

John F. Stanziola Director, Government & Regulatory Affairs

May 30, 2013

Kristi Izzo Secretary of the Board Board of Public Utilities 44 S. Clinton Ave. 9th Floor PO Box 350 Trenton, NJ 08625-0350

RE:

Combined Heat and Power Energy Efficiency Portfolio

Standard – Board of Public Utilities Staff Straw

Proposal

Dear Ms. Izzo:

On behalf of the South Jersey Gas Company ("South Jersey" or "Company") I am pleased to offer comments relative to Board of Public Utilities Staff ("BPU Staff") Straw Proposal regarding the development of a Combined Heat and Power ("CHP") Energy Efficiency Portfolio Standard.

South Jersey is a local gas distribution company which provides gas service to approximately 355,000 customers in the southern most seven counties in New Jersey. The Company appreciates the opportunity to comment on the Straw proposal and commends the Board of Public Utilities ("Board") for taking this approach. We believe this open and collaborative process provides for the valuable exchange of information that will ultimately assist the Board make this important policy decision for the future of our state.

At a CHP – FC Working Group Meeting held on April 30, 2013, BPU Staff introduced a conceptual program through a Straw Proposal directed toward the development of a long term funding source for CHP development at facilities throughout the state. BPU Staff introduced this concept in an attempt to address the 2011 Energy Master Plan CHP target of 1500 MW while providing storm response, economic and environmental benefits.

The proposal provides for natural gas utilities to procure a CHP portfolio standard obligation which would be set annually as a percentage of the CHP goal outlined in the Energy Master Plan. The annual CHP percentage would be an obligation on the individual utilities and would be determined based on annual retail sales and other factors including market conditions and supply and demand. The CHP portfolio standard would be subject to review and change in response to market conditions such as demand, system costs, environmental and energy benefits and overall economic conditions. Gas utilities would be directed to submit a compliance filing consistent with the Board's order and regulations.

There would be two separate programs for the CHP portfolio standard; a long-term financing structure for critical public facilities and a second for private sector facilities. Due to the Board's desire to immediately address reliability issues following Super Storm Sandy, the Straw Proposal appears to be leaning toward the initial development of a public facility program followed by the private sector component. For both areas, the CHP long term financing incentives would be limited strictly to the new development of CHP facilities.

The Straw proposal anticipates that gas utilities would solicit CHP projects on an established schedule. Based upon responses to the solicitation, the utility would then be required to select the most cost effective proposals up to its annual CHP portfolio standard limit. Natural gas utilities would initially provide 100% financing for new CHP projects through the competitive process. The utilities would be required to enter into long-term contracts with the winning bidders. Budgets, financing costs, payback periods, incentive amounts and ratemaking implications were not specifically addressed. These and other significant issues were identified as areas to be developed through a stakeholder process.

South Jersey is supportive of the concept contained within the CHP Straw Proposal and commends the Board's Staff for introducing an innovative approach in an attempt to advance one of the major goals within New Jersey's Energy Master Plan. The Company has long been an advocate for CHP development in the State, recognizing this technologies' significant energy efficiency, environmental and economical benefits. In addition if properly located, CHP can also assist in alleviating electric transmission congestion. Super Storm Sandy has now shown us that CHP can also be an effective measure in terms of storm response and reliability. South Jersey believes now is the time for the State to take additional measures to work toward achieving the CHP target of 1500 MW by 2020.

The Straw Proposal has introduced a broad conceptual framework toward the development of a CHP Energy Efficiency Portfolio Standard. Many important issues will need to be addressed within a process and timeframe that will be decided by the Board of Public Utilities (BPU). As the BPU and its Staff contemplates the next steps, South Jersey urges that you consider the following elements we believe are necessary to develop and implement a fair, equitable, successful and efficient program:

 The Program must be established on a state-wide basis. All areas of New Jersey should be permitted and encouraged to participate.

- 2. The State needs to quickly identify the "critical facilities" eligible to participate in this program. This will permit all parties the opportunity to begin their initial stages of program development. Consideration should be given to include facilities designated by Homeland Security.
- 3. The State should consider opening both the public and private sector components of this program during the initial stages. Facilities such as privately-owned hospitals should not be precluded from participating in any program from its beginning. Also initial participation from the private sector will assist the State achieve its goal of 1500 MW of CHP capacity by 2020.
- 4. Preliminary guidelines/information for the criteria to annually review the CHP capacity requirements needs to be developed quickly. This will assist in eliminating uncertainty in the marketplace and help interested parties perform the necessary program evaluation.
- 5. The solicitation must be an open, transparent competitive process. The bid and evaluation process must be consistent statewide. Utilities should not be required to administer programs within their respective service territories. One central organization, chosen by the Board should administer, evaluate and award all solicitations. The Board appears to have the necessary infrastructure in place with its relationships with the Rutgers CEEEP and the Clean Energy Program Administrator to perform these functions. We also believe that any bid evaluation must be cost/performance based.
- 6. CHP developers should be required to meet certain qualifications in order to be eligible for the program. Qualifications should include operational and financial considerations. The BPU should require at a minimum, that developers post a letter of credit equivalent to the combined amount of financing and grants requested to secure any financial incentives. Additionally, any work performed within the public sector should continue to require Department of the Treasury, Division of Property Management and Construction (DPMC) certification.
- 7. Gas utilities are unable to control market response or customer behavior and therefore should not be held accountable (penalties) if annual goals are not attained. The BPU should also consider establishing a system which provides flexibility and avoids the denial of cost-effective proposals due to annual budget or CHP capacity restraints.
- 8. A tentative budget needs to be established without the threat of a lapse This will assist all stakeholders evaluate the program's financial impact and reduce the uncertainty of funding during the development stages of a CHP project. Additionally, we believe that limiting funding levels to SBC and utility-specific EEE programs needs to be carefully reviewed. While we understand BPU Staff's intent to develop a rate-neutral program, South Jersey questions whether 1500 MW can be financed without some impact on customer rates.

- 9. The incentives offered for CHP development must be flexible and provide options which include a blend of grants and attractive financing packages. A 100% upfront financing requirement may be offered but should not be required. We believe a one-size fits all approach does not work and will not attract the most cost-effective solicitations from CHP developers. Further, 100% financing via this program would seem to eliminate all of the developer's risk in the transaction. Having "skin in the game" would incent developers to be more diligent regarding the operational and financial aspects of the project.
- 10. Gas utilities must be afforded proper ratemaking treatment for financing this program. The Companies are being requested to provide significant investment funding levels and incur incremental operating costs. This program must establish a fair and equitable regulatory ratemaking process designed to provide for the timely recovery of prudently incurred operating costs and a full return on its investment. South Jersey believes the Board has a successful, existing regulatory mechanism in place within the energy companies' EEE filings. We encourage the Board to develop a similar mechanism for the CHP Portfolio Standard.

South Jersey Gas Company is hopeful that the Board finds these comments beneficial. As always, we look forward to working with the Board and all stakeholders address the important issues necessary to incentivize CHP development throughout the State. Thank you.

Very truly yours,

John F. Stanziola

Director,

Government & Regulatory Affairs



May 30, 2013

Michael Winka Senior Policy Advisor, New Jersey Board of Public Utilities Post Office Box 350 44 South Clinton Ave Trenton, NJ 08625-0350

Re: Response to the New Jersey Board of Public Utilities Request for Comment on the Resiliency/CHP Portfolio Standard Straw Proposal

Comments of ClearEdge Power

Dear Mr. Winka:

ClearEdge Power submits the following comments based on the public request from the New Jersey Board of Public Utilities related to the Resiliency/CHP Portfolio Standard Straw Proposal, which was introduced to the large scale CHP/Fuel Cell working group on April 30, 2013.

Respectfully submitted,

Lisa C. Ward

Government Relations Manager



STATE OF NEW JERSEY

BOARD OF PUBLIC UTILITIES

RESILIENCY/CHP PORTFOLIO STANDARD PROPOSAL

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 produce power without combustion 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 Board of Public Utilities resiliency/CHP portfolio standard straw proposal.

II. Comments

A. Program Objectives

The initial straw proposal indicates the resiliency standard will be limited to combined heat and power (CHP) generation. While CHP is an efficient technology and would help meet the high level goals suggested in the proposal, there are other commercially available fuel cell technologies, with and without heat recovery, that operate at high system efficiencies. This program should not be limited to fuel cell projects with heat recovery; the program should recognize overall project efficiency to determine the eligibility of fuel cell projects.

B. Tiered and Performance Based Incentive Structure

The newly formed portfolio standard for distributed generation, including fuel cells and combined heat and power projects, should include a tiered incentive giving the largest amount of State funding to critical facilities in known refinery gas territories where siting distributed generation can be more costly.

The tiered structure for fuel cells should begin at the current small program funding level, which for fuel cells is the lesser of 60% of project costs or \$2M. This would be the base incentive for all fuel cell projects. An enhanced incentive, in addition to the base, should be given incrementally to the following fuel cell project types:



- 1) Fuel cell installations for facilities in natural gas territories where the typical transmission pipeline gas composition specification is not met (i.e. refinery gas and/or propane/air)
 - a. Suggested incentive in addition to the base: \$1 per installed watt
- 2) Fuel cell installations at facilities with grid independent capable distributed generation (critical or non-critical) where the natural gas meets the typical transmission pipeline gas composition specification
 - a. Suggested incentive in addition to the base: \$1 per installed watt

Please note these suggested incentives are additive - an additional incentive of \$2 per installed watt would be available for a fuel cell installation with grid independent capability if installed where the natural gas does not meet the typical transmission pipeline gas composition specification.

Much of New Jersey's industry is located in a natural gas territory with known refinery gas and propane/oxygen gas injection practices. These injections into the natural gas pipeline make it increasingly difficult to site resilient, clean distributed generation without a mechanism to "clean" the natural gas. Removing a majority of the contaminants from the natural gas will add cost to distributed generation projects, which is why we suggest a \$1 per installed watt increase to the total incentive.

Additionally, if the distributed generation project is also capable of providing power and heat without the grid, we suggest a further increase to the incentive of \$1 per installed watt to help defray the costs of additional equipment needed to provide the grid independent benefit. These increased incentives should only be considered in the short term (next 5 years). To avoid burdening ratepayers with additional distributed generation costs, like natural gas cleanup, over the long term, the State should consider setting new standards for refinery gas injections to avoid the need for cleanup at the distributed generation level in the future.

Because the increased incentive amounts would be substantial for critical facilities in refinery gas territories as compared to the current structure, we would also suggest a more performance-based pay out. Rather than 80-100% of the funding being disbursed upfront, we suggest the funding be disbursed similar to other states, such as New York and California; fifty percent (50%) of the incentive is allocated initially and the remaining is paid based on the electric output of the distributed generation project (in kWh) over a period of three to five years, up to the maximum incentive amount. This represents an improved balance of helping with the upfront investment and protecting ratepayers by requiring performance from projects sponsored with ratepayer dollars.

C. Program Requirements - Efficiency

In order to fully maximize the number of fuel cell or CHP projects installed at different facilities, critical or not, the efficiency requirement of 60% HHV should be reconsidered. We fully support systems with high efficiencies; however, the 60% HHV does not necessarily



return the best payback for most applications and therefore may limit the speed of deployment of fuel cells in New Jersey.

Under the current rules, a customer desiring to deploy a CHP fuel cell must burden the project with extra equipment and costs to meet the efficiency hurdle, even if the additional costs do not result in sufficient heating fuel savings that pays the initial costs back. As an example, the data center market is an excellent fit for fuel cells and CHP, especially given their potential as critical facilities. Data center applications typically utilize byproduct heat to drive absorption chillers for cooling, which only takes advantage of the high grade heat produced by fuel cell systems. Due to this particular heat utilization profile, where only the high grade heat is needed, the 60% HHV requirement is a difficult hurdle for project implementation without adding further costs to the project to also use some portion of the low grade heat. To overcome this obstacle more effectively, we would suggest an efficiency requirement of 50% HHV. This efficiency requirement is similar to efficiencies that meet the requirements of the State of California's Self-Generation Incentive Program. While this is lower than the current 60% HHV efficiency requirement, an absorption chiller application using fuel cell waste heat can actually increase in efficiency over time, since the amount of chilling capacity increases over the life of the fuel cell.

Additionally, not all facilities have a large thermal load, making electric-only fuel cell installations attractive. The current electric-only efficiency requirement of 45% within the first year is understood to be a difficult hurdle for some industry participants. Additionally, some fuel cells with high reported first year electrical efficiency values degrade quickly, resulting in a lower average electrical efficiency over a few years following installation. In order to drive true market competition and allow all companies the same opportunities for electric-only projects, and in order to ensure high overall efficiency for fuel cell customers, we would suggest a first year electrical efficiency requirement of 42%.

D. Regulatory items - Standby Charges

Proceeding GO12070600, which is currently underway at the New Jersey Board of Public Utilities, was established per the directive from Bill 219, which required all electric distribution companies to examine the standby charge law related to distributed generation. Based on most submissions from the four New Jersey electric utilities in November 2012, the current standby charge law should be extended with no rate structure updates. Industry understands the need for the electric utilities to account for peak demand without including distributed generation (DG). However, penalizing New Jersey consumers who choose to install on-site generation through the use of standby charges and extended demand charge periods will significantly deter the development of distributed generation within the State. This will ultimately lessen the environmental savings and the installed capacity of DG the State could realize as directed by the Energy Master Plan. It would also prevent the State from capitalizing on the far-reaching benefits of distributed generation. Distributed generation not only offers benefits to the host site but to ratepayers in general by providing communities with resilient power during major weather events and power outages.

The BPU should consider updating the standby charge law to: 1) create more strict availability and/or capacity factor requirements for DG installed in-state and 2) set fixed,



statewide costs for standby charges and demand charges with no ratcheted costs. By setting more stringent rules for the capacity factor of DG, the electric utilities can rely more heavily on continuous on-site generation and discontinue significant standby and demand charges on its DG customers.

E. Strategic long term plan

The State of New Jersey should continue to review and update regulatory policies that would help facilitate the installation of clean, on-site generation. A regulatory hurdle for DG developers is the lack of standardized interconnection requirements for base load technologies. Most utilities outside of New Jersey require a reverse power relay for all DG installations that do not qualify for the net metering tariff. To overcome the cost impact of the reverse relay requirement and lifetime operation costs, the New Jersey electric distribution companies (EDCs), in conjunction with the BPU, should strongly consider standardizing the interconnection requirements for fuel cells. This should include a separate track for high capacity factor DG (> 80%) with a certified inverter and would require a detented meter instead of a reverse power relay. This would decrease installation costs for stationary fuel cell projects while simultaneously maximizing on-site power usage, as well as the maximizing the environmental attributes of the fuel cell.

A majority of end users who use fuel cell systems to generate their on-site power do not become net exporters of power to the utility. As a result, the amount of power exported to the utility does not usually factor into a fuel cell project's value proposition. A standard interconnection process with a detented meter option can play a twofold financial role in the development of stationary fuel cell projects:

- Reduced installation cost. Through the use of a detented meter, the need for a grid-protection relay to prevent power export to the utility grid is nonexistent. Without this piece of interconnection equipment, the utility will not allow momentary export of power, thereby introducing the need for a certified relay.
- A detented meter would allow higher electrical output from the fuel cell to be achieved by allowing electric-load following with no power import buffer.

By requiring the EDCs to standardize fuel cell interconnections, the BPU can streamline the installation process for fuel cells statewide. Standardization of the required interconnection equipment would also help the overall value proposition for larger DG installations at critical facilities; installation and permitting costs would be lower, allowing State funding to support a higher number of grid resiliency projects. Fuel cells actually offer a larger carbon emission reduction than variable output technologies, like wind and solar, due to their high system efficiencies and high capacity factor.

The key to the long term strategy will be the continuation of state supported programs, which would indicate New Jersey's commitment to the Energy Master Plan goals and the State's resiliency goals in the aftermath of Hurricane Sandy. 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. Given that small and



large fuel cell programs were only re-opened in January 2012, it would be extremely premature if the State were to move the funding dedicated to these programs by June 2013. Fuel cell and CHP projects have a long development timeframe, typically 12 to 18 months. To continue the development of clean DG projects in the State, stable and dedicated programs are required for at least 5 years to make an appreciable impact.

III. Conclusion

Thank you for the opportunity to comment on Board of Public Utilities resiliency/CHP portfolio standard straw proposal. We would be pleased to provide you with additional information or clarification as needed.

Respectfully Submitted:

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Government Relations Manager

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May 30, 2013



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May 30, 2013

VIA ELECTRONIC AND REGULAR MAIL

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Re: RESA's Comments on the Combined Heat and Power Portfolio Standard Straw Proposal

Dear Mr. Winka:

On behalf of the Retail Energy Supply Association's ("RESA's")¹ Third Party Suppliers ("TPSs") of natural gas, we submit these comments regarding the Combined Heat and Power ("CHP") Long Term Financing Mechanism Straw Proposal ("Proposal") issued by the Board of Public Utilities ("Board") on April 15, 2013. RESA members offer retail electric and natural gas service to commercial, industrial and residential customers in New Jersey, throughout PJM and in other competitive markets across North America. For the reasons described in detail below, RESA recommends that the Board modify the Proposal to enable TPSs to have the same opportunities as the Gas Distribution Companies ("GDCs") to supply natural gas to the CHP projects supported under the Proposal.

¹ RESA's members include: Champion Energy Services, LLC; ConEdison Solutions; Constellation NewEnergy, Inc.; Direct Energy Services, LLC; GDF SUEZ Energy Resources NA, Inc.; Hess Corporation; Homefield Energy; IDT Energy, Inc.; Integrys Energy Services, Inc.; Just Energy; Liberty Power; MC Squared Energy Services, LLC; Mint Energy, LLC; NextEra Energy Services; Noble Americas Energy Solutions LLC; NRG, Inc.; PPL EnergyPlus, LLC; Stream Energy; TransCanada Power Marketing Ltd. and TriEagle Energy, L.P. The comments expressed in this filing represent the position of RESA as an organization but may not represent the views of any particular member of RESA.

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As a threshold matter, RESA would like to commend Board staff for recognizing all of the portfolio standards that energy suppliers are currently obligated to meet in New Jersey and for proffering a Proposal that does not foist yet another obligation upon them. Unlike other programs administered by the Board, such as the solar and offshore wind portfolio standards, this Proposal does not require suppliers to procure energy efficiency measures in order to meet the Energy Efficiency Portfolio Standard ("EEPS") set forth in the Proposal. Rather, the Proposal sets forth the superior approach of requiring the Electric Distribution Companies ("EDCs") and GDCs to meet the EEPs by providing upfront financing to CHP projects as loans supported by their rate base.

Moreover, RESA appreciates that, unlike with past portfolio standard requirements, this Proposal does not discriminate against TPSs by requiring them to break existing supply contracts to meet the new portfolio standard, while exempting utility suppliers from the same requirements. Nor does it require TPSs to purchase Renewable Energy Credits ("RECs") in excess of their load which was the case with previous programs. In this manner, the Proposal is competitively neutral and promotes the core policy of the Electric Discount and Energy Competition Act ("EDECA") to "place greater reliance on competitive markets, where such markets exist, to deliver energy services to consumers in greater variety and at lower cost than traditional public utility service." N.J.S.A. 48:3-43, N.J.S.A. 48:3-43, et. seq.

While RESA appreciates that the Proposal's procurement requirements do not discriminate against TPSs, RESA believes that the Proposal could be anti-competitive in another significant respect: it does not require that TPSs have the same opportunity as the GDCs to supply natural gas to the CHP projects supported by the Proposal. Rather, it gives the GDCs the exclusive opportunity to sell natural gas to those CHP projects they finance under the Proposal even though both customers of GDCs and TPSs are financing these CHP projects through their base rates. Even if the GDCs do not require the CHP projects to use their gas supply as a condition to receiving financing (which it appears they can do under the Proposal), they will have an advantage over third party natural gas suppliers insofar as they have an existing relationship and detailed knowledge about the timing and details of various CHP projects. To avoid this unfair advantage, RESA believes that the Proposal should ensure that TPSs have the same opportunity as the GDCs to sell gas to the CHP projects receiving financing under this Proposal. Otherwise, both those customers of GDCs and TPSs are financing the CHP projects through their base rates, while only GDCs are reaping the benefits of increased gas sales.

It is no secret that CHP projects are very attractive to natural gas customers and that this Proposal provides a significant opportunity for natural gas suppliers to increase sales. In accordance with EDECA, the Board should enable all natural gas suppliers, including the GDCs, to have the same market opportunity to compete for these sales. By modifying the Proposal to

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require that TPSs have the same opportunity to compete to sell gas to these CHP projects funded through the Proposal, the Board will support EDECA and enable CHP customers to benefit from myriad choices regarding their gas supply. Specifically, these customers will be able to access innovative and tailored energy products and services that are offered by TPSs. They can then compare these value-added products and services with those offered by other TPSs, as well as the GDCs, and choose the combination that best meets their particular needs.

RESA appreciates the opportunity to comment regarding this important matter and looks forward to working with Board staff and all stakeholders in this proceeding to craft a Proposal that promotes both energy efficiency and a competitive natural gas market. Please do not hesitate to contact me should you have any questions or concerns.

Respectfully submitted,

Murray E. Bevan



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May 30, 2013

VIA ELECTRONIC AND REGULAR MAIL

Michael Winka Senior Policy Advisor for Smart Grid President's Office 44 South Clinton Avenue, 9th Floor Post Office Box 350 Trenton, NJ 08625-0350 OCE@bpu.state.nj.us

Re: Bloom Energy Corporation's Comments on the Combined Heat and Power Portfolio Standard Straw Proposal

Dear Mr. Winka:

On behalf of our client, Bloom Energy Corporation ("Bloom Energy"), please accept these comments regarding the Combined Heat and Power ("CHP") Long Term Financing Mechanism Straw Proposal ("Proposal") issued by the Board of Public Utilities ("Board") on April 15, 2013. For the reasons stated in detail below, Bloom Energy urges the Board not to adopt the Proposal unless it is modified to include all-electric fuel cells in addition to CHP.

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 who desire a highly reliable distributed power generation solution, but may not have the thermal requirements necessary to support a CHP solution.

As the provider of highly efficient and resilient all-electric fuel cells, Bloom Energy objects to the Proposal designating CHP as the exclusive technology in which Electric Distribution Companies ("EDCs") and Gas Distribution Companies ("GDCs") shall fulfill their

Michael Winka May 30, 2013 Page 2 of 3

energy efficiency portfolio standards ("EEPS") under the Proposal. While Sections (g) and (h) of N.J.S.A. 48:3-87 authorize the Board to require the EDCs and GDCs to "implement energy efficiency measures" that reduce "electricity usage" and "natural gas heating usage" respectively, the Proposal does not specify what types of "energy efficiency measures" should be taken by the EDCs and GDCs. Therefore, the Proposal's decision to rely on CHP as the exclusive "energy efficiency measure" is clearly a policy choice: a policy choice that will have the effect of depriving an important group of customers from participating in the financing incentive mechanism. For instance, customers without a matching thermal load would be unable to take advantage of the financing offered under the Proposal despite the fact that these customers may be more critical in the event of a widespread power outage than those customers who can take advantage of the funding to install CHP.

While CHP is certainly a significant "energy efficiency measure", it is not the *only* "energy efficiency measure" that the Board should be encouraging through this long term financing mechanism. Rather, the Board should include various energy efficient technologies, including all-electric fuel cells. All-electric fuel cells represent the single cleanest and most resilient form of on-site power for many critical electric customers that are smaller or very often do not have a matching thermal load like many supermarkets, retail stores, telecommunications providers, data centers, government facilities, and nursing homes, amongst others. Especially in the wake of Superstorm Sandy, these are the very types of customers the state should be encouraging to install reliable distributed generation through its financing proposals.

Moreover, if the Board does not allow for an expansion of eligibility to include all-electric fuel cells, the same electric customers that will be denied the opportunity to participate in the program by virtue of the fact that they may not have a thermal load suitable for CHP will be required to finance the costs of the program under the current Proposal. The Board should broaden eligibility to include all-electric fuel cells in order to avoid this plainly unfair and inappropriate result.

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As the Board develops proposals to address storm response, there are opportunities to direct funding towards various energy efficiency measures 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: Mary Beth Brenner

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May 30, 2013

BY ELECTRONIC DELIVERY

Mr. Michael Winka, Senior Policy Advisor for Smart Grid New Jersey Board of Public Utilities Division of Economic Development and Energy Policy 44 South Clinton Ave, PO Box 350 Trenton, NJ 08625-0350

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Re

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Comments of Public Service Electric and Gas Company	

RPH Staff CHP Portfolio Standard Straw Proposal

Dear Mr. Winka:

Please accept the following initial written comments on behalf of Public Service Electric and Gas Company ("Public Service" or "PSE&G") regarding Board Staff's April 15, 2013 straw proposal exploring the development of a CHP Portfolio Standard ("CHP Straw Proposal").

Public Service commends Board Staff for continuing to advance the State's efforts to achieve a secure energy future, a sustainable environment and a healthy economy. Individually, these are no small feats, and collectively, they present unprecedented challenges. With that said, as discussed more fully below, Public Service supports the concept contained within the CHP Straw Proposal — that CHP is a form of energy efficiency— but, similar to concerns expressed by many other stakeholders, believes that there exist constraints to implementation of a CHP Portfolio Standard (CHP-PS) as contemplated by the CHP Straw Proposal. To the extent the Board wishes

support from the gas distribution companies ("GDCs") for CHP development, the appropriate path is to encourage the GDCs to file petitions pursuant to N.J.S.A. 48:3-98.1.

(1) Straw Proposal Background

The Straw Proposal recommends that the BPU direct the GDCs to implement a CHP-PS to procure, through a series of competitive solicitations, 1,500 MW of CHP resources by 2020 to meet the Energy Master Plan CHP goal. The GDCs would enter into long term contracts with winning bidders/customers, who would be able to utilize utility on-bill financing with some percentage of their CHP expenditures/ indebtedness forgiven based on the unit's performance and actual energy savings. The amount forgiven would somehow be paid for by ratepayers. Each solicitation would seek a specific amount of cost-effective projects (either based on MW, MWh, therms or btus), but no budget or cost analysis was available. Additionally, while recognizing the need for CHP projects to demonstrate a net benefit, the CHP Straw Proposal does not at this time include a definition for "cost-effective," which presumably will be defined at a later time, nor does it discuss the minimum performance requirement for the facilities. Because of the need to address storm response, the CHP-PS procurements would be open initially to public entities only; from municipalities to county and state-owned facilities for storm response, but there is no assessment of whether state owned facilities that meet the requirements for storm response are suitable candidates for CHP.

(2) The CHP Straw Proposal Improperly Gives N.J.S.A. 48:3-87g. and h. Greater Effect Than the Statutory Language Allows.

The CHP Straw Proposal has as its goal "[t]o develop a long term secure and stable funding/financing source to implement the 2011 Energy Master Plan CHP target of 1,500 MW that includes both storm response CHP and dual economic and environmental benefit CHP."

However, as noted at the April 30, 2013 CHP stakeholder meeting by the representative from the United States Department of Energy's Mid-Atlantic Clean Energy Application Center, this goal is inconsistent with the statute upon which the CHP Straw Proposal is based.

N.J.S.A. 48:3-87g. and h. allow the Board to adopt, pursuant to the Administrative Procedure Act, an energy efficiency portfolio standard that may require each electric public utility to implement energy efficiency measures that reduce electricity usage in the State by 2020 to a level that is 20 percent below the usage projected by the board in the absence of such a standard and require each gas public utility to reduce natural gas usage for heating in the State by 2020 to a level that is 20 percent below the usage projected by the board in the absence of such a standard. The type of energy efficiency defined in N.J.S.A. 48:3:87 g and h is specific to customer usage, such as replacing older inefficient appliances and equipment with new, more energy efficient replacements. Although CHP, when utilized properly, can improve the energy efficiency of the overall energy delivery system, it does not improve specific end-use efficiency as contemplated in N.J.S.A. 48:3-87 g. and h. In fact, in the case of natural gas, it will increase consumption if used as the input fuel.

Generally, an agency charged with enforcement of a statute is entitled to great deference in its interpretation of the statute. In re Distribution of Liquid Assets upon Dissolution Reg'l High Sch. Dist. No. 1, 168 N.J. 1, 10-11 (2001). Such deference is required because "agencies have the specialized expertise necessary to enact regulations dealing with technical matters"

N.J. League of Municipalities v. Dep't of Cmty. Affairs, 158 N.J. 211, 222 (1999). Thus, "agency rules are accorded a presumption of validity and reasonableness, and the challenging party has the burden of proving the rule is at odds with the statute." In re Freshwater Wetlands Prot. Act Rules, 180 N.J. 478, 489 (2004) (internal citations omitted).

On the other hand, the courts have recognized that [a]n administrative agency only has the powers that have been "expressly granted" by the Legislature and such "incidental powers [as] are reasonably necessary or appropriate to effectuate" those expressly granted powers. N.J. Guild of Hearing Aid Dispensers v. Long, 75 N.J. 544, 562 (1978) (quoting In re Regulation F-22 Office of Milk Indus., 32 N.J. 258, 261, (1960)). "Where there exists reasonable doubt as to whether such power is vested in the administrative body, the power is denied." In re Closing of Jamesburg High Sch., 83 N.J. 540, 549 (1980). See also Avalon v. N.J. Dep't of Envtl. Prot., 403 N.J. Super. 590, 607 (App. Div. 2008), certif. denied, 199 N.J. 133 (2009). An agency's regulation "may not under the guise of interpretation ... give the statute any greater effect than its language allows." In re Freshwater Wetlands, supra, 180 N.J. 478, 489 (quoting In re Valley Rd. Sewerage Co., 154 N.J. 224, 242 (Garibaldi, J., dissenting)).

An agency's regulations will be invalidated if they are "inconsistent with the statute [they] purport[] to interpret," Smith v. Dir., Div. of Taxation, 108 N.J. 19, 27 (1987), or they violate the "express or implied legislative policies" of the enabling act. GE Solid State, Inc. v. Dir., Div. of Taxation, 132 N.J. 298, 306 (1993). An administrative interpretation that "attempts to add to a statute something that is not there can furnish no sustenance to the enactment." In the Matter of CENTEX HOMES, LLC Petition for Extension of Service and/or for Exemption from Main Extension Rules N.J.A.C. 14:3-8.1 et seq. Pursuant to N.J.S.A. 48:2-27 and N.J.A.C. 14:3-8.8(A)(4) or (a)(6), 411 N.J. Super. 244 (App. Div. 2009) (holding that BPU did not have the authority to incorporate "smart growth" principles into its regulations merely because a statutory provision in its enabling statute referenced acting in a manner that "preserves and conserves" the environment) (quoting Serv. Armament Co. v. Hyland, 70 N.J. 550, 563 (1976)).

With respect to the CHP Straw Proposal, while understanding Board Staff's desire to facilitate CHP development consistent with the 2011 Energy Master Plan CHP targets, PSE&G believes that there is no legal support for utilizing N.J.S.A. 48:3-87g. and h. to form the basis for incorporating a CHP portfolio standard into Board regulations that, as contemplated, would mandate GDCs to finance upwards of \$2.7 billion dollars of CHP development in upfront payments off their balance sheets as a pass through with only recovery of costs and no return on investment over some unspecified period of time. Moreover, as discussed further below, twisting the authority, intention and meaning of N.J.S.A. 48:3-87g. and h. to foster CHP development in this manner, in addition to being inappropriate, is also unnecessary given the existence of N.J.S.A. 48:3-98.1 – a statute that specifically addresses how electric and gas public utilities may invest in energy efficiency and conservation programs.

(3) The Board lacks jurisdiction to order GDCs to enter into long-term contracts to finance CHP.

In addition to the fact that, as discussed above, the CHP Straw Proposal does not discharge the primary objective of the statute upon which it is based (i.e. it does not reduce natural gas usage for heating and electricity usage in general by customers), Board Staff should recognize that the proposal improperly seeks to expand the authority of the Board beyond the statute to enable the Board to mandate the GDCs to enter into long-term contracts to fund CHP. Although certainly agreeing with Board Staff that CHP, if implemented properly, could be a worthwhile type of energy efficiency measure, there is no statutory support for the Board to fund

¹ Total financing based on estimated average cost for CHP of \$1,800/kW, multiplied by the goal of 1,500 MW of CHP by 2020. During the April 30, 2013 stakeholder meeting to discuss the CHP Straw Proposal, Board Staff presented a PowerPoint including at slide 11 a proposed path to get to 1,500 MW of CHP by 2020. It should be noted that slide 11 called for 107.4 MW of CHP to be developed in 2014. In addition to being significantly greater than any past CHP development, it should be recognized that utilizing a back of the envelope calculation of approximately \$1,800/kW or \$1.8M/MW to build CHP, it would take approximately \$192,600,000 in financing in 2014 alone to build 107 MWs.

CHP in the manner contemplated in the CHP Straw Proposal. More specifically, PSE&G submits that the Board does not have the statutory authority to order the GDCs to enter into long-term CHP financing obligations.

The Board has jurisdiction over a local distribution company's ("LDCs") rates and services. N.J.S.A. 48:2-13; 48:2-21. The Board has jurisdiction to set the funding levels for energy efficiency and renewable energy programs, and to determine which programs shall receive SBC funding. N.J.S.A. 48:3-60(a)(3). The Board may also direct the electric distribution companies ("EDCs") to offer net metering for certain customers that qualify. N.J.S.A. 48:3-87(e)(1). The Board has jurisdiction to review and approve certain utility-proposed transactions – including some affiliate contracts, sales of property, financings, and mergers. N.J.S.A. 48:3-10; 48:3-7; 48:3-7.1; 48:3-9, 48:3-10. The Board also "may allow electric public utilities to offer long-term contracts through a competitive process, direct electric public utility investment and other means of financing, including but not limited to loans, for the purchase of SRECs and the resale of SRECs to suppliers or providers or others, provided that after such contracts have been approved by the board, the board's approvals shall not be modified by subsequent board orders." N.J.S.A. 48:3-87k. However, the Board has no jurisdiction to affirmatively order an LDC to enter into a specific contract at an administratively determined price to fund CHP development.

(4) The Board has the statutory authority to approve CHP Financing Programs pursuant to N.J.S.A. 48:3-98.1.

The CHP Straw Proposal indicates that "[t]he main goal of the CHP-PS is to develop and secure a stable and long-term funding source for CHP that is not lapsable to the general funds." Public Service respectfully submits that N.J.S.A. 48:3-98.1 provides the appropriate legal

authority for the Board to meet this goal. In fact, this is precisely the vehicle the Board has utilized for other energy efficiency, conservation and renewable energy programs.

Pursuant to N.J.S.A. 48:3-98.1a., "[n]otwithstanding the provisions of any other law or rule or regulation to the contrary:"

(1) an electric public utility or a gas public utility may provide and invest in energy efficiency and conservation programs in its respective service territory on a regulated basis pursuant to this section, regardless of whether the energy efficiency or conservation program involves facilities on the utility side or customer side of the point of interconnection;

As used in the statute, "Energy efficiency and conservation program" means any regulated program, including customer and community education and outreach, approved by the Board pursuant to this section for the purpose of conserving energy or making the use of electricity or natural gas more efficient by New Jersey consumers, whether residential, commercial, industrial, or governmental agencies. N.J.S.A. 48:3-98.1d. Unlike N.J.S.A. 48:3-87 g and h, this statute allows utilities to invest in energy efficiency programs on either side of the point of interconnection, a much more expansive application of energy efficiency. CHP, in contrast to traditional energy efficiency measures that improve efficiency on the customer side of the meter, improves the efficiency of the overall energy delivery system in two ways; by eliminating the line losses of the electric T&D network by being located at a customer site, and by improving (in the proper application) total fuel efficiency by more effective use of the waste heat of the generation source. Undeniably, CHP fits within the scope of N.J.S.A. 48:3-98.1.

Public Service as well as several other LDCs have voluntarily developed and implemented EE programs for their customers. These programs have been shown to be cost effective and simple for the customer. In fact, many of them provide full project financing with partial repayment through the utility bill; just as described in the Straw Proposal. The annual

N.J.S.A. 48:3-98.1 review process could also provide the forum for updating the CHP MW targets as market and other conditions change. Through a collaborative process, Public Service believes Board Staff, if interested, could analyze the applicability of a CHP component to these programs. Moreover, such a process would have the added benefit of allowing the Board and stakeholders to analyze potential ratepayer impacts before any program is put in place in recognition that (1) it is unlikely that 1,500 MWs of CHP can be financed in the next few years without some impact on rates; (2) there may be other agency initiatives (e.g. DEP and EDA) that might inform or help better target CHP which should be factored into Board action; and (3) there is a limited pool of appropriate participants for a CHP development program given the unique characteristics of CHP projects (overall costs, siting requirements, appropriate thermal energy profile, length of time from design to completion, etc).

In this regard, it is worth noting that last year at this time the Board concluded a review of utility supported solar programs. The purpose of the proceeding was to help the Board determine whether utility solar programs should continue, be allowed to expire, be modified or expanded. The Board found that the EDC solar programs should continue and requested that each EDC submit notice of intention to participate in Extended EDC SREC Programs for a capacity of 180 MWs over three years. In re Review of Utility Supported Solar Programs, BPU Docket No. EO11050311V, Order dated May 23, 2012. Public Service respectfully submits that a similar process could be utilized here to evaluate the merits of CHP financing by the GDCs and, if determined economically and environmentally cost beneficial, the Board could request the GDCs to submit new CHP filings under N.J.S.A. 48:3-98.1 and to provide notice of intention to participate or not in an EE-CHP Sub-Program for a specified total amount of CHP megawatts depending upon the ultimate program proposal adopted by the Board.

It should also be noted that utilizing N.J.S.A. 48:3-98.1 is entirely consistent with the conclusions of the Board's 2011 Energy Master Plan Clean Energy Funding Working Group which found that direct utility involvement in the provision of Clean Energy Programs should continue. Specific recommendations included 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 (Report at 27-28);
- since certain utilities have invested in these programs and relied in good faith on N.J.S.A. 48:3-98.1, it would be unfair to deny them the ability to continue to invest in and offer meritorious energy efficiency programs (Report at 28);
- endorse the Draft EMPs recognition of the value and benefits of having utilities support the delivery of energy efficiency and conservation programs in light of "the frequent and unique access utilities have to customers through monthly bills, customer call center functions, on-line resources and web-sites, field offices, and field activities" (Report at 19);
- utilities that wish to provide these programs be allowed to do so, subject to Board approval (Report at iii);
- note the considerable number of national studies from government agencies, energy efficiency advocate organizations and collaborative policy networks that support utility involvement in energy efficiency (Report at 28); and
- "[k]eeping the utilities as part of the energy efficiency equation would enable the State to leverage utility strengths, including customer relationships, billing and messaging systems, and energy technologies to, among other things, conduct targeted energy efficiency programs in congested areas and for so-called 'hard to reach' customers' (Report at 26).
 - (5) PSE&G welcomes the opportunity to work with OCE and other stakeholders with respect to other areas of the CHP Straw Proposal that likely would benefit from further stakeholder evaluation, consideration and discussion.

In addition to questions concerning the legal basis for the CHP Straw Proposal's longterm financing program, PSE&G respectfully notes that the CHP Straw Proposal raises several concepts that lack sufficient detail. For example, it lacks detail and information concerning (1) funding levels; (2) the recommendation that all State and Utility EE program funding be reduced commensurately with increases in CHP funding; and (3) any assessment of how the CHP Straw Proposal can be achieved in a "cost neutral" manner to customers.²

The proposal provides insufficient specificity about what SBC funding reductions are intended and offers no support to indicate that a reduction in statewide EE funding commensurate with increases in CHP funding would provide overall net benefits to New Jersey businesses and residents. The absence of information about this funding recommendation is troubling. Most significantly, there may be a mismatch between residential and commercial customers who benefit from existing EE programs and large commercial customers that benefit directly from CI-P funding. OCE and by extension, the Board, should proceed cautiously with any proposal that would eliminate funding that benefits some customer classes in order to provide benefits to others. In addition, while PSE&G certainly supports the State's efforts to prepare for future major weather events, it will be important for the Board to work with other stakeholders such as emergency management professionals at the state and local level as well as all of the LDCs to determine the effective applicability of CHP as a storm response measure. Effective application of CHP requires facilities with a steady electric and thermal load throughout the year. Once a process for properly identifying these facilities has been collaboratively developed, the Board can then further identify potential customers for Island Mode Operation and define potential costs associated with the CHP Straw Proposal in advance of additional consideration of recommendations. During the April 30, 2013 stakeholder meeting to discuss the CHP Straw Proposal, speakers referenced their belief that installation of CHP as a retrofit and/or as a grid-hardening measure would significantly add to the cost of the project compared to CHP installation in new construction. However, costs were not defined either in the

² The Straw Proposal states in the same paragraph that State and Utility CHP rebate program funding would be reduced dollar-for-dollar in response to increases in CHP-PS funding.

Mr. Michael Winka - 11 -May 30, 2013

Straw Proposal or at the meeting, and Board Staff stated that the public utility procurement of

CHP would be based on a capacity goal but would not have a cost or financing cap. Although

PSE&G assumes it is not the case, this implies that the CHP Straw Proposal intends MWs to be

procured at any cost.

PSE&G believes that the Straw Proposal's long-term financing recommendations can

simply not be adequately assessed in the absence of additional information about the potential

costs of the program and the level of possible benefits (including assessment of potential

customers who might be eligible for Island Mode Operation CHP).

CONCLUSION

PSE&G appreciates the opportunity to provide these comments and looks forward to

contributing to the CHP Working Group to assist Board Staff in evaluating the need and

appropriate model for incentivizing CHP development.

Respectfully submitted,

By:

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Dated: May 30, 2013



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May 30, 2013

Via Electronic Mail to publiccomments@njcleanenergy.com

Michael Winka, Senior Policy Advisor for Smart Grid Office of the President New Jersey Board of Public Utilities 44 South Clinton Avenue P.O. Box 350 Trenton, New Jersey 08625

Re: Comments by Rockland Electric Company on Straw Proposal for Combined Heat and Power ("CHP") Long Term Financing Incentive Mechanism, A "Smart" Portfolio Standard

Dear Mr. Winka:

Please accept these comments submitted on behalf of the Rockland Electric Company ("RECO") regarding the above proposal. While recognizing the preliminary nature of the proposal, RECO appreciates the opportunity to comment.

As an overall matter with respect to CHP, RECO recognizes that this technology can have value particularly for large customers with a high load factor and a need for thermal energy to provide power to non-electric processes. From the electric utility perspective, CHP is most beneficial to customers and the grid as a whole when it is installed in targeted areas where the distribution system is constrained, or on the cusp of needing major upgrades. A targeted approach to CHP growth allows utilities to incorporate CHP into their load relief plans and potentially defer infrastructure upgrades. Staff should therefore work with electric utilities to develop a CHP program that targets CHP installation where it can contribute to the benefit of all utility customers through infrastructure deferrals.

Staff's proposal calls for establishment of a CHP portfolio standard, which implies that installation of a certain amount of CHP is readily achievable by utilities and customers given the right level of incentives. It has been RECO's experience in its service territory that the number of customers for whom CHP makes sense is limited. Even on a statewide level, the opportunities for economically-efficient CHP are contained within a narrow population of customers with high load factors and a need for the thermal

energy that CHPs produce. RECO is therefore concerned that Staff has not adequately evaluated the unique circumstances, and the limits thereof, that are necessary to make CHP a good choice for New Jersey customers.

Given the specialized nature of CHP installations and the limited number of customers that can utilize the substantial thermal load produced by CHP technology, RECO requests that Staff reconsider its proposal to use a binding portfolio standard to meet the State's goal of 1,500 megawatts (MW) of CHP by 2021. A more appropriate policy mechanism might be a targeted CHP program to offer incentives for CHP systems that pass a cost-benefit test that factors in both the individual customer's energy costs and the costs associated with distribution system upgrades that could be deferred. Such a program would give utilities the flexibility to work with customers and pursue the most economically efficient projects available in their service territory as the circumstances allow. It would also avoid the risk of utilities pursuing less-desirable projects simply to meet an arbitrary target that does not account for the individual circumstances present in each region of the state.

RECO is also concerned that the creation of a ratepayer-backed financing mechanism for CHP will effectively mean that non-CHP utility customers will absorb the risk of project failure and/or loan default without gaining commensurate benefits. Non-CHP customers are not likely to experience system benefits from CHP unless the technology is installed in targeted areas that are in need of distribution upgrades. Additionally, the environmental benefits CHP offers small customers are questionable, because CHP is a fossil-fuel driven technology. Depending on the fuel CHP is replacing and the location of the emissions stack, CHP can have a net negative impact on local air quality. To the extent that the proposal is designed for the State to achieve environmental and resiliency goals, there are other options that would benefit a wider range of customers. End-user energy efficiency measures, such as advanced lighting technologies and high-efficiency chiller units are both more cost-effective and environmentally beneficial. Such measures would also contribute directly to the State's goal of reducing overall energy usage. In contrast to CHP, end-use energy efficiency eliminates the need for generating the megawatt hours (MWh) saved and reduces all emissions associated with that generation. While grid-supply MWh savings that result from CHP may make more efficient use of the primary energy (typically natural gas) and may reduce the overall emissions associated with electricity generation, typically CHP does not reduce the customer's electricity usage at the CHP site, and will likely increase local emissions at the CHP location, where air quality in a dense urban environment is already a major concern.

As to resiliency, the effectiveness of CHP is not certain. While an individual CHP customer may have a resilient power source during a major outage, that customer's CHP does not provide power to surrounding neighborhoods after a storm unless the customer has an arrangement with its electric utility to provide dispatchable back-up generation. Moreover, such sites as a storm shelter or major gathering center cannot take advantage of CHP's intrinsic efficiencies because they usually have a low load factor and generally lack a high thermal load. A CHP system installed in a sports arena, for

example, would provide resiliency benefits in the form of shelter and electricity, but at a very high cost that would be subsidized by non-CHP customers. A more cost-effective measure for providing a resilient power source would create incentives for backup generation for large and critical care facilities. Other alternatives include selectively undergrounding power lines or improving vegetation management. RECO suggests that Staff reconsider its narrow focus on CHP systems in its straw proposal, and broaden the range of acceptable back-up generation technologies.

Finally, the proposal to make the CHP requirement "smart" by changing dynamically with market conditions adds regulatory uncertainty and could lead to confusion in the market. Certainly, this concept requires further exploration to develop the means to "take the temperature" of the CHP market given its small size and situation-specific projects.

Thank you for consideration of these comments.

Respectfully submitted, Rockland Electric Company By its Attorney,

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CHRIS CHRISTIE

Governor

KIM GUADAGNO Lt. Governor DIVISION OF RATE COUNSEL 140 East Front Street, 4th Fl P. O. Box 003 Trenton, New Jersey 08625

> STEFANIE A. BRAND Director

May 30, 2013

Via Hand Delivery 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 08625-0350

Re: Combined Heat and Power/Fuel Cell Working Group

May 2, 2012 Request for Comments on Staff Draft Straw Proposal Combined Heat

and Power (CHP) Long Term Financing Incentive

Mechanism—a "Smart" Portfolio Standard

Revised Draft Dated April 15, 2013

Dear Secretary Izzo:

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

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

Honorable Kristi Izzo, Secretary May 30, 2013 Page 2

Thank you for your consideration and assistance.

Respectfully submitted,

STEFANIE A. BRAND Director, Division of Rate Counsel

By:

Paul E. Flanagan, Esq. Litigation Manager

Encl.

c:

OCE@bpu.state.nj.us Elizabeth Ackerman, BPU Michael Winka, BPU Mona Mosser, BPU Scott Hunter, BPU Jerome May, BPU Tricia Caliguire, Esq., BPU Rachel Boylan, Esq., BPU Marisa Slaten, DAG

Staff Draft Straw Proposal Combined Heat and Power (CHP) Long Term Financing Incentive Mechanism—a "Smart" Portfolio Standard Revised Draft Dated April 15, 2013

Comments of the New Jersey Division of Rate Counsel May 30, 2013

The Division of Rate Counsel ("Rate Counsel") would like to thank the Board of Public Utilities ("BPU") or ("Board") for the opportunity to present comments on the April 15, 2013 Revised Draft Straw Proposal for a "Combined Heat and Power (CHP) Long Term Financing Incentive Mechanism—a 'smart' Portfolio Standard." The Straw Proposal was circulated by the Office of Clean Energy ("OCE") Staff and was discussed at the April 30, 2013 meeting of the OCE's CHP Working Group. By e-mail notice dated May 2, 2013, the OCE requested comments on the Straw Proposal by May 30, 2013.

Introduction

Rate Counsel has serious concerns about the Straw Proposal. The Straw Proposal is completely lacking in any empirical support for the proposed transition from the existing system of rebates and grants for CHP. There is no analysis to demonstrate that the proposed "CHP portfolio standard" will be more cost effective than the existing program, much less that it represents the most cost-effective option. The Straw Proposal also contains no analysis of how Staff's proposal will advance its stated goals of encouraging development of CHP facilities in general or for "public critical facilities" that can play a role in storm response. There has been no analysis of the reasons for the poor responses to the existing program, and no effort to identify program features that would remedy identified deficiencies in the current program.

Furthermore, the portfolio standard mechanism envisioned by Staff has serious flaws. The Straw Proposal is confusingly written and lacking in crucial details, but even the limited details that are provided raise numerous practical issues. The mechanism that appears to be envisioned by OCE would at best be complicated and expensive to administer, and it may be completely unworkable. The Straw Proposal also would lack transparency with regard to costs. Unlike OCE's current CHP programs, which are conducted under a publicly available budget, the proposed mechanism would have its costs embedded within the rate structures of four separate utilities. The costs of the program would be difficult to ascertain for the general public, and, perhaps, also for experts.

Assuming that the development of CHP for critical facilities is a reasonable goal, the proposed portfolio standard will not achieve it. If it is workable at all, it will be complicated and costly. Rather than attempting to implement a novel and untested mechanism, Staff should first evaluate its existing programs, and conduct a careful analysis to identify the least cost alternative for reaching that goal, whether modifications to existing programs or a new proposal.

Proposed CHP Portfolio Standard

According to the Straw Proposal, its goal is "[t]o develop a long term secure and stable funding/financing source to implement the 2011 Energy Master Plan ("2011 EMP") target that includes both storm response CHP and dual economic and environmental benefit CHP."

Although the Straw Proposal includes some discussion of the overall 2011 EMP goals, a primary focus of both the proposal and the April 30, 2013 CHP Working Group meeting was a "CHP portfolio standard" to be implemented in the near term to promote the development of CHP at "critical public facilities," which Staff defines as publicly owned facilities that "could operate

24/7 and either temporarily or long term house, feed and shelter evacuated victims from an emergency such as super storm Sandy." Straw Proposal, p. 3-4.

OCE is proposing a mechanism that is type of portfolio standard. The proposed mechanism would require each of New Jersey's four natural gas utilities to procure CHP generation, to be located at critical public facilities, in annual amounts based on percentages of the CHP goals stated in the 2011 EMP. As clarified at the April 30, 2013 meeting, the utilities would not directly procure given amounts of CHP capacity, but rather units of energy savings resulting from the use of the CHP facility's thermal output. See April 30, 2013 meeting presentation, Slide # 8. OCE is proposing what it characterizes as a "smart" portfolio standard, i.e., one that can be increased or decreased by the Board based on "market conditions." Straw Proposal, p. 2.

Rate Counsel Concerns

Lack of empirical foundation for proposal

Rate Counsel is also concerned that OCE's proposal is premature. Staff states that the current rebate/grant structure would transition to the new long term portfolio standard as it is developed. Straw Proposal, p. 4. The Board has previously recognized since January 2007 the need for renewable energy, and particularly solar energy development, to reduce reliance on rebates and other direct payments in favor of market-based mechanisms. However, the Board only arrived at this conclusion with regard to these markets after a nearly two year investigation which included the formation of a specific working group to develop white papers outlining

¹Decision and Order Regarding Solar Electric Generation, BPU Docket No.EO06100744, In the Matter of the Renewable Energy Portfolio Standards – Alternative Compliance Payments and Solar Alternative Compliance Payments, pg. 2.

potential new transitional models, and the contracting of a consulting firm to perform independent analyzes of the proposals.²

One of the key findings of the many studies prepared through the Board's investigation in its Docket No. EO06100744 was with regard to the projected ratepayer impacts. The Board's consultant found that the previous rebate-heavy régime over-financed solar energy projects by \$2.796 billion,³ while providing substandard results. The analysis also found that the proposed new financing mechanism was by far the least expensive proposal for ratepayers.⁴ This finding confirmed the Board's position that the previous financing system based around rebates was unsustainable in the long-run.

Staff's proposed CHP portfolio standard contains no such empirical foundation, and it is not clear that the findings regarding renewable energy financing structures would hold for CHP. Instead, the proposal is completely opaque with regard to many important policy questions. The proposal claims that it will be rate neutral, by including adjustments to either the overall Utility E3 (energy efficiency) or Clean Energy Program Societal Benefit Charge ("SBC"). Straw Proposal, p. 5. However, Staff is proposing only that the entire Clean Energy Program budget not increase with the introduction of the proposed portfolio standard. Missing still is any analysis of the costs associated with the program and any analysis showing that the proposed mechanism would result in the least cost when compared to the current or alternative financing structures. As elaborated further below, Rate Counsel recommends Staff first conduct all necessary analyses of CHP within the State, including a feasibility analysis, ratepayer impact analyses, and an in-

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²Decision and Order Regarding Solar Electric Generation, BPU Docket No.EO06100744, In the Matter of the Renewable Energy Portfolio Standards – Alternative Compliance Payments and Solar Alternative Compliance Payments, pg. 2.

An Analysis of Potential Ratepayer Impact of Alternatives for Transitioning the New Jersey Solar Market from Rebates to Market-Based Incentives, July 31, 2007 Revised Draft, New Jersey Board of Public Utilities, p. 4.
 An Analysis of Potential Ratepayer Impact of Alternatives for Transitioning the New Jersey Solar Market from Rebates to Market-Based Incentives, July 31, 2007 Revised Draft, New Jersey Board of Public Utilities, p. 4.

depth review of the causes of the lackluster support received by the previous competitive solicitations for CHP. Only then will Staff and stakeholders possess enough information to make informed decisions regarding changes to CHP financing within New Jersey.

Lack of clearly defined objectives

Rate Counsel also is concerned that, even aside from any consideration of costeffectiveness, the Straw Proposal does not clearly define its goals, or explain how those goals
would be met by the proposed CHP portfolio standard. The Straw Proposal states that one of its
objectives is to "[d]evelop a near term CHP storm response program for critical public facilities,"
and proposes to set RPS requirements based on the CHP goals in the 2011 EMP. The Straw
Proposal does not, however, specify what those goals should be or provide any justification for
such goals. The Straw Proposal does not mention any analysis of the market potential for CHP,
and in particular the market potential for CHP at critical public facilities. If OCE wishes to
consider promoting CHP at critical public facilities, it should first assess the market potential for
cost-effective CHP at critical public facilities, the barriers to development of such CHP, and
possible means for overcoming those barriers.

Before embarking on a novel approach such as the proposed portfolio standard, OCE should conduct a thorough evaluation of the best means of achieving the CHP goals set forth in the 2011 EMP. Such an evaluation should include an analysis of OCE's existing CHP programs. Over the past several years, development of both small and large CHP projects has been sluggish despite the availability of attractive incentives under the existing programs. OCE should first evaluate the reasons why the present incentive structure has not been successful. OCE could then present a proposal that remedies the specific deficiencies found in the current incentive structure. Such a proposal could include, for example, measures to identify thermal loads that could be

served by CHP on an economic basis, and changes in the types of incentives being offered such as financing mechanisms in addition to or in lieu of the present rebate structure.

Unworkability of proposed structure

The Straw Proposal is lacking in critical details that would define how the CHP portfolio standard would actually work. As stated in the Straw Proposal itself, the details that remain to be worked out before the proposed portfolio standard could be implemented include further definition of eligible "public critical facilities," the maximum sizes of the CHP facilities, eligible technologies and fuel types, and types and levels of incentives to be provided to the CHP developers. Straw Proposal, p. 4.

In particular, it is not clear how the CHP procurement process would operate. As noted above, Staff appears to be envisioning a process whereby the gas utilities would procure energy savings. OCE has not clearly defined how the energy savings to be procured would be determined, measured, and tracked, and the few details that have been provided raise more questions than they answer.

A particularly puzzling aspect of the Straw Proposal is the proposal to consider only those savings resulting from the use of the thermal output of the CHP facility, and disregard the "additional gas used to generate the electricity." Straw Proposal. p. 3; April 30, 2013 meeting presentation, Slide # 8. Staff apparently intends to focus solely on the efficiency of CHP as a generator of thermal output, disregarding the benefits resulting from use of heat that would otherwise be wasted to generate electricity. A new boiler used for CHP may be more efficient that an old existing boiler, but is unlikely to be substantially more efficient than a standard new boiler that would be a likely alternative to CHP. By ignoring the benefits resulting from the concurrent generation of useful thermal output and electricity, the Straw Proposal assures that the

primary benefit of CHP, capturing otherwise unused heat to generate electricity, will not be properly measured, valued or incentivized. The proposed procurement process will not result in the selection of the projects that are the most efficient and cost-effective overall.

Aside from OCE's mistaken focus on the "thermal" side of CHP, the proposal is lacking in any suggested benchmarks or protocols for measuring savings, and also lacking in any suggestions for how such savings should be documented for a proposed project, and verified after a project is placed in service. This is likely in any event to require a complicated and costly administrative structure to measure and track the savings procured, and then delivered by the CHP facilities.

Further, the proposed portfolio standard would create a much less transparent cost structure than OCE's current CHP program. The current program operates under a Board-approved budget that is public. Both budgeted and actual expenditures are easily accessible from the Board Orders and other materials available on the OCE website. Cost information would be much less accessible under the proposed CHP portfolio standard. The ratepayer-funded subsidies inherent in the program would be embedded within the rates of four separate utilities, making it difficult for members of the public, or even experts, to determine the total costs of the program. On a related issue, Rate Counsel also notes its disagreement with the proposition that the development of a "non-lapsable funding source" should be a primary objective of program to encourage CHP. Straw Proposal, p. 1. OCE can assure that ratepayer funds are used effectively through a systematic process of evaluation and planning, and then spending according to those plans. A non-lapsable funding source that comes at the cost of transparency is not beneficial to ratepayers or in the public interest.

Conclusion

For the reasons discussed above, OCE should not proceed further with the propose CHP portfolio standard. This proposal is offered with no supporting analysis, and would be overly complicated, costly, and lacking in transparency. The Straw Proposal, at this time, does not provide a usable framework for encouraging the development of CHP.

New Jersey Business & Industry Association



TO: Office of Clean Energy

FR: Sara Bluhm, Vice President Energy & Environment, NJBIA

DATE: May 30, 2013

RE: CHP Portfolio Standard

On behalf of our 21,000 members, the New Jersey Business & Industry Association (NJBIA) appreciates the opportunity to comment on the BPU Staff's Straw Proposal on a CHP Portfolio Standard. NJBIA is supportive of the development of CHP for businesses to replace equipment and lower energy costs; however we have concerns related to implementing a Portfolio Standard.

Over the past decade, NJBIA has advocated for upfront incentives to spur the development of CHP at businesses around the state. We have supported the use of Retail Margin, RGGI and Clean Energy funds as well as the SBC tax credit to fund these incentives. Unfortunately one thing that has been lacking during this time has been a coordinated effort and consistent policy. It is our understanding that staff is exploring options to develop a long term funding source, yet we are still lacking the fully coordinated planning effort.

Within the Energy Master Plan (EMP) the Christie Administration recognized the need to lower the cost of energy for ratepayers. Another commitment was to develop 1500MW of CHP over a ten year period. The EMP stated that "implementation of these projects would require support from State incentives, including loans and loan guarantees as well as a streamlined permitting process." NJBIA advocated for a general permit at the DEP to cut down on the amount of time related to permitting these projects. After a two year process, DEP has a general permit available and in May 2013 they were reviewing their first application. NJBIA feels it is critical for business to easily have permits and funding approvals to help move these projects.

After Superstorm Sandy, there has been extensive evaluation of our infrastructure and storm preparedness. There is a need for cross agency planning related to CHP, not only to identify projects and prioritize areas that could be helped with CHP, but to align federal disaster aid money to possible CHP projects. This would help achieve the goal of the EMP CHP target and it would save ratepayers from paying for it. Given the recent reallocation of the Clean Energy Fund monies, it provides another funding source for public projects. Yet NJBIA has not yet seen a concerted effort to coordinate and develop an inventory of public projects that could be targeted for CHP and federal money.

Ratepayers are facing the seventh highest electric costs in the nation. These costs are expected to increase with the current filings before the BPU and upgrades to infrastructure overall. Currently, ratepayers are seeing a high cost for compliance for existing portfolio standards. The Office of Clean Energy estimated the total cost of compliance with the RPS, which ranges from approximately \$7.5 million in Reporting Year 2005 to \$197 million in Energy Year 2011 (EY). Adding an additional carve out for CHP is worrisome to NJBIA. Unlike solar, CHP has a high reliability factor and ability to run year round at a high capacity. It has a high upfront cost, but bears a reduction in

energy costs. Yet without a plan of where these projects could be built, who is interested in them, and what capacity will be built, ratepayers are forced to add another government imposed compliance cost to their bill. The BPU needs to take into account all of the potential impacts that face ratepayers and prioritize what they are going to pay for. We do not have an unlimited account to draw upon, nor can every goal be fully funded. It is critical to prioritize what improvements are going to be made at the expense of ratepayers.

Furthermore, the dynamic marketplace may not allow for longer term planning of projects if prices continue to shift over time. NJBIA is also concerned about the ability of the state to meet its targets. The Association appreciates the establishment of a floor and ceiling on market prices and a decline in the funding for CHP within the Clean Energy budget. However, this decline in Clean Energy is not resulting in a refund to ratepayers to offset the PS requirements. Most likely the money will be shifted to other projects. Therefore this has the potential to again increase the ultimate cost to ratepayers. NJBIA has been adamant that we need to reduce the 27 percent surcharge from government imposed taxes and fees. This portfolio standard adds to that 27 percent and does not decrease it.

NJBIA appreciates the opportunity to work with the Board on ways to reduce the cost of energy for ratepayers and lower the cost of doing business in New Jersey. We look forward to a continued dialogue on ways to offset the high initial costs of installing CHP.



May 31, 2013

BY ELECTRONIC DELIVERY

Mr. Michael Winka, Senior Policy Advisor for Smart Grid New Jersey Board of Public Utilities Division of Economic Development and Energy Policy 44 South Clinton Ave, PO Box 350 Trenton, NJ 08625-0350

publiccomments@njcleanenergy.com

Re: BPU Staff CHP Portfolio Standard Straw Proposal

Dear Mr. Winka:

On behalf of New Jersey Natural Gas Company ("NJNG") please accept the following initial written comments regarding Board Staff's April 15, 2013 straw proposal exploring the development of a Combined Heat and Power ("CHP") Portfolio Standard ("PS") ("CHP Straw Proposal"). NJNG appreciates the Board's efforts in continuing to pursue the State's goal to support and promote CHP development throughout New Jersey. NJNG would like to share its comments and observations regarding the CHP Straw Proposal as more fully set forth below.

These systems generate electric energy and utilize the thermal energy that is normally wasted. Most CHP systems are configured to generate electricity, recapture the waste heat, and use that heat for space heating, water heating, industrial steam loads, air conditioning, humidity control, water cooling, product drying, or for nearly any other thermal energy need.

¹ New Jersey currently has 3,000 MW of CHP at 209 facilities which is 17% of the capacity but less than 10% energy statewide. See, NJ Spotlight CHP Webinar, New Jersey's Clean Energy Program-Opportunities for CHP, Presented by Michael Winka, Senior Policy Advisor for Smart Grid, May 2, 2013.

CHP Straw Proposal:

The stated objectives of the CHP Straw Proposal are to:

Develop CHP as part of the State's long-term strategies for economic development.

Develop a near-term CHP storm response program for critical public facilities.

Develop a non-lapsable funding source

No new certificate trading programs

The CHP Straw Proposal recommends that gas distribution utilities implement a CHP PS to procure, through a series of competitive solicitations, 1,500 MW of CHP resources by 2020 to meet the Energy Master Plan ("EMP") CHP goal. As proposed, the gas distribution utilities would enter into long-term contracts with winning bidders/customers, who would be able to avail themselves of utility on-bill financing with some percentage of their CHP expenditures/indebtedness forgiven based on the unit's performance and actual energy savings. The amount forgiven would be recovered from the gas distribution utility's ratepayers. Each solicitation would seek a specific amount of cost-effective² CHP projects (either based on MW, MWh, therms or btus). Given the State's and the Board's desire to address storm response, the CHP PS procurements would be open initially to public entities only; from municipalities to county and state-owned facilities to address storm response.

Importance of CHP Relative to the EMP Goal and Renewed Focus on Resilience:

According to the CHP Straw Proposal, its goal is "[t]o develop a long-term secure and stable funding/financing source to implement the 2011 Energy Master Plan CHP target of 1,500

² The CHP Straw Proposal does not define "cost-effective", nor does it discuss the minimum performance requirement for the facilities.

MW that includes both storm response CHP and dual economic and environmental benefit CHP." The CHP Straw Proposal takes the EMP goal for CHP and establishes it as a specific regulatory requirement.

NJNG agrees that CHP is an important area to continue to develop and pursue in order to achieve the energy-efficiency targets contained in the EMP. Further, as was evidenced by the devastating effects of Superstorm Sandy, there are tremendous benefits that can be garnered for entities that had CHP systems, as was recently experienced during and immediately following the storm events that unfolded. As noted during the NJ Spotlight CHP Webinar held on May 2, 2013, there was an electric power outage in Princeton for over a week, but Princeton University was able to switch off the electric grid and power a large part of its campus with an 11 MW CHP unit. Also, the College of New Jersey was able to operate independent of the electric transmission and distribution system (commonly referred to as "Island Mode Operation" or "islanding") because of their CHP units. The College continued to stay open while the 26kV line that feeds power to the campus was down and was being repaired.³

The CHP Straw Proposal recommends developing a CHP long-term financing structure for public critical facilities and then, based on experience of this initial program, the private sector component could be added at some future point. According to the CHP Straw Proposal, a public critical facility would be defined as a public facility that could operate 24/7 and either temporarily or long-term house, feed and shelter evacuated victims from an emergency such as Superstorm Sandy.

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³ See, NJ Spotlight CHP Webinar.

NJNG Has Been Supportive in Promoting CHP:

Since 2003, NJNG has had a Board approved tariff for Distributed Generation ("DG") that would apply to CHP. NJNG continues to promote the merits of DG to our commercial markets that include healthcare campuses, military bases, large hotels, and colleges and universities. NJNG looks for optimal locations with either power reliability concerns or appropriate electric load characteristics with a thermal requirement. NJNG maintains close contact with key equipment manufacturers and distributors of DG equipment in order to understand their market strategies and assessment. NJNG posits that three critical elements, including(1) relevant utility rates; (2) customer needs; and (3) stability of financial incentives, together will motivate the customer to enhance their energy efficiency and reduce the demand on the electric grid with DG installations.

According to a recent NJ Spotlight article, "CHP is viewed as a way to "harden" the grid and reduce widespread outages, particularly at essential facilities like hospitals, wastewater treatment plants and other public facilities." NJNG will continue to assist the Board and Board Staff with its efforts as is evidenced by NJNG consistently and cooperatively working with the BPU in promoting NJCEP's offerings and solicitations.

Gas Distribution Utility Focus:

As set forth in the CHP Straw Proposal, "While the EEPS for CHP could be on both the electric and gas utilities for the more efficient cooling and heating equipment, it would be more effective and less confusing to initially address the CHP PS through one - the gas utilities. This current straw for long-term CHP financial assistance would be to finance 100 percent of the CHP

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⁴ See, NJ Spotlight, CHP Proposal Would Build Plants Without Burdening Ratepayers, May 1, 2013.

project through the EEPS obligation on the natural gas utilities. This would be through direct upfront financing by the utilities as a loan. The CHP PS would be a larger version of on the bill financing." NJNG appreciates and understands Board's Staff's motivation to streamline and reduce any marketplace confusion. However, this proposition may have unintended consequences, and, in fact, result in confusion, given the gas-only novel concept. Based upon a review of how other states have been promoting CHP, other states address CHP through either an EEPS or an Alternate Energy Portfolio Standard ("AEPS"). Typically, the EEPS only applies to the electric distribution utility. NJNG is not aware of any states placing the obligation on both the gas distribution and electric distribution utilities or any states placing it solely on the gas utilities.

NJNG cautions that if the CHP PS is to apply to both electric and gas distribution utilities, the Board should ensure that (1) the societal costs are properly distributed between the electric and gas distribution utilities; (2) the structure ultimately adopted allows for the best CHP projects to be selected; and (3) administrative costs are minimized.

"Smart" Portfolio Standard:

The CHP Straw Proposal envisions a "Smart" Portfolio Standard. According to the CHP Straw Proposal, "...this long term CHP financing structure would be a "smart" portfolio standard. The CHP PS requirement would not be static requirement as in the solar, Class I and Class II RPS." Again, while a novel concept, a "smart" portfolio standard may not provide the certainty that the market needs. The CHP Straw Proposal states that "...the main goal of the CHP PS is to develop and secure a stable and long term funding source for CHP that is not lapsable to the general funds. The CHP PS would be a long term financing incentive similar to the RPS structures." According to the CHP Straw Proposal, "the CHP PS requirement would be a

dynamic standard that responds and changes based on market conditions. The criteria for this change would be set as part of the CHP PS Order or rulemaking. Basically it would respond to market demand, overall system costs, overall environmental and energy benefits and overall economic condition to a cap and down to a floor." The CHP Straw Proposal goes on to state, "The CHP-PS would not be a filing pursuant to *N.J.S.A.* 48:3-98.1 (commonly referred to as "RGGI filings"). The utility CHP annual compliance filing would be based on the CHP-PS requirements established by the Board." Allowing the CHP PS to fluctuate may not provide enough of a sense of stability and security that the marketplace desires. NJNG suggests that further discussion amongst all stakeholders be undertaken to assess the benefits as well as the detriments to this concept.

Reliance upon N.J.S.A. 48:3-87(g) and (h) May Limit the Marketplace:

N.J.S.A. 48:3-87g⁵ and h⁶ allow the Board to adopt an energy-efficiency portfolio standard ("EEPS")⁷ for electric and gas distribution utilities to implement energy-efficiency measures that reduce electricity usage and gas usage in the State by 2020 to a level that is 20 percent below the usage projected by the Board in the absence of such a standard. By relying

⁵ *N.J.S.A.* 48:3-87g states: "The board may adopt, pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), an electric energy efficiency portfolio standard that may require each electric public utility to implement energy efficiency measures that reduce electricity usage in the State by 2020 to a level that is 20 percent below the usage projected by the board in the absence of such a standard. Nothing in this section shall be construed to prevent an electric public utility from meeting the requirements of this section by contracting with another entity for the performance of the requirements."

⁶ *N.J.S.A.* 48:3-87h states: "The board may adopt, pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), a gas energy efficiency portfolio standard that may require each gas public utility to implement energy efficiency measures that reduce natural gas usage for heating in the State by 2020 to a level that is 20 percent below the usage projected by the board in the absence of such a standard. Nothing in this section shall be construed to prevent a gas public utility from meeting the requirements of this section by contracting with another entity for the performance of the requirements."

⁷ According to the CHP Straw Proposal, "An EEPS, as defined in the statutes, means a requirement to procure a specific amount of EE or demand side management resources as a means of reducing energy usage and demand by customers."

upon this statutory authority, this may only allow for the recognition of the thermal output of a CHP system as paragraphs g and h require reduction of usage 'in the state' so the reduction at the customer level is not relevant and the only allowable reduction is from the waste heat recovery. Since CHP, under this approach, doesn't reduce the amount of electric used at the site, there are no electric savings to be measured and realized in the CHP Straw Proposal. If one were able to include the electric transmission and distribution ("T&D") losses, then one would be able to recognize the electric savings.

Allocation of obligation:

According to the CHP Straw Proposal, "As similar to the RPS the CHP PS would be set statewide annually as a percentage of the CHP EMP goal through energy year 2021. This annual statewide CHP percentage would be an obligation on the individual utilities based on annual retail sales of gas or electric and other factors which may include market conditions and supply and demand." This was further reiterated during the May 2, 2013 NJ Spotlight CHP Webinar and at the April 30, 2013 working group meeting wherein reference was made to utility annual retail sales as the basis for setting the retail obligation. NJNG believes the BPU staff should reconsider the use of annual retail sales as the method for allocating an obligation for this standard., NJNG suggests that an assessment of the market's technical and economic potential statewide would actually be a much more appropriate basis for distribution of an obligation as shown in the recently released, AGA Report entitled "The Opportunity for CHP in the United

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⁸ Although CHP can improve the energy efficiency of the overall energy delivery system, it does not improve the end-use efficiency at a customer's premise. The type of energy efficiency defined in *N.J.S.A.* 48:3:87 g and h is specific to customer usage. CHP may not lower the amount of energy used by a customer. While it will decrease the amount of electricity purchased from the transmission and distribution system, it may, in fact, increase gas consumption which could be contrary to *N.J.S.A.* 48:3-87 g and h.

States", May 2013. Alternatively, if sales volumes were used, it would be more appropriate to be based on commercial customer sales volumes, specifically, large commercial customer sales that match the profile of potential CHP customer (i.e., year round thermal requirement).

Financing:

According to the CHP Straw Proposal, "The main goal of the CHP PS is to develop and secure a stable and long term funding source for CHP that is not lapsable to the general funds. The CHP PS would be a long term financing incentive similar to the RPS structures."

The CHP Straw Proposal states that "The NJCEP rebate/grant structure would stay in place until the CHP long term financing is developed, implemented and available". NJNG would caution against departing from this incentive structure pre-maturely. Abandoning this incentive program pre-maturely could be misinterpreted by the marketplace that the State is abandoning its CHP development efforts. NJNG suggests that the CHP PS payment, financing and rebate/grant structures should run concurrently as the size of the CHP project and needs of the customer will dictate which solution is the most appropriate for the specific project and customer.

Given the unique nature of this CHP Straw Proposal, NJNG is not quite certain how the marketplace will react to this new financing structure, thereby impacting the State's efforts to meet the EMP goal; develop CHP as part of the State's long-term strategies for economic development; and develop a near-term CHP storm response program for critical public facilities. Further, given the uncertainty of whether the legal authority on which this CHP Straw Proposal is premised, it may further marketplace apprehension.

Rate Impact:

According to the CHP Straw Proposal, "In order to keep the rate impact for CHP projects neutral, a reduction in the overall Utility E3 and NJCEP SBC cost would be a part of the overall design of a CHP PS long term financing program. As the long term financing structure were developed and implemented the direct utility E3 CHP or NJCEP CHP rebate budgets would be reduced by an equivalent increment. This would result in a reduction of the E3 rate or the SBC rate to insure the net cost to the ratepayer over the same period were, at a minimum, a net zero sum gain. Basically this would result in adding no new cost to the ratepayer."

NJNG suggests that the Board staff conduct an analysis to determine whether a long-term financing structure that is acceptable to the market can support the 1500MW CHP capacity objective with "a net zero sum gain".

Conclusion:

NJNG believes that the CHP Straw Proposal requires further consideration and evaluation to ensure that the format for a new CHP financing structure will help advance the CHP market. As noted, one of the largest barriers to the marketplace has been the need to provide financial certainty. As such, there may be other paths that could be utilized other than an EEPS for CHP. With any structure or program that is finally adopted, it must be noted that utilities should have the ability to set programs with longer horizons than the one year planning outlook that the NJCEP uses. Due to varying financial needs and ownership structures of CHP projects, NJNG recommends that the Board concurrently offers various incentive options to the marketplace.

NJNG appreciates the opportunity to provide these comments and looks forward to actively participating CHP Working Group to assist Board Staff in pursuing CHP development that will be viable and sustainable over the long-term.

Respectfully submitted,

Andrew K. Dembia

Regulatory Affairs Counsel



Comments on NJ straw proposal for critical infrastructure CHP PS

Clean Energy Group/Clean Energy States Alliance applauds this effort by New Jersey to address critical infrastructure resilient power needs with a forward-looking CHP initiative. We offer the following comments on the straw proposal.

- The program should support eligible CHP projects using renewable fuels, such as biomass, as well as natural gas.
- Since CHP systems typically generate more heat than electricity, and generate heat more efficiently than electricity, it is necessary to size CHP plants to the heat load rather than the electric load. This frequently results in CHP plants that cannot support the peak electric load of the host facility, but these plants may still be able to support a critical load. For this reason, the CHP PS should include a requirement that critical service loads at the host facility be identified and that the CHP equipment be sized to support the critical load, and that switching systems be installed that will drop non-critical load upon the loss of grid power. A minimal standard for critical service provision may need to be developed.
- Black-start capability and appropriate switchgear should be required.
- Some electric utility service areas may not support synchronous generators. The CHP PS should be developed in consultation with electric utilities to ensure that resulting projects will be able to tie into the grid without undue delays.
- Standards should be developed for storm resilient CHP, including placement of equipment in protected areas above flood levels, secure fuel supplies, etc.
- "The incentive payment would transition from an up-front rebate/grant to a financing incentive either funded upfront or over time based on performance of electricity generated and energy saved." Such a performance-based incentive should account for both electricity and thermal energy produced or displaced by the CHP system. Any calculation of environmental benefits or impacts should include displaced emissions associated with grid-supplied electricity, which can partially offset local emissions from the CHP plant.
- It may be helpful to offer a hybrid incentive based partially on capacity and partially on performance, so that a portion of the incentive (the capacity payment) is received early to defray first costs, while another portion of the incentive is received annually over a period of years (the performance payment) based on energy generated/displaced.

Clean Energy Group - Comments on NJ straw proposal for critical infrastructure CHP PS Page 2 of 2

- A minimum system efficiency standard should be developed.
- The emphasis on market responsiveness should not obviate the obvious benefits of critical infrastructure resiliency, which are not generally compensated by markets. The "floor" capacity should not be too low.
- It may be helpful for the state to more specifically identify facilities that are both appropriate for CHP technologies, and beneficial from a critical facilities standpoint.
- It may be helpful to seek a list of eligible facilities from municipalities. Municipal authorities may be in the best position to identify the needs of their communities and the facilities that could best meet those needs in an emergency situation.

Lewis Milford

LMI

President, Clean Energy Group

www.cleanegroup.org

Mr. Michael Winka, Senior Policy Advisor for Smart Grid New Jersey Board of Public Utilities Division of Economic Development and Energy Policy 44 South Clinton Ave, PO Box 350 Trenton, NJ 08625-0350

OCE@bpu.state.nj.us

RE: Combined Heat and Power Energy Efficiency Portfolio Standard -Board of Public Utilities Staff Straw Proposal

Dear Mr. Winka:

On behalf of DCO/Energenic, I am pleased to offer comments in support of the Board of Public Utility staff ("BPU Staff") Straw Proposal regarding the development of a Combined Heat and Power ("CHP") Energy Efficiency Portfolio Standard.

DCO/Energenic and its affiliates continue to play a leadership role in New Jersey in the development of combined heat and power applications for both the public and private sectors as well as energy produced from landfill methane gas extraction and other renewable energy projects statewide. We appreciate the opportunity to support the work of Board Staff and to comment on the straw proposal. We believe that a collaborative approach to the development of public policy in these areas will go far to assist the Board in their ultimate policy decision-making process.

At the CHP - PS working group meeting held on April 30, 2013, BPU Staff introduced a conceptual program that would direct our state's gas distribution utilities to develop a long-term funding source for CHP facilities aimed initially at our state's most critical assets. The framework of this program was designed to support the goals of New Jersey's Energy Master Plan CHP target of 1500 MW by 2020. This program would support not only the energy efficiency, economic, and environmental benefits of CHP at these critical assets, but, would also provide for significant energy infrastructure "hardening" at these locations to provide a power island platform as a "hardened structural" defense to future severe storms.

As we understand the proposal presented at the meeting, natural gas utilities would be required to procure a CHP portfolio standard obligation that would be set annually as a percentage of the CHP goal outlined in the Energy Master Plan by the Board. Depending upon market response, and other factors, the Board would either raise or lower this obligation on an annual basis. Our state's gas distribution utilities would then be directed to submit a compliance filing consistent with the Board's order and regulations.



The initial CHP portfolio standard would create the opportunity for a financial grant (or loan forgiveness) and/or a potential long-term financing structure for critical public facilities throughout the state. This program would be followed by the creation of a second program similarly designed for CHP development at private sector facilities.

The proposals anticipate that gas distribution companies would open a solicitation for projects on an established schedule and then engage a process that would select the most cost effective proposals up to the required level of participation. Gas distribution utilities would then enter into long-term contracts with bidders based upon the conditions specified within the winning bid.

We presume that Board Staff is relying upon NJSA 48:3-98.1 for the authority to approve the CHP - PS financing program and find that this statute would provide gas distribution utilities the appropriate rate treatment required for this program to be fairly administered and successfully implemented.

Inasmuch as the GDC's solicited bids could all be valued and compared through a standard application of net present value analysis; issues of term of loan, interest rate requested, amount of funds contributed as a grant (or loan forgiveness), and all other traditional metrics would not need to be specified in the detail of the solicitation. This would then create maximum flexibility for host critical facilities and CHP developers to find "best fit" full requirements energy contracts to support the financials of each individual project.

The gas distribution utility solicitation, therefore, could be as simple as posting number of megawatts required in the solicitation and setting a standard "ceiling" limit such as 50% of total project financing. Bidders then could propose any mix of financial support up to that limit as would be required to make the project financially viable. From that point forward the bid projects would compete against one another on the basis of delivering the greatest value.

We are also of the opinion that this program would need to define and identify "critical assets" eligible to participate at the front end of this program. Additionally, we would suggest that each utility (or on a statewide consolidated basis) engage a third party to evaluate responses to the solicitation and to make the awards based upon their independent determination in an open and transparent process.

Should the enabling statute permit, consideration might also be given to funding the winning projects on a consolidated basis spreading the cost in an appropriate allocated basis to all of our state's gas distribution utilities rather than relying upon each gas distribution utility to fund projects solely within their franchise territory.

The success of this program also relies fundamentally upon the experience and qualifications of the CHP development community that will be involved both financially and operationally for the duration of the program. It is clear that minimum



requirements for eligibility would include DPMC ESCO certification as well as the demonstrated credit necessary to cover the combined grant/loan to secure the financial support provided. Taken together these two requirements would assure both the operational and financial success of the projects undertaken. We also believe that developers should have an equity stake in the project to insure their continuing interest in operational excellence.

Clearly, a number of cost / benefit issues need to be considered along with rate impacts to customers of the gas distribution companies statewide. These issues, however, can be reasonably resolved through the development of project modeling for typical critical assets. DCO/Energenic can provide some of this modeling data which can then be used to form the basis of understanding the downstream costs to ratepayers as well as the system benefits that will also flow to both electric and gas ratepayers statewide.

DCO/Energenic appreciates the opportunity to provide these comments and looks forward to contributing to the CHP working group in resolving these issues and moving forward to protecting New Jersey's critical assets through the application of state of the art energy efficiency technologies.

Joseph Scheufele

Executive Vice President

Energenic, LLC

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May 31, 2013

VIA EMAIL TO OCE@BPU.STATE.NJ.US

Michael Winka Board of Public Utilities 44 South Clinton Avenue P.O. Box 350 Trenton, NJ 08625-0350

Re: <u>BPU Staff Straw Proposal on CHP/EEPS</u>

Dear Mr. Winka:

Jersey Central Power & Light Company ("JCP&L" or "Company") is pleased to submit comments on Board Staff's Straw Proposal dated April 15, 2013 regarding a proposed combined heat and power ("CHP") energy efficiency portfolio standard ("EEPS").

JCP&L has reviewed the CHP Straw Proposal and accompanying presentation and offers the following comments. The Straw Proposal is drafted at a high level, omitting detail that would otherwise evoke more substantive comments. As such, JCP&L's comments are also provided a high level, and JCP&L reserves the right to submit additional comments as the stakeholder process continues. Similarly, JCP&L is not commenting specifically on the parameters of the proposed program, such as eligible technologies or types of incentives, because the Straw Proposal implies that such issues will be addressed as part of the stakeholder process.

The Straw Proposal suggests that CHP be implemented via utility financing programs and an associated utility CHP Portfolio Standard ("CHP PS"). JCP&L does not support such an approach, and notes that the Straw Proposal does not appear to be based on any analysis of whether this approach is the most cost-effective manner in which to encourage the development of CHP facilities in New Jersey. JCP&L is opposed to risking customer or shareholder funds to otherwise finance CHP projects, especially where the benefits of such a program largely accrue to natural gas utilities and their customers. Accordingly, the Company asserts that, if such a program is created, it should be limited to gas utilities and should not include electric utilities.

Michael Winka, BPU May 31, 2013 Page 2



In addition, the Straw Proposal suggests that CHP must be cost effective, although there is no description of the criteria on which such measurement would be based. In fact, the Straw Proposal suggests that portions of the on-site energy consumption would be ignored for project evaluation, stating that the CHP PS would not include the additional gas used to generate electricity. Omitting some portion of the overall system energy consumption implies that a project need not be energy efficient, but only less costly to operate to be eligible under the CHP Program. JCP&L suggests that a multi-criteria screen that includes an element of cost–effectiveness, energy efficiency and the efficacy of the use of waste heat (thermal output) be used. Otherwise, the explicit result of using CHP to reduce energy cost is nothing more than fuel switching, without necessarily improving the overall efficiency of energy use of the facility.

Moreover, a CHP program should only be open to projects where the technology is deployed in a proper application (i.e., where there is a significant coincidence between thermal and electric demands). Even PURPA, enacted in 1978, requires a minimum thermal energy for qualifying facilities. JCP&L submits that a minimum thermal usage requirement, at least at the level suggested by PURPA, be another screening criteria for CHP projects. Although subject to interpretation, the example on Slide 13 of the Power Point presentation that accompanied the Straw Proposal implies that projects of a somewhat lesser quality, or perhaps not cost effective whatsoever, may be eligible should the target MWs not be fully subscribed for that program-year. In this instance, the verbiage suggests that the project only need be the "most cost effective" available to qualify under the CHP program. JCP&L believes that clear evaluation criteria, including performance, cost and overall efficiency (including minimum thermal use) need to be established for any CHP Program.

JCP&L recognizes that the Straw Proposal identifies one of the objectives to be the development of a near-term CHP storm response program for critical public facilities. However, many of these of facilities may not have a coincident thermal load and, therefore, would not be appropriate applications for CHP. In fact, emergency generation is likely the most appropriate and cost effective application at such facilities. The appropriate evaluation must be conducted on a project–by-project basis.

In addition, JCP&L does not support a CHP PS as a <u>utility</u> obligation, even more emphatically as an electric utility obligation, and questions whether even a true portfolio standard approach for CHP is plausible. An EEPS approach requires measurement and verification, which is often complicated, imprecise and expensive. Moreover, the juxtaposition of a utility financing program with an EEPS does not appear to be consistent with the State's approach to transitioning renewable energy and energy efficiency programs to market-based mechanisms. A portfolio standard approach works most efficiently when tradable commodities (such as RECs) are used for compliance. The Straw Proposal makes no reference as to whether there would be CHP credits associated with the CHP commodity, or whether suppliers will be

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able to buy and sell the CHP credits. Rather, the Straw Proposal appears to propose a mandatory utility CHP purchase (or, more specifically, a mandatory financing obligation) under the guise of an EEPS. Rather than foisting another PURPA-like financial obligation on utilities, the Board should consider a market-based portfolio standard approach, where competitive suppliers are responsible for satisfying the CHP PS. Under such a portfolio standard, suppliers would not "finance projects" but would simply buy CHP credits.

In sum, while there are potential benefits of CHP when used in appropriate applications, the Straw Proposal simply proposes an inappropriate utility-based subsidy program, with little focus on delivering cost-effective CHP projects where they will have the most benefit. Rather than burdening New Jersey utility customers with another financial obligation, and utilities with another subsidy program to administer, the Board should first investigate market-based approaches to procuring CHP.

JCP&L appreciates the opportunity to comment on these important issues.

Sincerely,

/s/ Gregory Eisenstark

Gregory Eisenstark Attorney for Jersey Central Power & Light Company



Mr. Michael Winka Senior Policy Advisor NJBPU – President's Office 44 South Clinton Ave., P.O Box 350 Trenton, NJ 08540-0350 May 30, 2013

Re: Comments in response to the BPU staff straw ("straw") Proposal on CHP incentives

Dear Mr. Winka,

New Jersey Resources Clean Energy Ventures ("CEV") appreciates the opportunity to submit comments in response to the BPU staff straw proposal on CHP incentives.

We agree with many of the general concepts in the proposal. Moving from an SBC based rebate to a portfolio standard linked to the Energy Master Plan target of 1,500MW, which adjusts with market conditions makes sense provided these adjustments are based on transparent, objective criteria. Incentives derived from competitive market forces, and based on energy output and not capacity installed will encourage development of cost-effective, high quality projects. We further agree that another certificate based trading program is not desirable, and that having the distribution utilities as the long term contracting entity will provide needed stability to incentives.

The straw appears to limit the incentives to "critical public facilities". The Energy Master Plan goal of 1,500 MW also includes non-public industry segments, many of which require some form of incentive to support favorable project economics, and should be included in this program.

The straw proposes that the incentive be structured as a loan, with utilities financing the most cost effective projects which require the least amount of loan foregiveness. This approach could be complex to evaluate and track. A better approach may be to model the loan structure similar to the solar loan program, in which loan amortization is directly linked to a competitively derived value for actual energy generation. Alternatively, as demonstrated in the solar markets, private sources of financing can be accessed if securitized by a long term utility contract tied to actual energy generation.



A necessary condition for the extension of the solar utility financing programs to CHP is that there are a robust number of projects to create an efficient competition for incentives. To provide initial support to the market, it may be necessary for the BPU to establish and periodically adjust floors and caps on bids and offers.

CEV appreciates the opportunity to comment on the straw proposal and looks forward to continued discussion on this matter with stakeholders in the CHP working group.

Sincerely,

Larry Barth

Director, Business Development

Robert Kudrick

Manager Business Development, CHP



May 30, 2013

Mr. Michael Winka, Director Office of Clean Energy New Jersey Board of Public Utilities 44 South Clinton Avenue, 9th Floor P.O. Box 350 Trenton, NJ 08625-0350

Re: Combined Heat and Power Portfolio Standard (CHP-PS)

Dear Mr Winka:

FuelCell Energy, Inc. ("FCE") appreciates this opportunity to provide comments on the "straw" combined heat and power portfolio standard ("CHP PS") proposal issued by the Board.

Broadly, the adoption of 1500 MW of CHP capacity will further State goals as outlined in the Energy Master Plan to assure power and heat can be available to key facilities during normal business conditions and to augment the electric grid with local power resources during and after unforeseen weather events. Furthermore, beyond simply combining heat and power from one system, fuel cell based systems offer additional benefits in the form of low or negligible emissions, high electrical efficiency, quiet and reliable performance and the flexibility to be sited in areas where traditional CHP would have limitations. The straw proposal offers a framework for a successful CHP PS program.

FCE offers the following specific comments

Alternative Compliance Penalty

The straw proposal indicates that no ACP structure will need to be in place as the CHP PS will be a direct obligation of the utilities and not a market based system with an obligation on electric suppliers. While compliance mechanisms under the CHP PS have not yet been defined, Board regulation and utility cost recovery are effective means for adoption of the CHP PS goals.

Managed CHP market

The straw proposal recognizes that while the state-wide benefits of CHP are high, the number of potential customers utilizing CHP is lower than the solar market. The managed market approach using compliance filings and Board established requirements appears a good means to provide planning predictability for program participants and yet flexible enough for the Board to adjust capacity to accommodate CHP system demand.



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Stable and Long Term Funding

A premise of the CHP PS is to develop the 1500 MW under a non- lapsable funding source. Given time cycle for project development from concept to construction, this goal is critical to assure site hosts and suppliers have an adequate time horizon to conceive and implement a project.

Lowest Rate Impacts

The implementation of this CHP program comes at a time of budgetary restraint. Maintaining lowest incremental costs to ratepayers as provided for in the draft framework of the financing mechanism is laudable. However, a portion of the 1500 MW of new capacity will be providing unique local benefits and degrees of efficiency and reliability that will warrant investment by ratepayers above the "zero-sum gain". Features of the financing program should be put in place to incentivize higher value attributes such as efficiency or reliability at least cost to ratepayers.

Utility Financing

The straw provision to offer direct financing thru the utilities has the potential to minimize transaction costs and reduce project development time cycle. A forgivable portion of any loan based on performance can also be amended to incentivize other desirable technology, environmental or societal attributes such as efficiency, low emissions and local grid reliability.

FCE looks forward to participating in the stakeholder process and supporting the Board's effort to establish an effective Combined Heat and Power Portfolio Standard.

Respectfully submitted,

Trunk Wolk

Frank Wolak

Vice President, Government Business

FuelCell Energy, Inc.

cc: Sean Wilson, Ben Toby



A PHI Company

June 12, 2013

VIA FIRST CLASS MAIL and ELECTRONIC MAIL kristi.izzo@bpu.state.nj.us

publiccomments@njcleanenergy.com

Kristi Izzo Secretary of the Board State of New Jersey Board of Public Utilities 44 South Clinton Avenue, 9th Floor P.O. Box 350 Trenton, New Jersey 08625-0350 Philip J. Passanante Associate General Counsel

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302.429.3105 – Telephone 302.429.3801 – Facsimile philip.passanante@pepcoholdings.com

RE: Comments by Atlantic City Electric Company Combined Heat and Power ("CHP") Straw Proposal Long Term Financing Incentive Mechanism, a "Smart" Portfolio Standard

Dear Secretary Izzo:

The Atlantic City Electric Company ("ACE") thanks you for the opportunity to comment, and respectfully submits these comments regarding the above proposal.

ACE, and our corporate family, knows from experience that CHP technology can bring value, particularly for large customers with a high-load factor and the need for thermal energy to provide power to non-electric processes with complementary load patterns. ACE is concerned that selected facilities to be used as storm shelters or emergency gathering centers will normally have difficulty in taking advantage of CHP's intrinsic efficiencies because they will, more than likely, lack a high electric load factor and a productive need for the heat output, other than limited heating/cooling and hot water uses.

Further, CHP facilities are more complex than the typical utility plant designed for office buildings or sporting event facilities, and efficiency is designed around continuous use. Sports and convention events are typically intermittent and last for short durations of time. A CHP plant designed to serve a significant crowd of people needing emergency shelter for one to two weeks will not run optimally for the usual types of facilities suitable for CHP, unless the design is broken up into multiple zones / units that can be staged as needed. That approach requires

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more complex design support that, as built, inherently requires more space needed under the roof, more investment, and more maintenance.

Pepco Holdings Inc., in which ACE is a subsidiary, does support CHP in other jurisdictions. In such cases, there are achievable benefits along with reasonable cost recovery of mechanisms in place. ACE's experience also indicates that CHP is not for everyone. Force fitting the technology into locations is likely to generate considerable ongoing costs with insufficient ongoing benefit, requiring significant subsidization to justify the expense involved. Critical public facilities that can benefit from CHP need to be identified, project criteria need to be clearly defined, and the cash flow of the investments need to be clearly understood before customers or taxpayers are committed to supporting such investments.

As to resiliency, the effectiveness of CHP is not certain to produce that outcome. ACE's experience indicates that CHP would generally not be a cost effective method to provide resiliency, as finding an ideal site with the appropriate mix of power and thermal demand patterns will be challenging enough on its own while, in addition, locating a site that has environmental and zoning approval potential, fuel supply, sufficient road or rail access, adequate lay-down area and physical access for cranes to install or maintain large, heavy equipment make it even more difficult. All of these considerations will stress the economics of the desired installation unless the project is subsidized for all installation, repair, maintenance and operating costs.

It might be a more cost effective measure to achieve a resilient power source if the State provides incentives for installation of sufficient redundancy in backup generation for large gathering facilities, emergency operation centers and critical care facilities to ensure operating capability at needed capacity with one or two generators out of service for whatever reason. Other options such as distribution automation, smart meters and system controls could also be a more cost effective approach to strengthening distribution infrastructure and adding resiliency.

ACE appreciates the effort to develop an approach to achieve the CHP goals of the 2011 Energy Master Plan, and the need for New Jersey to have storm shelters that can support temporary population displacement after a natural disaster. ACE suggests that the State thoroughly explore the proposal to develop a path forward that maintains cost-effectiveness to ratepayers by incorporating whatever combination of approaches yields the most reasonable costs for the citizens to bear, while providing safety for the population.

The circumstances in which CHP makes economic sense for the customer and provides quantifiable reliability benefits are limited, as evidenced by the absence of widespread adoption in New Jersey and other states. Scandinavian policies regarding CHP versus any other power and heat sources do not exist in this country, and are significantly more costly than the approaches used here. Scandinavian countries have justified the cost as a societal benefit, and if New Jersey wishes to pursue a similar approach, then the costs should be clearly recognized and absorbed within government expenditures, rather than being imposed on property owners. In ACE's view, the imposition of a CHP procurement obligation on utilities and the offer of long-term financing incentives will not transform CHP into a technology applicable to a larger number

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of customer sites. Instead, the proposal will more likely only make CHP less expensive for a small group of customers, and is unlikely to yield the widespread public shelter benefit that is sought.

Finally, the proposal to make the CHP requirement "smart" by changing incentives dynamically with market conditions adds regulatory uncertainty and could lead to confusion, which would be treated as risk in the market. Risk translates into higher borrowing costs, or unavailability of capital for the specific type of investment. ACE agrees that this concept requires further exploration and should start with an effort to "take the temperature" of the CHP market potential, determining its actual size and situation-specific site opportunities under different levels of incentive (or subsidy) requirements.

Thank you for consideration of these comments.

Respectfully submitted,

Philip J. Passanante

An Attorney at Law of the

State of New Jersey

Deborah Petrisko

From:

Katogir, Lou [Lou.Katogir@pbfenergy.com]

Sent: To: Friday, June 14, 2013 5:39 PM

Subject:

publiccomments@njcleanenergy.com
Comments to Combined Heat & Power Program

Please consider the following comments to the upcoming Combined Heat and Power Program.

1. The Program is capped at \$3,000,000 maximum incentive or 30% of the total capital cost. CHP projects greater than 7 MW are less incentivized as indicated by the following calculation:

	MW	\$/W	incentive \$
	3.00	0.55	1,650,000
	3.86	0.35	1,350,000
Total	6.86		3,000,000

The Program has indicated an ambitious goal of developing 1,500 MW of CHP generation over the next 10 years. Achieving this goal will be more difficult if the incentive is not fully offered to larger CHP projects. Consider eliminating the incentive cap for larger projects, say greater than 7 MW. The incentive can still be limited to the lesser of 30% of total project capital cost or \$0.35 per watt.

2. The current eligibility requirement limits the size of the new CHP installation to 100% of the most recent historical peak demand. The most recent peak demand may not be reflective of more typical peak demands due to production outages or other factors. Consider establishing the peak demand based on the average of the peak demands for the most recent 4 years or the average of the three highest peak demands over the last 4 years. Also consider allowing new CHP installations to be greater than this average but only provide the incentive up to average peak demand or 30% of the prorated project cost. For example, a facility that has a average peak demand of 10.0 MW and installs a 15.0 MW CHP project costing \$25,000,000 would receive the following total incentive:

	MW	\$/W	incentive \$	
	3.00 7.00	0.55 0.35	1,650,000 2,450,000	
Total	10.00		4,100,000	
Installed	15.00		5,000,000	total project cost \$25,000,000
Max incentive	9		4,100,000	•

Thank you for your consideration. Please let me know if you require additional clarifications.

Regards,

Lou Katogir Staff Process Engineer / Energy Coordinator Paulsboro Refining Company Paulsboro, NJ (856) 224-6056