-efficiency. One example of this partnership is that NJNG provides an On-Bill Repayment Program (“OBRP”) for our customers who participate in NJCEP’s Home Performance with ENERGYSTAR (“HPwES”) program. This feature is essentially integrated into NJCEP’s program in lieu of a separate loan. Our OBRP has been extremely well received by customers and promoted by many contractors in our territory.

Plus, NJNG’s team of in-house auditors has performed more than 20,000 HPwES audits providing the Company with considerable insight in dealing with customers and contractors implementing or contemplating comprehensive EE improvements. Our efforts have helped to support many small, local businesses- evidenced by the fact that we are now working with nearly 1,500 contractors in our service territory. Plus, our insights in working with contractors as well as the direct contact with the homes for which we provide audits helped identify the prevalence of the orphan water heater issues and importance of contractor training to address that safety concern.

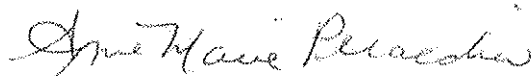
Specific to the CRA straw proposal, we are pleased to see that Board Staff envisions a process that will allow for companion utility programs. NJNG can understand Staff’s desire to take some steps to align utility programs with the strategic plan that will be developed for NJCEP. NJNG is happy to continue to share our insights from our programs to help inform the strategic plan and we intend to actively participate in the work group addressing utility programs. We encourage guidance for that work group to continue to allow utilities to propose creative approaches for energy efficiency programs and to affirm that the alignment of utility programs should not mandate consistency statewide in every aspect. A forced consistency could slow the ability for new approaches to be tested, limit the availability of new features or program elements, and even result in higher administrative costs.

As an example, NJNG is currently working with the United States Department of Energy (“DOE”) on their Home Energy Score program. The Home Energy Score is intended to be similar to a vehicle’s mile-per-gallon rating in that it allows homeowners to compare the energy performance of their homes to other homes nationwide and provides homeowners with suggestions for improving their homes’ efficiency. This national program started as a pilot in

2010 and is still in its infancy. NJNG's SAVEGREEN team members saw an overview of the Home Energy Score at a DOE conference last summer and were anxious to get involved to test whether it might make a meaningful difference in influencing customers to take action to improve their homes. Within a matter of weeks NJNG had signed up as a partner and completed the DOE training. With just over 6 months of activity, NJNG already accounts for approximately 1/3 of all homes rated nationwide and we are continuing to share insights with DOE as they refine their program and have already shared thoughts with Board Staff regarding the potential to consider Home Energy Score for future NJCEP programs. That valuable experience would not have been possible if there was a mandate that all utilities participate. Plus allowing one utility to test this approach allows NJNG to move quickly and at a lower cost than if NJCEP had to consider a statewide launch.

These brief examples showcase how utilities can help partner with NJCEP to test new approaches or launch new features. Additionally, utility communication channels and local connections can be leveraged to promote NJCEP programs as has been done in relation to outreach for NJCEP's enhanced incentives for Superstorm Sandy victims. We hope that the CRA and new NJCEP Strategic Plan continue to allow such productive partnerships to continue.

Sincerely,



Anne-Marie Peracchio
Director- Conservation and Clean Energy Policy

Cc: Elizabeth Ackerman, BPU
Michael Winka, BPU
Michael Ambrosio, AEG
Mona Mosser, BPU
oce@bpu.state.nj.us



April 26, 2013

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

RE: Revised Staff Straw Proposal for NJ's Clean Energy Program (CEP) Comprehensive Resource Analysis (CRA)

To Whom It May Concern,

ACCA-NJ is a non-profit trade association for heating, ventilating, air conditioning & refrigeration contractors in the State of New Jersey. We represent & serve firms large and small who design, install, service & repair air conditioning, heating, refrigeration, air purification & ventilating systems of all sizes & complexities. ACCA members serve the residential, commercial, and industrial sectors. Our membership includes contractors, manufacturers of equipment, wholesalers and distributors, vocational & technical schools, utilities, professionals, & others with an interest in the HVAC industry.

After reviewing the Straw Proposal we would like to offer the following high level comments and will provide more detail as the actual program(s) proposals are developed. We offer to be of assistance at any time to answer any questions or offer any insight from the contractor/industry perspective as the Residential and C&I program(s) are developed. We would like to say that the Residential Energy Efficiency Programs have achieved tremendous energy savings for NJ ratepayers while at the same time contributing to the NJ economy and creating jobs amongst our members and their vendors. With that being said we hope that the focus/funding for Residential EE programs is maintained. We will also take this opportunity to put forth a few core principles that are critical to making any program have successful contractor participation in any program.

- Financing is critical in any Energy Efficiency (EE) program's success, but based on the success of surrounding states financing only programs, we do not feel financing alone will achieve the Energy Master Plan's goals, and believe some level of rebates to offset the cost of the upgrade should be part of any successful Residential EE Program(s).
- Financing also has several stipulations that need to be met to get the mass of contractors to participate, and make the program successful:
 - Contractor Payment timeliness is critical to program success in any financing based program, without a streamlined and rapid payment, many contractors will not be able to afford to embrace the program, and the ones that can afford it, simply won't want to, this is a major hindrance to the current HPWES financing uptake.
 - Approval periods need to be more expedient, and financing paperwork &/or preferably, online applications streamlined as much as possible. Consumer's value instant gratification, and when they have a HVAC problem even more so, making these processes extended hinders achieving the EMP goals.
 - Pre-approvals should be within 24 hours at maximum, if not instantaneous through a website.
 - Full approval (time to be able to commence work) after loan application information has been verified must be less than a week. Documentation should be minimal as Fannie Mae is getting out of the EE loan process.
 - Financing offerings need to have some versatility so even the credit challenged can receive the benefits of NJ Office of Clean Energy's (NJOCE) EE programs.
 - This can be achieved by offering higher rates to those that fail the top level financing.

- Utility On Bill Repayment Financing (OBRP) is a viable option, as it centralizes the energy savings and the upgrade payment, *but only if* it meets all of the above qualifications, *plus* some additional qualifications if it will be successfully be adopted by contractors:
 - Payment has to be made to the contractor for the work completed, not to the homeowner. The programs have QA processes in place and completion certificates; there is no need to pay the homeowner to ensure the work was done. Giving homeowners a check for a completed project that they didn't pay for does not work, our members spent a lot of additional time chasing those payments down, and it reduces contractor participation.
 - The financing offering across the state should be uniform, as well as the application/approval process. It creates confusion in the marketplace and creates administrative burden on the program(s) and contractors when there are different offers and processes for each utility territory.
 - To reiterate rapid loan decision timelines are critical, we have received some member feedback about slow preapproval timelines in current OBRP programs.
 - There have been OBRP offerings in the past by PSEG that offered their utility customers OBRP but the only contractor that could offer that program was PSEG's unregulated service division. Any offering such as this, where any one party was able to benefit from OBRP will be vehemently fought against by our membership, and could be detrimental to OBRP in general.

- We agree with the Straw that in general utility Program(s) should be complimentary, and not competing to the NJOCE Program(s), and that a more coordinated program filing process is advisable.
 - That utility programs should be more closely coordinated with the OCE and across the state
 - Utility offerings should be as uniform across the state as reasonably as possible
 - That NO utility program should *ever* supersede a NJOCE Program, locking contractors out of offering the OCE programs in that utility's area.
 - Commissioner Fox asked if there were specific examples of this point, so we will detail
 - Past PSEG UEZ Zone HP Program, HPwES Contractors could not offer lifelong customers the HPwES Program and either had to not offer them the best incentives available or give their client to PSEG
 - Competition between utility and OCE Programs is also of concern, although not as egregious as superseding an OCE Program, some utility programs have competed against higher level OCE offerings (as have other OCE programs), once again we agree a more coordinated effort (including the contractors) would help eliminate these largely unintentional completions.
 - All Residential and C&I Programs should be open market based, and not restricted to a certain group of contractors, based on labor affiliation, or restricted to anything other than required technical training/certifications.

Sincerely,



Patrick Stewart

Air Conditioning Contractors of America New Jersey Association

Christine Guhl, Organizing Representative
Sierra Club, Beyond Coal Campaign New Jersey
120 Funderne Avenue, Suite 280
Bridgewater, NJ 08807

April 26, 2013

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

**Submission of the Sierra Club
RE: Straw Proposal on the Comprehensive Resource Assessment**

Please accept these comments on the Comprehensive Resource Analysis (CRA) on behalf of the Sierra Club and its 17,000 members in New Jersey. The Sierra Club advocates for energy efficiency as a least-cost resource which reduces dangerous pollution and provides jobs and economic development. Reducing energy demand will control the cost of energy for all consumers by lowering energy rates in New Jersey. Investing in energy efficiency is cheaper than new generation and has a broader positive economic impact. For these reasons, the Sierra Club supports the efforts of the Clean Energy Program to reduce New Jersey's energy use through efficiency.

The Sierra Club's position on the Comprehensive Resource Analysis is that proposed funding levels and energy savings are insufficient. The CRA proposal acknowledges the Clean Energy Program's failure to maximize energy savings. However, the proposed measures for 2014 are inadequate to lower energy costs for residents or significantly reduce emissions in the electric sector. The Sierra Club urges the Board of Public Utilities to work to maximize New Jersey's energy efficiency programs through significant investments in the Clean Energy Program.

Energy Efficiency is a Least-Cost Resource

As New Jersey's energy demand rises, the State will need new capacity. Energy efficiency offers the capacity to meet New Jersey's energy needs at a significantly lower cost than building new generation. This is acknowledged in the 2011 Energy Master Plan¹ and reiterated in the CRA straw proposal. Reducing peak demand through efficiency also avoids the need to run expensive, less efficient power plants which are brought online only at peak times.

¹ http://nj.gov/emp/docs/pdf/2011_Final_Energy_Master_Plan.pdf

New Jersey is currently pursuing a proposal to construct three new natural gas plants using ratepayer subsidies amounting to nearly \$3 billion². Based on the formula cited in the 2011 EMP, a comparable investment in residential energy efficiency would save New Jersey customers \$5.4 billion on their electric utility bills. This figure does not account for the vast savings from avoided health and environmental externalities associated with the extraction and burning of fossil fuels. In addition, as recognized in the CRA, there are significant economic benefits that result from energy efficiency through job creation and keeping energy dollars in New Jersey.

As underscored by the CRA, the primary goal of the 2011 Energy Master Plan is to “drive down the cost of energy for all customers”. Investing ratepayer dollars in energy efficiency accomplishes this goal twofold. Utility customers who take advantage of the State’s energy efficiency programs reduce their energy bills by reducing their energy use. Those who do not take advantage of efficiency programs still benefit from lower wholesale energy costs because of the reduced demand.

BPU Should Strive for EnerNoc’s High Achievable Potential

The EnerNoc study relied upon by Staff to develop the CRA proposal defines High Achievable Potential as “a maximum target for the EE savings that an administrator can hope to achieve through its EE programs”. The High Achievable Potential takes into account cost-effectiveness, technical capability as well as assumptions about the efficiency market potential. The EnerNoc study employs the Total Resource Cost test for cost-effectiveness of efficiency targets. According to the study, economic potential is significantly higher than even the High Achievable Potential. The Sierra Club urges the Board of Public Utilities to strive for High Achievable Potential or greater. The High Achievable Potential is a target, not a mandate, and there is no legitimate reason why the Board should limit funding levels to a median goal.

The primary policy goal Staff has laid out for the Board’s clean energy programs is to “maintain New Jersey’s leadership position in the promotion and use of energy efficiency and renewable energy, so the state remains attractive to new residents and business investment.” This position is already in jeopardy, as indicated by the American Council for an Energy Efficient Economy (ACEEE) Scorecard³. New Jersey’s position has fallen every year for the last five years and is now number 16 overall. This is primarily due to Governor Christie’s diversion of clean energy moneys to the general fund and the withdrawal of New Jersey from the Regional Greenhouse Gas Initiative. Both of these actions impose severe limitations on efficiency investments.

The second policy goal Staff laid out for the Board is to “reduce the total cost of energy to customers, both residential and business, thereby enhancing the competitiveness of New Jersey’s economy”. The CRA acknowledges that aiming for savings levels in EnerNoc’s High Achievable study would lead to the lowest overall energy costs to the state. However, the Board of Public Utilities has historically limited the funding levels, preventing the State from achieving all cost-effective energy efficiency. By aiming

² <http://www.njspotlight.com/stories/12/10/03/payments-proposed-at-power-capacity-auction-impact-n-j-ratepayers/>

³ <http://aceee.org/research-report/e12c>

for the highest level of cost-effective efficiency, New Jersey can achieve economies of scale which may not be met by benchmarking funding and targets to median levels.

The Sierra Club urges the Board to benchmark funding levels to Enernoc's High Achievable Potential. By striving for a median goal between Achievable High and Achievable Low Potential New Jersey will not realize the full benefits of energy efficiency. This amounts to higher energy costs for residents, fewer jobs created, more polluting emissions and an economic disadvantage due to lost investment opportunities. The High Achievable Potential equals approximately 1.47% savings per year which is equivalent to or lower than the targets of other Northeastern states⁴.

New Jersey Should Model Efficiency Goals and Funding after Comparable States in the Region

The Sierra Club urges the Board of Public Utilities to scale up efficiency funding levels and spending to meet those of other states in the region. Efficiency budgets in New Jersey are significantly lower than many Northeastern states and New Jersey's energy savings reflects that. Furthermore, New Jersey's actual efficiency expenditures are even less due to an annual budgetary diversion of clean energy moneys by the Christie Administration. The Sierra Club is encouraged to see that Staff has set a goal of fully committing/expending all clean energy moneys for efficiency to alleviate this issue in 2014.

Another serious concern is that when budget and expenditures are equivalent, New Jersey's energy savings are not. According to the Northeast Energy Efficiency Partnership Policy Snapshot⁵, efficiency expenditures are comparable for New Jersey and Pennsylvania, but Pennsylvania is achieving much greater savings. This is also true for Maryland. This difference implies that New Jersey is lacking in its administration of energy efficiency programs, as acknowledged by Staff. The Board's decision to move programs to one administrator is intended to improve implementation of the Clean Energy Program. The Sierra Club urges the Board to closely evaluate the single-administrator to ensure that the highest possible energy savings are achieved.

Reducing Greenhouse Gas Emissions Must be a Consideration in Post-Sandy New Jersey

Climate disruption is undoubtedly affecting New Jersey and will continue to have serious implications for the state if action is not taken to reduce greenhouse gas emissions. More frequent and severe storms, like Hurricane Sandy, are already occurring. Sea level rise and storm surges are of particular concern to coastal states. New Jersey is facing prolonged heat waves which strain the electric grid. New Jersey must not only adapt to the unavoidable consequences of climate disruption, but also work to mitigate potential future climate impacts. Energy efficiency reduces greenhouse gas emissions and provides security to the electric grid through demand reduction.

The Sierra Club is encouraged that Staff has acknowledged the need for the BPU to actively participate in rebuilding following Hurricane Sandy. Massive rebuilding efforts going forward provide a unique opportunity to increase New Jersey's energy efficiency. Many old homes and buildings that were destroyed did not adhere to recent building codes. Old appliances and industrial facilities will need to

⁴ <http://neep.org/uploads/policy/EE%20Policy%20Snapshot%20Updated-5.2.12.pdf>

⁵ http://neep.org/uploads/policy/NJ_potential.pdf

be replaced with new, more efficient technologies. The Sierra Club urges the BPU to require all reconstruction be completed in the most energy efficient way possible.

New Jersey Should Adopt an Energy Efficiency Resource Standard

An Energy Efficiency Resource Standard (EERS) would provide the funding and investment security necessary to meet all cost-effective energy efficiency. Twenty-six states have set EERS mandates⁶ to reduce energy use by a designated year. Adopting an EERS would result in lower customer costs, lower emissions, job-creation and economic development for New Jersey.

Adoption of an EERS has resulted in significantly higher savings even in states with existing energy efficiency programs. This is exemplified by Washington and Iowa. Prior to adopting EERS mandates these states achieved approximately 0.6%-0.8% annual energy savings. Upon the adoption of an EERS, Iowa's energy savings jumped to 1.2% and Washington's savings went up to 1.5% annually.

A successful Energy Efficiency Resource Standard must establish a binding, long-term energy savings target[s] for utilities. Funding for efficiency through an EERS would continue to be provided by the Societal Benefits Charge (SBC) during program ramp up. Eventually, the SBC could be phased out and all programs and funding would be handled by New Jersey's utilities. The Board would continue to regulate these programs through the ratemaking process to ensure proper administration. Utilities are the natural choice for implementing efficiency programs as they have access to customers. An EERS would alleviate the issue of budgetary diversions of clean energy money because all efficiency programs could be transferred to the utilities. An EERS would also ensure the lowest cost and greatest amount of energy savings for the state.

⁶ <http://aceee.org/press/2010/12/reaching-tipping-point-majority-states-have-now-adopted->



Consolidated Energy Design Inc.

● LEED® Integrated Energy Conservation Systems ● Real-Time Pricing Systems ● Indoor Air Quality ● Solar & Trigeneration ● Water Conservation



April 26, 2013

The Honorable Kristi Izzo
Secretary, New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
PO Box 350
Trenton, NJ 08625-0350

Re: Comments on the Staff Straw Proposal for New Jersey's Clean Energy Program Comprehensive Resource Analysis

Dear Secretary Izzo,

Please accept these comments and recommendations on the Staff Straw Proposal for New Jersey's Clean Energy Program Comprehensive Resource Analysis ("Proposal") issued by the NJ Board of Public Utilities ("BPU") on March 28, 2013.

It was a pleasure testifying before President Hanna and Commissioner Fox on Tuesday, April 23, 2013. This correspondence seeks to memorialize our comments and expand upon them where necessary.

RELEVANT BACKGROUND:

While most of the existing New Jersey Office of Clean Energy ("NJOCE") programs have served the NJ ratepayer well in their various formats over close to 30 years, times and circumstances have changed and hence we respectfully suggest that the existing Energy Efficiency (EE) programs change as well to meet the new challenges posed by the 21st century.

Over the last 60 years the population of America has increased 2X while the electricity traveling across our power lines has increased 7.5X. There appears no end in sight to America's thirst for energy and quite frankly our existing generation and transmission lines can't keep up with the pace.

800-CED-0051 (Toll Free)
732-681-8800 (Office)
732-681-8802 (Fax)
reym@cedinternational.com (Email)

1933 Highway 35
Suite 105, No. 367
Wall, New Jersey 07719-3502
www.cedinternational.com

We are quickly approaching the **“perfect energy storm”**. We need new transmission lines and power generation but no one wants them “in their backyard”. We don’t have to look far to see how true this statement is than NJ. The governor has approved three (3) new power plants and yet only one has begun construction with serious doubts that it will be completed on schedule and the other two (2) plants are embroiled in legal battles. Much the same is true with new proposed transmission lines.

To make matters worse, Oyster Creek is set to be retired in a few years and where is the 690 MW loss in generation going to come from?

A large number of the existing heavy polluting “peaker plants” are scheduled for shut down in the next few years unless they take actions consistent with the Energy Master Plan (“EMP”) to renovate, become more efficient and bring emission levels down to meet NJDEP standards. We applaud this action but where is the loss in generation going to come from if as predicted many of these “peakers” go offline forever?

As it is the PJM Interconnection (“PJM”) can’t provide sufficient power for NJ during extremely hot and humid days without these “peaker” plants coupled with Capacity Demand Response (“DR”). NASA’s Goddard Institute for Space Studies states that 12 of the hottest years on record have occurred in the last 15 years! NOAA who has been keeping meteorological records since 1880 says that 14 of the past 15 years have been the hottest!!

Super storm Sandy and Irene proved beyond a shadow of a doubt that NJ’s existing electrical infrastructure is not “hardened” or “resilient” enough to deal with the devastation these storms can bring. There is mounting evidence that supports the premise that these are no longer “100 year storms”. These storms will become more commonplace and there is not enough money NJ ratepayers can throw at “hardening” the existing electrical infrastructure to prevent millions of people being without power yet again and again.

PJM is responsible for the electric traffic in 13 states including Washington, DC and NJ. So NJ is not their only problem. PJM is having serious problems with reliability, stability and resiliency especially with the Frequency Regulation issues brought about by intermittent generation from solar and wind. These problems will only increase as states start to reach their RPS goals.

Put all of the forgoing into the mix and we have the **“perfect energy storm”**. The resulting black outs will be intolerable by the NJ population at large and an economy that is by many reports still anemic (particularly in those NJ sectors heavily impacted by Super storm Sandy).

RECOMMENDATIONS TO AVERT A CATASTROPHE IN NJ:

We are not trying to be “alarmist” by using the word “catastrophe” but the aforementioned facts are clear. We need to take action right now to avert a catastrophe. Our economy, our way of life, our Homeland Security, our future and the future of the generations that come after us depend on the choices we make now. On the positive side, the recommendations included in these comments will not only help resolve problems with NJ’s electric infrastructure and hence avert the **“perfect energy storm”**, but will put thousands of people back to work for decades which will make our anemic economy rebound and be a model for every other state to emulate.

May we suggest the following:

1. Develop a **Smart Grid Program** which will include but not be limited to incentives for the following:
 - a. Enhanced Building Automation (15% - 20% annual energy savings from intelligent control)
 - b. Fully Automated Demand Response
 - c. Frequency Regulation
 - d. Advanced Energy Storage
 - e. Advanced Data Mining, Monitoring and Fully Automated Energy Analysis sub metering (To prove energy savings without the need for human intervention and isolate electrical equipment problems before said problems turn into equipment failures, etc.).
 - f. Smart Grid does not mean so called "Smart Meters". "Smart Meters" are hardware that become obsolete after 2 – 3 years but for which the electric ratepayer continues to pay for at least a 10 year period at ~10.5% interest. No reasonable person would make that investment on computers for their facility so how would it make sense to throw away ratepayer money on "Smart Meters". Utility grade shadow meters cost less money, record data as quickly as once every second and provide far more useful information/data. Let's put ratepayer money into smart grid software that can adapt to future needs and hence not become obsolete.
 - g. Smart Micro Grids (Large facilities, university and corporate campuses, municipalities and cities)

2. Develop a **Distributed Generation Program** (Where CHP is not recommended). Some of the benefits include, but are not limited to the following:
 - a. Distributed Generation ("DG") equipment is the same as CHP except that one does not use the waste heat for other purposes. By default that means that this type of generation is very clean and should be approved by the NJDEP (especially Tier IV i and later Tier IV f machines with emission controls).
 - b. DG uses power at the facility it is serving and hence has no transmission losses (less polluting). It is possible that existing "Peakers" that will be phased out can be replaced with DG *strategically* scattered throughout the state of NJ where it is actually needed by the Commercial & Industrial sector.
 - c. Unlike Emergency Standby Generators that are typically "dirty", can only run for about 48 hours nonstop before "freezing up" and only handle emergency loads in a building (an elevator, some lighting, some receptacles, some communication, etc.), DG are "clean", can run over 8000 hours continuously and can provide 100% power for a facility (They can "island" a facility in the event of a power outage from power grid stress, cyber attack of the power grid or a damaging storm).
 - d. After Super Storm Sandy many businesses in NJ were shut down for 1 – 2 weeks resulting in a major hit to the economy.

\$25,000,000,000 (\$25 trillion)

Estimated dollar value of the lost business activity as a result of Sandy, according to financial analysis firm IHS Global Insight.

We can't afford another super storm.

- e. With the aid of **Smart Grid technology**, DG can also be used for multiple income producing purposes such as peak shaving, base loading, DR and Frequency Regulation. In order to use DG in these ways, expertise in the form of architects, engineers, telecom, trades (electricians, pipe fitters, controls technicians, sheet metal contractors, riggers, masons, general contractors, etc.) and others will be required. This means JOBS – JOBS – JOBS!
- f Everyone benefits:
 - 1) Facility owners.
 - a) Receive incentives from PJM for DR and Frequency Regulation;
 - b) Realize reduction in their utility bills from peak shaving and base loading;
 - c) Can keep their operations running in “island mode” thus keeping their employees gainfully employed during power outages. Hence the economy does not get as negatively impacted as it would without DG.
 - 2) PJM.
 - a) Would be more reliable, stable and resilient
 - b) Would not need as many “Peakers”. Less pollution, transmission losses, Frequency Regulation issues.
 - c) Wholesale electric rates to electric rate payers would go down.
 - 3) Utility Companies.
 - a) Would have more time to design, engineer and implement T&D “hardening”.
 - 4) NJBPU.
 - a) Far less complaints as a result of outages.
 - b) More time to redirect resources to study other national and European clean energy programs and learn from their mistakes as they embark on Demonstration Pilots to test out additional ways to reduce energy rates (including promotion of EVs).
 - 5) Governor’s Office.
 - a) Benefits from robust economy. Can put back \$800 million into Clean Energy Program to replicate success of NJOCE.
 - b) Benefits from improved Homeland Security.
 - c) Avert the very real potential of a catastrophe caused by the “**perfect energy storm**”

3. Streamline P4P Program.

- a. The existing P4P program was created with all the right intentions namely to ensure that the energy rate payer got their money’s worth by only paying contractors/end users based on good performing energy projects.
- b. Sadly, this program has never created sufficient jobs. Why?
 - 1) It is hampered by the requirement of a computer model that is hotly contested by contractors (including highly qualified, experienced contractors).
 - 2) This computer model should no longer be required.
 - 3) Various advanced data mining, monitoring and fully automated energy analysis sub metering programs should be tested and approved to Measure & Verify energy savings with no need for human intervention.

- 4) The Market Manager should simply assess whether a proposed energy project has a “reasonable” chance of success. If it does, then the contractor should simply be given an approval to move forward with the project. The aforementioned three (3) steps will result in a major increase in JOB CREATION.
 - 5) The initial intent of the P4P program will remain intact because the contractor will not get paid the full incentive for an energy project unless the aforementioned sub metering system proves an energy savings of at least 15%. Energy Savings in excess of 15% shall be paid to the contractor in the form of a bonus to help pay down the project and incentivize the contractor to do a better job for the client.
- c. The NJ government “Red Tape” commission should look into ALL complaints with respect to how the Market Manager is running the program and, where appropriate, make necessary changes to streamline the process.

CONCLUDING COMMENTS:

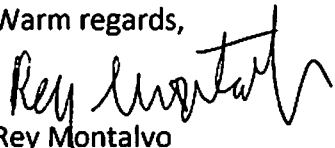
ALL NJOCE programs should pay incentives based on performance. This will assure that the rate payer gets the “biggest bang for the buck” from their Societal Benefits.

California has been the national leader in energy programs including smart grid technology. However as a result they have also made many mistakes. NJ can learn from those mistakes and make our EE programs better and ultimately take a leadership role in smart grid and DG technology in America.

In the process we can rebuild our economy and have a more reliable, stable and resilient power grid.

Thank you for your kind attention to our comments and recommendations.

Warm regards,


Rey Montalvo
President & CEO

**Cc: President Robert Hanna
Commissioner Jeanne Fox**



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

April 26, 2013

VIA REGULAR AND ELECTRONIC MAIL

Honorable Kristi Izzo, Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
P.O. Box 350
Trenton, New Jersey 08625

**Re: I/M/O Comprehensive Energy Efficiency and Renewable
Energy Resource Analysis for the 2014-2017 Clean Energy
Program ("CRA IV")
BPU Docket No.: EO11050324V
Comments on the Revised Straw Proposal (March 28, 2013)**

Dear Secretary Izzo:

Enclosed please find original and ten copies of comments submitted on behalf of the New Jersey Division of Rate Counsel in connection with the above-captioned matter. Copies of the comments are being provided to all parties 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

c: (via e-mail)
OCE@bpu.state.nj.us
Rachel Boylan, Esq., BPU
Elizabeth Ackerman, BPU
Mike Winka, BPU
Anne Marie McShea, BPU
Mona Mosser, BPU
Benjamin Hunter, BPU

**I/M/O Comprehensive Energy Efficiency and
Renewable Energy Resource Analysis for the
2014-2017 Clean Energy Program (“CRA IV”)
BPU Dkt. No. EO11050324V**

**Re: “OCE Revised CRA Straw Proposal – Proposed Funding Levels
FY14-FY17 (dated March 28, 2013)”**

**Comments submitted by the
New Jersey Division of Rate Counsel**

April 26, 2013

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 regarding the April 17, 2013 Revised Straw Proposal (“Revised Straw Proposal”) for funding levels for the New Jersey Clean Energy Program (“NJCEP”, “CEP”) for the 2014 through 2017 budget years. Rate Counsel previously presented comments in this matter regarding Board Staff’s original Straw Proposal on October 26, 2012.¹ The Straw Proposal contained Board Staff’s proposed funding levels for the four twelve-month periods ending June 30, 2014, June 30, 2015, June 30, 2016, and June 30, 2017, referred to in the text of the Straw Proposals as the 2014 through 2017 budget years.²

¹ Re: Staff Draft Straw Proposal NJCEP 2013 through 2016 Funding Level Now the NJCEP 2014 through 2017 Funding Level Comprehensive Energy Efficiency and Renewable Energy Resource Analysis August 22, 2012 BPU Docket No.: EO11050324V, Comments of the New Jersey Division of Rate Counsel, October 26, 2012.

² Within the Revised Straw Proposal, references to ‘Budget Years’ have been replaced by the term ‘Fiscal Year’.

Subsequent to Rate Counsel's original comments on October 26, 2012, Board Staff circulated a revised Straw Proposal ("Revised Straw Proposal") on March 28, with further revision on April 17, 2013, which significantly altered the original Straw's proposed funding levels. Board Staff's proposal now requests that the Board establish funding levels for Fiscal Year ("FY") 2014 only, and defer a decision on funding levels for FY 2015, 2016 and 2017 until after the Board engages a new Program Administrator ("PA"), and the PA develops a Strategic Plan transitioning the NJCEP programs to meet Governor Christie's stated goals, as laid out in the 2011 Energy Master Plan ("EMP").³ The Straw Proposal proposes to collect from New Jersey ratepayers \$227.665 million in FY14 to fund the OCE's existing energy efficiency ("EE") and renewable energy ("RE") programs, including costs to administer them, as well as certain Economic Development Authority ("EDA") programs.⁴ Finally, the Straw Proposal proposes to establish a separate new budget category for Combined Heat and Power and Fuel Cells ("CHP-FC") programs, which was previously included within the EE program budget.⁵

As a preliminary matter, Rate Counsel recommends that the OCE should strive for more accuracy in matching program budgets with actual spending. The historic inability of the CEP or the Market Managers to spend the entire CEP annual budget and increase savings needs to be addressed in the budgeting process. Rate Counsel submits that program budgets should be based on realistic projections of program activity. Almost all of the budget should be spent each year, and the OCE should propose a properly developed and supported plan to do so.

In addition, as a general matter, cost-benefit analyses should also be considered in directing the annual program budgets to ensure that programs are likely to achieve the greatest

³ Revised Straw Proposal, p. 46.

⁴ Revised Straw Proposal, p. 54.

⁵ Revised Straw Proposal, pp. 47-48.

savings at lowest cost to ratepayers, while avoiding cream skimming and lost opportunities. Otherwise, programs may not be prioritized in an effective way and there may be large amounts of waste due to free-ridership and improperly designed programs. Finally, the CRA should be based on realistic assessments of future energy costs in order to measure savings.

As discussed in detailed below, Rate Counsel supports the OCE's proposal to await the engagement of the PA and the development of a Strategic Plan before setting funding levels for the FY 2015, 2016 and 2017. However, Rate Counsel has concerns about the OCE's proposals for FY 2014, which are set forth below

I. ENERGY EFFICIENCY

The March 28, 2013 CRA Straw Proposal (“Revised Straw Proposal”) puts forth a more balanced, transparent approach for EE programs than the August 21, 2012 Straw Proposal. In particular, Rate Counsel supports the revised proposal’s more cautious approach transitioning to financing, increased emphasis on coordination with utilities, increased evaluation efforts, attention to management of funds, and limiting the budget proposal to a single year given the anticipated changes associated with the CEP at this time.

A. General EE Comments

Generally, the Revised Straw Proposal takes a measured approach to incorporating financing into CEP incentives. Unlike the August 21, 2012 Straw Proposal, the current version does not advocate for a rapid shift from rebates to financing; rather, it recommends “eliminating a specific proposed allocation of funding to financing programs and replacing it with a process for testing the potential benefits of financing programs through pilots and evaluation and other research, prior to committing a specific level of funding to financing programs.” Revised Straw Proposal, p. 15. Consistent with our previous comments, Rate Counsel supports this approach.

Rate Counsel agrees with the increased emphasis on coordination with utilities, as discussed on pages 7 and 18 of the Revised Straw Proposal. However, Rate Counsel would like to see a more specific timeline for convening a working group focused on improving CEP coordination with utility EE programs.

Rate Counsel also appreciates the increased attention to program evaluation. As discussed on pages 21 and 22 of the Revised Straw Proposal, the OCE recommends a review of the most recent program evaluation plan and an increase in funding for evaluation compared to

historical levels. As with utility coordination efforts, Rate Counsel would like to see a more specific timeline for the review of the program evaluation plan. Rate Counsel looks forward to working with the OCE and stakeholders in developing and refining EE program evaluation activities.

Consistent with our previous comments, Rate Counsel also supports a review of CEP's fund management activity to better coordinate the collection of funds with the payment of incentives. Revised Straw Proposal, p. 16.

Unlike the August 21, 2012 Straw Proposal, the Revised Straw Proposal does not propose funding levels for the entire four year period. Reasoning that "the EMP sets out numerous goals and objectives, such as 'Redesigning the delivery and financing of State energy efficiency programs' that requires additional evaluation", the Revised Straw instead proposes that the Board establish funding levels for fiscal year ("FY") 2014 only and defer a decision on the funding levels for FY2015-2017. The FY2015-2017 funding levels would then be informed by results of additional evaluation and a Strategic Plan. Revised Straw Proposal, p. 46. The Strategic Plan is intended to guide the CEP as it moves from rebate and incentive-based programs to market-driven programs and was a required element of the OCE's PA proposals. Rate Counsel understands that the award for the PA Request for Proposals and the development of the Strategic Plan await resolution. Revised Straw Proposal, p. 15. Therefore, Rate Counsel agrees that the determination of funding levels for FY2015-2017 at a later date will allow time for the transition to a new PA, and possibly the development of a Strategic Plan. Also, by that time, other efforts supporting the basis for CEP EE program funding may be underway or completed, such as a review of alternative financing mechanisms, development of a new

evaluation plan, and increased utility coordination. Rate Counsel supports revisiting the CRA at a later time.

Meanwhile, Rate Counsel has a number of concerns with the Revised Straw Proposal for EE, as set forth below.

B. EE Savings Levels and Allocations among Sectors

Rate Counsel notes that the portfolio and sector level savings and expenditure forecasts developed and proposed for the entire energy efficiency programs for 2013 to 2016 need further refinement. In general, Rate Counsel notes that the projected savings levels for FY2013 are much higher than historical levels. Rate Counsel understands that the energy savings forecasts will be further refined after the new PA is in place, and evaluation and benchmarks studies are completed, among other tasks. Rate Counsel looks forward to commenting on the revised savings projections when they become available. The Board should provide for the submission of comments by interested parties, including Rate Counsel, once the new projections are released. Meanwhile, Rate Counsel's observations regarding the current projections are set forth below.

1. Electricity EE Savings Forecasts

On pages 40 to 45 of the Revised Straw Proposal, the OCE presents its energy savings and expenditure forecast for NJCEP for 2013 through 2016 based on its review of the savings and expenditure estimates developed by EnerNOC and Applied Energy Group ("AEG"). Relative to the annual sales projection for 2013, OCE has projected over 1.2% in EE electric energy savings for the residential sector. The projected savings level in 2013 for the residential

sector is in the range of historical achievements. However, the OCE residential savings projection represents a 60% increase above the level achieved in 2011 and 2012. For the C&I sector, the OCE projects 1% annual savings in 2013, which assumes that savings will nearly triple relative to the historical savings rate in 2011 and 2012.⁶ Historically, annual electric energy savings for the C&I sector in New Jersey ranged from 0.2% to 0.4% over the past 10 years.

2. Natural Gas EE Savings Forecasts

On pages 40 to 45 of the Revised Straw Proposal, the OCE presents its gas savings and expenditure forecast for NJCEP for 2013 through 2016 based on its review of the savings and expenditures estimates developed by EnerNOC and AEG. Unlike its projection of residential electric savings, the OCE proposes a significant reduction in residential gas savings from the current savings level. However, Rate Counsel notes that the CEP has recently achieved and exceeded the OCE's highest energy savings forecast of 0.16% as well as the EnerNOC's Achievable High Potential of 0.2%.⁷ Similar to its forecast for C&I electric savings, the OCE's forecast of 2013 natural gas savings for the C&I sector is roughly triple the historical annual energy savings level. However, the C&I gas savings level was only 0.13% of annual sales or about 300,000 dekatherms ("Dtherms") in 2011 and 2012, yet the OCE's projection pushes the C&I gas savings level to nearly 0.4% or about 889,000 Dtherms in the following year, 2013. Historically, annual gas energy savings for the C&I sector ranged from less than 0.1% to 0.25% over the past 10 years in New Jersey.

⁶ The average savings levels from 2011 and 2012 are about 0.8% and 0.3% of annual sales for the residential and the C&I sectors respectively.

⁷ See table entitled "Natural Gas Energy Efficiency Potential Savings", Revised Straw Proposal, p. 37.

C. EE Budget

Rate Counsel recognizes that the CEP budget will be further refined once the new PA is in place. Presently, the OCE's budget proposal does not break down proposed spending by electricity or gas sector and is limited to one fiscal year, FY2014. Revised Straw Proposal, pp. 45 and 54. In contrast, the OCE's program savings and expenditure analysis goes out for 4 years. While Rate Counsel agree with limiting the proposal to one year at this time, it would nonetheless be helpful to know what level of budget the OCE is expecting over the next four years, even if only for illustrative purposes. Thus, Rate Counsel recommends that the OCE present its preliminary, long-term budget forecast. Once the PA is in place, Rate Counsel recommends that the OCE should release for comment a draft budget proposal with more detail, as well as four-year projections going forward. Rate Counsel looks forward to a further review of the budget projections at that time. In the interim, the OCE should note that its future budget estimate is subject to change based on the progress made in FY14 and further studies.

D. Evaluation

Rate Counsel strongly supports the OCE's recommendation for an increased level of evaluation, as compared to past years. Revised Straw Proposal, p. 22. Although the OCE does not provide any specific budget recommendation, 2% of the total budget would be a reasonable budget level for evaluation, as proposed by the OCE. Rate Counsel also strongly recommends that the OCE devote resources to executing and completing planned evaluation activities in a timely manner in order to inform the budget process. Further, Rate Counsel recommends that, as presented in the 2010 evaluation plan, evaluation studies should be comprehensive and include impact evaluation, process evaluation, measure baseline evaluation, avoided costs, and protocol

updates.⁸ Rate Counsel notes in particular that process evaluation is critical given that (a) the CEP has been underperforming, in terms of annual electric and gas savings, relative to savings achieved by other states and utilities over many years, and (b) the results of the evaluation would be very useful for re-designing the existing programs to be administered by a new program administrator starting next year.

The CEP has not met its own targets for EE program evaluation activities. The 2010-2011 Evaluation and Research Plan proposed various evaluation activities for 2010 and 2011, but the majority of such activities have not been conducted to date as of April 2013.⁹ This point is evident when comparing the historical budget and expenditures on CEP's evaluation activities. From 2009 to 2011, only 8% to 28% of the annual evaluation budget was spent, which represents a total of \$2 to \$3 million unspent annually.¹⁰

The Revised Straw proposal makes clear that New Jersey is spending significantly less on evaluation than other states. The CEP spent \$1.1 million on evaluation in 2011, about 0.6% of the total CEP budget. Revised Straw Proposal, p. 20. In contrast, the Revised Straw Proposal notes that typical evaluation budgets are in the range of 2% to 5% of program costs. Straw Proposal, p. 22. For example, a 2009 ACEEE report found that both Massachusetts and New

⁸ Rutgers Center for Energy, Economic and Environmental Policy ("CEEPP") 2010. 2010-2011 Evaluation and Research Plan: New Jersey's Clean Energy Program Energy Efficiency and Renewable Energy Programs, Final Report (January 27, 2010).

⁹ Such studies include, but are not limited to the following: (a) Residential Appliance Saturation Survey, (1) C&I Equipment Saturation Survey, (2) Low Income Program Assessment, (3) EE Impact on Advanced Energy Building Code, (4) SmartStart Buildings Impact Evaluation, (5) Residential and C&I New Construction Baseline Studies, (6) Pay for Performance Process Evaluation, and (7) Local Government Energy Audits Impact Evaluation.

¹⁰ Percent of budget spent was calculated using data from the "Admin" worksheet of the "2001-2011 Program results(2).xls" workbook (available under 2011 reports at <http://www.njcleanenergy.com/main/public-reports-and-library/financial-reports/clean-energy-program-financial-reports>).

York have spent or plan to spend about 2% of their energy efficiency program budgets on evaluation.¹¹

Rate Counsel also notes that while the 2010-2011 Evaluation Plan states that the “evaluation plan should be updated annually as part of the program and budget planning process” (CEEEP 2010, p. 16), no such update was made in 2011 or 2012. Rate Counsel supports the OCE’s recommendation that the most recent program evaluation plan be reviewed. Revised Straw Proposal, p. 22.

E. Alignment with EMP Goals

The 2011 EMP provides goals and a high-level framework for guiding EE program budgets. The Revised Straw Proposal summarizes the goals for EE and Demand Response (“DR”) established by the EMP as follows:

- Reduce electric consumption by 2020 to below 80,000 GWh (approximately 17% reduction);
- 3,624 MW of DR – 17% reduction.¹²

These goals reflect modifications to the 2008 EMP goals in order to reflect PJM’s updated forecasts. Specifically, the peak demand reduction was reduced from a 5,700 MW load reduction to a 3,634 MW load reduction, and the percentage energy demand forecast percentage reduction was lowered, but the original goal of reducing energy consumption below 80,000 GWh by 2020 was retained.¹³

¹¹ ACEEE 2009. Saving Energy Cost-Effectively: A National Review of the Cost of Energy Saved through Utility-Sector Energy Efficiency Programs

¹² Straw Proposal (August 21, 2012), p. 12.

¹³ “The targets that were set forth in the 2008 EMP have been revised to reflect PJM’s most recent peak demand forecasts. The State’s peak demand reduction goal in 2020 is 3,634 MW, or

Rate Counsel offers the following recommendations for the anticipated budget updates, once the PA is in place. The EMP goals should be translated into the energy reductions (and coincidence with peak energy levels) that are expected to result from the proposed funding levels for EE and DR, while taking into account the savings expected from programs outside of the CEP (i.e., utility EE RGGI-funded programs and the SBC Credit Program). While the EMP does not provide explicit annual goals, the budgeting process should be contextualized in terms of its contribution to the EMP goals, and provide discussion of the levels of reductions that will be needed in future years, during and beyond the current CRA planning period, to achieve the EMP goals. For example, the anticipated updated projections should project baseline energy usage and corresponding emissions levels against which progress toward the electric consumption and demand response goals could be measured. This discussion and the assessment of a long-term path toward the EMP goals would guide the CEP to achieve the EMP goals.

To achieve the EMP's goals, the OCE notes that it will coordinate with the State Energy Office, the Departments of Community Affairs and Environmental Protection, the new PA, Rate Counsel, utilities, program partners and other stakeholders to develop methods and/or programs aimed at achieving these objectives. Further, the OCE states that it will seek to reinforce the goals established in the EMP through the funding levels it proposes. Revised Straw Proposal, p. 4. Rate Counsel concurs that coordination across the various entities mentioned by the OCE is

a reduction of 17% relative to PJM's 2011 demand forecast." (2011 New Jersey Energy Master Plan, December 6 2011, p. 29.)

¹³ E.g., per the April 27, 2007 Order

necessary and desirable, and agrees that the funding levels proposed in the CRA should support the achievement of the EMP goals.¹⁴

Rate Counsel also acknowledges the fact that much of the coordination among utility and CEP programs will occur through the strategic planning process once a new administrator is in place. Therefore, Rate Counsel does not believe that any analysis of how the CRA will help achieve the goals of the EMP should wait until a new PA is established. The OCE should convene a stakeholder working group early on to inform this process.

F. Impact from Other EE Programs

The Revised Straw Proposal correctly states that the impact from other programs needs to be considered in the context of meeting the EMP goal statewide.¹⁵ However, the Revised Straw Proposal does not consider the budgetary and energy savings impacts of the SBC Credit Program and other EE programs, such as utility-sponsored RGGI programs.

In addition to affecting cash flow for the CEP, the SBC Credit Program will produce energy savings and could affect the distribution of EE program benefits across sectors, which should be considered in the overall development of goals for the CEP. Since the design of the SBC Credit Program is still under consideration in a separate docket (BPU Dkt. No.

¹⁴ E.g., per the April 27, 2007 BPU Order initiating the third CRA process, “the 2009 through 2012 funding levels must support and implement the goals and strategies of the Draft EMP.” See I/M/O Comprehensive Energy Efficiency and Renewable Energy Resource Analysis for 2009-2012 Clean Energy Program, BPU Docket No. EO07030203, (Order, 9/30/08), p. 5.

¹⁵ Regarding savings, the OCE states that “energy savings must be considered comprehensively, and those savings delivered by NJCEP programs should complement other non-NJCEP activities such as stricter building codes, higher appliance standards, utility programs and EE in state facilities.” Revised Straw Proposal, p.6. Regarding costs, see page 7 of the Revised Straw Proposal: “A number of utilities offer EE programs that supplement the NJCEP. Because the NJCEP and utility efficiency and renewable energy programs are both funded by ratepayers, Staff believes that the costs associated with such programs should inform the level of funding for the NJCEP.”

EO12100940), the OCE should calculate a range of scenarios for the SBC Credit Program's energy savings contribution to state goals and cash flow impacts. These ranges could be incorporated in the anticipated future projections.

The Straw Proposal also does not consider the budgetary and energy savings impacts of the utility EE programs toward the EMP goals. As with the SBC Credit Program, the OCE should consider utility RGGI programs' cash flow impacts and energy savings contributions to state goals using a multiple scenario analysis.

G. Bidding into the PJM Markets

As noted in the Straw Proposal, the EMP highlights a valuable impact of energy efficiency in reducing peak energy costs. Revised Straw Proposal, pp. 4-5. While energy efficiency by itself will reduce peak energy purchases in the wholesale market, ratepayers will not benefit from reduced capacity charges unless the peak MW savings from EE programs are bid into the capacity market through the PJM's Base Residual Auction ("BRA") and incremental auctions.¹⁶ That is, the system operator, PJM, will continue to project capacity requirements, and New Jersey utilities will continue to procure capacity as though the energy efficiency programs do not exist unless the energy savings from CEP programs are bid into the capacity market.

¹⁶ PJM, the Regional Transmission Organization coordinating the flow of wholesale electricity in the region encompassing New Jersey, operates a market for electric capacity to serve electric customer load known as the Reliability Pricing Model ("RPM"). PJM's RPM capacity market is the construct used by PJM to ensure that all load has sufficient electrical capacity to maintain reliability. RPM prices serve as the regional indicator of capacity costs for all load. The RPM has a 3-year forward horizon, with a one-year term capacity market structure that allows eligible peak energy saving programs (such as EE or demand response programs) to meet capacity obligations. PJM pays qualifying EE or DR providers for verified capacity based on the clearing prices in the RPM market. See www.pjm.com.

Two substantial benefits are lost when CEP peak savings are not bid into PJM's capacity auctions. First, revenues available from PJM's capacity market are lost. With PJM BRA clearing prices on the order of \$150/MW-day, roughly \$1 million per year is left on the table for every 20 MW of peak savings that accrue from the CEP programs. Second, PJM's transmission planning efforts use load forecasts that reflect the level of cleared EE savings in the capacity market auctions. Failing to offer these savings into the capacity market leads to exaggerated load projections informing transmission needs in the region.

Although the Revised Straw Proposal acknowledges that energy efficiency can reduce peak energy costs, it does not address whether and how CEP savings will be bid into PJM capacity market. Offering energy savings into the capacity market will require further investigation by the OCE and the determination of the proper vehicle through which the bids can be placed, but this technical concern should not overshadow the points made above. Numerous other PJM region entities successfully offer EE program savings into the PJM capacity market, and NJ CEP can and must follow suit. Many states have created state-chartered utilities to offer ratepayer-funded energy savings into capacity markets. For example, the Vermont Energy Investment Corporation and Efficiency Maine are two entities that enable state energy efficiency programs to receive payments from capacity markets for their energy savings. Efficiency Vermont and Efficiency Maine have offered and cleared capacity in all seven ISO-NE auctions that have occurred to date, and have met or exceeded their obligations in each of the first three delivery years that have occurred.

Likewise, New Jersey's own utilities successfully offer EE savings into the BRA and incremental auctions. Either or both of EE and demand response savings have successfully cleared the prior PJM BRA for all four NJ EDC service areas. The EDCs represent one possible

"originating vehicle" for CEP participation in the BRA, if other state constraints prohibit direct participation by CEP.

In sum, failing to bid energy reductions into the PJM capacity market further negatively impacts ratepayers by denying ratepayers revenues that could be earned through PJM capacity credits. This essentially amounts to leaving ratepayer money on the table to be earned by electric generators. The Revised Straw Proposal does not address whether and how CEP savings will be bid into PJM capacity market. The anticipated updates of budget projections once the PA is in place should reflect participation in PJM markets.

II. RENEWABLE ENERGY

A. General RE Comments

Within the 2011 EMP, there are numerous references to promoting cost-effectiveness in renewable energy programs. Specifically, the 2011 EMP states the following:

“One of New Jersey’s most important policy goals is to moderate the electricity rates paid by consumers. For most businesses in New Jersey, energy costs are the second largest overhead item, behind labor-related expenses. (...) The State must reconsider all social policies that add to the cost of energy and must review, restructure, and reformulate the way the State promotes and subsidizes both traditional and renewable energy.”¹⁷

As noted in the discussion of the OCE’s Energy Efficiency proposals, Rate Counsel appreciates Staff’s commitment to evaluations of the cost-effectiveness of its proposals, after the new PA is engaged. Rate Counsel looks forward to participating in a comprehensive analysis of the costs and benefits of the Board’s RE programs.

¹⁷ 2011 New Jersey Energy Master Plan (December 6, 2011), p. 86 (emphasis added).

With regards specifically to Renewable Energy, the need for program evaluation is naturally limited due to the limited scope of CEP's initiatives into RE matters. A single comprehensive study during FY2014 assessing the performance of the Board's RE initiatives would be sufficient to gauge program performance. Based on experience with past the OCE studies, Rate Counsel believes that a reasonable budget for such an evaluation is no more than \$100,000.

B. RE Budget for FY2014

Rate Counsel has the following specific concerns with the Straw Proposal's FY2014-FY2017 renewable energy budget proposal:

- Some items of the proposal appear to continue to be at odds with the objectives laid out by Board policy to rely more on renewable energy markets (i.e., the renewable energy credit ("REC") and solar renewable energy credit ("SREC") markets) and market-based approaches to support renewable energy, as opposed to rebates and administratively determined programs.
- The proposal does not adequately consider the changing market conditions for non-solar renewables.
- The OCE should provide additional documentation in support of its proposed \$2.5 million in funding for solar administration.
- The proposal would increase the burden of ratepayer financial support for renewable energy without appropriately recognizing the already significant degree of financing already provided by ratepayers through the Board's Renewable Portfolio Standards ("RPS") and utility-supported programs.

These concerns are discussed in more detail below.

1. New Funding for Direct Incentives

In BPU Docket No. EO06100744, concerning the Board's Renewable Portfolio Standards, the Board recognized the need to reduce reliance on rebates to promote renewable energy development, particularly solar energy. The Board, instead, moved in the direction of promoting renewable energy development through the use of market-based mechanisms

including placing greater reliance on REC and SREC revenues for renewable energy project support.¹⁸ The Board's motives in transitioning to market-based mechanisms have been clear: (1) a successful renewable energy sector depends on the availability of stable incentive payments above market prices; and (2) rebate-type incentives are not sustainable in the long-term.¹⁹

Rate Counsel has supported the OCE's proposals, and the Board's approval, of past CEP budgets that have consistently reduced the share of overall CEP funding associated with renewable energy. Yet, while those funding commitment levels have decreased, the OCE continues to propose considerable ongoing commitments to direct incentives for renewable energy. The renewable energy component of the CEP in the Revised Straw Proposal proposes \$5 million in additional FY2014 funding for incentives related to biomass and energy storage technology.²⁰ Rate Counsel has concerns about the continued use of direct incentives for renewable energy. Rate Counsel recommends that the Board should not add new funding for direct incentives for renewable energy technologies at this time until further program evaluations are completed.

2. Changing Market Conditions for Non-Solar Renewables

The Revised Straw Proposal adds an additional \$2.5 million for incentives to promote the development of biomass energy within the state, representing a four year funding level of approximately \$10 million. The proposed funding level is approximately 25 percent higher than level of rebates and commitments made since 2009, based on the position that "the biomass

¹⁸ I/M/O the Renewable Energy Portfolio Standards – Alternative Compliance Payments and Solar Alternative Compliance Payments, BPU Docket No. EO06100744, Decision and Order Regarding Solar Electric Generation (December 6, 2007), p. 2.

¹⁹ I/M/O the Verified Petition of Jersey Central Power & Light Company Concerning a Proposal for an SREC-Based Financing Program Under N.J.S.A. 48:3-98.1, BPU Docket No. EO12080750, Order Designating Commissioner (October 4, 2012), p. 2.

²⁰ Revised Straw Proposal, p. 52.

market has recently begun to expand,” citing 6 new projects approved since August 2012.²¹ The Revised Straw Proposal also alludes to the consideration of potential future funding for incentives tied to on-shore wind and hydrokinetic energy.²²

All New Jersey renewable energy projects must compete with a wide range of other renewable resources across the entire PJM market area. The price of PJM-sourced Class I RECs, over the past several years, has been driven in very large part by lower-cost Midwestern wind energy. Thus, New Jersey on-shore wind, biomass, and hydrokinetic resources must compete against much larger resources that are able to take advantage of scope, scale, and the ability to leverage other subsidized resources, such as bulk transmission lines, that are used to move this power into the northeast region. In the specific case of on-shore wind energy, New Jersey simply lacks the large scale potential found in other States.

Rate Counsel’s conclusions are reinforced by the Board’s recently-commissioned renewable energy market assessment performed by Navigant Consulting, Inc. (“Navigant”).²³ Navigant found only 132 MWs of technical potential for on-shore wind generation, an amount which approximately equals the average size of a single utility-scale wind generation project in the Midwest.²⁴ It should be further noted that this finding by Navigant does not incorporate any economic limitations such as cost-effectiveness, so that New Jersey’s real potential is probably far less than the technical potential reported by Navigant.²⁵

²¹ Revised Straw Proposal, p. 50.

²² Revised Straw Proposal, pp. 51-52.

²³ Market Assessment Services to Characterize the Opportunities for Renewable Energy, Presentation to the Renewable Energy Committee, October 9, 2012, pg. 9.

²⁴ Id., p. 8. See also AWEA U.S. Wind Industry Third Quarter 2012 Market Report, October 17, 2012, pp. 10-14.

²⁵ Id., p. 5 & 8.

Rate Counsel recommends that the Board take a cautious approach to any potential incentives for New Jersey on-shore wind, biomass, or hydrokinetic resources. Any such incentive should be implemented only after careful study of their respective costs and benefits in light of the market conditions discussed above.

3. Support for \$2.5 Million for Solar Administration

Rate Counsel is concerned by the Revised Straw Proposal's request for \$2.5 million for administration of the NJCEP SREC program. As defined in the Revised Straw Proposal, such funding is required for administrative tasks such as the processing of applications and tracking and reporting SREC activities and prices.²⁶ This proposed funding is in addition to the already requested \$5 million to cover overall NJCEP Administration such as OCE Staff salaries and overhead.²⁷ It is Rate Counsel's position that the OCE should provide additional supporting documentation for the proposed additional \$2.5 million for costs associated with administering the SREC program, and maintains that such a request for funding warrants greater justification than provided in the Revised Straw Proposal.

3. Consideration of Other Ratepayer Support of Renewable Energy

The Revised Straw Proposal does not appear to give adequate consideration to the substantial ratepayer support given to renewable energy through the RPS and utility-sponsored programs. The Revised Straw Proposal estimates the cost of RPS at over \$148 million for Energy Year 2012.²⁸ In addition, ratepayers bear the costs of utility and utility-sponsored programs, including: the Solar Loan I and II programs (PSE&G), the Solar 4 All program

²⁶ Revised Straw Proposal, p. 50.

²⁷ Revised Straw Proposal, p. 54.

²⁸ Revised Straw Proposal, p. 9.

(PSE&G), and the SREC-Based Financing Programs (ACE, JCP&L, and RECO). Additionally, currently pending before the Board are a number of additional proposals to extend or expand these existing utility programs including a proposal to extend the SREC-Based Financing Program and the creation of a new Solar Loan III program to replace PSE&G's expiring Solar Loan II program. Although the Revised Straw Proposal does not quantify the costs of the utility and utility-sponsored programs, those costs are substantial. The Revised Straw Proposal states that the costs of other programs should be considered in establishing the CEP budget, but does not propose any budget reductions in consideration of the costs of other programs. As a result of the substantial ratepayer support that is already being provided, New Jersey appears to be successful in meeting New Jersey's Class 1 and solar energy RPS requirements. However, Rate Counsel has serious concerns about the continued level of ratepayer support for renewable energy through the CEP budget.

Rate Counsel recognizes that the impacts of other RE programs will be given fuller consideration as part of the development of a Strategic Plan, after a new PA has been retained. Nonetheless, these impacts need to be better quantified by the OCE and should be considered in refining the budget for FY2014.

III. COMBINED HEAT AND POWER ("CHP") AND FUEL CELLS

Rate Counsel's comments on Combined Heat and Power and Fuel Cells ("CHP-FC") are divided into three subsections below. First, the process of identifying solutions for improving grid reliability and resiliency, and the legitimacy of funding blackstart capability for CHP with

ratepayer money are addressed. Second, fuel cells are addressed. Finally, the OCE's proposed goals and budgets are addressed.

A. CHP and Resiliency

In December 2012, the Board re-convened the CHP/fuel cell working group “tasked with evaluating the costs and benefits of CHP and with determining how to best implement this technology.” Revised Straw Proposal, p. 12. Rate Counsel notes, however, that the Rutgers Center for Energy, Economic and Environmental Policy (“CEEEP”) is still developing this cost-benefit analysis at the time of this writing, and that even preliminary results have yet to be presented to the working group. Despite this, the Revised Straw Proposal recommends that CHP should play an expanded role in emergency response. Noting that the entities with CHP units were able to operate by isolating their CHP unit from the grid after Superstorm Sandy, the Revised Straw Proposal states that CHP can play a role in hardening infrastructure for critical facilities, and micro-grids can help to enhance system reliability. Revised Straw Proposal, p 12.

To our knowledge, however, the problems that are motivating the OCE to consider changing CHP incentives and program structures have not been clearly articulated or prioritized. Rate Counsel recommends that the OCE should first step back and identify/define the problems associated with the current state of storm response strategies and system reliability, and secondly, identify and prioritize a range of potential solutions to the problems, including providing incentives to promote blackstart capability and/or microgrid. The OCE's current strategy has defined the solution first, which could result in an ineffective use of ratepayer funds. For example, increasing tree trimming efforts and other distribution system “wires” restoration efforts might provide greater benefits in terms of energy system resilience at a lower cost than

CHP, fuel cell, or micro-grid promotion.²⁹ Upon the conclusion of this process, the OCE may or may not find that CHP is one of the critical tools for increasing the reliability and improving the resiliency of the electric grid, for providing power to customers' premises, or for some other purpose (such as providing power to places of refuge). At this point, the OCE should consider whether it is appropriate to use ratepayer's money to fund CHP for its blackstart capability in addition to the current funding for CHP.

Lastly Rate Counsel recommends that as a part of any cost-benefit analysis, benefits to grid reliability and emergency response that are beneficial to all ratepayers should be isolated from individual customer benefits that result from the ability of customers with CHP to keep running during grid outages.

B. Fuel Cells

Rate Counsel supports inclusion of fuel cell technologies with heat recovery (i.e., are a form of combined heat and power) as part of any CHP program, which should include a competitive solicitation element to attain a given MW level of the resource at lowest possible program cost. However, Rate Counsel does not support separate, stand-alone funding for fuel cell technologies that do not incorporate heat recovery mechanisms. Fuel cell technologies generally (a) emit significantly less emissions than other CHP technologies, and (b) are still under development and exhibit potential to further reduce cost.³⁰ Because they are currently more costly than traditional CHP, their ability to successfully compete with CHP technologies

²⁹ Some of these measures are contemplated in the Board's Order in BPU Docket No. EO11090543, I/M/O the Board's Review of the Utilities' Response to Hurricane Irene (1/23/2013). However the benefits of CHP were not fully considered in that Board Order.

³⁰ For the current and projected cost of fuel cells, see http://www1.eere.energy.gov/hydrogenandfuelcells/pdfs/2011_market_report.pdf

may depend on how much value is ascribed to the lower emission characteristics of the technology. Rate Counsel suggests that the decision-making criteria employed by CEP when choosing among competing CHP options would take this incremental emissions-reducing value into account when evaluating responses to competitive solicitations.

C. CHP-FC Budget

Rate Counsel also has concerns about the level of funding proposed for CHP-FC programs. The OCE is proposing to roll the current carryover present within the CHP-FC program budget forward to the FY2014 budget. Furthermore, the OCE requests that the Board approve an additional \$30 million for such programs in FY2014, based on the conclusion that it “does not believe that current funding levels and programs will be sufficient to meet the State’s goal of 1,500 MW of CHP by 2021.”³¹

Rate Counsel has previously expressed its concerns about the OCE’s reliance on carryover funds. Recent history has shown that incentives for CHP-FC have garnered very little support. In 2012, the Small CHP program had a budget of \$17 million to provide in incentives. However, through the end of 2012, the program had only been able to issue rebate approvals for a little over \$2 million, or about 12 percent of its total budget, due to incredibly low interest in such systems.³² Likewise, the Large CHP program first solicitation conducted in late 2012 only received a little over \$11 million in applications even though the solicitation was for \$20 million.³³ The second Large CHP solicitation issued in January 2013 has fared no better, having received only one application as of April 17, 2013 in response to a \$25 million solicitation.³⁴

³¹ Revised Straw Proposal, p. 48.

³² Revised Straw Proposal, p. 48.

³³ Revised Straw Proposal, p. 48; and CHP-FC Working Group Meeting, December 18, 2012.

³⁴ Revised Straw Proposal, p. 48.

This would seem to indicate that there has not been an increase in interest in the CEP CHP-FC program in the aftermath of Hurricane Sandy. The OCE's second Large CHP solicitation has been conducted entirely after the devastating hurricane, and has continued the historical trend of insufficient interest to expend the amounts budgeted for this program. If the Board does decide that the potential benefits of micro-grids warrants continued funding of CHP-FC incentives, Rate Counsel suggests the Board revise the Straw Proposal's funding level to an amount significantly less than the \$30 million included within the proposal.

Rate Counsel agrees with the proposed consolidation of the small and large CHP programs to reduce administrative redundancy, Revised Straw proposal, p. 53, and increasing emphasis on "larger systems and those technologies that generate electricity [at] a lower cost per kW." Revised Straw proposal, p. 48. However, Rate Counsel notes that an emphasis on large CHP may undercut the OCE's goal of increasing implementation of CHP in emergency response if the OCE needs to provide additional incentives for equipment that allows for CHP black-start capability. The small and large CHP programs have left large amounts of budget unspent in the last two years. For this reason, Rate Counsel agrees that CHP should be allocated a smaller budget than in the past.