# In the Matter of the Comprehensive Energy Efficiency and Renewable Energy Resource Analysis for the 2013-2016 Clean Energy Program

### Docket Number EO11050324V

Rockland Electric Company's Response to Certain Questions

Posed in the Board's Order dated October 7, 2011

16. Should the Board continue the Regional Greenhouse Gas Initiative (RGGI) EE and Solar programs managed by the Utilities? Please explain your answer. (Order, p. 8)

### Response:

Rockland Electric Company ("RECO" or "the Company") supports the ability of the utilities to petition the Board to extend any current EE and Solar programs or to propose new programs to the extent the individual utility believes that there is value in providing those programs within the utility's service territory consistent with the goals of State and the Energy Master Plan. For example, RECO currently provides two energy efficiency programs through its Energy Efficiency Economic Stimulus filing made under RGGI and one Solar Program also made under RGGI. With respect to its energy efficiency programs, the Company does not propose to extend its Enhanced HVAC Rebate Program. This Program offers a utility-provided rebate to customers who purchase energy efficient HVAC equipment and who also participate in the Office of Clean Energy's ("OCE") Home Performance with Energy Star Program ("HPES Program"). The HPES Program provides a rebate for efficient HVAC equipment, so RECO's rebate is provided primarily to incent the customer to participate in the HPES Program. Due to the limited eligibility for the rebate, the (lengthy? complicated?) process for qualifying for the rebate, and the uncertainty in the State regarding the continuation of OCE programs, RECO's Enhanced Rebate Program has not enjoyed significant customer participation. Consequently, the Company plans to let the Program expire at the end of the year.

On the other hand, RECO does see value in continuing its USF Low Income Direct Install Program. This energy efficiency Program for low income customers was also implemented as part of the Company's Energy Efficiency Economic Stimulus RGGI filing. The USF Low Income Direct Install Program is similar in customer benefits to the statewide Comfort Partners' program, in which RECO does not participate. In its last full year of participation in Comfort Partners, less than ten customers were provided with energy efficiency measures. Under the Company's Low Income Direct Install Program, 166 customers participated in the Program over the past 19 months. While RECO believes that this Program could continue to provide important customer benefits in its service territory, its primary concern with continuing the Program is the time and resources required to submit, and secure Board approval of, a new RGGI petition to extend the Program. The RGGI filing requirements and the discovery submitted in association therewith are burdensome and often of marginal value. The Company must weigh these burdens in determining whether it is advisable to try to continue the Program.

A third Energy Efficiency Economic Stimulus Program, i.e., the development of an online energy audit tool has been completed.

RECO also has a SREC-Based Financing Program which was implemented pursuant to a Board-mandated RGGI filing. Given the current state of the solar market in New Jersey and the current over-supply of SRECs in the market, RECO does not believe it is necessary to continue this Program.

17. How should the Board ensure that utility programs funded through RGGI are not duplicative of programs funded through the NJCEP? (Order, p. 8)

# Response:

The RGGI Minimum Filing Requirements for Petitions under N.J.S.A. 48:3-98.1 currently provide this assurance. Requirement II(b) requires that the utility provide with its petition "a detailed explanation of the differences and similarities between each proposed program and existing and/or prior programs offered by the New Jersey Clean Energy Program, or the utility." Requirement II(c) requires that the utility provide "a description of how the proposed program will complement, and impact existing programs being offered by the utility and the New Jersey Clean Energy Program with all supporting documentation."

18. Should the individually filed utility EE and Solar programs be consolidated in one filing? (Order, p. 8)

# Response:

Whether or not program filings are consolidated should be left to the discretion of the utility submitting the RGGI Petition. Issues such as the timing of program implementation, the administrative efficiency of combining programs into a single filing, and the availability of information and documentation for each program in order to complete the RGGI Minimum Filing Requirements may impact the decision of how and when (and indeed whether?) to submit a Petition. These decisions are best made by the utility.

15. Should the State continue to rely on market transformation programs or utilize resource acquisition programs similar to the Standard Offer Program or rebate program? (Order, p. 9)

#### Response:

Given the results currently being achieved in other States, a role still exists for rebate programs and other demand side management programs delivered directly to the customers. Moreover, RECO sees value in allowing utilities to design and implement such programs on a utility-by-utility basis. RECO's parent company, Orange and Rockland Utilities, Inc., currently has three electric efficiency programs fully operational across the State border in its New York service territory and has realized success despite current economic conditions. These programs: (i) are beyond the start-up phase and have been approved to continue for four more years; (ii) serve all market segments, including residential, commercial and industrial; (iii) are primarily

implemented internally using in-house resources; (iv) utilize local contractors who operate in both New York and New Jersey; (v) are marketed through the Orange and Rockland website, which also serves RECO customers; and (vi) are producing material energy savings contributing to New York's goal to reduce energy usage by 15% by 2015. These programs could be extended seamlessly across the border into New Jersey, which would eliminate the customer confusion currently resulting from having a portfolio of utility-run programs available in one jurisdiction, none of which are available in the adjoining jurisdiction. All of these programs have passed initial Total Resource Cost test screening and are continually measured, verified and evaluated. RECO would like the opportunity to offer these programs to its New Jersey customers and contribute to New Jersey's energy efficiency goals.

# I/M/O the Comprehensive Energy Efficiency and Renewable Energy Resource Analysis for the 2013-2016 Clean Energy Program BPU Docket No. EO11050324V

# Comments of the New Jersey Division of Rate Counsel

November 7, 2011

### I. INTRODUCTION

The Board Order dated October 7, 2011 ("October 2011 Order") in this docket requested comments on how New Jersey's Clean Energy Program ("CEP") can support the objectives set forth in the June 2011 Draft Energy Master Plan ("EMP") and the changes to programs and funding levels needed to achieve the EMP objectives. Rate Counsel is pleased to provide these initial comments addressing energy efficiency ("EE") and renewable energy ("RE") program issues. These comments include both summary comments and responses to some of the questions posed in the October 2011 Order.

Rate Counsel plans to supplement these comments with more detailed program design and budgetary recommendations at the appropriate time during the commenting process. By reference, Rate Counsel's comments include its comments submitted in the ongoing EMP proceeding and the 2011 and 2012 CEP proceedings. Furthermore, Rate Counsel reserves its right to provide further comments upon the release of the final EMP and any intermediate versions.

### II. SUMMARY

The Clean Energy Programs have provided, and will continue to provide, significant net benefits to New Jersey ratepayers. When designed and administered in a cost-effective manner, these programs provide critical information on EE technologies and practices, provide access to their

<sup>&</sup>lt;sup>1</sup> The Center for Energy, Economic and Environmental Policy (CEEEP) 2008. Cost-Benefit Analysis of the New Jersey Clean Energy Program Energy Efficiency Programs.

implementation, and generally leverage customer contributions to minimize funding requirements from the Societal Benefits Charge ("SBC").

We summarize our concerns and recommendations below:

1. Develop or Refine Existing Revolving Loan Fund Programs Where/As Appropriate to

Leverage Customer Contributions and Increase Overall Participation in EE Programs. Rate

Counsel supports the use of revolving fund financing mechanisms for EE where and as

appropriate. However, Rate Counsel is concerned that financing programs have not attained success in some areas, and that caution is needed to avoid disruption to cost-effective rebate programs in order to retain their associated ratepayer benefits. Design of revolving loan programs needs to give careful attention to successful practices elsewhere, but also recognize that New Jersey has both centralized, state-wide EE programs (CEP administered, with recently-implemented off-bill financing initiatives) and utility-specific EE delivery vehicles (with recently-implemented on-bill financing initiatives). Revolving loans may work best when coupled with other incentive structures. They should be "rolled out" incrementally to allow for "lessons learned" to be incorporated in successive incarnations. Rate Counsel believes that revolving loan mechanisms can complement cost-effective rebate-based programs for selected programs in some sectors.

The OCE should work closely with the Electric Distribution Companies ("EDCs") in order to most effectively implement a revolving loan program, if "on-bill" financing is to be a part of the program. Loan programs are more likely to be most effective and workable at increasing participation if they are "on-bill" financing programs that minimize transaction hurdles for customers.

2. Ensure Provision of Substantial Ratepayer Benefits by Retaining the SBC Mechanism as a

Means to Overcome Market Barriers to EE Funding. The market failures that underlie the

need for EE programs in the first place have not abated much over time, even though some

technologies (e.g., compact fluorescent lamps) have made inroads in the marketplace. We urge deliberate consideration of the ongoing presence of these market hurdles when considering changing the nature and goals of the EE programs.

Smaller customers, and low-income customers in particular, face the greatest hurdles when contemplating making EE improvements. In the absence of SBC-funded rebate programs, many of these customers would not elect to take action to increase the energy efficiency of their dwellings or businesses. Loans can help relax capital constraints faced by customers, but rebates still play a key role. Rebates help customers overcome simple payback hurdles which persist even with loans. Also, loans are unsuitable for limited-scale product purchases such as efficient light bulbs and refrigerators as they unnecessarily complicate the transaction. Simply buying down the price of such products at retail or wholesale levels through SBC funding is a more effective solution.

Rate Counsel recommends the SBC should not be eliminated for the foreseeable future. The SBC is a core funding source to ensure delivery of highly cost-effective EE resources that provide significant net benefits. Other sources of funds, such as capacity market revenues, or mechanisms to leverage participant contributions such as revolving loan programs, should be maximally utilized. However, these mechanisms and alternative funding sources would not, by themselves, keep NJ on track to achieve its energy use reduction goals. Cost-effective, SBC-funded rebate programs must remain part of NJ's EE strategy.

Energy Efficiency Portfolio Standards ("EEPS") that depend on tradable "white tag" EE certificates or credits are not necessarily a viable mechanism for ensuring EE implementation in New Jersey for a number of reasons. The EE delivery marketplace is more complex and fractured than the renewable energy marketplace. It is composed of the delivery of many different technologies with varying costs, targeted to many different end uses and different customer groups. EE is provided by a wide-ranging group of actors—technicians, hardware store sales clerks, professional energy consultants, and local electricians and

plumbers, to name but a few. Unlike the renewable marketplace, EE does not lend itself well to the market-based, tradable certificate mechanisms that have spurred development of renewable resources. It also must be noted that due to the 'patchwork' nature of the EE marketplace, uniform or more standardized measurement & verification of energy savings would bee more problematic. Also, such mechanisms encourage energy service companies and any other entities seeking to sell certificates to focus on the cheapest energy efficiency measures and thus will create significant amounts of lost opportunities to pursue deeper and more comprehensive efficiency measures. Moreover, if Energy Efficiency Portfolio Standard credits are traded via a single clearing price market, ratepayers would be paying a substantially higher price for EE resources than they are paying currently.

- 3. Allow Complementary RGGI-Funded EE Program Delivery If/As Appropriate. Rate Counsel supports utility-based EE programs pursuant to the provisions of the RGGI law (N.J.S.A. 48:3-98.1) as long as those programs can capture economies of scope and economies of scale in their implementation. In particular, they can help deliver energy efficiency to niche markets, such as the urban enterprise zone focus of PSE&G's Home Performance with EnergyStar program. Potential program overlap, both positive (e.g., use of on-bill financing of CEP programs through host EDC or gas distribution company ("GDC") and negative (e.g., duplicative administrative structures to deliver the same services) must be carefully monitored and addressed as part of both initial program design, and normal, mid-course corrections common to EE programs.
- 4. Revise the Program Administrator Structure. Rate Counsel supports a transition to a single third party contracting entity for delivery of NJ CEP programs with OCE oversight to streamline program administration and reduce costs associated with the current structure.
- 5. Mandate CEP Participation in the PJM RPM Base Residual and Incremental Capacity

  Construct Auctions. PJM's RPM construct allows the peak demand savings from energy

  efficiency programs to be used as a capacity resource, and pays RPM clearing prices to those

- resources. All CEP programs (in addition to RGGI-funded programs) should be required to submit program peak demand savings to PJM to both receive a source of funding for the programs, and to ensure that New Jersey's energy efficiency efforts are reflected in PJM's planning processes.
- Ensure that 2013-2016 Budgetary Goals Allow Sufficient EE Achievement to Meet Draft
  Energy Master Plan Goals, But Don't Over-collect SBC Revenues. Aggressive pursuit of
  energy efficiency potential is still required to meet EMP goals. Rate Counsel recommends
  that budgetary estimates reflect a path to achieving the MWH and Therm savings goals
  reflected in the EMP. The final budget estimates should be supported with projections of
  savings from those funds that are consistent with the associated program designs and costeffectiveness calculations. As noted in the Clean Energy Funding Work Group report, SBC
  collections should be sufficient, but not excessive, when meeting budget requirements. There
  is no programmatic need to over-collect SBC funds and carry them over from year to year.
- 7. Allow Appropriate and Complementary CEP Participation in Demand Response ("DR")

  Programs. Currently, PJM market mechanisms appear to be successful in capturing largercustomer demand response resources in New Jersey. However, smaller customers rely on
  EDCs to provide DR programs, and it is not clear that all cost-effective small customer DR
  resources are being exploited. Given the presence of CEP contractors on many small
  premises (residential and small C&I), it is reasonable to envision a CEP role in helping to
  ensure these customers' participation in EDC DR programs. Rate Counsel does not
  recommend that CEP offer additional financial incentives for DR, but we do support closer
  coordination between CEP and the EDCs to enable the capture of otherwise "lost
  opportunities" at CEP program sites.

# III. RESPONSES TO QUESTIONS IN THE OCTOBER 2011 ORDER

In this section, Rate Counsel responds to certain questions set forth in the October 2011 Order.

### A. Questions Relevant to Both Energy Efficiency and Renewable Energy

- 2. What revenue generating mechanisms should the Board pursue to achieve the EMP goal to reduce or eliminate the Societal Benefits Charge (SBC)? In your response, consider PJM capacity payments for EE, and Energy Efficiency Portfolio Standard (EEPS).
- a. Capacity Payments. Rate Counsel maintains that both the state CEP and RGGI-funded EE and demand response program budgets should be supported in part with revenues based on offering the maximum possible program-generated demand savings into PJM's capacity market. However, Rate Counsel notes that capacity market revenues will pay only a portion of EE and DR program costs. Ratepayers should be benefitting from capacity market revenues, but SBC funding will still need to play a significant role if New Jersey is to meet its EE goals.

b. Energy Efficiency Portfolio Standard ("EEPS"). An EEPS can come in a number of forms. If the EEPS was effectively a target for achieving a given level of EE savings (akin to what is in the Draft EMP), then New Jersey's CEP and RGGI-funded programs could use the EEPS to guide program development and delivery. In this form, an EEPS would encompass requirements that, during the period 2013 through 2016 (and perhaps beyond), the regulated EDCs and GDCs achieve and document end-use energy savings equal to specified portions of their retail throughput. The savings can be achieved through a combination of CEP and RGGI-funded programs.

EEPS can also be defined as establishing a policy whereby EE targets are met through trading of energy efficiency certificates (also called white tags). These tags could result from EE program activity undertaken by a range of players. However, certificate trading models have a lot of drawbacks compared with the current model.

Rate Counsel does not recommend use of an EEPS that uses tradable certificates. An EEPS with tradable "white tags" or credits is likely to impose higher costs on ratepayers than under the

EE resource (i.e. the most expensive resource that clears the market). Such a mechanism also encourages energy service companies and any other entities seeking to sell certificate to focus on the cheapest energy efficiency measures and thus creates significant amounts of lost opportunities to pursue deeper, and more comprehensive efficiency measures. It will also add additional administrative costs for running energy efficiency programs. On balance, Rate Counsel does not see sufficient need for or benefit from transitioning to an EEPS with tradable white tags at this time.

- 4. Should the Board replace all rebate programs with financing programs and/or other mechanisms to generate revenues for the NJCEP? If so why? What would be the overall impacts in terms of costs and benefits? If not, why not? What would be the overall impacts in terms of costs and benefits? and,
- 5. How would this transition of the NJCEP from rebates to financing impact economic development, jobs creation, and energy savings?

While some incorporation of revolving loan funds or financing is desirable for promoting EE programs and for increasing customer contributions, these incentive structures should not be adopted universally across all programs or across all measures. Although direct customer rebates can be costly to administer, loans are not suitable in all situations. Consumers who are elderly, consumers with unstable income, or those who plan to sell a building in the short term may be hesitant to commit to loans. Also, loans' high transaction costs to participants make them impractical for small EE measures, such as some lighting applications or smaller appliances. In some situations, such as purchasing and installing expensive HVAC measures or undertaking building energy retrofits, loans would help consumers with limited upfront cash to close the gap between what they could pay and the price of the measures with or without rebates. It is important to note that sometimes loans and rebates can work together to promote EE more efficiently than each working alone.

One of the largest concerns of shifting to loans from rebates is effects on program participation rates. User-pay financing programs for EE have had limited and varied impact to date, as discussed in the 2011 Draft Energy Master Plan Report of the Clean Energy Funding Work Group

dated October 10, 2011. In addition to the studies cited in the October Work Group report, an ACEEE study released in September 2011 reaches a similar conclusion regarding the effectiveness of financing programs by themselves:

we believe our approach shows that across surveyed programs there is a pattern of very low market penetration by these programs...This observation implies that energy efficiency financing programs alone are not the 'silver bullet' that will solve all energy efficiency challenges or meet every individual's needs. Achieving the full potential of efficiency improvements available in the buildings sector will likely require additional complementary services and approaches.<sup>2</sup>

Energy efficiency constitutes the bulk of the NJCEP. Since the first statewide EE rules were put into place by the Board in 1991, substantial EE savings have been achieved. Throughout these 20 years, there has been strong reliance on rebates or similar direct financial incentives in one form or another. To switch all rebate programs to financing programs would lead to a precipitous drop in EE implementation. In that scenario the costs of EE—both those borne through the SBC and those borne by participating customers—would drop, but sizable net benefits, in the form of savings and jobs, would be lower. All in all, slashing EE implementation could represent a detriment to the state's economy.

Unlike the structures put in place to "make markets" for renewable energy supply, EE does not lend itself to a pure "market-based" approach. The Board should tread carefully on these program design issues because the sizable net benefits associated with well-delivered EE programs could be at risk should participation decline under alternative incentive structures. Per Question 7, it makes more sense to try to identify the markets and program areas where rebates can be trimmed, and/or where it is feasible to introduce or expand financing programs, with least disruption to EE participation, and greatest likelihood of continued EE implementation by households, businesses, and institutions.

To the extent that greater emphasis is put on financing, the Board should consider whether and how loans for CEP services could be repaid via participants' utility bills ("on-bill financing").

<sup>&</sup>lt;sup>2</sup> Hayes, Sara, Steven Nadel, Chris Granda, and Kathryn Hottel. September 2011. "What Have We Learned from Energy Efficiency Financing Programs?" ACEEE report no. U115, page 5.

On-bill financing could be a very effective tool given that (1) the loan amount could set up in a way that monthly energy bill savings exceed the monthly loan payment resulting in positive cash flows to consumers; (2) loans need not be tied to the consumers, but to the "meter" so that consumers do not need to worry about recouping the benefits of efficiency measures by staying longer in the same property; and (3) "on-bill" financing programs can be set up to minimize customers' transaction hurdles. Currently, some utility RGGI-funded programs offer on-bill financing. However, not all NJ utilities with such programs have offered, or have been willing to offer, on-bill financing. One such example is the Elizabethtown Gas Company residential EE program, which doesn't offer on-bill financing even though it does offer loans. Rate Counsel believes that the Board should investigate whether it can order the utilities to put charges for CEP-backed loans on CEP participants' utility bills.

7. Would all EE and RE markets respond to financing programs without any rebates? Please identify which markets would respond and the nature of the market's response.

To varying degrees, all of the EE market sectors likely require at least a minimal form of rebate support to overcome the pervasive market barriers associated with energy efficiency implementation. At the same time, however, all of the sectors could benefit from financing program opportunities, which can effectively elicit increased customer contributions, and increased participation. The detailed design of complementing rebate structures and financing arrangements must be undertaken thoughtfully, with careful attention to participation outcomes. We briefly characterize the different sectors below.

The institutional sector may be a good place to try expanding or adding financing programs, since over the years energy service companies ("ESCOs") that install and finance user-paid EE improvements have tended to have their greatest success rate with hospitals, health care, educational, and similar facilities. Rebate levels associated with CEP (and utility RGGI-funded programs) for

government facilities could be reduced if workable financing programs were in place and demonstrating successful participation levels.

The C&I sector could benefit from thoughtfully designed financing programs. Successful small C&I loan programs have been operated in different jurisdictions, including New Jersey. It is our understanding that incentives are still required, at a minimum to help reduce the simple payback of a group of measures to something roughly resembling the term of the financing — thus establishing positive or at least zero cash flow effect on the customer from the investment made for the energy efficiency measures. Large C&I sector participants generally are the most sophisticated customers with respect to understanding the technical and financial dimensions of EE investments. Access to low-cost or no-cost financing could allow these participants to make EE investments with a minimal need for incentives to reduce simple payback periods. For both small and large C&I customers, the availability of on-bill financing with incentive programs could result in increased participation relative to off-bill financing, as transaction costs and hurdles would likely be lower.

The residential sector remains the most constrained in terms of access to capital to make large-scale EE investments (e.g., for whole-house insulation and/or highest efficiency heating/cooling systems). While loan programs also have a role to play in this sector, it's likely imperative that on-bill financing structures be introduced or retained to ensure increased participation in EE programs. A transition from CEP, off-bill financing for residential programs (HPwES) to on-bill financing of customer contributions towards CEP investments in EE could result in the greatest participation increases and the highest net ratepayer benefits. We recommend that any expansion of financing be accompanied by strict guidelines for installing top-tier high-efficiency equipment, to minimize free ridership.

9. What funding level should be established for the next four years to meet the policy goals with regard to:

Residential Energy Efficiency; Commercial and Industrial Energy Efficiency; Low Income Programs; and Class I Renewable Energy Resources.

Rate Counsel does not propose specific funding levels at this time but may make a proposal at a later time as the CRA 2013-2016 proceeding progresses. The EE savings goal proposed in the 2011 draft EMP, calling for a roughly 20% reduction in electricity consumption relative to PJM's 2011 forecast, is aggressive. In order to achieve the goal, Rate Counsel submits that the state's energy efficiency programs need to continue to produce savings, and at an increasing pace.

As Rate Counsel has noted repeatedly in its comments on CEP budget levels,<sup>4</sup> the amounts collected through the SBC to fund CEP-EE programs should be based on realistic projections of actual program expenditures. Historically, the SBC rates paid by ratepayers were higher than necessary to fund CEP EE programs. Rate Counsel has proposed a two-step process to bring greater discipline to the budgeting process. The first step is the development of realistic projections of program activity and funding needs. This step requires sufficient information to inform budget determinations, including summary information about program cost effectiveness, energy savings, free-ridership rates, and participation rates, to facilitate EE resource portfolio comparisons across sectors, programs and even at the measure level. The second step is to return over-collections to ratepayers in the form of reduced SBC rates in the next budget cycle.

The CEP EE budget and thus the amount of the SBC also needs to be reviewed in light of increased utility EE spending resulting from the implementation of utility-based EE programs pursuant to the provisions of the RGGI law.

<sup>&</sup>lt;sup>3</sup> 20% is based on a baseline of 96,317 GWh for ACE, JCP&L, PSE&G and RECO zones in 2020, shown in Table E-1 of PJM's January 2011 Load Forecast Report (<a href="http://www.pjm.com/planning/resource-adequacy-planning/-/media/documents/reports/2011-pjm-load-report.ashx">http://www.pjm.com/planning/resource-adequacy-planning/-/media/documents/reports/2011-pjm-load-report.ashx</a>) relative to the 2011 Energy Master Plan energy goal of 75,696 GWh for 2020, shown in Table 2 on p. 30 of Rutgers April 12, 2011 Analysis for the 2011 Draft New Jersey Energy Master Plan Update (<a href="http://www.nj.gov/emp/docs/pdf/emp-creeep-report20110412.pdf">http://www.nj.gov/emp/docs/pdf/emp-creeep-report20110412.pdf</a>).

<sup>4</sup> For example, see Rate Counsel's November 17, 2010 comments on the proposed 2011 CEP budget and its December 3, 2011 comments on transitions within the CEP.

17. How should the Board ensure that utility programs funded through RGGI are not duplicative of programs funded through the NJCEP?

Some utilities now operate EE programs pursuant to the state's 2008 RGGI legislation (N.J.S.A. 48:3-98.1). Several of the utilities' programs include incentives to their ratepayers that merely supplement or "piggy-back" CEP incentives. There are several problems with having utilities administer programs that only supplement CEP financial incentives. First, offering supplemental incentives through the utilities adds yet another layer of administration of the programs. Second, because the utilities' supplemental programs target the same audience (albeit within their service areas) and generally cover the same measures as existing CEP programs, utilities have difficulty quantifying the supplemental programs' cost-effectiveness, energy savings, and other benefits over and above the savings that would be achieved by CEP programs in the absence of the utility programs. In some cases, utility supplemental incentives appear to be unjustified and excessive. Third, customer confusion can result if program administrators do not carefully coordinate marketing and outreach efforts.

A utility could be allowed to continue administering RGGI programs, provided that it can clearly demonstrate 1) that its programs are cost effective on an incremental basis (that is, in the cost-benefit analyses, the utility should not take credit for the savings that would be achieved by CEP programs in the absence of the utility programs) 2) that its programs target sub-sector(s) that face unique challenges or provide services or measures that are not covered by CEP and 3) that the utility can administer the program more effectively and more cost effectively than would be the case under the CEP framework. If a utility cannot make these demonstrations, the utility program should not be continued.

Some utility programs offer on-bill financing, which currently cannot be offered by the CEP.

The Board should monitor current utility on-bill financing programs to determine if they are costeffective. If so, the Board should consider expanding such programs.

The CEP program managers must strive to ensure equity of EE expenditures across service territories, taking into account (as best they can) the existence of RGGI program offerings. There should be roughly proportionate program spending relative to revenues received through SBC from any given customer group. That is, CEP funding per EDC or GDC (from SBC charges) should roughly equal CEP expenditures to customers of that EDC or GDC. Ideally, this "rough justice" would be reflected not just at the aggregate EDC or GDC level, but by sector also. Exceptions to this guideline should be made when reconciling expenditures and revenue collection for programs targeted to lower-income sectors. Funding for Comfort Partners, for example, should not be limited to funds collected from ratepayers who meet the eligibility criteria for participation in that program.

### **B.** Energy Efficiency Questions

EE 5. Can and should SBC funding be made available to encourage the manufacturing of EE technologies in New Jersey?

Rate Counsel has reservations about using ratepayer dollars to encourage manufacturing of EE technologies in New Jersey. While many of the Board's regulatory activities and decisions can influence economic development, using SBC funding to promote manufacturing jobs goes beyond the Board's primary policy purpose of establishing fair, just, and reasonable utility rates for NJ ratepayers.

EE9. Should the NJCEP incentives fund "clean" generation, such as fuel cells without heat recovery as a separate program and not part of the Pay for Performance (PFP) program? Should it continue as part of the Pay For Performance program, or both?

These types of expensive technologies should not be funded unless they are cost effective and, if so, then as part of the New Jersey's renewable energy technology research and development efforts. They should not be funded through the PFP EE program.

EE10. Should the NJCEP fund demand response program? What are the costs and benefits?

Under N.J.S.A. 48:3-98.1, the RGGI Law, the Board has the authority to direct utilities to undertake energy efficiency, conservation and renewable energy improvements and to allow the recovery of program costs and incentive rate treatment for those initiatives. On July 1, 2008 the Board exercised that authority by issuing an Order ("Demand Response Order") establishing two dockets for the development of proposals for the delivery of Demand Response ("DR") beginning June 1, 2009.

Demand Response refers to the reduction of electricity use during the hours of highest electricity use, or peak demand. Typically peak demand occurs in less than 100 hours each year. DR has the potential to provide benefits to ratepayers in the form of reductions in the costs of generation, transmission and/or distribution capacity, as well as reductions in the costs of electric energy during peak hours. Reductions in peak electricity use from DR also may produce environmental benefits in the form of reducing ozone levels during those hours.

The two Dockets were as follows:

- Docket EO08050326 required the State's four EDCs to develop proposed programs that could achieve an aggregate reduction of 300 MW in the first year and 600 MW by the third year. The four EDCs are Public Service Electric and Gas Company (PSE&G), Jersey Central Power and Light Company (JCP&L), Atlantic City Electric Company (ACE) and Rockland Electric Company(RECO).
- Docket EO08060421 invites market-based proposals from all energy industry entities for market-based programs that could achieve an aggregate reduction up to 600 MW by the third year.
   Energy industry entities include load serving entities ("LSEs"), curtailment service providers ("CSPs") and EDCs.

In response to the Demand Response Order, New Jersey EDCs submitted filings proposing a total of 13 DR programs. CSPs ENERNOC and ConsumerPowerline (CPLN) each submitted filings proposing market-based approaches. Several other CSPs submitted filings describing their ability to either deliver, or help deliver, DR programs.

The programs proposed by the two CSPs and four EDCs are listed in Table 1 below with the corresponding projected MW reductions in year 1, i.e., the year beginning June 1, 2009. The two CSPs project year 1 state-wide reductions of between 120 MW and 300 MW. In contrast, the four EDCs, in total, project an aggregate year 1 reduction of 144 MW. The EDC aggregate projection is less than 50% of the Board's year 1 goal of 300 MW. (JCP&L and ACE project reductions equal to their year 1 goal; PSE&G and ACE do not expect to achieve their year 1 goal).

TABLE 1

Proponent		Proposed programs		Reduction - Year 1		
		-	Forecast MW	Goal MW	Forecast % of Goa	
Market-Based Ap	proach Di	R Programs (mutually exclusive state-wide esti	mates)			
ENERNOC			300	n/a	n/a	
CPLN	1		120	n/a	n/a	
7 OLGO	2	Residential pool pump Small Commercial AC	0 1.6			
PSE&G	1	Residential central AC	1.7			
	š					
	4	CICS (C&I Curtailment)	30			
	5	Load Shift	0			
		Sub-total	33.3	165	20%	
JCP&L	1	Tariff Based Curtailment	60			
	2	Integrated Distributed Energy Resource	15			
				ľ		
	3	Peak Load Shift	5			
	3	Electricity storage	3			
		Electricity storage	3	93	100%	
ACE	1	Electricity storage Programs approved in other dockets Sub-total Residential smart thermostat	3 10 93 3.12	93	100%	
ACE	4	Electricity storage Programs approved in other dockets Sub-total Residential smart thermostat Internet Demand Response Platform	3 10 93 3.12 9			
ACE	1	Electricity storage Programs approved in other dockets Sub-total Residential smart thermostat	3 10 93 3.12	93	100% 34%	
ACE RECO	1 2	Electricity storage Programs approved in other dockets Sub-total Residential smart thermostat Internet Demand Response Platform Sub-total AC Cycling	3 10 93 3.12 9 12.12			
	1 2	Electricity storage Programs approved in other dockets Sub-total Residential smart thermostat Internet Demand Response Platform Sub-total	3 10 93 3.12 9 12.12			

The Board has since approved two tracks, a market based approach for C&I and a utility approach.

The four New Jersey EDCs submitted filings proposing a total of 13 DR programs. Of those, six are Direct Load Control ("DLC") programs targeted primarily at residential customers; six are pre-arranged guaranteed load reduction programs targeted at commercial, institutional and industrial customers, and one is an experimental load shifting program.

According to projections in the Summit Blue report commissioned by three EDCs, at a capacity price of \$ 65/kw-year, residential DLC would be cost-effective according to the TRC test when treating incentives as a program cost. They projected TRC results from 1.2 to 1.7 depending on the DLC control technology. The Benefit to cost ratios of the programs under the TRC test based on projected costs, projected enrollment and projected revenues from participation in PJM DR programs tended to be lower than the Summit Blue projections, closer to the 1.1 range.

By the summer of 2009, the Board had approved DLC programs for three of the EDCs – PSEG, JCP&L and ACE. Each EDC proposed to reach maximum participation in those programs over approximately five years, i.e. by about 2014. As of mid-2011 each of the three EDCs has experienced some delay in rolling out their programs due to equipment supply problems and less than expected levels of enrollment, particularly by small C&I customers. BPU never approved RECO's proposed program.

Based on the experience to date, Rate Counsel suggests that the three EDCs be allowed to complete their roll-out and have their results evaluated before the CEP contributes any further direct funding to these programs. Also, while electric utilities are the logical administrators for DLC demand response programs, greater coordination between CEP contractors and the EDCs could lead to increased participation in EDC DR programs. Rate Counsel recommends that CEP's programs allow for contractors to play a greater role in identifying prospective EDC DR candidate facilities and providing that information to EDCs, to reduce lost opportunities for DR participation. The Board should also consider requiring RECO to develop and submit a plan for cost-effective demand response programs for its retail customers.

### C. Renewable Energy Questions

1. How can the State's renewable energy incentive programs be structured to ensure a greater percentage of the NJ Renewable Portfolio Standards (RPS) goal of 20% renewables by 2020 is met by projects that also contribute to the New Jersey's energy and capacity needs?

New Jersey renewable energy ("RE") policy over the past several years has focused almost exclusively on solar energy. The exception to this preference has been the growing emphasis, underscored by recent legislation, for offshore wind ("OSW") generation. While solar and OSW are both important and exciting renewable energy resources, they are orders of magnitude more costly than other types of renewable energy.

RE generating resources, despite their positive environmental attributes, face many of the same longer-term financial support challenges that any generator interested in adding capacity faces in spot markets that contract for periods from one to three years (like the BGS Auction). Class I RE resources also face broad PJM-based competition, much like their fossil counterparts. The price of Class I RECs, over the past several years, has been driven in very large part by lower-cost Midwestern wind energy capacity additions.<sup>5</sup> Thus, New Jersey on-shore wind and biomass resources must compete against a much larger and broader set of renewable resources, in addition to having limited contract terms for capacity support.

One means of overcoming this challenge would be to examine in-state renewable capacity development support through longer-term contracting. The cost of this Class I contracting, however, may very well include a financial premium over and beyond Class I REC prices. Rate Counsel is not advocating this specific approach, but does believe that future research and investigation on the matter should be undertaken by the Office of Clean Energy ("OCE") much like the process for solar energy. Continued reliance on rebates without careful study of their effectiveness compared with other approaches, is unlikely to result in the development of a meaningful levels of in-state Class I RE capacity.

2. How can the funds from the SBC be used to motivate investment in Class I RE technologies to meet the RPS goal of 20 percent renewables by 2020 with expectations for the funds to be repaid to the state for future investments?

<sup>&</sup>lt;sup>5</sup> Office of Clean Energy. New Jersey's Renewable Portfolio Standard Rules: 2010 Annual Report. April 13, 2011, p. 26-27 and Appendix 5.

Rate Counsel believes that continued rebates through SBC support may be unneeded. If solar energy can be competitive without rebates, as articulated by OCE in prior program evaluation filings,<sup>6</sup> then other renewables may face similar outcomes, particularly if longer-term regulatory risks hampering project development can be addressed through appropriate market design analyses. Rate Counsel is supportive of investigating Class I market design issues to determine the methods and potential price premiums, relative to current Class I REC prices, that may be needed to provide effective incentives for the development of new incremental capacity.

Rate Counsel recommends that the Board eliminate rebate funding for onshore wind and biomass, and direct OCE to open a generic market design investigation for Class I renewable resources. The lessons learned from the solar securitization and Generic SREC proceedings<sup>7</sup> may have implications for the development of other in-state renewable resources. Rebates and direct funding would be unnecessary if the appropriate market design mechanisms were constructed.

Alternatively, rebates and direct funding, to the extent the Board preserves these activities, could be directed to additional support for Class 1 resources that secure a long-term contract through a competitive bidding process. Such a program could be considered to provide support for a limited number of non-solar Class I projects. Rate Counsel does not support a rush to judgment on the use of rebates and longer term contracting, and believes that further investigation is needed before reaching any broad conclusions on the potential effectiveness of such an idea.

3. Is there a role for SBC funds in overcoming barriers, unrelated to installation costs, to more widespread adoption of renewable energy technologies in New Jersey? Should SBC funds be used more extensively for initiatives such as, but not limited to, education and outreach to reduce municipal permitting, zoning, land use barriers, grid interconnection or technology development?

Rate Counsel does not support the use of CEP funding for addressing legal and policy barriers to RE development, particularly municipal land use and zoning ordinances. These issues are

Honeywell's Residential Energy Efficiency and Renewable Energy Program Filing for 2012, p. 43 (October 7, 2011).

New Jersey BPU Docket No. E006100744, Order dated December 6, 2007.

best left to those political institutions closer to their constituents. Further, Rate Counsel would question the cost-effectiveness of using limited CEP resources for this purpose. Rate Counsel would prefer to see all ratepayer funds committed to project development rather than activities that are best left to the political arena, and that do not directly result in getting renewable energy projects in place and operational.

4. Can and should SBC funding be made available to encourage the manufacturing of renewable energy technologies in New Jersey?

No. Rate Counsel has serious reservations about using ratepayer dollars to encourage manufacturing of renewable energy technologies in New Jersey. Using SBC funding to promote manufacturing jobs simply goes far beyond what should be the Board's primary policy purpose of facilitating the inclusion of renewable resources into New Jersey's energy supply in the most cost-effective manner for ratepayers. Other mechanisms, such as tax incentives and EDA programs exist to encourage manufacturing and economic development. Those mechanisms may be used to complement the ratepayer dollars used to promote renewable energy as part of New Jersey's resource mix.

While many of the Board's regulatory activities and decisions can influence economic development, promoting manufacturing activities is simply beyond the scope of the Board's primary responsibilities as an agency charged with regulating the State's energy utilities. The best economic development programs that the Board can pursue for renewable energy is developing programs and market institutions that create vibrant and competitive renewable energy markets.

5. Should the RE program incentives be targeted to specific locations and/or interconnection assets in order to address distribution congestion, reliability or other factors to the NJCEP fund? What are those other factors? If these incentives benefit the distribution system, how would the incentives be restructured to revolve back for reuse? Do potential constraints from greater integration of renewables into the PJM Grid justify an expenditure of SBC funds on research into this topic? Does the intermittent and variable nature of renewable energy sources justify an expenditure of SBC funds on research and incentives for energy storage technologies?

No. Rate Counsel believes that targeting financial rebates for RE projects to alleviate system operational constraints is problematic and could lead to questionable outcomes. In order for such an approach to be effective, "congestion, reliability, and other factors" would need to be clearly, accurately, and regularly identified and valued. This would require considerable annual study and resource commitments by the Board, the OCE (if they are making congestion pricing recommendation for Board approval), and the EDCs (if this issue is appropriately restricted to distribution level constraints).

Further, it is typically the case that congestion, reliability, and availability are wholesale level operational constraints. While Rate Counsel supports Board actions that alleviate wholesale-level operating constraints, we recognize that many of the decisions and actions governing the investments necessary to overcome these constraints are regulated and made at the wholesale (federal) level. Thus, coordinating congestion-mitigating rebate policies could have important jurisdictional implications.

Given the complexity and fluid nature of electric transmission systems and their tendency for actions and reactions to manifest themselves in a geographically-dispersed and sometimes counterintuitive fashion, Rate Counsel would be also be concerned that congestion rebate programs of this sort could result in a free-rider problem where New Jersey ratepayers are paying premiums to alleviate congestion that may benefit areas outside of the state.

Lastly, the valuation of congestion rebates would have to be a fluid process that could change frequently, possibly even annually as loads and bulk power resources shift and change over time. Such rebates, while having the potential to serve as an additional financial support mechanism for renewable energy, may not create the anticipated signals for strategically-located RE investments unless those payments could be guaranteed (i.e., "securitized") over time. Thus, congestion rebate support for RE, like any other type of RE financial support, is likely to need long-term support in order to be effective. This long term support, however, would be risky or even impossible, given the fluid nature of congestion over time.

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